SELF STUDY REPORT

ACCREDITATION– FIRST CYCLE

Submitted to

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE, INDIA

Submitted by

Suryodaya College of Engineering & Technology
Survey No. 117 / 1 & 117 / 3 Vihirgaon, Umrer Road, Tah.& Dist
Nagpur (M.S.) 441204
Website : www.scetngp.com, Email: scetngp@gmail.com

NAAC Steering Committee Members

Sr. No.	Name of faculty member	Designation	Designation for Steering Committee
1	Dr. Santosh D. Chede	Principal	Chairman
2	Prof.Vivek G. Parhate	Vice-Principal	Vice-Chairman
3	Prof.Ram Wayzode	HOD& Asst.Prof Mechanical Engg.	Co-ordinator
4	Prof.Pratibha Ghode	HOD& Asst.Prof Compter Engg.	Member
5	Prof. Vijay Nagpurkar	HOD& Asst.Prof Humanities and science(First year)	Member
6	Prof.AsthashilBambulkar	HOD& Asst.Prof Compter Engg.	Member
7	Prof.Pravin kr Jangade	HOD& Asst.Prof Electrical Engg.	Member
8	Prof. Sachin Malke	HOD& Asst.Prof Electronics and Telecommunication Engg.	Member
9	Mr.Manoj Guhe	Administrative officer	Member

COVERING LETTER

NATIONAL RURAL DEVELOPMENT & RESEARCH SOCIETY'S

Suryodaya College of Engineering & Technology

Survey No. 117 / 1 & 117 / 3 Vihirgaon, Umrer Road, Tah. & Dist Nagpur (M.S.) 441 204

Ref.: SCET/2016-17/Uni./ 314

Date: 30.03.2017

To,
The Director,
National Assessment and Accreditation Council (NAAC)
Southern Regional P.O. 1075,
Nagarbhavi,
Bangalore – 560072.

Subject:- **Self-Study Report (SSR) uploading on college website for first cycle assessment and accreditation by NAAC.**

Ref.: The college website : www.scetngp.com

Sir/ Madam,

I am glad to upload on college website the SSR for assessment and accreditation.

The hard copies will be submitted to your office within stipulated time.

Thanking you,

Yours faithfully,

Chede

Dr. S. D. Chede
Principal
**Principal
Suryodaya College of Engineering
& Technology, Nagpur.**

CONTENTS

Part A: PREFACE

Suryodaya college of Engineering and Technology (SCET) Nagpur was established in the year 2010 by National Rural Development and Research Society(NRDRS).It is a self-financed unaided private institute approved by All India Council for Technical Education, New Delhi and Directorate of Technical Education, Maharashtra State. It is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.

The institute vision to be recognized among the leading institutions, imparting quality engineering education to produce world class professional who possess knowledge, skill & necessary value that help them to face challenges at global level.

The college offer four year UG programs in five disciplines of engineering Mechanical Engineering (ME), Computer Engineering (COMP). Electronics & Telecommunication Engineering (ETC).Electrical Engineering (EE) and Civil Engineering(CE).

In addition Suryodaya college of Engineering and Technology (SCET) Nagpur conduct three year Diploma Program in shift II in two discipline Civil Engineering (CE) and Mechanical Engineering (ME) from 2015-16.

The infrastructure of the institute is excellent with state of art laboratories, digital library, Wi-Fi campus to mention a few which are as per norms of AICTE. Regular feedback is taken from stakeholders for overall improvement.

The college offer additional course beyond syllabus to explore the students towards the Industrial requirement by conducting courses such as CREO, Auto cad, C++, Java. The industry visits are frequently conducted to bridge gap between industry and institutes.

Suryodaya college of Engineering and Technology (SCET) Nagpur has established the quality in teaching learning process adhering to the ethical standards and professional integrity to enhance the satisfaction level of students and parents and hence Suryodaya college of Engineering and Technology (SCET) Nagpur become a preferred destination of the aspiring students.

It is an immense pleasure to submit self study report (SSR) of our institute to National Assessment and Accreditation Council (NAAC), Banglore for first cycle accreditation. The report is an outcome of collective efforts of all HOD, faculties and staff. This report is prepared with sincerity and dedication as per the guideline laid down by NAAC authorities. I congratulate and thank the management, the steering committee members, IQAC and administrative department for sharing the responsibility for drafting self study report (SSR)

Suryodaya College of Engineering and Technology (SCET) Nagpur team is looking forward to get evaluated by NAAC Peer Team and recognize the progress of Institute.

Part B :- EXECUTIVE SUMMARY AND SWOC ANALYSIS

Suryodaya College of Engineering & Technology, Nagpur (SCET) was established in the year 2010 by National Rural Development & Research Society with a motto of providing technical and higher education to equip the young generation so that the industrial technical and humanitarian need of the society will be fulfilled. The SCET has been successful to create its place in the academic circle of Rashtrasant Tukdoji Maharaj Nagpur University. The qualified and technically sound faculty members and staff strive in 360 degree to create technocrats par excellence.

Criterion I : Curricular Aspects

Being affiliated to RTMNU, the college follows the syllabi prescribed by the University. In addition, the college prepares the most suitable and innovative plans so that the syllabi can be delivered and taught to its best way. Faculties are always motivated for faculty Development Programme so that they will remain updated and their skills will be sharpened. The institute always takes initiative for workshops and Short Term Training Programmers. Vision and Mission of the college are always priority in every activity.

The college always encourages the students to apply their theoretical knowledge into practical. Therefore, the collegehas given due emphasis to the theory classes as well as practicals. While doing this, the Academic Calendar and the pattern of the Universityis taken into account. The feedback from the students is obtained on regular basis and so it is conveyed to the respective faculty members so that the required adaptation can be done because the students are always in the centre of planning and execution. The college runs all the programmers on self-financed mode and admission are done in accordance with the guidelines of the government and the concerned University.

Criterion II : Teaching Learning and Evaluation

All the admissions are done as per the DTE directives through Centralized Admission Process, 80% of the seats are accepted through this process and the remaining 20% are Institute Level Quota to be filled in accordance with the rules of DTE. The admissions are from SC/ST/NT/VJ/SBC/OBC/General Categories, Women, Differently abled, economically weaker class and Minorities. The institute offers Tuition Fees Waiver Scheme to the economically weaker students. The college also provides waiver and concessions in admissions fees to the needy

students. These admissions are well maintained by the dedicated efforts for excellence and good governance in all spheres. The college prepares students so that they will get recruited at campus Recruitment Drives conducted by Training & Placement Department.

To maintain good placement record, special programs for soft skills enhancement, sessions on Mock Interviews are held. The college prepares students for competitive examinations. For this, regular coaching is provided. The college has agreements with many industrial units to provide internships to students so that they will get acquainted with industrial on goings.

The extra ventures are provided if required for difficult subjects. Special arrangements of classes are done for Direct II year students. The Academic Calendar is prepared for teaching and examinations and due emphasis is given in it to co-curricular activities. Along with black-board teaching, some topics are taught through Power Point Presentations. For easy learning, learning videos are presented. The classroom teaching is accompanied by Industrial visits and Industry based projects.

The Teacher–Guardian scheme is inculcated in the planning. Under this a group of students is assigned a faculty member as guardian. Faculty looks after the mental, intellectual and emotional counseling of students. The college has appointed a regular counselor for this, who professionally deals with their problems. The performance of students is evaluated regularly and the parents are updated accordingly. The results are analyzed and the meritorious students are honored at Annual Gathering "JALSA". The college also honors the Best Students as "Student of the year" every year by analyzing the performance in academics, sports and cultural activities. The motto is to motivate the students for the best.

Criterion III: Research, Consultancy and Extension

The institute gives emphasis on the Research and Development. The college has formed a separate committee to develop research culture among faculty members and in-process engineering graduates. A specially dedicated towards research "Suryodaya Academy of Research and Advanced Learning (SARAL)" Centre is installed in the campus.During the last years, the college has encouraged the faculty members for Ph.D. and consequently few are pursuing research. Some have submitted the thesis for Ph.D. and others are on the verge of completion. There is a great enhancement so far research paper publications are concerned. Over 05 scholars are pursuing Ph.D. in the college. The students are also assisted and guided for innovative projects which will cater the

need of society as well as industry. The Training & Placement cell provides a link with the industry. The student interacts with the industrial personnel and accordingly prepares their projects.

To bring the students in human and social touch, the programmes like Blood Donation, Cleanliness Drive, Orphanage & Old age home visits, Tree Plantation, Donations to the needy, etc. are held. The NSS unit of the college takes initiative in this regard. This helps to create philanthropic approach among students.

Criterion IV : Infrastructure and Learning Resources

The institute has furnished the infrastructure as per the norms laid down by AICTE. It contains the well modeled classrooms, Laboratories, Common Rooms for girls and boys separately, Centralised Computer Centre, Library with a large number of books with reputed journals. The central library has good ambience with well-arranged reading hall. The high speed broad band internet facility is available. The laboratories are well equipped with latest computers and machines. There is generator power back-up availability. The play-ground is available for sports activities. The kits for many indoor games are provided to the students for their physical fitness.

Criterion V: Student Support & Progresses

Every year annual prospectus is updated and provided to students to update them with information regarding admission, programs, facilities and placements. The college strives at all levels to facilitate the needs of the students of academic and Co-academic.

The college provides scholarship in the form of fees concessions to the economically weaker students. SC/ST/NT/VJ/SBC students are given financial assistance in some cases. Through Professional Counselor and Teacher-Guardian scheme, one to one counseling is done. The students are encouraged for participation at collegiate and inter collegiate competitions. Every year a large number of students participate in inter-collegiate competitions like Model Exhibition, Paper Presentation, Poster Exhibitions etc. and emerge as winners. The students are given the guidance and coaching for competitive exams on regular basis and the college has tie-up with a reputed coaching institute for competitive exams. The Guest lectures for GATE and other exams are organized. The college has built and developed a culture which provides the required mechanism and training for growth and development of students, which eventually result in placement. For this the college has independent Training & Placement cell. It guides the student for personal and career

perspectives. It opens many professional and career options for students. There are regular mentoring and counseling sessions. Remedial lectures for slow learners, Anti-Ragging Cell, Continuous Feedback, Students Council etc. are the signature hallmarks of the college."Art of Living" workshops are every year in college.

Criterion VI: Governance, Leadership, & Management

"Technocrats Par Excellence" is the vision of the college. The college aims to create world-class professions. To achieve this, the efforts from all stakeholders are combined and properly guided. The Advisory Body gives the guidelines and directions towards governance and management. The Principal& Head of the Departments are entitled with academic autonomy concerned. Heads of the department ensure quality in teaching learning process. The management gives priority to appoint teaching and supporting faculty members because quality human resource adds quality to resources of college. Performance appraisal is done on regular basis. Every faculty member is aided to realize potential. The reward to the best performers and counseling to the low performers is provided. Faculty members are encouraged to attend Seminars, Workshops, FDP`s, STTP`s, Conferences etc.

The rules and regulations of AICTE / DTE / University are always held into account. All finance and accounts are duly audited every year.

The management extends full support for enhancing the professional development of staff members.

Criterion VII:Innovations and Best Practices

The college committed to create technocrats par excellence. For the innovations and best practices the college has established "Suryodaya Academy of Research and Advanced Learning Center (SARAL) centre. This innovative unit grooms the student in the best way towards innovative practices. Entrepreneurship and Skill Development programmers are undertaken by SARAL regularly. The various projects are undertaken to empower the future engineering graduates with skills and knowledge to cater the industrial and social needs. The emphasis is given for creation of public utility projects for rural areas as well as urban areas. The personnels from industry are invited to guide our students. The industry personnel conduct workshops and prepare the students mentally and intellectually for the industrial realities, Many times, Entrepreneurs from small enterprise are called to share their experiences about the enterprise set-ups. They include garage owners, grocery

shop oweners, Restaurant owners, Mechanics, Electricians, Road Contractors, etc. The students are also regularly taken for industrial visits so that they will get acquainted with the industrial proceedings. One of the project developed by our students was highly appreciated by Hon. Chief Minister of Maharashtra State Shri Denvendraji Fadanvis.

To create and nurture the humanitarian approach among the students is held high while implementing the curricular and co-curricular activities. The issue of global warming and increasing pollution level is alarming in the present era. The institute is dedicated towards environment conservation. The good green corner in the campus is properly maintained by the collective efforts of the faculty members and students. The various plants are planted and nurtured in the campus. Every year, hundred of plants are planted through "Tree Plantation Program" in the campus and outside the campus. The students are encouraged for participation in environment conservation activities such as "Cleanliness Drive", "Nirmalya Collections during Ganesh Festival" etc.

SWOC Analysis

Strengths:

- Dedicated and committed Management.
- Devoted, dedicated, determined and disciplined faculty members.
- Adequate infrastructure and excellent Teaching-Learning environment.
- Well-equipped laboratories.
- Consistent academic performances in the University examinations.
- Departmental student's Forums for overall development of students.
- Students are rewarded at various inter collegiate competition.
- Students are provided with holistic engineering education including personality development, placement training, communication skills etc.
- Meritorious students are rewarded .
- Need based scholarship is also given to the economically weaker students.

Weakness:

- The socio-economic background of many of the students admitted in the department is responsible for poor language competence. This leads to an unsatisfactory level of comprehension and communication.
- The institute needs to strengthen the research activities by taking more initiatives for formation of Centre of excellence.
- Lack of faculty with industry experience.

Opportunity:

- Strengthen industry institute interaction to give better industrial exposure to the students.
- Improve the quality of research publications.
- Entrepreneurship development.
- Innovations and creativities can be provoked through incubation cell.

Challenges:

- Retention of qualified and competent faculty.
- To collaborate with reputed colleges / universities to promote student and faculty exchange programs.
- Tough competition from IIIT, VNIT, Govt. College of Engg. and autonomous colleges in the region.
- Frequent and fast changing technology.
- Campus placement in core engineering companies.

Part C: - PROFILE OF THE COLLEGE

Part C: - PROFILE OF THE COLLEGE
1. Name and Address of the College

Name	Suryodaya College of Engineering and Technology
Address	Survey No. 117 / 1 & 117 / 3 Vihirgaon, Umrer Road, Tah.& Dist Nagpur (M.S.) 441204
City	Pin: 441204 — State: Maharashtra
Website	www.scetngp.com

2. For Communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr.Santosh D. Chede	07103-276283	09860233020		scetngp@gmail.com
Vice-Principal	Prof. Vivek G.Parhate	07103-276283	09423612120	07103-276282	scetngp@gmail.com
Steering Committee Co-ordinator	Prof.Ram Wayzode	07103-276283	08087084544		scetngp@gmail.com

3. Status of the Institution:

i	Affiliated College	√
ii	Constituent College	-
iii	Any other (specify)	-

4. Type of Institution:

a.	By Gender	For Men	-
		For Women	-
		Co-education	√
b.	By Shift	Regular	√
		Day	-
		Evening	-

4. It is a recognized minority institution?

i	YES	-
ii	No	√

If yes specify the minority status (Religious/Linguistic/any other) and provide documentary evidence.

6. Sources of funding:

i	Government	-
ii	Grant-in-aid	-
iii	Self-financing	√
iv	Any other	-

7. a. Date of establishment of the college: 13/7/2010

b. University to which the college is affiliated/ or whichgoverns the college (If it is a constituent college):
Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.

c. Details of UGC recognition:

Under Section		Date, Month & Year (DD-mm-yyyy)	Remarks (if any)
i	2(f)		
ii	12 (B)		

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

Under Section/ clause	Recognition/ Approval Details Institution/ Department Programme	Day, Month and Year (dd-mm-yy)	Validity	Remarks
F.No. West/ 1-6595181/ 2010/New	**Engineering & Technology (UG)** 1) Civil Engineering 2) Computer Engineering 3) Electrical Engineering 4) Electronics & Telecommunication Engg. 5) Mechanical Engineering	**13-07-2010**	**1 Year**	
F.No. Western/ 1-12370791/ 2011/EOA	**Engineering & Technology (UG)** 1) Civil Engineering 2) Computer Engineering 3) Electrical Engineering 4) Electronics & Telecommunication Engg. 5) Mechanical Engineering	**01-09-2011**	**1 Year**	
F.No. Western/ 1-746355389/ 2012/EOA	**Engineering & Technology (UG)** 1) Civil Engineering 2) Computer Engineering 3) Electrical Engineering 4) Electronics & Telecommunication Engg. 5) Mechanical Engineering	**10-05-2012**	**1 Year**	
F.No. Western/ 1-1449789243/ 2013/EOA	**Engineering & Technology (UG)** 1) Civil Engineering 2) Computer Engineering 3) Electrical Engineering 4) Electronics & Telecommunication Engg. 5) Mechanical Engineering	**19-03-2013**	**1 Year**	
F.No.	**Engineering & Technology (UG)**	**10-06-**	**1 Year**	

Western/1-2018840193/2014/EOA	1) Civil Engineering 2) Computer Engineering 3) Electrical Engineering 4) Electronics & Telecommunication Engg. 5) Mechanical Engineering	**2014**		
F.No. Western/1-2454158630/2015/EOA	**Engineering & Technology (UG)** 1) Civil Engineering 2) Computer Engineering 3) Electrical Engineering 4) Electronics & Telecommunication Engg 5) Mechanical Engineering	**07.04.2015**	**1 Year**	
F.No. Western/ 1-2809746968/ 2016/EOA	**Engineering & Technology (UG)** 6) Civil Engineering 7) Computer Engineering 8) Electrical Engineering 9) Electronics & Telecommunication Engg 10) Mechanical Engineering	**05-04-2016**	**1 Year**	

8. Does the affiliating University Act provide for conferment of autonomy (as recognized byUGC), on its affiliated colleges?

| Yes | √ |

| No | - |

If yes, it 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	√

b. For its performance by any other governmental agency?

Yes	-

No	√

10. Location of the campus and the area in square meters:

Location	Urban
Campus area in sq. mts.	20300 square meters.
Built up area in sq. mts.	17279 square meters.

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in 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**:- NA
- ❖ **Seminar Hall**:-Available.
- ❖ **Sports facility:**
  - Play Ground:- Available.
  - Swimming pool:-Not Available.
  - Gymnasium:-Not Available.
- ❖ **Hostel:**
  - Boys Hostel:- Not Available)
  - Girls Hostel :- Not Available
  - Working women's Hostel:- Not Available
  - Residential facilities for teaching and nonteaching staff:- Not Available.
- ❖ **Cafeteria**:-Available.
- ❖ **Health centre:**
  - First aid:-Available.
  - Inpatient:- Not Available

- Outpatient:- Available (with Dr Girllurkar Multi specialist Hospital)
- Emergency care facility:- Available with Dr Girllurkar Multi specialist Hospital)
- Ambulance:-Made available.

❖ **Health centre staff:**

- Qualified Doctor

Full Time	-	Part Time	√

❖ **Bank**:- Not Available
❖ **Post Office**:- Not Available
❖ **Book Shop**:-Available.
❖ **Transport Facilities to cater to the needs of studentsand staff**:- Available.
❖ **Animal House**:-Not Available.
❖ **Biological waste disposal**:-Not Available.
❖ **Generator or other facility for management/regulation of electricity and voltage** :- Available
❖ **Solid waste management facility**:- Available.
❖ **Waste water management**:-Available.
❖ **Water harvesting**:-Available.

12. Details of programmes offered by the college (Give data for current academic year):- 2016-17

Sl. No	Programme level	Name of the programme or course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved student strength	No. of students admitted* I	DSY
1	Under-Graduate	Computer Engineering	4 Year	10+2	English	60	22	28
2	Under-Graduate	Electronics and Telecommunication Engineering	4Year	10+2	English	60	06	19
3	Under-Graduate	Mechanical Engineering	4Year	10+2	English	120	22	76
4	Under-Graduate	Civil Engineering	4Year	10+2	English	60	23	43
5	Under-Graduate	Electrical Engineering	4Year	10+2	English	60	11	53

* No. of students including TFWS.

13. Does the college offer self-financed programmes?

| Yes | - |

| No | √ |

If yes, how many? [ ]

14. New programmes introduced in the college during the last five years if any?

| 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 department offering common compulsory subject for all programs like English, regional languages etc.)

Sl. No.	Level of Programme		Course	Introduced academic year
1	Under-Graduate	B. E.	Computer Engineering	2010-2011
		B. E.	Electronics and Telecommunication Engineering	2010-2011
		B. E.	Mechanical Engineering	2010-2011
		B. E.	Civil Engineering	2010-2011
		B. E.	Electrical Engineering	2010-2011

16. Number of programmes offered under (programmes means a degree course like BA, BSc., MA, M. Com……..)

a	Annual system		
b	Semester System	√	08
c	Trimester System		

17. Number of programmes with:

a	Choice Based Credit System		
b	Inter/ Multidisciplinary approach		
c	Any other (CBS)	√	05

18. Does the college offer UG and/ or PG programmes in Teacher Education?

| Yes | - |

| No | √ |

19. Dose the college offer UG or PG programmes in Physical Education?

| Yes | - |

| No | √ |

20. Number of teaching and non-teaching position in the Institution.

Positions	Teaching faculty						Nonteaching Staff		Technical Staff	
	Professor		Associate Professor		Assistant Professor					
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC / University /State	11		21		64		-	--	----	
Government Recruited-Sanctioned by the Management/ society or other authorized bodies	--	--	--	--	--	--	--	--	--	--
Recruited	01	---	--	--	65	31	29	10	14	--
Yet to recruit	10		21		0		-	-	-	--

21. Qualifications of the teaching staff:

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	M	**F**	**M**	**F**	**M**	**F**	
Permanent (Approved Teachers)							
Ph.D	01	-	-	-	-	-	01
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	22	15	37
Temporary (Adhoc Teachers)							
Ph.D	-	-	-	-	-	-	-
PG	-	-	-	-	43	16	59
Part Time Teachers							
Ph.D	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-

22. Number of Visiting Faculty /Guest Faculty engaged with the College. :-17

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

Categories	Year 1 (16-17)		Year 2 (15-16)		Year 3 (14-15)		Year 4 (13-14)	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**
SC	43	18	32	15	47	5	52	24
ST	5	1	5	1	8	2	13	1
OBC	115	22	81	35	130	28	140	46
General	67	8	60	14	46	2	44	8
Others (SBC/NT)	13	4	10	6	32	3	31	5

*Above data includes TFWS admissions

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

Type of students	UG	DIPLOMA	M. Phil.	Ph. D.	Total
Students from the same state where the college is located	286	184	00	00	470
Students from other state of India	13	08	00	00	21
NRI students	NIL	00	00	00	00
Foreign students	NIL	00	00	00	00
Total	299	192	00	00	491

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

UG	**15.03**

PG	**NIL**

26. Unit cost of Education

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

(a). Including the salary component :- Rs. 71769/-
(b). Excluding the salary component :-Rs. 25160/-

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

Yes	

No	√

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

Sl. No.	Level of the Programme	Course	Teacher – Student Ratio
1	UG	Computer Engineering	15:1
2	UG	Electrical Engineering	15:1
3	UG	Electronics a & Tele communication Engineering	15:1
4	UG	Mechanical Engineering	15:1
5	UG	Civil Engineering	15:1

29. Is the college applying for Accreditation:

Cycle 1	Cycle 2	Cycle 3	Cycle 4	Re-Assessment
√				

30. Date of accreditation (applicable for Cycle 2, Cycle 3 and Cycle 4 refers to re-Accreditation only) :- Not applicable

31. Number of working days during last academic year: 264 days

32. Number of teaching days during last academic year: 204days
(Teaching days means days on which lectures were engaged excluding the examination days)

33. Date of establishment of Internal Quality Assurance Cell (IQAC):
IQAC 21/04/2016 (dd/mm/yyyy)

34. Details regarding submission of Annual Assurance Reports (AQAR) to NAAC. :-Not Applicable.

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

RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY

'Established by Government of Central Provinces Education Department by Notification No. 513 Dated the 1st of August, 1923 & presently a State University governed by maharashtra Public Universities Act, 2016 (Mah. Act No.VI of 2017)'

COLLEGE SECTION

Chhatrapati Shivaji Maharaj Administrative Premises, Ravindranath Tagore, Nagpur. Phone No. 0712- 2529932, 2522390

CS/5714.

Dated 24/ 03 /2017.

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Suryodaya College of Engineering & Technology, Vihirgaon, Umred Road, Dist. Nagpur** is affiliated to the RTM Nagpur University, and the following Programmes/ courses are taught in the said College as per approval.

Programme	Courses	Duration	Affiliation	Validity period
Undergraduate	**B.E.**- Electronics & Telecommunication Eng., Civil Eng., Computer Eng., Mechanical Eng., Electrical Eng.	4 years	Temporary	2015-16 to 2016-17

Dy. Registrar (College)
Rastrasant Tukadoji Maharaj,
Nagpur University , Nagpur.

Part D: - CRITERION-WISE ANALYTICAL REPORT

CRITERION I- CURRICULAR ASPECTS

1.1 Curricular 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.**

Ans:-

Vision: -

To be recognized among the leading institutions, imparting quality engineering education to produce world class professional who possess knowledge, skill & necessary value that help them to face challenges at global level.

Mission: -

To impart quality technical education which is inline with the latest global requirement and develop all round abilities of the students.

Goals and Objective: -

Communication to the students, teachers, staff & other Stakeholders: -

- Our institution keeps stakeholders updated about curricular activities of the institution with full of transparency.

- The vision and mission of the institute are displayed at the entrance of the college and on home page of the institutional web site.

- Awareness about vision and mission of institution is conveyed to students as well as parents through induction program of every new academic batch.

- In accordance with the institutional vision and mission, all departments of institution align their vision and mission.

- Through joint meeting of staff and stakeholders, management discusses various aspects to achieve vision and mission of college.

- Institute provides college magazine, college prospectus and departmental forums for communication to students.

- Various workshops and motivational speeches are conducted for students and staff to achieve vision and mission.
- Regular surveys are done at departmental level toward assessment and extra curriculum activities to achieve vision and mission.

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).

Ans: - To achieve effective teaching-learning goal, various action plans are deployed in well planned manner. Such as:

- A meeting of staff conducted with IQAC committee to develop various action plans before starting of every semester.
- In accordance with action plans of College and University academic calendar, the academic calendar for college is designed to implement curriculum.
- Heads of individual department conduct meeting with respective staff members to complete relative subject syllabus according to academic calendar.
- The subject distribution for next semester is done during the Preparation leave period of current semester. So, proper preparation of each topic of syllabus is done before the session starts and teaching plan is designed according to that.
- Teaching plan is monitored and approved by HOD for every subject.
- Laboratories are updated with required instruments and laboratory manuals are prepared with updated syllabus.
- Well ventilated and spacious class rooms are provided.
- Monitoring of teaching and learning process is carried out by HOD of respective department and Principal by simply observing or by taking oral feedback from students.
- In addition with traditional teaching metHOD, innovative teaching techniques are adopted to improve teaching learning process.
- NPTEL lectures are provided to students to improve self-learning capabilities.
- Expert lectures, industrial visits are conducted regularly in alignment to implement curriculum.

- Extra classes for academically weaker students are conducted during off days or working days if vacant time slot is available.

- Subject files prepared by respective staff contain teaching notes, teaching plan, question bank and performance detail of students.

- Unit test and Pre University tests are conducted to check the performance of students.

- Feedback from students is taken to improve the quality of education.

- Special additional technical inputs by industry/academic expert are given to students for project idea selection and implementation.

Academic calendar of even semester 2016-2017

Month	Mon	Tue	Wed	Thu	Fri	Sat	No. of Working Days	Activities
DEC				1	2	3		17: Display of Time Table 14 to 22 : INDUSTRIAL TOUR 19: Commencement of Classes
	5	6	7	8	9	10		
	12	13	14	15	16	17		
	19	20	21	22	23	24	6	
	26	27	28	29	30	31	6	
JAN	2	3	4	5	6	7	6	2:Display of Assignment No.1(3 Unit) 14:Project Progressive Seminar 1 20: Guest Lecture 21: Badminton Matches(Girls & Boys) 26: REPUBLIC DAY 28: Chess & Carom Matches 31: Submission of Assignment No.1
	9	10	11	12	13	14	6	
	16	17	18	19	20	21	6	
	23	24	25	26	27	28	5	
	30	31					2	
FEB			1	2	3	4	4	1: Student Feedback 1 2:Display of Assignment No.2(3 Unit) 10: Display Monthly Attendance 1 & Tentative Detention List 1 11:Project Progressive Seminar 1 13 TO 18: PUT 1 24: MAHASHIVRATRI 25: Display Result PUT 1& Final Submission of Project 27: Submission of Assignment No.2 28 to 1: TECHTRENDS
	6	7	8	9	10	11	6	
	13	14	15	16	17	18	6	
	20	21	22	23	24	25	5	
	27	28					2	
MAR			1	2	3	4	4	3 to 4: OUTDOOR SPORTS 6 to 7: JALSA 10:Display Monthly Attendance 2 & Tentative detention list 2 13: HOLI 14:Display of Assignment No.3(6 Unit) 18: PARENTS MEET 23-24: Workshop 28: GUDIPADWA
	6	7	8	9	10	11	6	
	13	14	15	16	17	18	5	
	20	21	22	23	24	25	6	
	27	28	29	30	31		4	
APRIL						1	1	1: Final Student feedback 4: RAM NAVMI 10:Display Final Monthly Attendance & detention list 10: LAST TEACHING DAY(tentative) 10:Submission of Assignment No.3 11 to 15 :Internal Practical Exam 14: DR.B.R.AMBEDKAR JAYANTI & GOOD FRIDAY 17 to 22: PUT 2 29: Display result PUT 2 & Internal Marks
	3	4	5	6	7	8	5	
	10	11	12	13	14	15	5	
	17	18	19	20	21	22	6	
	24	25	26	27	28	29		
TOTAL DAYS							102	

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

Ans: -

As per RTMNU Nagpur University concern, University provide academic calendar, syllabus, appropriate reference books and text books for subject, assessment schemes etc. which is helpful to teachers in effective teaching process. As well as various board of University organize various subject syllabus oriented workshops for faculty. In addition to this, institute provides:

- Additional reference books and NPTEL lectures in library.
- Teaching aids like LCD, Projectors and computers with internet facility.
- Virtual notice board on institutional site.
- Provide facilities for staff to attend STTP, workshops, seminars, conference etc. to improve knowledge.
- Computer with internet facility and Wi-Fi provided to each and every faculty for betterment of teaching-learning process.
- Provision of departmental libraries for departmental staff, which provide instant teaching material.
- Conducts motivational and spiritual speeches by experts to improve the qualities and to build the confidence of teachers.
- Lectures on research methoologies by eminent academicians to promote research activities in the departments and also to enrich their potential to guide student's projects.
- Various innovation orientation programs in the institute to improve the skills of the faculty.

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.**

Ans: -

Institution takes various initiatives for effective curriculum delivery and fruitful outcome. Some of them are as follows:

- Time table is designed which includes library, soft skill and seminar hours.

- Subject are distributed to teachers according to choice and experience of subject taught, result analysis and feedback from students.

- Modern teaching aids like projectors and computers are provided to every branch.

- Facility of well-structured workshop and laboratories.

- Daily monitoring of classes and practical and taking formal and informal feedback by HOD and Principal.

- Filling weekly analysis report from every faculty for syllabus completion.

- Advanced preparation of proper teaching plan, teaching notes, question bank, assignments lab manuals in well manner.

- Students are motivated by teachers, HOD and Principal for innovative research project work and publication.

- Guest lectures, seminars and workshops are regularly arranged to improve quality of education

- Providing industrial visits to get on site knowledge.

- Well scheduled examination, standard question papers, appropriate evaluation and handover of the reports to parents through Parents-Teacher meet.

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

Ans: -

Training and Placement Officer is always in contact with industry persons for any update from industry side.   HOD and Principal regularly attend the meetings held by Vidarbha Industries Association and University.

Student point of view:

- **Training**

  - We arrange guest lecturers of experts from industry orientation, through which the associated industry explain the needs and current trends of the industry. They also clears the type of expertise require to earn a job, to be entrepreneur and other personality facts which are being observed while offering a job to the potential fresher student.

➢ Technical workshops and guest lectures are organized to provide hands on experience.

➢ Personality development workshops are organized so as to improve student's attitude and personality including Basic English Communication Skills.

• **Internships and placement:** We have tie ups with industries which provide our students internships and placements too.

Faculty wise: We intend to keep connect of our faculties with the industry and hence we organize guest lectures and visits for our faculties as well. This helps us to impart practical knowledge that the industry expects from the students.

Table: 1.1: Industry Collaboration

Sr. No.	Name of the industry/organization	Areas of Collaboration
1	JDS Group of companies	Guest lectures for faculty development from the industry point of view, guest lectures for Communication Skills, Mechanical and Electrical branch to cover practical aspects of the syllabus. Industry visit and summer internships. Placement
2	JETKING	Guest lectures, industry visit, placement
3	AXIOM SOFTECH SOLUTIONS PVT LTD	Guest lectures, industry orientation program, internships and placements.
4	OXFORDS SPEAKERS' ACADEMY	Overall personality development
5	AAKAR FOUNDATION	MPSC/UPSC competitive examination guidance and preparation
6	WARDHA IT PARK	Guest lectures, Placement
7	BUTIBORI MIDC ASSOCIATION	Guest lectures, placements, internships.
8	COMPEX	To provide platform to our students to show case their

		project on a wider level.
9	SAMVIND INTERNATIONAL	Guest lectures for faculty development from the industry point of view, guest lectures for Communication Skills, Mechanical and Electrical branch to cover practical aspects of the syllabus. Industry visit and summer internships. Placement
10	SMART SKILL TECH PVT. LTD.	Guest lectures, industry orientation program, internships and placements.
11	VEDANT PAPERCRAFT	Guest lectures for faculty development from the industry point of view, guest lectures for Communication Skills, Mechanical and Electrical branch to cover practical aspects of the syllabus. Industry visit and summer internships. Placement
12	SPANKRAFT HYDROSYSTEMS PVT. LTD.	Guest lectures for faculty development from the industry point of view, guest lectures for Communication Skills, Mechanical and Electrical branch to cover practical aspects of the syllabus. Industry visit and summer internships. Placement

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.

Ans: -

- As the institution is affiliated to RTMNU Nagpur University, institute follows all rules and regulations provided by University. Faculties regularly consult to respective bord of studies for updating information from University.

- By taking oral feedback from students regarding any changes or updation in syllabus, by discussing the feedback with departmental staff if any needful changes require, HOD and Principal discuss it with members of board of studies for the same.

- Institute also takes feedback from parents in Parent-Teacher Meet, if feedback contain any fruitful suggestion HOD communicate with members of board of studies.

Table 1.2: BOS participation

Name of Faculty	Name of Board
Dr. Santosh Chede	Ex-Chairman Board of Studies(Electrical Engineering), RTMNU, Nagpur

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.

Ans: -

Yes. As institute is affiliated to RTMNU Nagpur University, institute offered various courses in different engineering stream which are helpful to students to improve knowledge. Some of the courses offered by institution are as follows:

Table 1.3 Curriculum Course

Sr. No.	Course Name	Name of Staff	Duration of Course	Department
1	CAD/CAM	Prof. Praful Deshpande	3 Months	Mechanical Engineering
2	Certification Course NX.10	Mr.Mohnish Suryawanshi Porf. Praful Deshpande	3 Months	Mechanical Engineering
3	Analysis of Beam and Frames using Software	Prof. A.V. Bhambulkar Prof. P.M. Nagdeve	1 Week	Civil Engineering
4	Advances Power Electronic in	Dr. Santosh Chede Prof. Pravin Jangle	1 Week	Electrical Engineering

	power system potation			
5	VB.net	Prof. Pratibha S. GHODe Prof. Ruchira Selote	3 Days	Computer Engineering
6	Advanced Trends in Embedded System Design	Dr. Santosh Chede Prof. Sachin Malke	1 Week	Electronics & Telecommunication
7	Modern communication Systems	Dr. Santosh Chede Prof. Rasika Manapure	3 Days	Electronics & Telecommunication

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

Ans: -

- By conducting Pre-Unit-Test and unit test, according to the result generated from exam, staff monitors the outcome before taking any step. As staff realized that the syllabus outcome is not achieved as per the objectives, department takes required remedial classes to achieve the same, like re-test, extra classes.

- Regular project seminars conducted to take update from project members and provide guidelines to them to achieve final required output, which is helpful for employability at National and Multinational Companies.

- Special classes conducted for University affected ATKT students.

- Regular evaluation of laboratory manuals along with viva-voce and experimentation is carried out.

- Students of institute participated in various inter-collegiate and intra-collegiate competitions.

- The alumni of institution are securing top position in different organization/institution.

- Most of students achieve good marks in their University examinations. The college also secures good number of University ranks.

- Class committee meeting are conducted (one meeting at the end of every Pre-Unit-Test exam) to improve the teaching learning process. Corrective and preventive actions are taken whenever required.

1.2 Academic Flexibility

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

Ans: -

- Keeping in mind the growing needs at state, national and global level and considering the unprecedented need of making the environment friendly, the college imparts education at Graduate Level in all branches.

Following objectives/goals are broadly followed by all departments across the institution:

- To participate National/ International conferences in an academic year.
- To organize guest lecture.
- To motivate the students to go for higher studies.
- To encourage faculty to attend workshops every year.
- To organize industrial visits.
- To ensure maximum number of students getting placed in reputed companies.
- To ensure maximum number of students' participation in paper presentation, seminars, workshops and project competition.
  - **Fig:1.1Technical Workshop for Students**

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

Ans: -

No. The institution does not offer any programs that facilitate twining/dual degree.

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.

- **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 mobility within and across programs and courses**
- **Enrichment courses**

Ans: -

- As institution is affiliated to RTM Nagpur University, Institute follows syllabus provided by University. University offers electives as per in final year of engineering and respective department choose electives as per choice of students. Following table shows electives offered by University and same opted by college:

  - **Table: 1.4 Summary of Elective Subject Offered semester Wise**

Sr. No.	Department	Year/sem	Electives offered by University	Electives opted by college
01	Mechanical Engineering	7th Sem.	Elective-I-6	2
		8th Sem.	Elective-II-6	2
			Elective-III-6	2
02	Electrical Engineering	7th Sem.	Elective-I-4	1
		8th Sem.	Elective-II-4	1

			Elective-III-4	1
03	Civil Engineering	7th Sem.	Elective-I-7	2
		8th Sem.	Elective-II-11	1
			Elective-III-7	1
04	Computer Engineering	7th Sem.	Elective-I-3	1
			Elective-II-3	1
		8th Sem.	Elective-III-3	1
			Elective-IV-3	1
05	Electronics & Telecommunication Engineering	7th Sem.	Elective-I-4	1
		8th Sem.	Elective-II-4	1
			Elective-III-4	1

- Institution provides choice based credit system and range of optional subjects as per University.
- As per RTM University, subject consists of 6 units and each unit has same weightage.
- Credit transfer and accumulation facility as per University concern.
- Institute offer lateral mobility within programs, like if any student wants to change his/her discipline, institute provide this facility according to student result.
- In every session, institute provides some extra courses for particular department to enrich the ability of employability and quality of education.

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.,

Ans: -

Yes. The UGC recognized programs affiliated to RTM Nagpur University are self-financed.

Note: Our institute currently offers under graduate program only.

Table 1.5 Self Financed Programme

Sr. No.	Level of Program	Name of Program	Duration	Intake
01	Under Graduate Engineering B.E	Mechanical Engineering	4 Years	120
		Civil Engineering	4 Years	60
		Computer Engineering	4 Years	60
		Electronics Engineering	4 Years	60
		Electrical Engineering	4 Years	60
02	2nd Shift Diploma	Mechanical engineering	3 Years	60
		Civil Engineering		60

- Institute takes fees from students as per the recommendations of Shikshan Shulk Samiti/FRA.
- Teachers' qualification and salary offered to them are followed according to AICTE and UGC norms.

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

Ans: -

Yes. In accordance with regional and global employment, institute provides additional skill oriented programs. Some of them are:

Table 1.6 Skill Oriented Program

Program Name	Beneficial For
Campus Recruitment Training Program	Final Year Students
Online Aptitude Test	All students(B.E. Third & Final Year)
Personality Development Program	All B.E. students
Spiritual Lectures	All B.E. students and Teaching staff

Industrial Visit	All students (B.E. Third & Final Year)
Art of Living	First Year Students
Robotics	Third and Final year Mechanical students
Employment Enhancement Skill Development Program(EESDP)	All Students(All branches)

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?

Ans: -

Yes. The RTM Nagpur University provides distance mode of education for students to choose the course/combination of their choice, but the institution does not have such provision.

1.3 Curriculum Enrichment

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

Ans: -

For the parallel implementation of academic programs and institutions goals and objectives, following initiatives are taken by institution as a supplement to the University curriculum.

- Well-organized institutional academic calendar provide ease of implementation of curriculum, academic programs and to achieve institutional goals and objectives.
- Proper structured time table helps staff and student for the fulfillment of teaching learning objectives.
- Institute arranges guest lectures, workshops, seminars, industrial visits and trainings in accordance to get thorough knowledge of relevant topic in syllabus as well as current industrial scenario, which will helpful to students for their employability.
- During teaching, if staff finds that there is need to add some extra topics in theory, department include such contents beyond syllabus and experiments.

- Co- curricular activities like paper presentation, project and quiz competitions are organized for the students. Additional resource lectures are organized for the students.
- Employment Enhancement Skill Development Program is organized by the institute. To make up for any deficiencies, the college supplements the University's Curriculum by imparting special courses like Personality Development, Soft skills development and communication skills.
- Students are encouraged for industrial visits and internship programmes.

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?

Ans: -
- As institute affiliate to RTM Nagpur University, in addition to standard curriculum provided by University, institute makes provision of industrial visits, expert lectures, guest lectures, hands on workshops, CRT classes etc.
- By taking regular interaction of T & P Head with different company HR Heads, institute arranges a weekly lecture of T & P Head in different department to stay students updated with employability in market by providing them information about the current scenario and future scope of market. Accordingly, arranges special training and value added programs for students.
- Apart from teaching learning process, staff provides regular guideline to students about the recent trends and areas in which major and mini project topics needs to be selected.
- Collect oral feedback from alumni members in alumni meet to get market information for employment.

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?

Ans: -
Institute follows the curriculum provided by University, Apart from that institute boldly thinks on social unbalanced issues, and makes efforts to overcome such issues so that students as well as staff

will be good human beings at their societal level. Some of the efforts taken by institution are as follows:

1) **Gender issue:**
   - Institute avoids gender partiality during admission process.
   - Provides equal opportunity to both genders for the employment, speeches during functions, forum initiatives, inchargeship of events, sports, cultural activities etc.
   - Encourage both genders to participate in various technical events held at inter college level by making mixed groups of boys and girls, such as paper presentation, quiz etc.
   - Equal opportunities provided to gents staff and ladies staff to build the confidence.

2) **Climate change issue:**
   - Institute organizes Tree Plantation program regularly to encourage current generation for plantation.
   - Arranges talk on climate change.
   - Provide greenery campus to avoid soil erosion.

3) **Environmental Education:**
   - A special environment education course named Environmental Engineering provided by University is compulsory to students.
   - Under this course, a PPT presentation followed by report writing is carried out for each and every student.
   - Institution organizes poster presentation competition on environmental education.

4) **Human Rights:**
   - Institute takes initiative to avoid ragging inside college campus by displaying human rights for ragging over every floor of college.
   - A committee formed by college for students to protect their rights.

5) **ICT:**

- All departments have at least one course related to computer and separate LAB with internet connection is provided to them by institution.
- Students have Wi-Fi facility in institute campus to access an internet for their study.
- Each department has separate projector and computer machines available for staff to deliver digital lecture in class.
- Centralized computer lab with internet connection is made available in institution.

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

- **Moral and ethical values**
- **Employable and life skills**
- **Better career options**
- **Community orientation**

Ans: -

- **Moral and ethical values:**
  1) Spiritual lectures are organized by institution to realize students about prohibition of tobacco, liquors etc.
  2) Lectures conducted by Swamiji of Tukadoji Maharaj Saunsthan, Mozari to feed moral and ethical values in students.

- **Employable and life skills:**
  1) Training Programmes for personality development, communication Skills and employability training campus.

- **Better Career Options:**
  1) Institution organizes career guidance workshops and talks regularly.
  2) Weekly lecture by training and placement head.

- **Community orientation:**
  1) Tree plantation.
  2) Blood Donation Camp.
  3) Health Check-up Camp.

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

Ans: -

As per the feedback received from students, industry people, experts, with respect to curriculum, additional technical contents, other than curriculum i.e. content beyond syllabus are incorporated in teaching plan. Contents are related to latest trends in technology and application.

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

Ans: -

- Based on the feedback taken from stakeholders, department evaluate quality of its enrichment programs.
- Also by analyzing the feedback from guardian of students, institute monitors its quality of programs.
- By observing performance of students in internal exam and University exam.
- On the basis of answers given by students during viva-voce in practical lab, staff evaluates the quality of departmental enrichment programs.
- Participation and position acquire by students in technical competitions.

1.4 Feedback System

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

Ans: -

- As per curriculum provided by University, institute follows it properly and syllabus is completed in stipulated period.
- The syllabus prescribed is followed as per the affiliated RTM Nagpur University and the revised syllabi is implemented as per the changes.
- We have oral discussion with dean faculty and staff members of other colleges.
- As per the discussion with Dean, Faculty of engineering & technology, Chairman BOS of various stream, we used to recommend varies suggestion to be incorporated in syllabi.

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

Ans: -

Yes. The college has a formal mechanism to obtain feedback on curriculum from students and stakeholders. The IQAC of the college plays a pivotal role in conducting Feedback. Feedback on curriculum is conducted by first semester students as well as the outgoing students.

- In the 4th- 5th week of academic session, the oral feedback is taken from the students by the Head of Department.

- At the end of each semester Feedback is obtained from the students in the prescribed format. The feedback is analyzed by the academic committee including the HOD of the concerned department and a summary report is prepared for review by the principal.

- Above 80% feedback, the appreciation letter is given to the staff.

- Below 80 % feedback, improvement letter is given to the staff.

- The feedback mechanism is primarily used for enhancing the quality of teaching learning process.

- The exit student feedback is obtained from the final year students about institute & department & academics.

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

Ans: -

Sr. No.	Name of program/course	Year
01	Polytechnic –Mechanical Engineering	2015
02	Polytechnic – Civil Engineering	2015

Criterion II: TEACHING-LEARNING AND EVALUATION

2.1 Student Enrollment and Profile

2.1.1 How does the college ensure publicity and transparency in theadmission process?

Ans: The Directorate of Technical Education (DTE) conducts CentralizedAdmission Process (CAP) for admission to the Engineering Collegesthroughout the Maharashtra State. The institute participates in the CentralizedAdmission Process (CAP). This ensures total transparency in admissionprocess. 80% of the seats of UG programs are filled through this process. 20%Management Quota seats are filled at the institute as per admission rules ofDTE.

The publicity and transparency in the admission process followed by DTE isas follows:

1. DTE publishes Admission notification in all leading National andregional daily newspapers and its website(www.dtemaharashtra.gov.in).

2. DTE allocates Application Receipt Centers (ARC) & FacilitationCenters (FC) throughout Maharashtra.

3. Students register themselves for CAP by filing online applicationsthrough facilitation centers. Verification of student's documents is alsodone at facilitation centers.

4. The merit lists of students and college allotment lists are published online and are available to all for perusal.

The publicity and transparency in the admission process followed by the

institute is as follows:

1. Details of admission process are made available on the collegewebsite.

2. Admission advertisement for the institute level quota is published inleading newspapers by the institute.

3. The institute is entrusted with the job of explaining the admissionprocedure and publicises the progress and achievements of the instituteover years to all the visitors who make enquiries.

4. The institute publishes the Institute Leaflets/Prospectus for widecirculation.

5. The institute conducts seminars for guiding the 12th standard students/Diploma students & their parents about the Centralized AdmissionProcedure (CAP).

6. The institute carries periodic promo through social media.

2.1.2 Explain in detail the criteria adopted and process of admission (Ex.(i) merit (ii) common admission test conducted by state agencies andNational agencies (iii) combination of merit and entrance test or merit,entrance test and interview (iv) any other) to various programmes of theInstitution.

Ans: Our institute runs 5 Under Graduate (UG) & Diploma Programmes. The Eligibility criteria for UG Programmeas per Directorate of Technical Education (DTE), Mumbai are as follows:

For UG Programmes:

1. Eligibility Criteria for admission in UG Programmes – EngineeringFirst Year:

The candidate for admission in UG Programmes is categorised as:

(a) Maharashtra State Candidate

(b) All India Candidate, Jammu & Kashmir Migrant Candidates

(a) Maharashtra State Candidates:

(i) The Candidate should be an Indian National.

(ii)Passed HSC or its equivalent examination with Physics andMathematics as compulsory subjects along with one of the Chemistry orBiotechnology or Biology or Technical or Vocational subjects.

OR

(ii) Passed Diploma in Engineering and Technology and obtained at least50% marks (at least 45% marks, in case of Backward class categoriesand Persons with Disability candidates belonging to Maharashtra Stateonly).

OR

(ii) Passed B.Sc. Degree from a Recognized University as defined by UGCand obtained at least 50% marks (at least 45% marks, in case ofbackward class categories and Persons with Disability candidatesbelonging to Maharashtra State only).

(iii) Upto 2013-14, candidate should have secured minimum 45 % marks(minimum 40 % marks, in case of Backward class categories andPersons with Disability candidates belonging to Maharashtra State only)in the subjects Physics, Mathematics and Chemistry / Biotechnology /

Biology /Technical Vocational subject added together in HSC.

(iv) From 2014-15, candidate should have a positive Composite score i.e.,marks obtained after adding 50% of JEE (Main) marks and 50% ofnormalized Standard XII (Board or Equivalent Examination) marks inPhysics, Chemistry and Mathematics.

(v) From 2016-17, candidate should have non-zero score in MHT-CET2016 conducted by competent authority.

(b) All India Candidates, Jammu and Kashmir Migrant Candidates:

(i) The Candidate should be an Indian National.

(ii) Passed HSC or its equivalent examination with Physics and Mathematics as compulsory subjects along with one of the Chemistryor Biotechnology or Biology or Technical or Vocational subjects ofany State Board of Secondary & Higher Secondary Board or itsequivalent examination.

(iii) Secured minimum 50% marks in the subjects Physics, Mathematics &Chemistry/ Biotechnology/Technical Vocational subjects addedtogether.

(iv) Obtained All India Rank in JEE (Main) given by CBSE.

2. Eligibility Criteria for admission in UG Programmes – EngineeringDirect Second Year (Lateral Entry):

(i) The Candidate should be an Indian National.

(ii) Passed Diploma Course in Engineering & Technology with atleast50% marks (45% marks in case of candidates of Backward classcategories and person with disability belonging to Maharashtra Stateonly) in appropriate branch of Engineering & Technology from an AllIndia Council for Technical Education or Central or State Governmentapproved Institution or equivalent.

OR

(ii) Passed B.Sc. Degree from a University Grants Commission UGC) orAssociation of Indian Universities recognized University with at least45% marks (40% in case of candidates of backward class categoriesand Persons with Disability belonging to Maharashtra State only) andpassed HSC with Mathematics as a subject. Provided that studentsbelonging to this category shall clear the subjects of EngineeringGraphics/ Engineering Drawing and Engineering Mechanics of theFirst Year Engineering Program along with Second Year subjects.

3. Admission Process:

The distribution of the seats in Under-Graduate courses is given in thetable 2.1 below:

Table 2.1: Distribution of the seats

Stream of Admission	CAP Quota 80 (%)		Institute Level Quota	TFWS
First Year B.E	For All India 15%	For MH CAP 85%	20%	5%(*)
Lateral Entry Second Year B.E. (After completing Diploma in Engineering)**	100% (For MH CAP)		-	-

* TFWS seats are over and above the sanctioned In-Take.

** The admissions are against the vacant seats of First Year and Direct SecondYear quota.

a. Through CAP (Centralized Admission Process)

- The admission process normally begins immediately after declaration ofresults of HSC (10+2) Examination & JEE Mains results.

- The Maharashtra State candidates can apply against the advertisement ofDTE, Maharashtra State, which is published in most of leading newspapers or can directly apply to the institute to seek admission under theInstitute Level Quota. The OMS (Outside Maharashtra State) candidatescan directly apply to the institute for the admission.

- The institute participates in centralized admission process (CAP)governed by Directorate of Technical Education (DTE), Mumbai.

- CAP information in details is made available on DTE website.

- Upto 2012-13, admissions were done on merit basis which was preparedon the score of MHCET (Maharashtra Common Entrance Test) / AIEEE(All India Engineering Entrance Examination) and PCM marks of 12[th]board examination.

- For year 2013, admissions were done on merit basis which was preparedon the score of MHCET (Maharashtra Common Entrance Test) / JEE(Joint Entrance Examination) and PCM marks of 12th boardexamination.
- From 2014-15, admission were done on merit basis which was preparedbased on positive composite score (Marks obtained after adding 50%JEE Main 2014 Paper I marks and 50% of normalized Standard XII(Board or Equivalent Examination) marks in Physics, Chemistry andMathematics).
- For 2016-17, admissions were done on merit basis which was preparedon the score of MHTCET-2016.
-

b. For Institute Level seats
- The candidates fill the application form of the institute against theadvertisement published by the institute.
- A merit list is prepared and candidates are admitted as per the merit list.

c. For Direct Second Year Seats
- Admission through the CAP round of DTE, Mumbai.

Centralized Admission Process

Publication of Information Brochure by Competent Authority

↓

Availability of Information Brochure on purchasing application kit

↓

Filling of Online Application form by the candidate

↓

Confirmation of Online Application form & Document Verification at Facilitation Center

↓

Display of Provisional Merit List

↓

Submission of grievances, if any, by candidates

↓

Display of Final Merit List

↓

Display of available Category wise Seats for CAP Round-I

↓

Filling and Confirmation of Online Option Form for CAP Round-I

↓

Display of Provisional Allotment for CAP Round-I

↓

Reporting and acceptance of allotted seats in CAP Round-I by candidate at Admission Reporting Center (ARC)

↓

Display of available Category wise Seats for CAP Round-II

↓

Display of Provisional Allotment for CAP Round-II

↓

Reporting and acceptance of allotted seats in CAP Round-II by candidate at Admission Reporting Center (ARC)

↓

Fig. 2.1: CAP PROCESS

2.1.3 Give the minimum and maximum percentage of marks foradmission at entry level for each of the programmes offered by the collegeand provide a comparison with other colleges of the affiliating Universitywithin the city/district.

Ans: As per the Directorate of Technical Education (DTE), the minimumand maximum marks in HSSC Examinations for admission in engineeringcolleges are as shown in Table 2.2 & Table 2.3 below:

Table 2.2: Academic Year 2012-13, 2013-14

Category	Minimum Marks	Maximum Marks
General (Open)	45 %	No Limit
Reserved (OBC/SC/ST/SBC/NTVJ)	40 %	No Limit

Table 2.3: Academic Year 2014-15. 2015-16, 2016-17

Category	Minimum Marks	Maximum Marks
General (Open)	50 %	No Limit
Reserved (OBC/SC/ST/SBC/NTVJ)	45 %	No Limit

- For all categories, non-zero positive score is required in CET/JEE.
- The eligibility criteria for all the RTM Nagpur University affiliated colleges are identical.

The minimum and maximum marks for the admission at entry level for eachof the UG programmes offered by the institute and it's comparison withTulsiram Gaikwad Patil College of Engineering & Technology, Nagpur,affiliated to RTM Nagpur University is as shown in Table 2.4 below:

Table 2.4: Comparison of Minimum and Maximum Marks for admission – UG Courses

Year of Admission	UG Course	Minimum CET/JEE/Composite Marks of admitted students		Maximum CET/JEE/Composite Marks of admitted students	
		SCET	TGPCOE	SCET	TGPCOE
2013-14 (CET Marks)	MECH	09	5	84	66
	ELECTRICAL	37	30	86	59
	COMPUTER	36	22	87	67
	E&TC	40	7	75	59
	CIVIL	06	-	77	-
2014-15 (CET	MECH	08	4.27	99	56.24
	ELECTRICAL	15	11.06	80	64.17

Marks)	COMPUTER	15	8.06	95	70.62
	E&TC	24	9.33	91	45.36
	CIVIL	02	-	99	-
2015-16 (CET Marks)	MECH	01	18.71	95	68.48
	ELECTRICAL	01	4.07	96	60.23
	COMPUTER	09	13.59	85	71.85
	E&TC	57	4.93	89	58.92
	CIVIL	11	-	94	-
2016-17 (CET Marks)	MECH	18	2	68	112
	ELECTRICAL	23	3	73	87
	COMPUTER	16	14	77	91
	E&TC	41	12	92	80
	CIVIL	16	-	68	-

2.1.4 Is there a mechanism in the institution to review the admissionprocess and student profiles annually? If 'yes' what is the outcome of suchan effort and how has it contributed to the improvement of the process?

Ans:

The admission process is governed by the DTE and is not inthe control of the institution, the student profiles are analyzed every year afteradmission.

The institute collects detailed information about admitted student interms of the following:

- Number of students admitted against the sanctioned in-take
- Marks secured in qualifying examination (cut-off Marks)
- Gender representation
- Category to which the admitted students belongs to
- Academic background – place and name of the institute last studied
- Residential area of the admitted students

The Student admission profiles of the Institute as shown in Table 2.5 below:

Table 2.5: Details of admitted students

Categories	Year (16-17)		Year (15-16)		Year (14-15)		Year (13-14)	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**
SC	43	18	32	15	47	5	52	24
ST	5	1	5	1	8	2	13	1
OBC	115	22	81	35	130	28	140	46
General	67	8	60	14	46	2	44	8
Others (SBC/NT)	13	4	10	6	32	3	31	5

The details of admitted students are analyzed.

Outcome: This detail analysis helps to understand the market trend,willingness of aspirants towards specific programmes etc.

Contribution to Improvement:

Based upon this detailed analysis, the lacuna, if any, in the system ofadmission is identified and remedied. Suitable steps are taken by the instituteto intensify the publicity for the admission for such programmes in differentareas and strategies are framed to improve the admission number.

2.1.5 Reflecting on the strategies adopted to increase/improve access forfollowing categories of students, enumerate on how the admission policyof the institution and its student profiles demonstrate/reflect the Nationalcommitment to diversity and inclusion

* SC/ST

* OBC

* Women

* Differently abled

* Economically weaker sections

* Minority community

* Any other

Ans: The admission process is governed by Directorate of TechnicalEducation (DTE), Mumbai. The institute follows the rules, regulations andguidelines set up by DTE, Mumbai. The admissions of the students ofdifferent categories like SC/ST/OBC, Women, Differently abled,

Economicalweaker sections of societies are done as per thegovernment norms, rules & regulations and allotments.

SC/ST/OBC:

- Students belonging to the SC/ST/OBC categories are admitted as per the norms of the DTE.
- As per the government policy scholarships are provided.
- As per the government policy, the students are required to pay their fees after the deduction of their scholarship at the time of admission and the scholarship amount is reimbursed by the government approximately after 6 months to 15 months.

Women:

- As per DTE, 30 % seats are allocated to women.
- No distinction is made between men and women for admission to various programmes offered by the Institute.
- Various facilities are available for women like Women's Grievance Cell, activities for female student empowerment and separate common room for girls.

Economically Weaker Sections:

- The institute offers EBC Scholarship to the economically weaker students as per the government norms.
- The institute offers the Tuition Fee Waiver Scheme (TFWS) to the economically weak students.
- The institute provides information about other scholarships offered by Government and NGOs.
- The institute also provides information and support about educational loan facilities to such students.
- The institute provides installment facilities to pay the college fees to such students, if required.

Differently abled:

- The institute provides information about the special facilities, reservations and scholarships offered by government.

- The institute counsels physically challenged students and try to cater to the needs of such students.
- Subject teachers provide special attention to physically challenged students in the classes.
- Teacher guardian motivates such students, tries to create positive attitudes among themselves to face the challenges.

Minority Communities:

- The institute offers the benefits of Minority Scholarship to the admittedminority students.

Any Other:

- Students admitted under SBC, VJ/NT Quota are offered the benefits as per the DTE, Mumbai Guidelines.

The UG scholarship disbursement details of the institute for last five years are as shown in Table 2.6 below:

Table 2.6: Scholarships Disbursement

Sr. No.	Academic Session	Government Scholarship					
		SC	ST	NT/VJ	SBC	OBC	EBC
1	2013-2014	170	9	27	45	369	25
2	2014-2015	150	14	34	41	312	40
3	2015-2016	150	12	39	39	502	42
4	2016-2017	91	0	27	17	218	74

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

Ans: The applications and admission process is carried out by Directorate ofTechnical Education (DTE), Mumbai.

The details for various programmes offered by the Institution during the lastfour years are as shown in Table 2.7 below:

Table 2.7: Details of admitted students – UG Programmes

Sl. No.	UG Programmes	Year	Sanctioned Intake	No. of students admitted	Demand Ratio
1	Mechanical Engineering	2013-14	120	71	-
		2014-15	120	45	-
		2015-16	120	31	-
		2016-17	120	22	-
2	Electrical Engineering	2013-14	60	29	-
		2014-15	60	19	-
		2015-16	60	22	-
		2016-17	60	10	-
3	Computer Engineering	2013-14	60	22	-
		2014-15	60	20	-
		2015-16	60	41	-
		2016-17	60	20	-
4	Electronics & Telecommunication Engineering	2013-14	60	12	-
		2014-15	60	8	-
		2015-16	60	3	-
		2016-17	60	6	-
5	Civil Engineering	2013-14	60	42	-
		2014-15	60	28	-
		2015-16	60	35	-
		2016-17	60	23	-

The reasons for increase/decrease in the admissions are decided as follows:

- Depending upon the market trend and interest of aspirants in the concerned programmes.

- Employment scenario projected by government, industry and society surveys.

- Total number of seats available for admissions in the State.

Actions initiated for Improvement:

- The institute used to counsel the students and the parents to take admission in various programmes. The institute elaborates the importance and scope of Electronics Engineering and motivates students to take admission in Electronics Engineering.

- The institute has taken up an initiative "MANTHAN", to groom the students through group discussion, personal interview techniques and aptitude development which help them for their campus placement.

- The institute organizes communication workshop "PRAYAS" for students.

- The institute promotes the students for industrial training, internships and visits.

- The institute conducts value added trainings in consultation with Industries.

- The institute encourages students to take up Industry based projects.

- The institute conducts various technical training for students.

- The institute takes efforts for the placement of students.

- The institute does wide publicity through news papers and social media.

- Satisfaction level of students and parents helps in improvement in admission numbers.

2.2 Catering to Diverse Needs

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

The institution is very sensitive towards the needs of differently-abled students by providing them

- Wheel chairs , Walker

- Separate toilets are considered for them.

- Medical help

- Ramp

- Well -laid roads within the campus

- Help in the library and canteen

- Understanding and supportive staff members

- In case of extreme physical disability, class work is arranged in the ground floor to avoid physical movements.
- During examinations such students can be provided with writers as per University norms if necessary.
- The examinations are being conducted in the ground floor to avoid physical movement.

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

Ans:-

Yes. The institution assesses the students' needs in terms of knowledge and skills before the commencement of the program by the following:

1. **Awareness Programme:**

   For the student who is aspiring admission in B.E programme and their parents before the admission process commences, to explain the admission procedure and to create awareness in them on branch selection and also on college selection, depending on the facilities needed for students to study in the college they choose.

2. **Induction Day:**

   The institution organizes fresher's induction day (AARAMBH) in which the respective Heads of the Department and teachers interact with the students and assess their knowledge and interests. Parents also remain present on induction day.

3. **Bridge Courses:**

   The Bridge Courses conducted for the enrolled students before the commencement of regular first year teaching programme. It also help to assess the students. Special coaching classes are conducted for lateral entry students on communication skills and mathematics.

4. **Counseling Books:**

   Immediately after commencement of the programme, students' needs are assessed through a counseling process (by the class counselor) in terms of their performance in school, family background, and skills sets in co-curricular and extracurricular activities and recorded in the counseling books. The individual teachers extend one to one coaching to needy students during the initial part of each semester. Each teacher does this job in the first period and

accordingly spends initial few classes to revise the basics of the subject under foundation courses.

Details of Bridge courses/Programs conducted for current first year UG students

For example, Timetable for First Year Students

Table No. 2.8 Time Table of First Year Section-A

Suryodaya College of Engineering & Technology
B.E. 1st Semester-2015
Time Table
Section -A

W.E.F:- 29/07/2015

DAY/TIME	10.30-11.30	11.30-12.30	12.30-1.30	1.30-2.00	2.00-3.00	3.00-4.00	4.00-5.00
MONDAY	CHEM	EE	PHY	R	M-1	ED	
TUESDAY	EE	A1-PHY/A2-CHEM/A3-EE		E	PHY	COMP	
WEDNESDAY	CHEM	A1-CHEM/A2-CS/A3-PHY		C	PHY	ED	LIB
THURSDAY	BCE	A1-CS/A2-EE/A3-CHEM		E	M1	ED	
FRIDAY	BCE	A1-EE/A2-PHY/A3-CS		S	CHEM	M1	
SATURDAY	BCE	M1	EE	S	SPORTS		

SUBJECTS	NAME OF TEACHING FACULTY
MI-MATHEMATICS I	MS. POONAM THAKUR
APPLIED CHEMISTRY	MR. VIJAY NAGPURKAR
APPLIED PHYSICS	MS. SANGEETA ITANKAR
COMMUNICATION SKILL	MR. AMOL MUSALE
COMPUTATIONAL SKILL	MR. NAYAN HARGULE
ELECTRICAL ENGINEERING	MR. PRAVIN JANGALE
BASIC CIVIL ENGENEERING	MS. PRADHNYA WASNIK
ENGENEERING GRAPHICS-I	MR. ATUL YAWALKAR

Table No. 2.9: Time Table of First Year Section-B

Suryodaya College of Engineering & Technology
B.E. 1st Semester-2015
Time Table
Section -B

W.E.F:- 29/07/2015

DAY/TIME	10.30-11.30	11.30-12.30	12.30-1.30	1.30-2.00	2.00-3.00	3.00-4.00	4.00-5.00
MONDAY	EE	PHY	BCE	R	M-1	B1-CS/B2-EE/B3-CHEM	
TUESDAY	EE	CHEM	ED	E	M-1	B1-CHEM/B2-CS/B3-PHY	
WEDNESDAY	EE	BCE	PHY	C	M-1	B1-PHY/B2-CHEM/B3-EE	
THURSDAY	CHEM	ED		E	M-1	B1-EE/B2-PHY/B3-CS	
FRIDAY	PHY	CHEM	BCE	S	COMP		LIB
SATURDAY	M1	ED		S	SPORTS		

SUBJECTS	NAME OF TEACHING FACULTY
MI-MATHEMATICS I	MR.PUPESH POHANE
APPLIED CHEMISTRY	MR. VIJAY NAGPURKAR
APPLIED PHYSICS	MS. SANGEETA ITANKAR
COMMUNICATION SKILL	MR. AMOL MUSALE
COMPUTATIONAL SKILL	MR. NAYAN HARGULE
ELECTRICAL ENGINEERING	MR. ISHRAQUE AHMAD
BASIC CIVIL ENGENEERING	MR. SAGAR NIMKAR
ENGENEERING GRAPHICS-I	MR. ATUL YAWALKAR

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 programme of their choice? (Bridge/Remedial/Add-on/Enrichment Courses, etc.)

The strategies drawn and deployed by the institution are

- Bridge courses are conducted for lateral entry students.
- The institution conducts remedial classes for slow learners in different subjects to enhance their skills and competence.
- EESDP & Personality Development programmes are conducted to improve their personality and to motivate them for an innovative and creative mindset.
- Guest lectures, Industrial visits and Industry training are arranged to create awareness among student.
- Add-on courses are organized for advanced learners to enhance their learning abilities.
- Career counseling for students by Training and Placement department regularly.

2.2.4 How does the college sensitize its staff and students on issues of gender, Environment etc.?

The college sensitizes its staff and students on issues of gender and environment,

- By providing equal opportunities for both male and female faculty members
- By making available employment initiatives, training programmes and every other facility for both boys and girls.
- A women protection cell is formulated headed by one senior lady staff member, one lady faculty member from each department (if available).

This cell looks after the welfare of girl students and lady staff members.

- By providing Sanitary Napkins wending machine "HAPPY NARI" for girl students in common room increases women empowerment.
- The students also involve in social service activities like clean and green programme, plantation, health checkup camps, blood donation camps, street play on "Swachh Bharat Abhiyan" etc.

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

- Advanced learners are identified right from the beginning, from their score in the higher secondary examination, unit tests, model exam and first semester University examination performance.
- The college organizes various competitions such as technical symposium, entrepreneurship development programs **"TECH TRENDS"**, innovative project competitions, poster presentations and quiz competitions in which they actively participate.
- Offering special coaching for AUTOCAD, CRIO.
- Encouragement given to them to prepare for competitive examinations like UPSC, GATE, CAT, examination. Also form competitive exam cell under which UPSC foundation course is started in which 15 students enrolled. College has to be provided facility of examination preparation within the campus at central Library.

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.)?

Slow Learners:

- Result analysis is done after each and every test. Those students who are not able to perform well are given counseling and additional training through special coaching classes, wherein the class strength is kept small so that individual attention could be given.

- Slow learners and poor performers are identified in the beginning of the semester itself and they are called, counseled and given adequate guidance and hence drop outs are almost minimum. Classes are conducted on Saturdays and during 3 pm – 5 pm on weekdays for slow learners.

- Teacher guardians interact regularly with student 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 challenges, slow learners and economically weaker students.

- Parent teacher meetings also provide an insight about problems of weak students.

Physically Challenged

- Institute counsels physically challenged students. It tries to provide the solution to the particular demand of student which includes location, movement and any other special needs.

- Institute counsels about the special facilities, reservations and scholarships offered by government

Economically Weaker Section

- Institute provides information about government scholarship, educational loan facility from banks etc.

- Institute provides partial / full concession in fees to few deserving candidates.

- Institute also provides free accommodation, if required, for deserving economically backward students.

Disadvantaged sections of society

- Tuitions Fee Waiver Scheme (TFWS) is provided by Government of Maharashtra.
- SC/ST/OBC/EBC/minority students are given benefits of reservations in admission and scholarship as per government norms.

2.3 Teaching-Learning Process

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

Academic calendar:

- It is issued by the affiliated University – RTMN University and it is followed.
- Principal, Vice- Principal and the Heads of Department prepares the academic calendar of the institute which includes Assessment Schedule ,commencement of the classes for the students of Various semesters, Academic events, Annual function, Sports Schedule, Extracurricular activities, List of Holidays, Unit Tests, PUT etc.

Teaching plan:

- Teaching plan for each subject is prepared by the faculty concerned well in advance and adherence to the lesson plan is duly checked by respective HODs.
- HODs conduct a meeting with the faculty members before commencement of the semester and subject allocation is made.
- Class time tables are prepared and displayed in all notice boards. Every faculty member prepares a course file which contains lecture notes, schedule, assignments, old question papers, content beyond syllabus, unit wise question papers etc.
- Lab manuals are prepared and supplied to the students at the beginning of semester. Review meetings are arranged periodically to review coverage of syllabus. Depending upon necessity, time tables are changed and modified in order to complete syllabus within the stipulated time.
- Faculty use teaching aids like models, PPTs and charts wherever necessary.

Evaluation:

- Continuous assessment and evaluation is carried out.

- Internal assessment of theory subjects is based on PUT, Assignments and University Guidelines.

- Assignments are given and are evaluated.

- University conducts semester end exams in both theory and labs and arranges evaluation.

Evaluation Blue Print:

- Academic preparation is verified before the commencement of each semester by the internal audit committee.

- Shortcomings found are discussed with the concern departmental HOD and corrective measures are taken.

- Academic audit is also carried out before and at the end of each semester.

- In short the content delivery of the teaching learning process is shown in the following flow chart:

Figure 2.2:Content Delivery Laboratory Practical
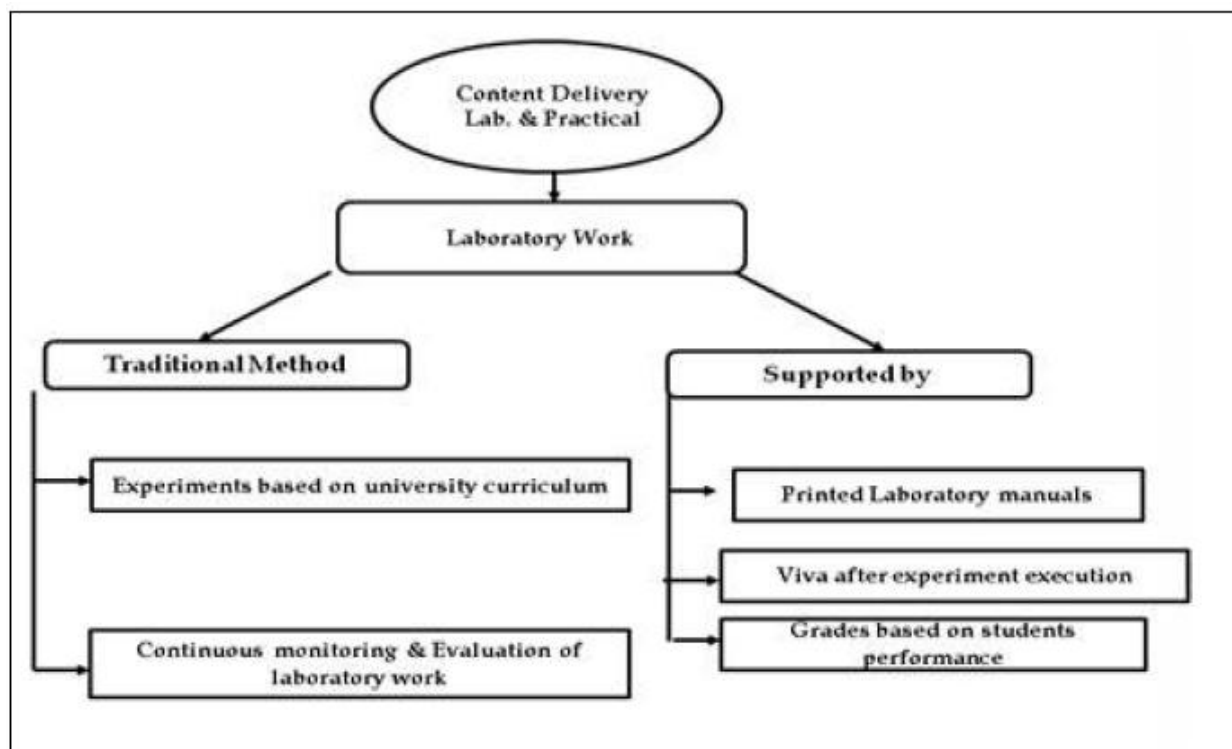
Figure 2.3:How does IQAC contribute to improve the teaching learning process?
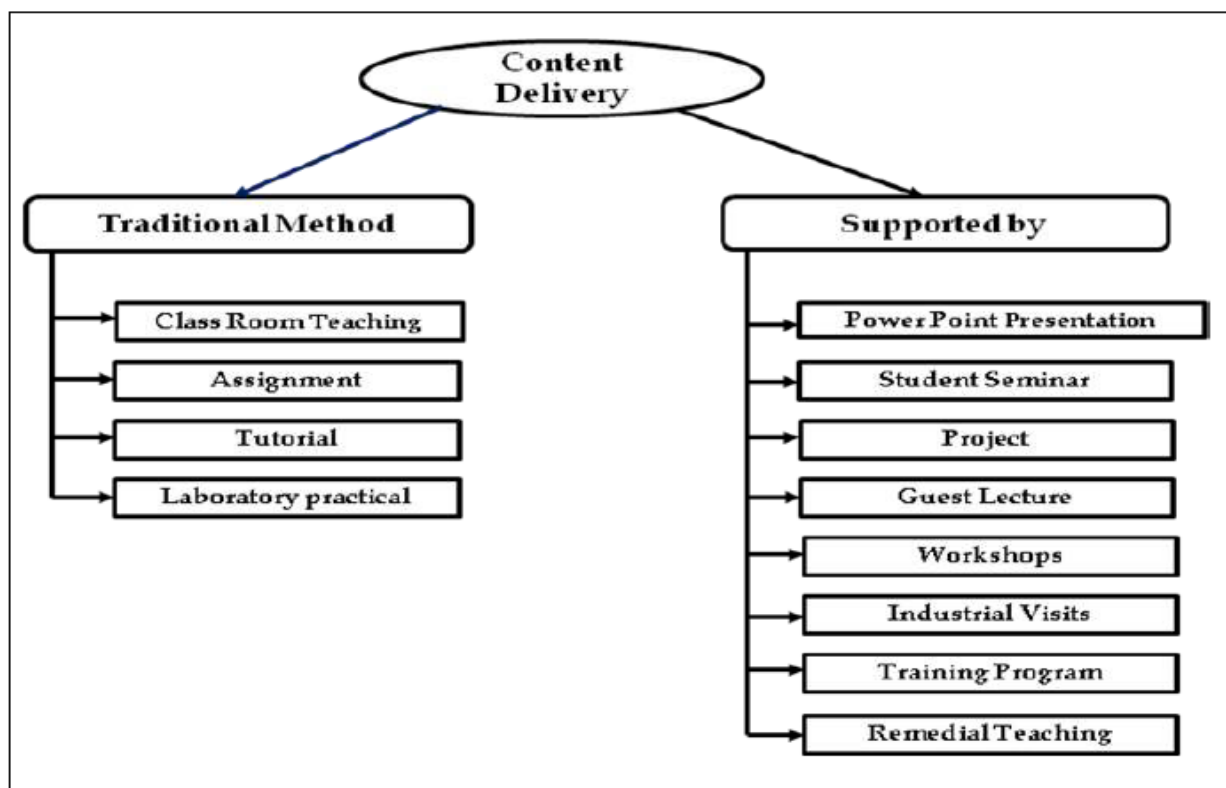
Ans:-Functions of IQAC

Internal Quality Assurance System: 6.5.1 Internal Quality Assurance Cell (IQAC)

Institute is having its Internal Quality Assurance Cell (IQAC). This Cell was established in the month of June , 2016 and functions on the basis of the guidelines set forth by NAAC & NBA. Even though officially IQAC is formed currently, all the processes / task related to IQAC is systematically handled by a group comprising of HODs, Principal and management representative. This group works towards improving and maintaining the quality of education, identifying and suggesting new ways of using teaching aids, developing suitable infrastructure and offering suggestions for the existing and any new courses. The Quality Policy of the Institute is as follows: "To achieve excellence in providing Quality Education through continuous improvement in all concerned processes and resources, for creating competent professionals with sound academic foundation and strong values."

Table No. 2.10:IQAC Committee

Sr. No	Category	Name	Designation
1	Principal	Dr. Santosh Chede	Chairman
2	Management	Mr. Ranjit Chafle, Secretary, NRDRS, Nagpur	
3		Mr. Abhshek Belkhede, Director, SCET, Nagpur	Director
4	Seven Senior Teachers	Prof. V G Parhate, Vice. Principal	Member
5		Prof. Ram Wayzode, HOD Mechanical	Member
6		Prof. Vijay Nagpurkar, HOD First Year	Member
7		Prof. Pratibha GHODe, HOD Computer	Member
8		Prof Asthashil Bhambulkar, HOD Civil	Member
9		Prof. Pravinkumar Jangale, HOD Electrical	Member
10		Prof. Sachin Mhalke, HOD Electronics & Telecommunication	Member
11	Administration	Mr. Manoj Guhe, Adminstrative Officer	Member
12	Local Society	Dr. Sanjay Raghatate, Director, Oxford Speakers Academy, Nagpur	Member
13	Industry	Shri. Jeevan Ghime, Hon. Secretary, Butibori MIDC Association	Member
14	Alumini	Mr. Shashank Tiwari, TCS	Member
15		Ms. Dipali Chaudhary, Infosys	Member
16	Student	Mr. Ajay Jangid	Member
17		Ms. Apurva Ambagade	Member
18	Invitee	Dr. Chandrashekhar Gillurkar	Invitee Member

The institutional policy with regard to quality assurance and the way it contributes in institutionalizing the quality assurance processes are as follows:

1. Preparation of academic plan and calendar.
2. Execution and monitoring of academic plan/activities.
3. Conducting internal assessment tests.
4. Collecting feedback from students and alumni.
5. Mentoring the students.
6. Organization of workshops, seminars on quality related themes.
7. Conducting activities for overall development of students as per need of industry and society .
8. Improvement through internal audit.

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 summary of student centric learning is as follows:-

Table No. 2.11 The summary of student centric learning

Teaching-Learning initiative process	Effective implementation of curriculum	As per RTM Nagpur University
	Comprehensive academic calendar	As per RTM Nagpur University
	Campus recruitment training	For Recruitment
	Industrial visits based on curriculum	Throughout the session
Student centric	Extra classes	For academically weaker student
	Transparency in evaluation process	All internal examination answer sheets are shown to the students
	Feedback to parents/ Parent teacher meet	Once in semester

- All academic and overall growth activities are students centric.

- Institute conducts Campus Recruitment Training for final year students.

- Institute arranges NPTEL lecture series for student, to make the subject easy to understand and direct access to the library recourses through OPAC for independent learning.

- Computers and laboratories are made available to students as per their requirement for carrying out the project work and mini projects.

- Lecture notes are distributed / discussed after each module is covered in the class.

- Institute conducts paper presentation contest, project competition and other technical events for all engineering students of the group.

- Students are also taken on long educational tours to different industries in India.

- Organizing alumni meetings for interaction with the students.

- Apart from central library, departments maintain department libraries to provide the students a source of knowledge to enable independent thinking.

- Wi-Fi Campus connectivity is available in the college to provide students quick access to knowledge sharing through internet.

- Student's centric notice board is provided at each department.

- Motivation to appear for qualifying examinations like GATE and GRE by independent learning.

2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?

- Continuous efforts are made by the faculty to nurture critical thinking among the students through various strategies.

- In addition to lecture metHOD, ICT tools are used to make space for experiential learning among the students.

- Project works are suitably integrated into the curriculum and the faculty encourage Peer Group work, group assignments and Group discussion for promoting qualitative learning process

- Guest lectures and seminars are organized in the college with eminent personalities in respective fields to enable the students to interact with them in the latest developments in the technology. This creates interest in the minds of students for further learning.
- Students are encouraged to gain knowledge in interdisciplinary subjects through selection of open electives, seminars and discussions with experts.
- To have critical thinking process of students, various group discussions, debates and seminars are organized in which students explore new ideas.
- Bind 'C' competitions, Bridge competition, transformers making and Poster Making competition are organized to develop creativity and critical thinking among the students.

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, E-Learning resources etc.

- The Faculty uses software packages and animation tools while teaching.
- Also, more E-learning facilities are provided in the digital library for the benefit of the faculty members.
- The college has well stocked automated library with online public access catalogue (OPAC)
- OPAC also serves as quasi-federated search engine for data bases.
- NPTEL video courses are also used by faculty members.
- Institute has subscribed for E-journals and has a good collection of E-books and is having ISTE membership.
- DELNET Developing Library Network.

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

- Advanced knowledge imparted to the students through value added programmes on current developments in the respective fields and guest lectures by industrial experts.
- Students guided in organizing technical seminars on advanced topics and encouraged to refer articles published in reputed journals and prepare papers and present them in seminars conducted by other reputed institutions
- Faculties are encouraged to participate in short term training programmes, Faculty development programmes and workshops to enhance their knowledge.
- Faculty and students are encouraged to participate /present papers at different levels of seminars/conferences.
- The departments conduct different competitions like poster presentation, paper presentation etc., under departmental association for the benefit of the students.
- Industrial visits are arranged to expose the students on advanced machineries, equipment, processes and technology practiced in the industries.
- Institute has the student's forum in each department which organizes the events to expose the students for advanced level of technology.

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

- The college has in place several support systems for guidance to the students.
- Each class is assigned a class in-charge who keeps track of the academic progress of the students form the first year to the final year from attendance to the overall grades obtained. Similarly, a set of 20 students is assigned under the Teacher Guardian as a mentee student. The following are the

Responsibilities of Teacher Guardian

- Maintenance of academic performance record of each mentee and apprising the parent / guardian of the academic progress of the student after every assessment.
- Ensure the regularity of the student.

- Keep track of the co-curricular and extra-curricular activities of the student.

- Identify personal issues of the student if any, that might interfere with the academic life of the student and resolve the same with the help of external counselor if needed.

- Coordinate with the class in-charge and the HOD to ensure the progress of the student in the right direction.

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

- In order to impart more innovative approaches in the teaching-learning process , the institution motivates all the faculty members to attend FDPs and Training programs, National and International Seminars, Conferences/Workshops organized by reputed Institutions Faculty members are also encouragedto attend industrial training.

- NPTEL, Simulations, Virtual Labs, PPTs and Charts are extensively used to augment conventional black board teaching. Working prototype models are also shown in the class rooms. Role plays, simulation studies, field visits, surveys and demonstrations are also incorporated in teaching metHODology.

- Apart from classroom interactions, the students undergo in-plant training, visit industries, present papers, carry out in-house projects, and take up paper publication etc., and faculty give them guidance in all such activities so that the class room learning is effectively and innovatively supplemented.

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

- The College has a well equipped central library with necessary text and reference books, periodicals, journals and e-resources in all the subjects related to engineering, technology, science and humanities.

- Apart from the central library, every department has a separate library with adequate collection of text and reference books and journals.

- Audio Visual lab of library is utilized by the students for video lectures (NPTEL) ,OPAC and there is also a separate space for research scholars.

- Book bank facility is also provides to student in library.
- Document Xerox, scanning, printing facility provides in central library.

Table No. 2.12: Central library.

Library holdings	2013-14	2014-15	2015-16	2016-17
	Numbers			
Text books & Reference books	Book 2090 Amt. 6,51,064	Book 1343 Amt 3,57,395	Book 1598 Amt 5,14,288	Book 666 Amt 1,70,477
Journals/periodicals	-	National -33 Amt 53,970	National -33 Amt 53,551 International - 17 Amt- 56,100	National -37 Amt. 54,835 International – 17 Amt. 56,100
E-recourses	-	-	-	-
CD of different subjects	153	97	69	32

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. Although the affiliating University prescribes the first and the last working day for a semester, the college has the autonomy to plan the number of working days per semester. The college plans its academic calendar wellhead of time and ensures that there is sufficient number of working days to cover the syllabus and to carry out the evaluation process.
- The number of working days per semester is always over and above the days stipulated by the University to include the extra improvement classes for the slow learners and model examinations for the lab and theory courses.
- Teachers keep a record of the effective utilization of the teaching hours and the process is regularly monitored by the HODs and also by the Principal.
- Hence the institution has not faced any challenge in completing the curriculum on time.

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

- At the end of each semester institute gets the subject and teacher wise feedback from students.

- The feedback is given for each faculty and wherever necessary counseling is done by HOD, Principal for improvement purpose.

- The management also receives feedback by means of interaction with a selected group of students from each class and conveys necessary guide lines to the Principal and concerned HOD.

- HOD monitors closely the effectiveness of teaching in class room and at laboratory.

- Principal gives the surprise visit to class room during the lecture hour and observe the teaching effectiveness.

- The internal assessment report is evaluated by HOD and corrective actions are taken wherever necessary.

- Internal audit is also conducted by IQAC members to assess the ability of teachers in teaching and their preparation.

- Arranging self appraisal sessions for all the teachers based on many criteria such as results produced and innovative teaching met HODs adapted etc.

- Again the outcomes of these points are taken to the HOD's meeting wherein the remedial measures wherever needed, including the training needed for teachers to improve the subject knowledge and quality of teaching are discussed and finalized.

2.4 Teacher Quality

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

- The recruitment is based on merit in terms of qualification, experience and attitude. The applications received are scrutinized by the Principal and HODs and short-listed. The short-listed candidates are called for an interview. A selection committee comprises of the Chairperson of the institution, the Principal, concerned HOD and external experts. For UGC approval as per roster, Interview panel is arranged by University.

- Retention is enabled through conducive HR policies such as sixth pay, other allowances, appraisal based increments and promotions.
- Teacher –student ratio of about 1: 15 is maintained as per AICTE norms.

Table No. 2.13:Faculty Data as per AICTE.

	M	F	M	F	M	F	
Permanent (Approved Teachers)							
Ph.D	01	-	-	-	-	-	01
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	22	15	37
Temporary (Adhoc Teachers)							
Ph.D	-	-	-	-	-	-	-
PG	-	-	-	-	43	16	59
Part Time Teachers							
Ph.D	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-

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

- The college encourages teachers to participate in orientation and refresher courses, workshops, seminars at state, national and international levels to learn and teach particularly new programs in emerging areas.
- Management supports teachers who take up higher studies and improve their qualification.
- Senior faculty members are recruited who are at the level of mentoring junior faculty in subject preparation and teaching metHODologies.
- Necessary books and journals in thrust areas are identified, procured and made available in the library on request from the teachers.
- Training programs on usage of IT related softwares are organized.
- Adjunct faculty members are invited to give guest lectures on specific topics.

2.4.3 Provide details on staff development programmes during the last four years. Elaborate the strategies adopted by the institution in enhancing the teacher quality.

Institution is aimed at enhancing research and teaching capabilities of faculty and encouraged faculty to attend and designed special courses for knowledge enhancement. The programme curriculam enables the participants to develop competence in understanding recent advances in technological advancements, to learn to improve pedagogies and to better presentation skill to become an effective faculty.

Table No. 2.14: faculty development program data

Academic Staff development Program	Number of Faculty Nominated			
	2013-14	2014-15	2015-16	2016-17
Refresh Courses	-	-	-	-
HRD Program	-	-	-	-
Orientation Programmes	-	-	-	-
Staff training conducted by University	01	02	06	01
Staff training conducted by Other Institutions	-	-	**02**	-

Table No. 2.15: faculty development program data

Sr.No	Name Of Program	Name of Guest	Year
1	Faculty development on Physics	Dr. R V Kshirsagar (Priyadarshani College of engineering Nagpur)	2013
2	Power System Reliability & Security	Dr. HariKumar Naidu, Dr. S Chandekar(SCET Nagpur), Prof Pravin Jangle(SCET Nagpur)	2014
3	Control System Engineering	Dr. HariKumar Naidu, Dr. S Chandrashekhar, Prof Pravin Jangle (SCET Nagpur)	2015
4	Effective Teaching	Dr. Nanoti (Priyadarshani Collage of engineering Nagpur)	2015
5	Teacher inYou	Dr. Sanjay Raghtate	2016
6	Teacher inYou	Dr. Sanjay Raghtate	2016

Strategies adopted by the Institution in enhancing the teacher quality:

- The institute promotes Faculty members for pursuing higher education and Ph.D.

- The institute encourages Faculty members to do research work and promotes to participate/present and to publish papers in National and International journals.

- The institute organizes expert/guest lectures, workshops, seminars, STTP, faculty development programs etc. for the Faculty members.

- The institute deputes Faculty members to attend workshops, seminars, STTP, faculty development programs etc. organized by reputed institutes.

- The institute provides duty leaves to faculty members if invited as resource persons

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?

- On the Induction Day, the first year students are made aware of the evaluation processes.

- The university allots 80% marks for the end semester exams and 20% internal marks. The internal marks are based on the PUT, assignments and attendance percentage. Internal marks and attendance are periodically communicated to the parents.

- The overall evaluation process is that prescribed by the affiliating Nagpur University. The ratio of formative internal assessment to the summative assessment is 20:80. Two sets of internal assessment marks have to submit on line to the University at an interval of one month through the semester.

- After valuation, the students are informed about the detailed scheme of valuation while receiving the answer scripts ensuring transparency. The marks are also displayed in the department notice boards along with an accolade chart. The marks obtained by their wards are communicated to the parents through the Academic Performance record.

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?

Reforms introduced by the University:

The college has adopted evaluation system based on RTMN University pattern. viz.

- Syllabus up gradation 2015-16.

- Online evaluation process introduced.

- Internal test papers carry questions similar to University examination.

- Internal assessment is awarded to the students as per the University criteria.

- Student centric learning through assignments, projects, seminars and practical sessions.

- The University has adopted major reform in evaluation by introducing grading system from the academic year 2012-13 and the institute has adopted the same.

- College has adopted new system of evaluation of projects where a team of faculties in each department is assigned the task of monitoring and evaluation of the work.

- Every batch of student should present the progress of the project at month end and marks are assigned to each presentation.

- Due weightage is given to these marks in the final calculation of term work and internal marks.

- New syllabus Credit Based System (CBS) has been introduced by the University and it is successfully implemented in the institution.

- Up-gradation and establishment of new laboratories are the hallmark of the institution.

- The major evolutionary reforms of the University are as follows.

- University has introduced credit based system.

- Online valuation is introduced.

- Syllabus up gradation for 2015-16 was carried out.

- Special task force as per the provision made in Maharashtra University Act.

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?**

- Any reforms or changes brought out by the university are available on the website of the university and they are also informed to the college through circulars.

- At the beginning of semester the intended activity is informed to all the teachers.

- At regular intervals the implementation is ensured by the Principal in meetings with Heads of Department.

- In addition to that student's feedback is also considered to review the effective implementation.Faculty engaged in university evaluation, guides the other faculty members of institute.

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

College has its own internal evaluation process based on University Curriculum and scheme.

- Unit tests, PUT,Assignments are conducted per semester.

- Viva-voce examination is conducted.

- Due credit is given for regular attendance.

- Assessment by teachers is displayed on notice board.

- Credit is also awarded to extracurricular activities and sports.

- Aptitude classes are conducted.

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(weight age for behavioral aspects, independent learning, communication skills etc.

- The progress of the students is monitored regularly through class tests, assignments, question sessions and viva-voce.

- The students are evaluated through internal tests. After evaluation, the report is sent to Head of the institution.

- The parents are informed about their ward's performance through letters. For weaker students, the parents are called and counseled to take care of their wards.

- The class teacher regularly monitors the progress of the students in terms of – attendance, marks, learning capability etc.

- The weightage is given for behavioral aspects, independent learning and communication skill about the students performance.

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

Graduate Attributes:-

All graduates of any higher education programs are expected to have identified technical/ functional, generic and managerial competencies. The Graduate Attributes of Engineering Programs are identified as follows

Engineering knowledge:

- Apply the 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, engineering sciences.

Design/development of solutions:-

- Design solutions for complex engineering problems and design system components or process that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

Conduct investigations of complex problems:-

- Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

Modern tool usage:-

- Create, select, and apply appropriate techniques, resources, and modern engineering tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

The engineer and society:-

- Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

Environment and sustainability:-

- Understand the impact of the professional engineering solutions in social and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Ethics:-

- Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Individual and team work:-

- Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary 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 the 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. Institution ensures the attainment of 12 numbers of graduate attributes specified above through effective teaching learning and evaluation system. Engineering knowledge is given by way of regular teaching. Problem analysis skills are developed through numerical, practical problems and some case studies. Design and development of solution is understood through various design subjects and their applications. Modern tools and software are taught through the curriculum and also through various skills enhancement programmes.

Lectures on ethical, professional practices, impact of solutions on society and environment are arranged. Students are given opportunity to work individually for programs such as posters and paper presentations, seminars and other assignments which also helps them to become lifelong learners. Oral and written communication is developed through presentations and writing seminars

and project reports. Students are given project work which helps them to learn project management, finance and lifelong learning skills.

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

At College Level:

The internal evaluation is majorly focused on student's attendance and their marks in sessional and pre-University examinations. The mechanism for redressal of grievance with reference to internal evaluation is as follows:

- Class teacher displays the attendance report on notice board at the end of every month and students having any discrepancy gets corrected by approaching concerned class teacher with due permission from head of the department. Students who have taken prior permissions for leaves from head of the department or genuine student with medical reasons are generally considered up to the permissible level.

- Faculty members evaluate the answer sheets of sessional and pre- University examinations and the evaluated answer sheets are shown to the students. Students grievances related to the evaluation are addressed by the concerned faculty.

- In each department, the final internal assessment marks of the students are displayed on the notice boards. Class teachers and head of the department address the queries of students, if any.

At University Level:

The University level grievances of the students are directed throughstudent section.

- Students can apply for photocopy of evaluated answer sheets. TheUniversity provides photocopy of the evaluated answer sheets regardingany grievances with reference to evaluation.

- The student is entitled to apply for challenge to valuation in theorysubjects by applying and paying prescribed fee to the University. Thechallenge forms of the students are directed to the University throughstudent section.

2.6 Student performance and Learning Outcomes

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

Yes. The college has clearly stated learning outcomes.

- The Program Outcomes as stated in Washington Accord (Graduate Attributes are referred to as Program Outcomes by Washington Accord)

- Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the conceptualization of engineering models.

- Identify, formulate, research literature and solve complex engineering problems reaching substantiated conclusions using first principles of mathematics and engineering sciences.

- Design solutions for complex engineering problems and design systems, 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 including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.

- Create, select and apply appropriate techniques, resources, and modern engineering tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

- Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.

- 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.

- Demonstrate understanding of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering practice.

- Understand and commit to professional ethics and responsibilities and norms of engineering practice.

- Understand the impact of engineering solutions in a societal context and demonstrate knowledge of and need for sustainable development.

- Demonstrate a knowledge and understanding of management and business practices, such as risk and change management, and understand their limitations.

- Recognize the need for, and have the ability to engage in independent and life-long learning.

- There is particular emphasis on Complex Engineering Problems and Complex Engineering Activities. These are characterized, as per Washington Accord, as

- Complex Engineering Problems

- Involve wide-ranging or conflicting technical, engineering and other issues

- Have no obvious solution and require abstract thinking, originality in analysis to formulate suitable models

- Requires in-depth knowledge that allows a fundamentals-based first principles analytical approach

- Involve infrequently encountered issues

- Are outside problems encompassed by standards and codes of practice for professional

- engineering

- Involve diverse groups of stakeholders with widely varying needs

- Have significant consequences in a range of contexts

- Are high level problems possibly including many component parts or sub-problems.

Complex Engineering Activities

- Can Involve the use of diverse resources (and for this purpose resources includes people, money, equipment, materials, information and technologies)

- Require resolution of significant problems arising from interactions between wide-ranging or conflicting technical, engineering or other issues,Involve creative use of knowledge of engineering principles in novel ways.

- Have significant consequences in a range of contextsExtend beyond previous experiences by applying principles-based approaches.

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

Ans:

- Weightage for various components are decided in the course committee meetings and scheme of evaluation is prepared for unit tests/ midterm and end semester evaluation.
- These are done with a view to ensure uniform evaluation of all the students taking the same course.
- The department monitors the performance of the students through continuous evaluation method.
- The continuous evaluation comprises of unit tests, midterm exam, end term exam, assignments, tutorials, lab exams and a final examination at the end of the semester. Progress reports of student's performance in each unit test sent to their parents.
- Induction programme and counseling is arranged by the first year department for the students.
- In the beginning of each semester students are communicated about their last year performance which gives them an input for improvement.

Result analysis for various departments is as follows:

1) Department of of Civil. Engineering

Table No. 2.16: Result analysis

Academic Year	3rd Sem	4th Sem	5th Sem	6th Sem	7th Sem	8th Sem
2012-13	22.85%	38.88%	93.75%	58.82%	-	-
2013-14	29.58%	46.27%	68.50%	56.25%	81.25%	93.75%
2014-15	32.58%	53.52%	42.13%	29.41%	96.5%	93.33%
2015-16	65%	77.77%	48.14%	81.63%	92%	96.15%
2016-17	56.52%	-	48.65%	-	64.52%	-

2) Department of Electronics & Telecommunication Engineering

Table No. 2.17: Result analysis

Academic Year	3rd Sem	4th Sem	5th Sem	6th Sem	7th Sem	8th Sem
2012-13	36%	20%%	75%	95%	-	-
2013-14	4.76%	38.88%	28%	37.50%	83.33%	100%
2014-15	25%	40.90%	46.15%	75%	75%	72.72%
2015-16	0.00%	15.38%	47.05%	56.25%	70.00%	80%
2016-17	11.11%	-	18%	-	79%	-

3) Department of Electrical Engineering

Table No. 2.18:Result analysis

Academic Year	3rd Sem	4th Sem	5th Sem	6th Sem	7th Sem	8th Sem
2012-13	20%	30.76%	77.77%	66.66%	-	-
2013-14	5.97%	15.94%	28.94%	28.20%	11.76%	88.23%
2014-15	41.25%	24.61%	35.41%	18.75%	20.83%	79.16%
2015-16	33.33%	48.14%	30.30%	37.87%	27.27%	68.75%
2016-17	22.85%	-	64.28%	-	31.74%	-

4) Department of Computer Engineering

Table No. 2.19: Result analysis

Academic Year	3rd Sem	4th Sem	5th Sem	6th Sem	7th Sem	8th Sem
2012-13	27.27%	27.27%	83.33%	66.67%	-	-
2013-14	31.58%	25%	77.78%	77.78%	66.67%	100%
2014-15	38.10%	33.33%	42.86%	53.33%	81.82%	45.45%
2015-16	65.52%	50%	51.14%	57.14%	75%	91.66%
2016-17	42.22%	-	51.72%	-	84.62%	-

5) **Department of Mechanical Engineering**

Table No. 2.20: Result analysis

Academic Year	3rd Sem	4th Sem	5th Sem	6th Sem	7th Sem	8th Sem
2012-13	12.70%	17.21%	54.76%	56.78%	-	-
2013-14	18.97%	31.00%	40.54%	52.77%	58.82%	100%
2014-15	22.95%	48.48%	37.82%	54.28%	48%	97%
2015-16	15%	26.45%	37%	41%	51.55%	81%
2016-17	15.38	-	42.10%	-	54.3%	-

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

Ans:

The faculties are made aware of the learning outcomes of the course they are handling and these outcomes are mentioned in their course file. Student knows the outcomes during the interaction with the faculty.

Teaching Strategies:

- Keeping the University instructions in view, lecture, tutorial and lab hours are planned.
- Time tables are prepared allocating enough hours to various theory, labs and placement training/Library/Sports activities.
- Special focus is maintained on application part of the subject.

Learning Strategies:

- Tutorials are conducted regularly in important subjects.
- Assignments are given in all important subjects.
- Seminars are arranged by the students.

- The achievements of learning outcomes are measured through various indicators like pass percentage, placement record etc.

- Through department associations, paper presentations, technical quizzes etc., are conducted.

- E- Learning material and video courses are made available in the central library.

- Pre-placement training is also made as a part of regular academic schedule.

Assessment Strategies:
- Performance evaluation through internal and external exams in both theory and labs.

- Performance evaluation by conducting tests, assignments, attendance and viva-voce.

- Performance evaluation in project work, seminars etc. During department meetings, outcomes are discussed and necessary remedial actions are taken to achieve targeted outcomes

2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (quality Jobs, entrepreneurship, innovation and research aptitude) of the courses offered?

Ans:
- Institute organizes workshops and training programs in emerging fields so that students gain knowledge relevant to industry.

- Students are trained on soft skills and other necessary areas for campus selection and also for succeeding in industry.

- Every year lectures/workshops are conducted on entrepreneurship development.

- Awareness programme for students about Job opportunities are carried out regularly.

- Students are provided pre-placement training at pre and final year of the course to secure jobs in industry.

- Training in English communication and quantitative aptitude skills is provided.

- Seminars are conducted to improve student's presentation skills.

- Conducting competitions to make students present their innovative ideas.

- Encouragement is assured by management by way of providing financial assistance for handling innovative projects.

- Entrepreneurship Development Cell (EDC).

2.6.5 How does the institution collect and analyze data on student learningoutcomes and use it for planning and overcoming barriers of learning?

Ans:

- Institute collects and analyzes data on student performance and learning outcomes.
- Institute collects the data about learning outcomes from students, alumni, employers and industries through Students feedback, graduate exit survey, Alumni Survey and Employer Survey.
- Student performance is evaluated on basis of their performance in academics, extra and co curricular activities.
- It analyses the same and discusses with faculty. The faculty uses the same for planning and overcoming the barriers of learning.
- All evaluation data is quantified, averaged for different parameters of the learning outcomes and then graded whether outcome is achieved, partially achieved, not achieved. Level of achievement is also quantified.
- Besides an Elegance and language lab, Institute promotes implementation of live projects and thus institute uses it for planning and overcoming barriers of learning in poor writing skill and ideas.

2.6.6 How does the institution monitor and ensure the achievement oflearning outcomes.

Ans:

The institute monitors the outcomes through:

- Class monitoring committees.
- System of continuous evaluation in both theory and lab subjects.
- Analysis of performance in theory and lab exams.
- Achievements of students in extracurricular activities.
- Tests and University examinations.
- Assignment and extension of experiments, Monitoring attendance ofstudents, Periodic students feedback.
- By monitoring participation and achievement of students in co-curricular activities.

- By identifying the slow learners and fulfilling their specific needs.

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.

Ans:

Yes. The Institute and individual teachers use assessment/evaluation outcomes as an indicator for evaluating student performance and achievement learning objectives.

The faculties are aware of the objectives and outcomes:-

- Individual teachers regularly assess the performance of students by assignments, internal tests, seminars etc. They use the outcomes of these to pickup weak students and put remedial classes in case of necessity.

- E-learning material is provided and video classes are arranged for comprehensive understanding of the subject.

- Remedial classes were conducted for the subject Power Electronics by Prof. Pravin Jangle, Department of Electrical Engineering. Also important topics like SCR and its characteristics, static controllable switches, line commutated converters, single phase and three phase half controlled converters, DC choppers and single phase and three phase bridge inverters were taught.

- The college takes feedback every year from outgoing students, alumni in detail and analyzes performance of the students at the end of University end examinations. Based on these, the management takes necessary steps to achieve learning objectives as below:

- Arrangement of guest lectures by reputed professionals.

- Arrangement of Industrial tours.

- Arrangement of necessary infrastructure in the departments.

- Procurement of latest books for library every year.

- Arrangement of special classes for communication skill development.

- Arrangement of Training Programmes for placement drives.

Any other relevant information regarding Teaching-Learning and Evaluation which the college would like to include.

- The college implements all the policies related to teaching-learning process.

- Evaluation process is done as per the guide lines of the University.

- Institute has developed Teacher Guardian scheme to monitor the teaching learning process and mentoring students in small group by mentor faculty.

- Bridge course, class-room seminar, conduct of association activities are scheduled to expose the students to better learning.

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?

Ans:-

➤ We have Suryodaya Academy of Research & Advanced learning (SARAL) centre where research activites as well as an advanced Training are carried out and monitor research &development activities in the institute.

➤ It is not a recognized center for R & D by affiliating University. Thecondition for the recognized research center of affiliating University isthat, the institute must have permanent affiliation, which the institutegets after completion of 10 years (Not Eligible).

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 which have been implemented and its impact.

Ans:-Yes, the SARAL centre research committee members are mentioned below. Students and faculty members are having many innovative ideas and hence always they are in need of appropriate guidance, facilities and encouragement. So it is necessary to have a research platform in the institture to address various research oriented issues like funding, expertise from Industry especially for multidisciplinary research areas and also issues related to research to society problems.

Table 3.1:"SARAL" Committee Members

	Research Committee	
Sr.No	**Name & Current Designation**	**Designation**
1.	Dr. S. D. Chede, Principal	Chairman
2.	Prof. V. G. Parhate	Member
3.	Prof. R. R. Wayzode	Member
4.	Prof. V. Nagpurkar	Member
5.	Prof. A. Bhambhulkar	Member
6.	Prof. P. Jangale	Member
7.	Prof. Pratibha Ghode	Member

Few of the recommendations of the committee which are as follows:

- Establishment of research wing under the administrative control of Chairman was recommended.
- Motivating staff to do research and enroll for PhD to upgrade their qualification.
- Starting e-journal for the institute to expand knowledge base.
- Faculties and students must do innovative projects which are relevant to the society.
- To setup Incubation facility for expanding research.
- The Institute must sponsor students for National /International level technical event, workshops. Also faculty members must be encouraged to attend for FDP, STTPs and innovative seminars.
- Institute must organize state level seminars & paper presentation events for the faculties and students.
- Institution must give recognition by instituting innovation awards for UG students in the area of project development.

The number of research publications by faculty members, which are as follows:

Table 3.2: Department wise Publications

Sr. No.	Name of Department	No. of paper published in journals	No. of paper published in National conferences	No. of paper published in International conferences	Total
1	General Engineering	08	--	03	11
2	Mechanical Engineering	21	08	02	31
3	Electrical Engineering	06	01	09	16
4	Civil Engineering	15	7	0	22
5	Computer Engineering	25	17	04	46
6	Electronics & Telecommunication Engineering	31	7	32	70

Following is the list of faculty members registered for Ph.D. in various reputed universities is as follow:

Table 3.3: Faculty Members Registered for Ph.D.

Sr. No.	Name of Faculty	Name of Department	Name of University
1	Prof. V. G. Parhate	Mechanical Engg.	RTM Nagpur University
2	Prof. Vijay Nagpurkar	General Engg. (Chemistry)	RTM Nagpur University
3	Prof. Sangita Itankar	General Engg. (Physics)	RTM Nagpur University
4	Prof. A. Bhambulkar	Civil Engg.	Sant Gadge Baba Amravati University
5	Prof. Rasika Manapure	Electronics & Telecommunication	RTM Nagpur University
6	Prof. Amol Musale	General Engg. (English)	RTM Nagpur University

Faculty members who have recently cleared the Ph.D. aptitude test conducted by various recognized Universities are as follows:

Table 3.4:Faculty Members who cleared the Ph.D. Test

Sr. No.	Name of Faculty	Name of Department	Name of University
1	Prof. Ram Wayzode	Mechanical Engg.	RTM Nagpur University
2	Prof. Ketan Tonpe	Mechanical Engg.	Symbiosis University
3	Prof. M.S. Baseshankar	Mechanical Engg.	RTM Nagpur University ,Gondwana University
4	Prof. M. N. Gajbhiye	Mechanical Engg.	Gondwana University
5	Prof. Rupesh Pohane	General Engg. (Mathematics)	RTM Nagpur University
6	Prof. P. Morey	Civil Engg.	RTM Nagpur University
7	Prof. Pravin Jangle	Electrical Engg.	RTM Nagpur University

Faculty members who are recognized as Ph.D. Supervisors are as follows:

Table 3.5 :Faculty Recognized as Ph.D. Supervisor

Sr. No.	Name of Faculty	Name of Department	Name of University
1	Dr. S. D. Chede	Electronics & telecommunication	RTM Nagpur University

National level seminars and paper presentation events organized in Tech-Trends 2016 (Technical research paper competition) are as follows:

Table 3.6: Technical Paper presentation Competition – Techtrends

Sr. No.	Name of Department	No. of papers presented			
		2013-14	2014-15	2015-16	2016-17
1	General Engineering	08	12	08	07
2	Mechanical Engineering	06	07	17	35
3	Electrical Engineering	10	16	100	22
4	Civil Engineering	10	08	14	24
5	Computer Engineering	06	08	09	12
6	Electronics & Telecommunication Engineering	05	05	05	06

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 investigatorTimely availability or release of resourcesAdequate infrastructure and human resourcesTime-off, reduced teaching load, special leave etc. to teachersSupport in terms of technology and information needsFacilitate timely auditing and submission of utilization certificate to the funding authoritiesany other

Ans:-Each and every Faculty of an Institution is encouraged to carry out research and write a funding proposal to various agencies like AICTE/DTE/ University and trasperent polices are framed for smooth progress and implementation of research schemes.This includes:

 Autonomy to the principal investigator/coordinator:
- The Institute provides complete freedom for research.
- The Principal Investigator (PI) has total autonomy to demand for latest equipment machines, related references & consumables as per the requirement of the project.

- Required guidance and support is provided to complete the research project within the stipulated time.

Timely availability or release of resources:
- Timely Financial assistance will be given to the faculty for publication of papers in Journals, Conferences and the funds also will be released timely.

Adequate infrastructure and human resources:
- The Institute has adequate laboratory facilities with necessary computers, softwares and internet facilities with modern equipments to carryout research projects.
- Central library having online facilities like DELNET.
- PhD faculties are actively involved in research activities due to adequate infrastructure.

Time-off, reduced teaching load, special leave etc. to teachers
- The time-off facility is available to the faculties for their researchwork.
- Also the work-load of the faculty are adjusted to meet research project demands.
- Special leave is given felicitate research.

Support in terms of technology and information needs:
- Institute has advanced technological equipments and softwares according to the latest technological trends /thrust areas.
- Institute has membership of DELNET library network providing access to information needs of the staff/students.
- The institute has computer centers having Internet connectivity and Wi-Fi facility.

Felicitate timely auditing and submission of utilization certificate to the funding authorities:
- For any funded project there will be provision for auditing and submission of utilization certificates after the verification by Charted Accountant (CA) to the funding authorities.

Any other:

- The Institute encourages faculties for Interdisciplinary research work of various domains for research projects.
- Interdisciplinary seminars, guest lectures, workshops and conferences by eminent academicians and industrialist, are organized under Industry Institute Partnership Cell (IIPC) and Entrepreneur Development Cell (EDC) at regular intervals to attract world class researchers.

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

Ans:-

Inculcating research in the mind of students is the main motive of the institute. The various efforts are made by the institution in developing scientific temper and research culture and aptitude among students is as follows:-

- Established research committee to promote scientific temper and creating research culture in the campus.
- Organized industrial visits for the students to create an awareness and interaction with industry to enable them to carry out novel project works.
- Students are encouraged to participate in technical paper presentations and project competitions to develop novel ideas.
- Technical paper presentation & project competition are organized at Institute level & best students are awarded with prizes.
- Institutes regularly conduct seminars, guest lectures, workshops, conferences, technical symposia and technical training for developing scientific temper.
- Innovative Project ideas are developed and nessarey support for completion of project work is taken from expert.

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.

Ans: - Details of the faculty involvement in active research are as follows:

Table 3.7 :Faculty Recognized as Ph.D. Supervisor

Sr. No.	Name of Faculty	Name of Department	Name of University
1	Dr. S. D. Chede	Electronics & Telecommunication	RTM Nagpur University& SGB Amravati Unversity.

Following is the number of Ph.D. supervisors who are guides:

Table 3.8 :Number of Ph. D. Scholars Guided

Sr. No.	Name of Department	Name of Faculty	Number of Ph. D. Scholars Guided
1	Electronics & Telecommunication	Dr. S. D. Chede	05 (Registred)

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

Ans:-

Institution periodically conducts workshops, seminars, technical training programs, project competition to imbibe research culture among the staff and students with the following objectives:

- To identify the prime area of research.
- To provide an opportunity to interact with experts in the concerned field.
- To help students to get knowledge outside their academic syllabus.
- To get hands on training.

The following is the list of workshops conducted which are as follows:

Table 3.9: Seminars/ Workshop Conducted

MECHANICAL ENGINEERING

Sr. No.	Academic Year	Activity	Name of the Speaker	Details of Speaker
1	2013-14	Personality Development	Mr.Vikas Hiranwar	T&P Incharge SCET,Nagpur
2	2013-14	Seminar on Advance Manufacturing Process	Dr. Khope	Associate Professor PCE,Nagpur
3	2013-14	Guidance on PPT Presentation	Mr. Vikas Hiranwar	T&P Incharge SCET,Nagpur
4	2014-2015	Seminar on Dynamics of Machine	Dr. C. N. Sakle	Associate Professor PCE,Nagpur
5	2014-2015	Guest Lecture on Personality Development & Communication Skill	Mr.Vishal Choudhary	CEO
6	2014-2015	Seminar on machine & mechanism	Dr. M. K. Sonpimple	Associate Professor, Priyadarshini College of Engg.
7	2014-2015	Seminar on Fire fighting	Mr. Syed Abdul Gaffar	CEO, KG-Mech, Hydrabad
8	2015-16	Guest Lecture on Introduction of FEM by Using ANSYS Software	Mr. Atish Bhawankar	Senior Executive officer,CADD Mastree
9	2015-16	Seminar on Static Force Analysis	Dr. A. V. Wanalkar	Associate Professor KDKCOE,Nagpur

Sr. No.	Academic Year	Activity	Name of the Speaker	Details of Speaker
10	2015-16	Seminar on current scenario of CAD/CAM/CAE software & job opportunities	Mr. Mahesh sahare	Senior Executive officer, DCS Pvt. Ltd.
11	2016-17	Carrier Opportunities in Seimens Software	Mr. Salim Khan	Senior Executive officer, 3M Software Solution
12	2016-17	Carrier Opportunities in GULF Countries	Dr. P. K. Khapre	QHSE Auditor, OMAN
13	2016-17	Personality Development	Dr. S. C. Raghatate	Oxford Speaker Academy

Table 3.10: ELECTRICAL ENGINEERING

Sr. No.	Academic Year	Activity	Name of the Speaker	Details of Speaker
1	2013-14	Seminar on Power Electronics	Dr.M.MRenge	Professor, RKNEC
2	2014-2015	Seminar on facts Devices	Irfan Ahmed	A.P, ACOET
3	2015-16	Seminar on Guidance on preparation of GATE examination.	Amol Khadse	AOM,H.R.Mentors
4	2016-17	Seminar on "Solar Panel Designing".	Mr. sandeepSonaskar	Director

| 5 | 2016-17 | Seminar on "Making of Transformer". | Mr. UmeshKubde | Director |
| 6 | 2016-17 | Workshop on "Making of Transformer". | Mr. UmeshKubde | Director |

Table 3.11: COMPUTER ENGINEERING

Sr. No.	Academic Year	Activity	Name of the Speaker	Details of Speaker
1	2013-14	Guest Lecture on Computer Network	Prof. Chandu Vaidya	Assistant Professor RGCOER ,Nagpur
2		Guest Lecture on "Training & Placement"	Prof. S.R. Kulkarni	Assistant Professor R.C.O.E. Nagpur
3	2014-15	Seminar on Gate Exam	Managing Director	I.C.E. Gate Exam
4		Workshop on Troubleshooting & Network Implementation	Mr. Prabuddha Sanyal	Managing Director ITNetworkZ
5		Workshop on Linux programming	Mr. Bhawesh	Managing Director ITNetworkZ

6		Guest Lecture on Complier Construction	Prof. N.G. Mungale	Assistant Professor U.C.O.E ,Nagpur
7	2015-16	Workshop on EISCP	Mr. Arpit Maheshawari	Icloudjunction Presents, Delhi
8		Seminar on carrier Guidance's	Mr. Amit Basware	Jetking, Nagpur
9	2016-17	Workshop on Hands-on session on 'C' technology	Mr. Santosh Selokar	SSIT Nagpur
10		Guest Lecture on Complier Construction	Prof. N.G. Mungale	Assistant Professor U.C.O.E ,Nagpur

Table 3.12: E&TC ENGINEERING

Sr. No.	Academic Year	Activity	Name of the Speaker	Details of Speaker
	2013-14	Guest Lecture on VLSI Tech	Mr.SwapnilShamkuware	Professor
2	2013-14	Guest Lecture on JAVA Tech	Mr.PratapShukla	Professor
3	2014-15	Guest Lecture on Communication Engineering	Prof P Bokade	Professor
4	2014-2015	Guest Lecture on TSS	Mr.SwapnilShamkuware	Professor
5	2015-2016	MPSC/ UPSC Guidance	Mr. Ram Wagh	Director

6	2015-2016	Introduction to LABVIEW	Mr. Sameer Taksande	Engineer
7	2016-2017	Guest Lecture on Personality development	Mr. GuruprakashShetti	Assistant General Maneger
8	2016-2017	Advance of Digital modulation Technique	Prof. B. R Thakre	Professor
9	2016-2017	Seminar on IOT Infra structure	Mr.AshishLabde	Engineer

Table 3.13:CIVIL ENGINEERING

Sr. No.	Academic year	Activity	Name of Speaker	Details of Speaker
1	2013-14	Personality Development	Mr. Vikas Hiranwar	Motivational Trainer, Disha Counselling Center
2	2013-14	AUTO-CAD	Mr. Abhishek Solanki	Instructur, CAD Center
3	2013-14	Guidance on PPT Presentation	Mr. Vikas Hiranwar	Motivational Trainer, Disha Counselling Center
4	2013-14	Mind Power	Mr. Yogesh Gajbhiye	Spiritual Trainer, Disha Counselling Center
5	2014-15	Total Station	Mr. Ravi Mokhade	Owner and Field Expert, Ravi Survey Agency
6	2014-15	Guest Lecture on Personality Development and Communication Skill	Mr. Vishal Chaudhary	Soft Skill Trainer, Global School
7	2014-15	AUTO-CAD	Mr. Abhishek Solanki	Instructur, CAD Center

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

Ans:-

All departments are having qualified and experienced faculty members with the expertise based on the research specializations who either forms research groups or take up individually research projects and publish papers in reputed journals. The research areas and the expertise details are given below:

Table 3.14:List of Faculties with Doctoral Research Areas

Sr. No.	Name of the Faculty	Doctoral Research Areas
1	Dr. S. D. Chede	Electronics & Telecommunication"Low power design aspects of Embedded System: A case study of Implantable Pacemaker"

The list of faculty members having expertise in the following research areas:

Table 3.15:List of Faculties with Research Areas

Sr. No.	Name of the Faculty	Research Areas
1	Dr. S. Chede	Electronics & Telecommunication Embedded System, Biomedical Engg.
2	Prof. V. G. Parhate	Medical Equipments for Physiotherapy
3	Prof. Rasika Manapure	Modeling of complex choetic non-linear signal using artificial inteligence
4	Prof. Vijay Nagpurkar	Separation technique(TLC)
5	Prof. Sangita Itankar	Luminescene properties of nanofibres
6	Prof. A. Bhambulkar	i)Water & waste water treatment (ii) Optimization technique related solid waste management
7	Prof. Amol Musale	Literature on Chetan Bhagat

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

Ans:-

The following eminent people have visited the college and interacted with teachers and students during the last four years which are as follows:

Table 3.16: Eminent Researchers associated with the institute

Sr. No.	Eminent Academicians/Scientists/Visitors	University/ College
1	Dr. Dilip Peshve	Professor,VNIT, Nagpur
2	Dr. D.K. Agrawal	Management Council Member, RTMNU, Nagpur
3	Dr. Vivek Nanoti	Professor, Priyadarshini Indira Gandhi College of Engineering
4	Dr. Pabhakar Khandait	Professor, KDK College of Engineering

Table 3.17: Mechanical Engg Dept.

Sr. No.	Name of the Academicians and Scientists / Visitors	Designation	Organization	Purpose of Visit
1	Dr. M. K. Sonpimple	Associate Professor	Priyadarshini College of Engg.	Technical Seminar
2	Mr. Mahesh sahare	Senior Executive officer	DCS Pvt. Ltd.	Technical Seminar
3	Mr. Syed Abdul Gaffar	CEO	KG-Mech Hydrabad	Technical Seminar
4	Dr. A. V. Wanalkar	Associate Professor	KDK, Nagpur	Technical Seminar

Sr. No.	Name of the Academicians and Scientists / Visitors	Designation	Organization	Purpose of Visit
5	Mr. Surendra Chopde	Head	CADCAMGURU , Nagpur	Technical Seminar

Table 3.18: Electrical Engg Dept.

Sr. No.	Name of the Academicians and Scientists / Visitors	Designation	Organization	Purpose of Visit
1	Dr.M.MRenge	Professor	Ramdeobaba College of Engg.	Technical Seminar
2	Mr Irfan Ahmed	Assistant Professor	Anjuman College of Engineeing	Technical Seminar
3	Mr. DeepakShriwastava	DGM	Mahindra & Mahindra	Technical Seminar
4	Mr. sandeepSonaskar	Director	V.S Informatics	Technical Seminar
5	Mr. UmeshKubde	Director	L Tech Labs	Technical Seminar

Table 3.19: Computer Engg Dept.

Sr. No.	Name of the Academicians and Scientists / Visitors	Designation	Organization	Purpose of Visit
1	Prof. Chandu Vaidya	Assistant Professor	RGCOER Nagpur.	Technical Seminar
2	Prof. N.G. Mungale	Assistant Professor	U.C.O.E Umrer	Technical Seminar
3	Mr. Amit Basware	Director	Jetking, Nagpur	Technical Seminar
4	Prof. S.R. Kulkarni	Assistant Professor	R.C.O.E.M Nagpur	Technical Seminar

Table 3.20:Electronics &Telecommunication Engg Dept.

Sr. No.	Name of the Academicians and Scientists / Visitors	Designation	Organization	Purpose of Visit
1	Dr. D K. Agrawal	Ex-Director BCUD, RTMNU Nagpur	RTMNU Nagpur	Technical Discussion with Faculty
2	Dr. M. D. Chaudhary	Dean Engineering & Technology RTMNU Nagpur	RTMNU Nagpur	Technical Discussion with Faculty
3	Dr. N.B.Chopade	Professor and Head	E&TC Dept,PCCOE, Pune	Technical Discussion with Faculty

Table 3.21 : Civil Engg Dept.

Sr. No.	Name of the academicians and scientists / visitors	Designation	Organization	Purpose Of Visit
1	Mr. V. D. Vaidya	Asst. Prof.	KDKCE, Nagpur	Technical Seminar
2	Mr. B. G. Godbole	Asst. Prof.	GHRCE, Nagpur	Technical Seminar
3	Miss. Priti Pusadkar	Asst. Prof.	KDKCE, Nagpur	Technical Seminar
4	Miss. NilimaDhabe	Asst. Prof.	KDKCE, Nagpur	Technical Seminar
5	Miss. VaishaliRajurakar	Asst. Prof.	Ramdeobaba, Nagpur	Technical Seminar

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?

Ans:-

- The College is committed to provide all the required assistance to the teachers for pursuing research and innovation. As a learning organization, it lays great thrust on the promotion of research.
- Institution has a provision to sanction leave with pay to the faculty members for research activities. This provision is to promote & enhance research culture in the campus.

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)

Ans:-

The institute has taken up following initiatives in creating awareness/ advocating/transfer of research findings as follows:

- The faculty members are conducting in-house workshop for students.

- The faculty member encourages students to do projects which are of industrial and social relevance.

- Live project models made by the students are exhibited in various events inside and outside the college campus.

- Research topics of community interest are demonstrated to motivate students towards research.

- School students from nearby villages are invited to generate interest in the field of technology and research by organizing their regular visits to the Institute.

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.

Ans: There is no fixed budget allocated for research as such, however priority is always given in funding quality research work. Departments are encouraged for upgrading the labs in terms of equipments needed from research point of view.

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?

Ans: There is no provision to provide seed money to the faculty for research, whereas the institute provides,

- Registration fees for workshops, presenting paper
- TA for conferences
- For selective UG and PG projects

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

Ans: Following are the financial provisions made available to support student research projects:

- Financial assistance to the meritorious students for research projects.
- Facilities like computers, access to internet and printer for students of all branches for doing their research projects.
- Financial assistance like travelling, lodging and boarding to all students for participation in technical events.
- Financial support to the students presenting and publishing research paper at National and International conferences.

3.2.4 How does 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.

Ans: In SCET, efforts are consistently taken to strengthen research areas by encouraging interdisciplinary research projects in the campus. The research committee identifies the interdisciplinary areas of research depending upon expertise and facilities available in the departments.

Following projects are interdisciplinary in nature and executed in the institute:

Table 3.22:List of Interdisciplinary projects

Sr.No.	Title of Project	Name of Guide	Expertise	Year
1.	Design and Fabrication of Android Chair	Prof. V. G. Parhate	Mechanical Engineering & Computer Engineering	2014-15
2.	Design and fabrication of RF based farmer friendly agriculture robot with motorized shovel and auto seed despining system	Prof. Prafulla Deshpande	Mechanical Engineering & Computer EngineeringM	2014-15
3.	Automobile speed braker energized power generating machine.	Prof. Vinod Sakhare	Mechanical Engineering & Electrical Engineering	2013-14
4.	Design and fabrication of magnetic levitated vertical axis AC wind turbine	Prof. Ram Wayzode	Mechanical Engineering & Electrical Engineering	2015-16

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

Ans: The R & D cell of the institute coordinates amongst various disciplines and labs to ensure the optimal use of various equipment and research facilities. The following is the list of laboratories being utilized by students/faculty for research and innovative projects.

Table 3.23 :Laboratories utilizes for research work

Sr.No.	Name of Research Laboratories	No. of hours of utilization per week	Area of Research
1.	Energy Conversion & RAC Lab	2 hours	I.C. Engines, Bio-diesel, RAC
2.	Heat Transfer Lab	2 hours	Experimental Heat Transfer
3.	CAD Lab	2 hours	Computer Aided Geometric Modeling, Structural Analysis
4.	Geotechnical Lab	2 hours	Soil
5.	Environmental Engg. Lab	2 hours	Water & Waste Water Treatment
6.	Concrete Technology Lab	2 hours	Modification in concrete
7.	Communication Lab	2 hours	Analog Communication
8.	Electronic Devices & Circuits Lab	2 hours	Electronic circuitry
9.	Advance Microprocessor Lab	2 hours	Microprocessors
10.	Electrical Machines Lab	2 hours	Electrical Motors & Transformers
11.	High Voltage Lab	2 hours	Corona Inception

12.	Computer Engg. Lab	2 hours	Visual Studio & JAVA SDK

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

Ans: Faculty members are planning to submit proposals to various funding agencies like AICTE/DTE/University etc.

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.

Ans: The Institute is committed to encourage our faculty for securing various research funds from the respective agencies. Guidance is being provided to the faculty members for making proposals seeking funds from various agencies.

3.3 Research Facilities

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

Ans:-Each department has a separate project and research lab for students. All the research laboratories are equipped with latest equipments needed for research. The details of major equipments in the departments within the laboratories are as follows:

Table 3.24:Research Facilities available at the Institute

Sr. No.	Department	Major Equipments
1	Electronics & Telecommunication Engineering	DSO, Function generator, TV trainer kit, Electronic Workshop setup, AM FM trainer, Microwave test bench, FAGA-A(Advance FPGA) trainer, SPARTAN 3, DSP Processor Trainer
2	Computer Engineering	C language C++ language, Microprocessor lab, Oracle, Java. OOPS, Data structure lab
3	Electrical Engineering	High Voltage lab, Switch gear protection
4	Mechanical Engineering	LVDT Trainer kit, RTD Trainer kit LDR Trainer kit, Thermal Conductivity of Powder apparatus, Air conditioning Test rig, Metallurgical Microscope, Diesel Engine, Petrol Engine Test rig, PLC Trainer kit, Air compressor test rig
5	Civil Engineering	BOD, Ph, DO, Turbidity, Soil Testing, UTM Testing machine

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?

Ans:-

- E-journals are available for multidisciplinary areas.
- Each department has identified verticals or competency domains within the department, with senior faculty mentoring the other faculty within the domain. Faculty mentors motivate faculty to attend FDP, to submit research proposal to funding agencies like AICTE/UGC/CSIR/DST etc.
- Procuring major equipment in various departments as per requirements.

- Additionally, institute provides support for in-house development of projects. Some of the labs have been designed and being fully furnished and equipped with systems having net facility considering the requirement of researchers.
- Eminent personalities are invited for guest lectures on recent technologies.

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?

Ans: - Proposals are being worked upon to get funds and grants from various govt. funding agencies as well as industry faternity.

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

Ans:-Research facilities available for students and research scholars outside the campus/ other research laboratories are as follows:

Table 3.25

Outside Research laboratories

Sr. No.	Reasearch Institute	Area of Research
1	**IIPDM Nagpur**	**CNC**
2	**DCS Nagpur**	**CAD**

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

Ans:-The existing centralized library has a research corners for researchers.College has a computerized library which has modern catalogue and journal facilities. Library has Carpet area (in m2) of 520 sq.mtrs area with 10 computers with 10mbps internet connectivity to access online resources. Printer & reprography facilities are made available in library.

The details of the expenditure incurred on books , magazines and journals are as follows:

Table 3.26 :Library expenditure on books, magazines/ journals

Year	E-resources (CD's& DVD's)	Books	Journals
2013-14	83	1473	36
2014-15	96	1098	26
2015-16	70	1318	33 National 17 International
2016-17	32	671	37 National 1 International

Library provides E-Learning material like DELNET, etc. wherein the faculty can refer to the fundamental concepts of some of the emerging areas

Research contributions by the staff at the centralized library.

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.

    Ans: -

The industry representatives are interacting with the concerned departments and vice versa for arrangements of training program for the students and faculties at the campus.

Table 3.27 : MoU/Collaborations

Sr. No.	Department	Company Name	Year	MoU Signed Date
1	CE	JETKING PVT LTD	2016	11/11/2016
2	EE	Electronics Designer	2015	13/12/2015
3	ME	AXIOM SOFTWARE PVT LTD	2016	31/12/2016
		DCS PVT LTD,NAGPUR	2011	19/09/2011
		THREE M SOFTWARE SOLUTION,NAGPUR	2012	17/08/2012
		THREE M SOFTWARE SOLUTION,NAGPUR	2013	19/08/2013

		THREE M SOFTWARE SOLUTION,NAGPUR	2014	17/07/2014
		THREE M SOFTWARE SOLUTION,NAGPUR	2015	23/03/2015

3.4 Research Publications and Awards

3.4.1 Highlight the major research achievements of the staff and students in terms of Patents obtained and filed (process and product)Original research contributing to product improvement Research studies or surveys benefiting the community or improving the services Research inputs contributing to new initiatives and social Development.

Ans: -

The original research which has led to recognition w.r.t. publications of the faculty members are as follows:

Table 3.28 :Faculty contribution towards original research work

Sr. No.	Name of the Faculty	Research Areas
1	Dr. S. D. Chede	Electronics & Telecommunication
2	Prof. V. G. Parhate	Medical Equipments for Physiotherapy
3	Prof. Rasika Manapure	Modeling of complex choetic non-linear signal using artificial inteligence
4	Prof. Vijay Nagpurkar	Separation technique(TLC)
5	Prof. Sangita Itankar	Luminescene properties of nanofibres
6	Prof. A. Bhambulkar	i)Water & waste water treatment (ii) Optimization technique related solid waste management
7	Prof. Amol Musale	Literature on Chetan Bhagat

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?

Ans: The institute is planning to start an interdisciplinary research journal.

3.4.3 Give details of publications by the faculty and students:

➢ **Publication per faculty**

➢ **Number of papers published by faculty**

➢ **Number of Paper presentation by students in peer reviewed (national / international)**

➢ **Number of publications listed in International Database (for Eg: Web of Science, Scopus, And Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.)**

➢ **Monographs**

➢ **Chapter in Books**

➢ **Books Edited**

➢ **Books with ISBN/ISSN Numbers with Details of Publishers**

➢ **Citation Index**

➢ **SNIP**

➢ **SJR**

➢ **Impact Factor**

➢ **H-Index**

Ans:-

Several faculty members are actively involved in research in their respective domains and are contributing to scientific community by publishing their research findings in reputed National and International journals as follows:

Table 3.29 :Department wise Research Paper Publication

Sr.No.	Name of Department	Total Nos.
1	General Engineering	10
2	Civil Engineering	22
3	Computer Engineering	46
4	Electrical Engineering	16
6	Electronics and Communication Engineering	70
7	Mechanical Engineering	31

The faculty member's who have contributed research papers in reputed journals whose impact factor are as follows:

Table 3.30

Impact factor of Journals

Sr. No.	Name of Journal	Impact Factor
01	International journal of innovative technology and research	4.236
02	International conference on Quality up-graduation in engineering science & technology	2.02
03	International Journal of Social Sciences and Education	0.987

04	International Journal of Engineering Research And Application	5.169
05	JETIR- Journal of Emerging Technologies and Innovative Research	4.14
06	**International Journal of Advance Research in Science and Engineering**	1.142
07	International journal of Emerging. Research & Indu. Appls	3.21
08	**International Journal of Mechanical Engineering**&Robotics research	0.565
09	International Journal Of Computer Trends And Technology	1.494
10	International Journal On Recent And Innovation Trends In Computing And Communication	5.835
11	International Journal Of Computer Science And Information Technology Research	3.80
12	International Journal Of Advance Research In Computer Science And Software Engineering	2.50
13	International Journal Of Science And Research	6.391

The faculties who have publications in reputed journals are as follows:

Table 3.31

List of Journals

Sr. No.	Name of Faculty	National/International Journal
01	Prof. V. G. Parhate	"Mechanical Effect Of Physiotherapy Traction: A Review Of The Literature" (Ijitr) Internatioanl Jouranl Of Innovative Technology And Research ,Volume No. 3, Issue No. 4 June-July 2015,2341-2345
		" Maximum Equipment Utilization By Combining Techniques Of Physiotherapy For Optimal Performance" International Conference On Quality Up-Graguation In Engineering Science & Technology (Icquest-2015) Isbn: 978-81-923623-1-1

02	Prof. Ram R. Wayzode	"Calculation Of Setup Variable For Process Of Bending And Rolling Operation Using Analytical Approach & Finite Element MetHOD" (Irjsse)/Volume :2 /Issue : 2/ June. 2014
		Ram.R.Wayzode, P. G. Mehar, V. N. Mujbaile, (2012). Modelling, Analysis And Comparison Of Forged Steel And Cast Iron Crankshaft. *Indian Streams Research Journal,* Vol. Ii, Issue. Vii, Doi : 10.9780/22307850
03	Prof. Ketan K. Tonpe	"Design & Performances Of Coconut De-Shelling Machine" (Ijera) Int. Journal Of Engineering Research And Application, Issn : 2248-9622. Vol. 4, Issue 7 (Version 3), July 2014, Pp. 39-44
		"Performance Analysis Of Coconut De-Shelling Machine "Jetir Journal of Emerging Technologies and Innovative Research (Issn-2349-5162) Pp.108-115.
		"Design and Development of Coconut De-husking Machine" International Journal of Engineering Research and Technology 3 (7 (July-2014)) Vol. 3 - Issue 7 (July - 2014) e-ISSN: 2278-0181
		"Performance analysis of coconut de-husking machine" Journal of Emerging Technologies and Innovative Research 1 (2 (August-2014)) Volume 1 Issue 2 eISSN: 2349-5162
04	Prof. Nitin P. Padghan	"Calculation Of Setup Variable For Process Of Bending And Rolling Operation Using Analytical Approach & Finite Element MetHOD" (Irjsse)/Volume :2 /Issue : 2/ June. 2014
		" Force Analysis Of Metal Sheet In Bending Operation On Sheet Bending Machine"(Ijert) Issn 2278-0181, Vol. 4 Issue 01, Janurary-2015
05	Prof. Prafulla D. Deshpande	"Design & Analysis Of Feedershaft/Opener Shaft For Ginning Machine" (Ijarse) Issn 2319-8354, Vol. 4 Issu 07, July-2015
		"Analysis Of Power Transmission System For Ginning Machine With Feeding Mechanism Using Fea" (Iosr-Jmce), Issn 2278-1684, Pp 23-32.
06	Prof. Manoj Baseshankar	Design , Development And Fabrication Of Advance Wire Rope Making Machine International J. Of Engg. Research & Indu. Appls. (Ijeria). Issn 0974-1518, Vol.3, No. Iv (November 2010), Pp. 193-216
		Estimating The Error Of Field Variable For Numerical Approximation Techniques Using Matlab *Int. J. Mech. Eng. Issn 2278 – 0149 Www.Ijmerr.ComVol. 3, No. 1, January 2014*
07	AshishBala	Investigation in Induction motor starting &speed control with variable frequency drive.

		IRJET Vol.3, Issue: 2 Feb-2016
		A novel approach to the performance of Induction motor with variable frequency drive. IJSRD Vol.4 Issue:2 April 2016
08	Nikhil V. Upadhye	Design of Hybrid Controller for Direct Torque Control of Induction Motor Drive. IRJET Vol.3, Issue: 4 April-2016
		Modeling and simulation of Direct Torque Control of Induction Motor Drive. IJSER Vol.6 Issue:12 December 2015
09	Rahul D. Dekate	Investigation in Induction motor starting &speed control with variable frequency drive. International journal paper presentation(IOSR)
10	ShitalYende	Optimal location of STATCOM for improvement of power system performance by using Genetic Algorithm International Conference TechEd-2015
11	DhammadipWasnik	Dynamic stability improvement of grid for different types of wind generator connected using STATCOM. International Conference ICRTEE-2016
12	Geetanjali Manekar	Trends in modeling of three phase induction motor. National conference
		Modeling metHODs of three phase induction motors. National conference
		Functional modeling of PWM inverter feed induction motor drive using VBR modeling and simulink. International Conference ICEECS -2016
13	Prof. Pratibha S. GHODe	" SST Techniques to implement Keyless Image Encryption : IEEE, Sponsored International Conferences on Empowering Emerging Trends in Computer information Technology & Bio-information(IJCITB) 2014 ISSN: 2278-7593,Volume-2,Issue-2
		"A Keyless approach to Lossless Image Encryption" International Journal of advanced Research in computer Science and Software Engineering(IJARCSSE) 2014
		"A Review on Keyless User defined Reversible Encryption for Color Image" IJCSMC, Volume-2 No-10 30 dec 2013
		"Web Filtering With SQL Injection" International Journal of Science and Research ISSN: 2319-7064,Volume-4,Issue-4, April 2015
		"Security in Data Storage and Transmission in Cloud Computing" International Journal of Advanced Research in Computer Science and Software Engineering Volume 6, Issue 3, March 2016
14	Prof. Ruchira N. Selote	"Remote Data Backup and Privacy Preserving Data Distribution in the Cloud: A Review" International Journal

		of Computer Science and Mobile Applications, ISSN:2321-8363,Volume-2, issue-11, nov-14
		Secure Data Storage on cloud for remote data backup server with user authentication. International Conference on Emerging Trends in Computer Engineering.
		Data security and privacy in cloud using RC6 algorithm for remote data back-up serverInternational conference/Journal of Engineering Science & Advanced Technology, Vol-5, issue-2,mar-apr-15
		Remote Data backup and privacy preserving data distribution in CloudInternational Journal of Engineering science & research technology, ISSN: 2277-9655, July-2015
15	Prof. Pravin Balbudhe	Novel Approach of Human computer Interaction using Brain Waves Electric Signals International Journal of Engineering & Scientific Research ISSN:2347-6532 Volume 2 Issue:10 Oct:2014
		"An Approach for Efficient Query Processing For M.V Selection and Maintenance" International Journal of Computer Science and Informatiom Technology Research ISSN 2348-120X(online)
		Novel Approach of Man Machine Interaction Using Brain Waves Electric Signal International Journal on Recent and Innovation Trends in Computing and Communication
16	Prof. Pradip Balbudhe	Implementation of Network Monitoring As a G-Host International Journal of Computer Science and Information Technology Research ISSN 2348-120X, Vol. 3, Issue 2, April - June 2015
		Cloud Storage Reference model for Cloud computing IJIEASR, M-2013 Volume-2, Issue 3
		Overview of sinktrul protocol for energy efficient data gathering in Cosn IJRITCC, May 2014 volume, issue 5
		Implementing Virtual Private Prive Using cloud O.S IJMIE, June 2012 volume-2 Issue 6
		Novel approach of man machine Interaction using brain wave electric Signal IJRITCC, June 2014 volume-2, issue 16
		Novel approach of man machine Interaction using brain wave electric Signal IJMRA, July 2014 volume -7, Issue -4 Impact Factor-3.46
17	Prof. Shrikant Dhawale	Analysis of Location Monitoring Techniques with Privacy Preservation in WSN CSNT-2014 (IEEE)-International Conference Print ISBN-978-1-4799-3069-2
		A Secured Dynamic Location Monitoring System in WSN IJRCCT –Volume 3 Year- 2014

18	Prof. Nayan Hargule	DDOS Detection Using Attack Model International Journal of Advance Research in Computer Science and Software Engineering
19	Dr. Santosh D. Chede	Design Overview of processor based Implantable Pacemaker" published in International journal of computers (Academy publisher) Vol.3.No.8, 2008, pp.49-57.
		" Algorithm to optimize code size and energy consumptioin in real time embedded system " published in International journal of computers (Academy publisher) Vol.3.no.6, 2008,pp.15-21.
		" A significance of VLSI techniques for low power real time system, published in IJFCA international journal,ISBN: 978-93-80746-20-3.
		"Overview and analysis of UWB for low power WPAN published in IJFCA international journal, ISBN: 978-93-80746-3.
		" Design and Improvement in WiMAX 3G using multiple keys" published in International journal of Engineering Science and Technology (IJEST), Vol.3, No.7, July 2011,pp 5964-5973,ISSN:095-5462.
		"Implementation and analysis of Traffic adaptive MAC protocol for wireless sensor network" International journal of Multidisciplinary research (IJMR), Vol.1, April 2012,pp.57-61, ISSN:2277-9302.
		" Detection and Removal of Black Hole in Mobile Ad-hoc Network (MANET)",International Journal of Electrical and Electronics Engineering (IJEEE), ISSN (PRINT): pp2231 – 5284 Vol-1 Iss-4, 2012
		"Detection of post operated copy more image forgery by Integrating Block Based and Feature MetHOD", International Journal of Advanced research in Computer science and Software Engg.(IJARCSSE), Vol.4,Issue 4,Jan.2014,pp 788-790 ISSN: 2277 128X,
		"Review on Efficient OFCDM Techniques", International Journal of Research in Advent Technology, Vol.2, No.2, February 2014 ,E-ISSN: 2321-9637
		"Efficient OFCDM Techniques in 4G",International Journal of Engineering Research and Application as well as for oral presentation at "International Conference on Industrial Automation and Computing (ICIAC-2014)" at Jhulelal Institute of Technology, Nagpur,ISSN 2248-9622,12-13 April,2014.
		"Overview of adaptive echo canceller based LMS and NLMS algorithm" International research journal of sustainable science and Engineering, ISSN:2347-6176,Vol.2,issue 4,April 2014.

		"Design strategies for classification of abnormalities in Retinal Images using ANFIS", International journal of Application or Innovation in Engineering and Management(IJAIEM),ISSN 2319-4847, Vol.3, Issue 3, March 2014.pp388-393.
		"Design of 32 Bit Floating point ALU with Universal Gate", International journal of Technological Exploration and Learning (IJTEL),ISSN 2319-2135,Vol.3,Issue 3,2014.
		"VHDL Implementation of Universal Asynchronous Transmitter", International Journal of Engineering and Research (IJERT),ISSN 2278-0181,Vol.3,Issue 06,June 2014.
		" Overview and Analysis of Floating point Multiplier using Wallace and Dadda Algorithm", International Research Journal of Sustainable Science and Engineering (IRJSSE),ISSN 2347-6176,Vol 2,Issue 4,April 2014.
		"Multicode Techniques in 4G", International journal of computer trends and Technology (IJCTT) ,ISSN 2231-2803, Vol.11,Issue 4,2014.
		"AMFM based Prediction of Multiple Sclerosis in Brain MRI Images", International journal of computer applications (IJCA),ISSN:10.5120/17682-8533, Vol.101,Issue 5,2014.
		"Wheeze Extraction Using Analog Filter For Asthma Patients", International Journal of Emerging Technologies in Engineering Research, Vol.1, Issue 1, July 2016.
		"Energy Efficiency of Wireless Sensor Network using Reactive and Proactive Protocol", International Journal of Computer Applications ,ISSN0975 – 8887) Vol. 105 – No. 1, November 2014.
		"A New Approach of Energy Efficient Role Assignment Algorithm for Maximizing Lifetime in Wireless Sensor Network", International Journal of Computer Trends and Technology (IJCTT) , Vol. 39 No.1 ,September2016.
		"An Overview on a Low Power Telemedicine System", International Journal on Recent and Innovation Trends in Computing and Communication ISSN: 2321-8169,Vol.3 ,Issue 5 , IJRITCC , May 2015pp. 258 – 262.
		"AM-FM based prediction of multiple sclerosis in brain MRI Images."publishedinInternational journal of computer application, ISSN: 0975-8887, Vol. 101 issue 5,Sept. 2014
		"Comparative Analysis of Different Classifiers to Detect the Disease in Brain MRI Images". published in International journal of Computer Trends and Technology(IJCTT) 2231
		"Performance evaluation of OFDM Based Wimax Physical

		layer under multipath Fading Channel with Different Modulation schemes and cyclic prefix",published in Global journal of Engineering , Jan
		Detection and Removal of Black Hole in Mobile Ad-hoc Networ(MANET)", International conference on Electrical and Electronics Engg.(ICEEE-2012),Nainital,20th May 2012,pp-11-13, ISBN:978-93-81693-97-1.
		" Security advances in WiMAX 3G using multiple keys" ICSE-2011, International conference at Rohtak, Haryana, January.21-23,2011, pp 107-111,ISBN:978-981-08-7931-0.
		" Mac module structure for secure simplification WIMAX ", ICICES-2011,International conference at Chennai,Feb.23-24,2011
		" WBAN based Health monitoring by using OMNeT++",ICICES-2011,International conference at Chennai,Feb.23-24,2011.
		" Software Related current/ Energy Estimation in Processor based Implantable Pacemaker", IICC-2008,IEEE International conference at IIT Kharagpur, Dec. 8-10, 2008.
		" Design overview of low power Implantable pacemaker using MSP 430 F 1612,SPIT-IEEE-2008, International conference at Mumbai,Feb. 4-5 .2008.Vol.2,pp.236-242.
		" Hardware/SAoftware co-design techniques in low power embedded system", (ICMECS-2007), International Multiconference of Engineers and Computer Scientists, Hongkong, March 21-23, 2007, pp. 1716-1721.
		" Object position detection strategy , analysis and control with Direct Digital Controller", (IASTED MSO-2004), International Conference on "Modeling, Simulation and optimization, at Kauai, Hawaii, USA, August 16-19, 2004,pp. 199-204.
		" The assessment of deteriorating level of transformer oil by (A) Ferrographic technique and (B) Thermal ageing failure data", CEIDP-1995, IEEE International conference "Conference on Electrical Insulation and Dielectric Phenomena," Oct.22-25, 1995, at Virginia (USA), pp. 313-315.
		" Efficient OFCDM Techniques in 4G",International Journal of Engineering Research and Application(IJERA) as well as for oral presentation at "International Conference on Industrial Automation and Computing (ICIAC-2014)" at Jhulelal Institute of Technology, Nagpur,12-13 April,2014.,ISSN2248-9622,pp.1-5.
		" Implantation and Analysis of a traffic adaptive MAC

		protocol for wireless sensor networks", International conference on Interdisciplinary research and Development in Management, Engg, Technology and social sciences,atTuli imperial Nagpur,28-29th April,2012.
		"Lung Sound Analysis Based MetHODology to Identify Asthmatic Patient for Low Power Low Cost Embedded System ",IEEE International Conference on Energy Systems and Applications (ICESA 2015) ,Dr. D. Y. Patil Institute of Engineering and Technology, Pimpri, Pune, 30-31st October 2015.
		"Review on Wheeze Monitoring for Asthmatic Disorders", 2nd International Conference on Science and Technology for Society,(ICSTS-2015),19-21[st]May 2015.
		"Identification of Asthma using Optimum WPT and it`s Coefficient for Development of Low Power Low Cost Embedded System",IEEE International Conference on Communication Networks (ICCN-2015),ITM University, Gwalior, Madhya Pradesh 19-21st November 2015.
		"Advanced Embedded System for Identification of Asthma", International Conference on Engineering and Material Sciences ,Jaipur National University, Jaipur.17-19th 2016.
		"Energy Efficiency of Wireless Network Using Balance Routing", 2015 International Conference on Computational Intelligence and Communication Networks,IEEE Computer society, 2015,pp100-104,pp.23-28.
		"Improving Lifetime of Wireless Networks Using Secure Hybrid Compression and Routing Techniques",International Conference on Engineering and Material Sciences , Jaipur National University, Jaipur.17-19th 2016.
		"Development of Low Power Cardiac Telemetry System",2015 IEEE International Conference on Communication Networks (ICCN)ITM University, Gwalior, Madhya Pradesh 19
		"Realization of Low Power Telemedicine System to Monitor Temperature and Heart Beats",International Conference on Energy Systems and Applications (ICESA 2015) at Dr. D. Y. Patil Institute of Engineering and Technology, Pune, India, 30 Oct
		"Application of FCM Clustering on AM-FM to Detect MRI Disease Progression For Multiple Sclerosis". published in IEEE Conference CICN-2015,12-14 Dec 2015.
		" Performance evaluation of Modulation Schemes for UWB " NCWC-2010National Conference on Advances in Wireless Communications,pp.143-146.

		" Current estimation in low powe Implantable pacemaker using MSP 430 F1612", IEEE conference at Pune, March 7-9, 2008.
		"Novel four step search algorithm for low bit rate video applications",NCDC-2006, National conference on Distributed computing organized by Dr.D.Y.Patil institute of Engineering, Pune.1-2 Sept.2006,pp.319-325.
		DVS and Dual VDD architecture for embedded SOC Design",(TSYGECA 2006), Natiioinal conference organized by Govt. College of Engg, Aurangabad, Jan.23-24,2006, pp.285-290.
		" Finger print recognition system",State Level IEEE conference on Signal processing and parallel computing.July 5-6,2003 at MIT Alandi, Pune.
		"Design of Floating Point Arithmetic Logic Unit with Universal Gate",National Conference on Ingenious Science, Technologies &Management,"SAMVID 2014", at SSITM,SSTC, Bhilaion 21st Feb 2014.
20	Prof. U G Marghade	"Wireless body area network for rural health care "I International journal of Technology Enhancement &imerging engineering research ,trends volume 3, issue 3 Jan 2015
		"A review on brain machin interface system with AI for person with disability". International journal of enginnering science and advance tyechnology (IJASET) jan-feb 2015
		"ECG signal classification & acquisition for brain machine interface system" Internastional conference on imergin\g trends in enginnering& technology. IJESAT/ITRSAT, april-may 2015.
		"brain machin interface system with AI for person with disability" International journal of enginnering science & research technology(IJASRT) July 2015
21	Prof. RasikaManapure	"Study of STTCMC- CDMA system for wireless application" International conference of sunrise technology(ICOST) JAN 11.
		"Performance enhancement of MC-CDMA system using space time coding usig STC and MIMO International conference on information , communication and embedded system(ICICES) feb 2011
		An overview of smart antenna implementation using neural network International conference on information , communication and embedded system(ICICES) JAN 11
		Neural Network approach for modeling of adaptive antenna system International conference on information ,

		communication and embedded system(ICICES)
22	Prof.Ms.Madhurininawe	Computation of CPU & GPU International journal of engineering science & advanced technology(IJESAT) Volume 6, 2015.
		. GPU Accerlated image processing using CUDA Internastional conference on imergin\g trends in enginnering& technology(IJESAT, ITRSAT) March 2015
		Design Of vehicular adhoc network using DSDV protocolInternational journal of recent scientific research International journal of recent scientific research
23	Prof. RoshniBhokare	" Performance of Hiperlan/2 for 16 QAM with ¾ code rate with without sale model. International conference of sunrise technology(ICOST) Jan 2011
		Performance analysis ofHiperlan/2 for QPSK & BPSK mode with non-puntured convolution code. International conference on advances in communication embedded systems and computing(ICACE) 14-15 jan 2011.
		An approach to reduce nonlinearity ofHiperlan/2 system using neural network. International journal of research in computer & communication technology IJRCCT 2013.
		Comparision of performance of AWGN- Racian& Rayleigh channel for Hiperlan/2 system for reducing nonlinearity using neural network.AE international journal of science & technology AEIJST volume 1, Issue 1
24	Prof. Mr.SachinMalke	The design & development of low cost Voip device using LINEX. Internation journal of engg research & application. March 2014.
		"Imlplementation of low cast Voip media stream encryption device using LINEX. International conference on industrial automation & computing ICICIAC, IJAAI journal April 2014
25	Prof. Gopal Pranjale	Electromyogram based control signal generation for mobility aid .CSIO-CSIR Research Conference.2015
26	Ashtashil V. Bhambulkar	"Municipal Solid Waste Collection Routes Optimized With Arc GIS Network Analys",International Journal Of Advanced Engineering Sciences And Technologies, ISSN: 2230-7818 Vol No. 11, Issue No. 1, 202 - 207,2011pp 286 – 291
		"Effects of Leachate Recirculation on aLandfill",International Journal Of Advanced Engineering Sciences And Technologies, ISSN: 2230-7818 Vol No. 11, Issue No. 2,2011pp 286 - 291
		"Municipal Solid Waste (MSW) Collection Route for Laxmi Nagar By Geographical Information System (GIS)",

		International Journal of Advanced Engineering Technology, 2011.
		"Application of GIs in Transportation Engineering", International Journal of Engineering Research and Applications, ISSN: 2248-9622, Vol. 3, Issue 2, March - April 2013, pp.540-542.
		"Analysis and Design of flare Bridge "International Journal of Innovative Technology and Research Volume No. 1, Issue No. 6, October - November 2013, 588 - 590.
		"Aqua Plant -Based Sewage Treatment Plants: Review" Int. Journal of Engineering Research and Applications ISSN: 2248-9622, Vol. 3, Issue 5, Sep-Oct 2013, pp.1290-1301
		"Micro- Plant and Wastewater Treatment: Review of Practical Aspects "International Journal of Innovative Technology and Research Volume No. 2, Issue No. 4, Jun-July 2014, 1139- 1150
		"Construction And Design Of Cable-Stayed Bridges" International Journal of Innovative Technology and Research Volume No. 3, Issue No.1, December – January 2015, 1858 - 1859.
27	Priyanka nagdeve	Analysis of long span bridges by multi support excitation presented at international conference held at National Bridge Research and development center
28	Preeti Morey	Progressive Collapse Analysis Of Building
		Efecct of enhance temp. On propreties of concrete with partial replacement of coarse aggregate by Blast Furnace slag
		Presentation on " Review Progrecive collapse of Building" in QUARK-12
		Presentation on " Rehabilitation of Fire Damage Building- a case study" in KDKCOE.
		Presentation on " Technique of Bridge Rehabilitation" in Institute of Engineering, Nagpur Presentation on " Effect of Elevated temperature on Green Concrete" in KDKCOE-17
29	Pradnya Wasnik	Presentation on " Fibre Reinforce concrete " in BDCOE, Sewagram
		Presentation on " Prametric study of stucture" in KDKCOE , Nagpur.
30	Pawan Barhate	Rainwater harvesting around Ramtek area (pertaining to Dudhala lake) ISSN-2394-3696 Vol 2 issue 3
31	Amit Khandve	Seismic response of RC Frame building with soft storey ISSN-2248-9622
32	Mohit Chachere	Effect of various temperatures on the strength of concrete with partial replacement of cement by rice husk ash and partial replacement of coarse aggregate by blast furnace slag issn-**2349-5162**

Sr. No.	Name of Student	Name of Paper	Department	year	National /International
33	Minakshi Yengale	Analysis of Water Distribution Network For Karanja Village- a Case Study ISSN No. 2248-9622			

The students of the institute have contributed the papers in following reputed journal:

Table 3.32: Number of Technical Paper presentation by students

Sr. No.	Name of Student	Name of Paper	Department	year	National /International
01	Dhanraj Dongarkar, Saurabh Warghat, Roshan Gomase, Rahul Tale, Chetan Kalode, Vishal Charpe	Techno-economic design and development of physiotherapy treatment table.	Mechanical	2013-14	National
02	Aakash Meshram, Aniket Rotke, Harish Khante Pawan Bhoyar Piyush Jambhulkar, Shubham KHODe	Fabrication of wheelchair model operated using android device.	Mechanical	2014-15	National
03	Ankush Bhongade, Nishant Dangore, Nitish Kumar, Shashank Tiwari, Vijay Bhoyar, Sumit Watkar	Fabrication of Eco-Friendly railway toilet system	Mechanical	2014-15	National
04	Abhishek Gupta, Brijesh Tripathi, Dhananjay Kumar, Himanshu Gupta, Lokesh Kalkotwar,	Design And Analysis Of high torque continuous torqueing tool	Mechanical	2014-15	National

	Nilesh Belsare Manish Verma,				
05	Antara Ahirkar, Akash Ukey Akshay Bawane, BAlvant Gupta, Bejoy Kattaickal, Naval Lanjewar Pritam Gedam	Design And Fabrication of Multi-Acting Can Crushing Machine	Mechanical	2015-16	National
06	Allauddin Shaikh, Pawan Kale, Pramit Dandwate, Rahul Taywade, Sagar Yeole, Tushar Pounikar, Vikky Shende	Techno-economic design and Fabrication of stair Climbing WheelChair	Mechanical	2015-16	National
07	Abdul Pathan, Tushar Deshmukh, Harun Qureshi, Ashish Kanorkar, Akshay Hedau , Ashish Badgevar, Vaibhav Ganthale	Performance and evaluation of diesel engine by using modified air filter	Mechanical	2015-16	National
08	Abhishek Itankar, Akahay Khobragade, Kushal Chimurkar, Mangesh Raut, Niteshesh Wadaskar	Design and fabrication of cable Laying Machine	Mechanical	2015-16	National
09	Chandrashekar Bhoyar Akash Dhoke, Atul Deshbhratar	Fabrication And Development of heat pump water heater coupled with	Mechanical	2015-16	National

	Pratik D. Dhoke Hemant Shende Kapil Shende	domestic refrigerator			
10	Aksh shriwas, Atal jambhulkar, Bhusha n Choudhary, Mayuri Wankhede, Mohit Bhoj Nikhil Gondane	Design and fabrication of magnetic levitated vertical axis AC wind turbine	Mechanical	2015-16	National
11	Akahsy titarmare Piyush dongare Vighnesh chavhan	Implementation of cloud computing security : from single cloud to multi cloud	Computer	2013-14	National
12	Neha bhoyar Pranju lokhande	Predictive search engine for document searching	Computer	2013-14	National
13	Pankaj b. Meshram Minesh g. Meshram	Novel approach geo spacial matching for image retrieval	Computer	2013-14	National
14	Ankita r. Suryawanshi Sapna r. Badge Shailesh r. Barapatre	Novel approachi for human machine interaction using hand gesture recognition techniques	Computer	2013-14	National
15	Yogesh ghuse Chetan harshe	Web filtering with sql injection	Computer	2014-15	National

16	Oshin m. Rangari Sapna n. Kose Swati d. Shirbhate	An approach for efficient query processing for materialized view selection and maintenance	Computer	2014-15	National
17	Karishma Chakole Tejaswini s. Malokar Pranali r. Jaiswal	Security in data storage and transmission in cloud computing	Computer	2015-16	National
18	Anand tembhurne Pratik kaste Vighnesh chavhan	Implementation of network monitoring as a g- host	Computer	2014-15	National
19	Ashlesha r. Chakole Shweta r. Chetule Akash v. Mohadikar	Design and implementation of secured data access control in cloud computing	Computer	2014-15	National
20	Amol b. Deshpande Samir d. Nagpure Abhilasha m. Zodape	A supar- resolution based image inpainting in the advertent of exemplar technique	Computer	2015-16	National
21	Ankush zatale Tejas thorat Shubhangi chafle	Energy efficiency data gathering using shortest tranjectory in wireless sensor network	Computer	2015-16	National
22	Pooja S. Soni Gaurav N.	Online editor for compiling and executing different	Computer	2015-16	National

	Suryawanshi Ratnadip P. Kawale	languages source code			
23	Budhan Thool Akshay Shrote Nitesh Jibhkaye Roshan Tayade	Experimental Investigation on self-compacting concrete by using miner affective	Civil	2013-14	National
24	Sumit Thakre Dhanjay Telrandhe Suraj Babre Rashmi Gaikway	Desgine of water treatment plant	Civil	2013-14	National
25	Snehay Mendhe Sneha Chaudhari Rahul Jambhulkar\ Nehal Akhtar	Study of Waste water treatment Plant	Civil	2013-14	National
26	Aasil Danish Deepali Sangolkar	Earthquake Resistant Construction Techniques	Civil	2014-15	National
27	Ruchi Thakur Amol Murhekar Kumar Dhahake Chetan Barne	Effect of intermitant using on compressive strength of concrete	Civil	2014-15	National
28	Deepali Choudari Basil Paul	Stabilization of black cotton soil by using rice husk ash and lime	Civil	2014-15	National
29	Sagar Sawnsukha Vicky Shambharkar Priyanka waghase Sourabh Lakhamapure Rakesh Ingili Komal Chawan	Optimization techniquae used in waste water treatment	Civil	2015-16	National

30	Gulzar Babrah Shaileshkumar Rawate Palash Kurvey Aafaque Ansari Pravin Tumlam Nikhil Kambale	Partial Replacement of Aggregate by recycled plastic waste	Civil	2015-16	National
31	Prashant Rahanddale Satish Gite Nilesh Mendke Nikhil Gotambare Shivshankar Meshram Tushar Kambhalkar	Comparative Study of Design of liquid retaining structure using IS 3370 (1965) and IS 3370 (2009)	Civil	2015-16	National
32	Minakshi Kankye Nikhil Dofe Mukesh KAmriya Ravindra Bandewar Vilas Pingare	Comparative Analysis of Manufacturing process of Various types of bricks.	Civil	2015-16	National
33	Gunkar Bhise Puja Raut Tushar Wandile Ravina Kawade	Variation of Strength of concrete by partial replacement of corner with rise ash coarse aggregate by furnace slage	Civil	2015-16	National
34	Avinash Chande Sureskha Gaykwad Tanmay Surkar Vinay Kajne	To Study the effect of acid on concrete	Civil	2015-16	National
35	Avinash Fulzale Amol pawar Hitesh BhatkHODe	Spy and Survivor Robo For Detecting Faults	Electrical	2013-14	National
36	Sachin Bomidwar Roshan Khapre	Inverter With Solar Battery Charger	Electrical	2013-14	National

	Pankaj Vaidya				
37	Amar Muneshwar	Electrostatic Precipitator Using Vibrator	Electrical	2013-14	National
	Umesh Lilore				
	Vaishali Mendhule				
38	Abhay Bhilkar	Multi Auto Mations To Control DC Motor Speed	Electrical	2013-14	National
	Akhil Ghotekar				
	Ankit Darwade				
	Krunal Boke				
39	Nishant Khobragade	Effect Of Load Charges On Transmission Utility	Electrical	2014-15	National
	Pratik Akhand				
	Pranay Selwate				
	Nilesh Gaikwad				
40	Amol Nagpure	Programmable AC Power Control	Electrical	2014-15	National
	Swapnil Hedau				
	Chetan Thakre				
	Harshal Mankar				
41	Vikas Nimgade	Auto Power Supply Control 4 Different Source Solar Mains Generator & Invertor To Ensure No Break Power	Electrical	2014-15	National
	Somendra Thakre				
	Harshal Mankar				
42	Achal Gedam	Power Generator Through Permanent Magnetic Motor	Electrical	2014-15	National
	Amol Amdhure				
	Aatish Gedam				
	Badal Doifode				
	Braj Bhushan Kumar				
43	Bhimesh Kumar Harinkhede	Closed Loop Speed Control Of BLDC Motor	Electrical	2015-16	National
	Gitesh Deshmukh				
	Kapil Ghatole				

	Nikesh Maywade				
	Roshan Kuhike				
	Ravindra Selote				
44	Ritesh Deshmukh	Maximum Power Point Tracking Of Surface Mount Permanent Magnet Synchronous Machine Based Wind Energy Conservation System Using Matlab Control	Electrical	2015-16	National
	Prashant Barsagade				
	Sushil Nagpure				
	Sanjay Nandanwar				
45	Komal Moon	Auto Power Supply Control From Different Sources Using Microcontroller To Ensure Uninterrupted Power Supply	Electrical	2015-16	National
	Mayuri Dhawale				
	Priya Choudhary				
	Monali Bharne				
	Pooja Tripathi				
	Sarika Wasekar				

3.4.4 Provide details (if any) of

- ➢ **Research awards received by the faculty**
- ➢ **Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally**
- ➢ **Incentives given to faculty for receiving state, national and international recognitions for research contributions.**

Ans:-

Recognition received by the faculty from reputed professional bodies under ISTE, IEI, CSI and other agencies, nationally as well as internationally are as follows:-

Table 3.33 : Membership of Professional Bodies

Sr.No.	Name of Faculty	Recognition
1.	Dr. Santosh Chede	ISTE
	Dr. Santosh Chede	IAENG
	Dr. Santosh Chede	Editorial Board Member International Journal for ElectroComputational World Knowledge Interface, ISSN-2249-5428(Online), 2249-541X(Print)
	Dr. Santosh Chede	Editorial Board Member International journal For Advancement in Technical Research & DevlopmentISSN-2277-405X
2	Prof. V. G. Parhate	ISTE
3	Mr. PRAVINKUMAR JANGLE	Indian Society of Technical Education (Life Member)
4	Ashtashil V Bhambulkar	IWWA
5	PradnyaWasnik	NICEE
6	PriyankaNagdeve	NICEE

3.5 Consultancy

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

Ans:-

- The institute was established in the year 2010-11.
- The institute has established EDC Cell for development of innovative Industrial projects.
- Training and Placement Officer (TPO) makes a liaison with the HR departments of different companies for placements.
- The institute keeps in touch with the passed out students of the college who are presently working. These students are also very helpful in placements.
- The institute is planning to prepare funding proposal for EDC from agencies like AICTE.

Objectives for Industry Institute Interface:

- Liaising with Research and Development organization and industry for knowledge sharing.

- Bridge the gap between institute and industry.

- Arrange expert lecturers of eminent personalities.

- Develop the skill to make the student employable.

- To get acquainted with industry requirement, process, managerial skill.

- It suggests advance training program.

The MoUs signed by Institute are as follows:

Table 3.34

MoUs Signed

Sr. No.	Department	Company Name	Year	MoU Signed Date
1	CE	JETKING PVT LTD	2016	11/11/2016
2	EE	Electronics Designer	2015	13/12/2015
3	ME	AXIOM SOFTWARE PVT LTD	2016	31/12/2016
		DCS PVT LTD,NAGPUR	2011	19/09/2011
		THREE M SOFTWARE SOLUTION,NAGPUR	2012	17/08/2012
		THREE M SOFTWARE SOLUTION,NAGPUR	2013	19/08/2013
		THREE M SOFTWARE SOLUTION,NAGPUR	2014	17/07/2014
		THREE M SOFTWARE SOLUTION,NAGPUR	2015	23/03/2015

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

 Ans:-

- Institution promotes consultancy with industry by framing a well-structured policy that permits use of existing lab infrastructure to carry out research activities and development of software application etc.

- Revenue generated from such activity is shared by the institute and the faculty. Industry contacts are made available through referral and through internet.

- The Institute had a great desire to start consultancy cell, which includes the experts of all the departments, those counsellors provide guidance to select the appropriate stream in which they have facilities & capabilities. Also during guest lectures, regular interaction with industry persons, during industry visits; it is conveyed to them about the facilities and expertise available.

- Periodically the updated literature about the institution has been sent to prospective companies highlighting the latest achievements including the facilities available with the department.

- Major areas of expertise are advertised through department homepage in the main college website and also through technical events/programmes, customized e-mails and public aware talks.

- Industrial problems are always solicited to provide solution through expertise of faculty members. MoU is signed with some Indusrial organizations.

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

Ans:-

- The Institute makes every effort to encourage the staff for utilization of all human resources, intellect and available facilities in the campus to promote liaison with industries/companies so as to improve the ties between the two in a very flexible manner by which the consultancy services gets a boost.

- Institution encourages the staff to utilize their capabilities and available facilities to extend consultancy services by fine tuning its HR policy which rewards and encourages such activity through an appraisal system where in faculty gives a self appraisal of all such activities undertaken by them annually.

- All such activities are amply rewarded through promotion and annual increments. The college motivates the professionally qualified faculty to utilize their expertise for consultancy services with the permission of the institute. Institute is entitled to provide seed money to carry out the consultancy. Institute deputes the staff for industrial training where they can find the potential for consultancy. All the available consultancy services are publicized on the institute's website.

- Each department is motivated to develop the multi disciplinary faculties to address the present needs of both students and industries.

- The department encourages faculty members to visit industries to supervise the project work carried out by the students in industries and ascertain the possibilities for any consultancy/ collaboration activities.

- Through personal visits to industries in order to obtain consultancy work.

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

Ans:-Efforts are being made for generating revenue through consultancy services especially by offering training in some of the selected areas such as soil testing, concrete testing, surveys, structural design, field survey, testing of energy meter.

The list of revenue generated due to consultancy services are as follows:

Table 3.35 :Revenue generated due to consultancy services

Sr. No.	Name of Consultancy Service	Revenue Generated	Year
1	CAD/CAE CONSULTANCY	Rs. 15,000/-	2013-14
2	CAD/CAE CONSULTANCY	Rs. 20,000/-	2014-15
3	CAD/CAE CONSULTANCY	Rs. 25,000/-	2015-16

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?

Ans: - Yes

Institute has policy of sharing the income generated through consultancy. The share is given to the faculty, administrative staff involved in consultancy as follows:-

The College - 40%

Faculty - 60%

Institute has policy which motivates maximum faculty members to get involved in consultancy as well motivate the faculty to increase involvement in consultancy. Major portion of the money earned is utilized for promoting research and development facilities

Invited Expert Lecture Series:

- The following are the lectures organized under these initiatives:

Table 3.36:

Details on student enrichment programme (special lectures / workshops/seminar) with external experts

MECHANICAL ENGINEERING

Sr. No.	Academic Year	Activity	Name of the Speaker	Details of Speaker
1	2013-14	Personality Development	Mr.Vikas Hiranwar	T&P Incharge SCET,Nagpur
2	2013-14	Seminar on Advance Manufacturing Process	Dr. Khope	Associate Professor PCE,Nagpur
3	2013-14	Guidance on PPT Presentation	Mr. Vikas Hiranwar	T&P Incharge SCET,Nagpur
4	2014-2015	Seminar on Dynamics of Machine	Dr. C. N. Sakle	Associate Professor PCE,Nagpur
5	2014-2015	Guest Lecture on Personality Development & Communication Skill	Mr.Vishal Choudhary	CEO
6	2014-2015	Seminar on machine & mechanism	Dr. M. K. Sonpimple	Associate Professor, Priyadarshini College of Engg.
7	2014-2015	Seminar on Fire fighting	Mr. Syed Abdul Gaffar	CEO, KG-Mech, Hydrabad
8	2015-16	Guest Lecture on Introduction of FEM by Using ANSYS Software	Mr. Atish Bhawankar	Senior Executive officer,CADD Mastree

9	2015-16	Seminar on Static Force Analysis	Dr. A. V. Wanalkar	Associate Professor KDKCOE,Nagpur
10	2015-16	Seminar on current scenario of CAD/CAM/CAE software & job opportunities	Mr. Mahesh sahare	Senior Executive officer, DCS Pvt. Ltd.
11	2016-17	Carrier Opportunities in Seimens Software	Mr. Salim Khan	Senior Executive officer, 3M Software Solution
12	2016-17	Carrier Opportunities in GULF Countries	Dr. P. K. Khapre	QHSE Auditor, OMAN
13	2016-17	Personality Development	Dr. S. C. Raghatate	Oxford Speaker Academy

Table 3.37 :

Details on student enrichment programme (special lectures / workshops/seminar) with external experts

ELECTRICAL ENGINEERING

Sr. No.	Academic Year	Activity	Name of the Speaker	Details of Speaker
1	2013-14	Seminar on Power Electronics	Dr.M.MRenge	Professor, RKNEC
2	2014-2015	Seminar on facts Devices	Irfan Ahmed	A.P, ACOET
3	2015-16	Seminar on Guidance on preparation of GATE examination.	Amol Khadse	AOM,H.R.Mentors

4	2016-17	Seminar on "Solar Panel Designing".	Mr. sandeepSonaskar	Director
5	2016-17	Seminar on "Making of Transformer".	Mr. UmeshKubde	Director
6	2016-17	Workshop on "Making of Transformer".	Mr. UmeshKubde	Director

Table 3.38 :

Details on student enrichment programme (special lectures / workshops/seminar) with external experts

COMPUTER ENGINEERING

Sr. No.	Academic Year	Activity	Name of the Speaker	Details of Speaker
1	2013-14	Guest Lecture on Computer Network	Prof. Chandu Vaidya	Assistant Professor RGCOER ,Nagpur
2		Guest Lecture on "Training & Placement"	Prof. S.R. Kulkarni	Assistant Professor R.C.O.E. Nagpur
3	2014-15	Seminar on Gate Exam	Managing Director	I.C.E. Gate Exam
4		Workshop on Troubleshooting & Network Implementation	Mr. Prabuddha Sanyal	Managing Director ITNetworkZ

5		Workshop on Linux programming	Mr. Bhawesh	Managing Director ITNetworkZ
6		Guest Lecture on Complier Construction	Prof. N.G. Mungale	Assistant Professor U.C.O.E ,Nagpur
7	2015-16	Workshop on EISCP	Mr. Arpit Maheshawari	Icloudjunction Presents, Delhi
8		Seminar on carrier Guidance's	Mr. Amit Basware	Jetking, Nagpur
9	2016-17	Workshop on Hands-on session on 'C' technology	Mr. Santosh Selokar	SSIT Nagpur
10		Guest Lecture on Complier Construction	Prof. N.G. Mungale	Assistant Professor U.C.O.E ,Nagpur

Table 3.39 :

Details on student enrichment programme (special lectures / workshops/seminar) with external experts
ELECTRONICS & TELECOMMUNICATION ENGINEERING

Sr. No.	Academic Year	Activity	Name of the Speaker	Details of Speaker
1	2013-14	Guest Lecture on VLSI Tech	Mr.SwapnilShamkuware	Professor
2	2013-14	Guest Lecture on JAVA Tech	Mr.PratapShukla	Professor

3	2014-15	Guest Lecture on Communication Engineering	Prof P Bokade	Professor
4	2014-2015	Guest Lecture on TSS	Mr.SwapnilShamkuware	Professor
5	2015-2016	MPSC/ UPSC Guidance	Mr. Ram Wagh	Director
6	2015-2016	Introduction to LABVIEW	Mr. Sameer Taksande	Engineer
7	2016-2017	Guest Lecture on Personality development	Mr. GuruprakashShetti	Assistant General Maneger
8	2016-2017	Advance of Digital modulation Technic	Prof. B. R Thakre	Professor
9	2016-2017	Seminar on IOT Infra structure	Mr.AshishLabde	Engineer

Table 3.40 :

**Details on student enrichment programme (special lectures / workshops/seminar)
with external experts
CIVIL ENGINEERING**

Sr. No.	Academic year	Activity	Name of Speaker	Details of Speaker
1	2013-14	Personality Development	Mr. Vikas Hiranwar	Motivational Trainer, Disha Counselling Center
2	2013-14	AUTO-CAD	Mr. Abhishek Solanki	Instructur, CAD Center
3	2013-14	Guidance on PPT Presentation	Mr. Vikas Hiranwar	Motivational Trainer, Disha Counselling Center
4	2013-14	Mind Power	Mr. Yogesh	Spiritual Trainer, Disha

			Gajbhiye	Counselling Center
5	2014-15	Total Station	Mr. Ravi Mokhade	Owner and Field Expert, Ravi Survey Agency
6	2014-15	Guest Lecture on Personality Development and Communication Skill	Mr. Vishal Chaudhary	Soft Skill Trainer, Global School
7	2014-15	AUTO-CAD	Mr. Abhishek Solanki	Instructur, CAD Center

- Institute aims to achieve its goals of providing education to create just, plural and equitable society in consonance with constitutional values. The major strength of this college is its ability to ensure holistic development of students to make them enlightened citizens.

- Activities of each unit is monitored and guided by a committed faculty member. The details and plan of activities are informed to all the students. Interested students enroll/register their names and actively participate to contribute their best.

- The institute has a fully fledged Counting Adult Education And Extension program which coordinates all social and community activities.

3.6 Extension Activities and Institutional Social Responsibility (ISR)

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

Ans: -

- As very well stated in the Mission and Vision declaration of the institution, to impart quality technical education which is in line with the latest global requirement & to develop all round abilities of the student.

The social outreach programme that has created an impact is asfollows:

- College students visited surrounding villages to enquire and create awareness about various government schemes.

- The institute arranges Blood donation camps, tree plantation, free health checkup plan.
- Created awareness about hygienic environment and pollution free climate Swach Bharat Abhiyan Awareness program- street play, organized for conducting bus stop cleanness drive at Nagpur Bus stop.

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

Ans:-
- Over the years the institution has built a fine network of highly motivated faculty and student. They coordinate for all social activities by effective participation.
- The stakeholder's perception on the overall performance and quality of the institution is assessed through feedback obtained from the faculty, students, parents, alumni, inspection committees, visitor's comments etc.

The mechanism of involvement consists of following measures:
- A faculty member is appointed as overall in-charge for a programme that coordinates student response from all departments.
- Concerned faculty brief the students about importance of various social activities and about incentive marks provided by the RTMNU, Nagpur.
- Every department has a corresponding In-charge who conducts such activities within the department.
- Each activity has student volunteers who actually supervise and run the programme under the guidance of their corresponding In-charge.
- In addition, the institute organizes annual events like Sambhav (Technical competitions), Jalasa (Cultural fest), Tech-trend (science exhibition and outreach program).
- Students register for at least one activity. The details and records are monitored by student heads. Faculty incharges submit reports of activity conducted to the Principal. Periodic reviews before and after conducting the activity help in tracking student involvement. All the activities are conducted for student development and help them in becoming responsible and confident citizens.

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

Ans:-

- Stakeholders such as students, parents, faculty members, industry, and alumni are elements of the education system who decide the overall performance and quality of the institution. For smooth functioning of the institute and to cater to the competitive environment, it is necessary that certain processes be laid down in order to establish effective linkages between these elements, thereby contributing to the overall improvement in the existing system.

- Institute involves the stakeholder's perception in various committees; overall performance and quality improvement are enumerated below**:**

- Every year a alumni meet is organized by college in order to get the perception, share their ideas their achievement and how college study help them to grow in their respective career. Alumni have provided good suggestions, constructive criticism and a feedback mechanism during alumni meet.

- Every class has a class representative along with girl representative. He/She communicates their suggestion, problems, and perception through respective class teacher / Head of Department / Principal. Suggestion box is also kept at various places which are accessible to students.Students have the freedom to approach the Principal & Head of Department any without prior appointment. This feedback is discussed in meetings of Training and Placement (T & P) cell and shortcomings are addressed. Student feedback for the respective course is conducted twice in each semester.

- Teacher/ Head of Departments/ Principal interact with guardians regularly to get there perception about college. Direct interaction of the guardians with the HOD is encouraged. Opinion and perception of parents are considered before planning an industrial visit.

- An institute conducts regular staff meetings to get perception on their overall performance and provide different aids which required for teaching.

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.

Ans:-
- The institution plans and organizes its extension and outreach program are as follows:
- The major extension and outreach programs are events like Free Health Check up camps, Tech Trend (National Level Technical Conference), SAMBHAV (National Level Technical Paper presentation).
- This provides a platform to enhance overall knowledge, skill level and confidence so that students can solve problems and contribute positively to the growth of the society.

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?

Ans:-
- The college had a NSS and Continuing Adult Education and Extention programme under the banner of RTM, Nagpur University..
- The college under takes wide spectrum of activities under the umbrella of NSS and Continuing Adult Education and Extention programme. During admission and orientation process, the representatives of these units apprise the students about the benefits and scope of these activities.
- A faculty member is appointed as overall in-charge of these programs.
- Program officer interacts with the students about brief overview of various social activities which are conducted are under Counting Adult Education And Extension like dowry system, alcohol consumption, smoking, caste system, child marriages and save girl child and also the students are appraised with incentive marks provided by the University.

- The institution encourages the students and faculty to take part in special integration camps by NSS andContinuing Adult Education and Extention proramme to bring awareness among the people.

- The detail of the program is displayed on the notice board and circulated in various departments.

- Institute gives special certificate and bonus marks in term of work done by the student volunteers.

- Students are also encouraged to participate in various activities proposed by social organizations.

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?

Ans:-

- The college ensures participation of students in these activities from under-privileged and vulnerable sections of society. Training is given by the students to self-help groups comprising mainly of underprivileged women and to school children in the neighborhood. Special coaching in computers, mathematics, and communication skills in English are given.

- The various social services and extension works organised which are as follows

Table 3.41 :Social services and extension works

Sr. No.	Name Of Activity	Date of Program	Venue
1	Tree Plantation	15/07/2015	College Campus
2	Literacy Camp	28/08/2014	Vihirgao
3	Blood donation camp	26/11/2015	S.C.E.T.
4	Visit to Vridhashram	23/03/2015	Panchavati Ashram
5	Street play	21/01/2016	Nagpur Bus stand

6	Computer Awareness Program	30/08/2014	Pragat High School
7	Free Health Checkup Camp	26/11/2015	S. C. E. T.
8	CET Free tuition classes	15 Mar to 30 April 2017	S. C. E. T.

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.

Ans: - The objectives and expected outcomes of the extension activitiesorganized by the institution are as follows:-

Objectives: Participation of students in the extension activities gives them an insight into needs of the societal problems and concerns. Based on this they are expected to use their technical expertise to solve some of the societal problems thus complementing their academic learning experience. The values inculcated are compassion and social responsibility.

The expected outcomes are

- ➢ Enhancement of confidence level in students
- ➢ Imbibing the culture of 'Hard work and Discipline'
- ➢ Development of personality and leadership skills
- ➢ Inculcation of moral and humane values

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?

Ans:-

- • The institute ensures the partnership of community in its reach out activities in the following ways:

- The innovative community project is Computer Literacy Program to the students of less privileged class has contributed in community development.
- The institution has initiated social and health awareness program like Save Vesan Mukati abhiyan, Anti-addiction, dowry system, environment protection, consumer protection awareness, anti-corruption, and cleanliness awareness etc.
- Created awareness about hygienic environment and pollution free climate Swach Bharat Abhiyan Awareness program- street play, organized for conducting bus stop cleanness drive in Nagpur Bus stop.
- This has contributed to both community and institution development.

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.

Ans:-

- Continuing Adult Education And Extension Programme,RTMNU arrange a series of lecture on Vesan Mukati by Kharate Maharaj.
- Blood Donation Camp, Tree plantation, Literacy camp, Street play (Swachata Abhiyan) are organized by college.
- Institute has developed constructive relationship with following institute for working on various outreach and extension activities.
- The list of constructive relationship with other institutions is as follows:

Table 3.42

Constructive relationship with other institutions

Sr. No.	Name of Institute /Agency
1	DCS Private Ltd.
2	3M Software solution
3	BSNL for EETP program
4	BSNL in Association with BARTI
5	Jetking Private limited
6	AXIOM Softtech

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.

Ans:-YES

A student project "Man Machine Interaction using Double Channel Electrooculogram (EOG) Signal" is awarded at National Level Project Competition, Raman Science Center Nagpur and also appriciated by Hon. Chief Minister of Maharashtra.

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.

Ans:-

The institute interacts through Research and Development centre / Training and Placement Department. The list of institution collaborations are as follows:

Table 3.43 : Institution collaboration

Sr.No.	Name of institute/industry	Nature of collaboration
1.	Priyadarshini Institute of Engineering and Technology, Nagpur	Development of teaching material teaching skill of faculty, delivery mechanisms including aids and props for faculty of humanities.
2.	MIDC Industries Association Hingna(MIA)	Undertake research on concern subject related to problem areas being experienced by member of industries.
3.	Butibori Manufacturers Association, Nagpur (BMA)	Relevant industrial input and expertise from concerned member industry.

4.	Vidarbha Industries Association, Nagpur	Academic experts and student assistants comparing research team
5.	Priyadarshini College of Engineering Nagpur	Faculty development programme, guest lectures
6.	K.D.K. College of Engineering Nagpur	Guest lectures

3.7.2 Provide details on the MoU/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.

Ans:-

Details of the MoU with institutions and industries are as follows:

Table 3.44 :MoU/Collaborations

Sr. No.	Department	Company Name	Year	MoU signing Date
1	Mechanical Enginnering	Axiom Software Pvt Ltd	2016	31/12/2016
		Dcs Pvt Ltd,Nagpur	2011	19/09/2011
		Three M Software Solution,Nagpur	2012	17/08/2012
		Three M Software Solution,Nagpur	2013	19/08/2013
		Three M Software Solution,Nagpur	2014	17/07/2014
		Three M Software Solution,Nagpur	2015	23/03/2015
2	Computer Enginnering	Jetking Pvt Ltd	2016	11/11/2016

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

Ans :-

The industry-institution-community interactions that have contributed to theestablishment /creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz.laboratories / library/ new technology /placement services etc are as follows:

- Collaboration with Axiom Software Pvt Ltd, Dcs Pvt Ltd, Nagpur,Jetking Pvt Ltd,Butibori Manufacturing Association (BMA),Vidarbha Industries Association, Nagpur (VIA) and KEC International Limited, Nagpur.
- Enhancement in placement of students.

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.

Ans: - Eminent Scientists /participants during various events organized byInstitute in last four years are as follows:

Table 3.45 :National Technical Events organized

Sr. No.	Department	National /International	Year	Name of the Eminent Scientist/Participant
1	Mechanical Enginnering	Techtrend	2014	Dr. Sahare VIT Nagpur
				Prof. P. Thakre ITM, Nagpur
		Techtrend	2015	Dr. M.K. Sonpimple (Asso. Prof.) PCE,Nagpur
		Techtrend	2016	Dr. C.N.Sakhale (Asso. Prof.) PCE,Nagpur
2				Dr. Pohane PBCOE, Nagpur

	Civil Enginnering	Techtrend	2015	Mrs. A Rajurkar RCOEM, Nagpur
				Mrs. N.Dhange KDKC Nagpur
		Techtrend	2016	Mr.Asif Mirza PCOE Nagpur
3	Electrical Enginnering	Techtrend	2014	Dr. S. Mule (PCOE Nagpur)
				Prof . S. Shrikant (SRMCE)
		Techtrend	2015	Praful Talwatkar
				Prof. M.M Renge(RKNCE)
		Techtrend	2016	Prof. Snehal Gawande(YCCE) Nagpur
				Mr. Kotangte(MSEDCL)
4	First Year Enginnering	Techtrend	2014	Dr. Ragini Dhokne Raisoni College Nagpur
				Dr. Sunil Wanjari (Hislop College) Nagpur
		Techtrend	2015	Dr. Lekhraj Hatwar(WCOE Nagpur)
				Dr. Sunil Wanjari (Hislop College) Nagpur
				Dr. Meenakshi Kale
		Techtrend	2016	Dr. Sudhi Tiple(J.B.Science Wardha)
				Dr. Sarang Dhote (Bhivapur Science College)
5	Computer Enginnering	Techtrend	2014	Prof. Yogesh Chaudhary(KDKCOE) Nagpur
				Prof. Kamlesh Kelwade
		Techtrend	2015	Prof. V.P. Thakare(UCOE) Umrer
				Prof. Manish Winchurkar(KDKCOE) Nagpur
		Techtrend	2016	Prof. Pravin Sen (NIT) Nagpur
				Prof. C.S. Gode (UCOE) Umrer
6	Electronics and	Techtrend	2014	Dr. Prabhakar Khandait(KDKCOE)

			Nagpur
Telecommunication Enginnering			Prof. S.N. Palod(SRPCE) Nagpur
	Techtrend	2015	Prof. N.P.Giradkar(SRPCE) Nagpur
			Prof. P.B.Pokale(PJLCOE)Nagpur
	Techtrend	2016	Prof. G.S.Raghalate(PJLCOE)Nagpur
			Prof. P.R.Bokade(PBCOE) Nagpur

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 –

Curriculum development/enrichment

Internship/ On-the-job training

Summer placement

Faculty exchange and professional development

Research

Consultancy

Extension

Publication

Student Placement

Twinning programmes

Introduction of new courses

Student exchange

Any other

Ans:-

Considering MOUs with various organisations, student visits are organized in order to aware them about industrial environment. Students are motivated to select a project as per the knowledge gain. Similarly many expert lectures are arragned on advanced topics in collaboration with organisations.Such organisations in collaboration with our institute had organized special placement oriented training modules in order to build up confidence in

the students. T&P dept. is planning to depute students for internship as well as summer training. Through expert lectures on advanced topics are delivered to students w.r.t. curriculum enrichment. Collaboration with organizations has enhanced the academic capabilities of the institutions w.r.t. training and publications.i.e. CNC training of students was imparted in collaboration with IIPDM, Paper publications by faculties in various journals and conferences.

Table 3.46 :Number of Paper Publications by faculties

Sr. No.	Department	Academic Year		
		2015-16	**2014-15**	**2013-14**
1	Mechanical Engineering	5	14	12
2	Computer Engineering	5	6	13
3	Electrical Enginnering	5	2	2
4	Civil Enginnering	6	6	5
5	Electronic and Telecommunication Enginnering	8	4	6
6	First Year Enginnering	3	4	2

Paper publications by students in various journals and conferences are as follows:

Table 3.47 :Number of Paper Publications by students

Sr. No.	Department	Academic Year		
		2015-16	**2014-15**	**2013-14**
1	Mechanical Engineering	42	36	12
2	Computer Engineering	4	3	2
3	Civil Enginnering	15	15	12
4	Electronic and Telecommunication Enginnering	6	17	12

List of student placed in various industries are as follows:

Table 3.48

Student Placement

Sr. No.	Name of Industry	Package(Lac)	Department	TOTAL
1	CEAT Nagpur	2.3	Mechanical Engineering	1
2	KJV Alloy Conductors Pvt Ltd, Nagpur	1.8		2
3	Maruti Suzuki India Ltd Gurgaon	3.2		1
4	GMR Raikheda	1.8		2
5	Rattan India Power Ltd Amravati	2.5		2
6	Spannkraft Hydrosystems Pvt Ltd Nagpur	1.8		7
7	Vedant Papercraft Pvt Ltd Nagpur	1.8		2
8	ZF Steering GearsIndia Ltd Pune	1.8		24
9	TCS Trivendrum	3.2		1
10	Smart Software Solution Pvt Ltd	1.2	Computer Engineering	6
11	Tribro Softech Pvt.Ltd	-		2
12	Unitechnosys	1.8		2
13	Eureka Forbes	1.2	Electrical Engineering	1
14	Unitechnosys	1.0		1
15	Indiabulls Power Ltd.	1.2		3
16	Honeywell	1.0		2
17	RattanIndia Power Ltd Amravati	1.1		5

18	Premier Plant Services	1.0		6
19	Spannkraft Hydrosystems Pvt Ltd Nagpur	1.2		1
20	Smart Software Solution	1.2		1
21	Indiabulls Power Ltd.	2.5	Electronics and Telecommunication	2
22	Tribro Softech Pvt.Ltd	2.0		1
23	Eureka Forbes	2.0		2
24	AAKG	2.5		2
25	Axiom Care Tech Ltd.	2.0		1
26	LG	2.5		1
27	Smart Software solution Pvt.Ltd.	2.0		6

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

Ans:- Institution has planned and established linkages/collaborations related to academic and research activities with various industries and research institutes are as follows:

- Planned and established linkages/collaborations related to academic and research activities for students and faculty members in various specializations.
- Inviting expertise from various industries for delivering Guest Lectures, key note address in Conferences, speaker in workshops and symposiums
- Establishing Industry Institute collaboration.

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1 PHYSICAL FACILITIES

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

Ans:-In order to create and enhance the infrastructure that facilitates effective teaching and learning, the policy is framed according to the strength of students in different streams. The policy also confirms to the strength of the Faculty appointed for the institution w.r.t. the increase in strength as per requirement.

4.1.2 Detail the facilities available for

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

Ans:-

Facilities available for Curricular and co-curricular activities:

- **Classrooms:** Well furnished and airy classrooms.
- **Library**: An excellent library with a collection of books, periodicals and journals for all classes as per AICTE norms.
- **Computer Lab**: A Hi-tech, air-conditioned and advanced computer lab.
- **Staff**: An excellent and experienced staff for imparting quality education.
- **Seminar Hall:** The College has well equipped seminar hall in each Department.

Laboratories: The College has well equipped laboratories and details are: Instruments like UTM , BOD incubator, Gyroscope couple, rotating and balancing apparatus, VCRS test rig, Rewinding Machine, Loading Rheostat 2KW single phase in 8 steps, DC shunt motor generator, Drill machine, UV exposure unit, Curing machine etc. in the lab and expertise in various departments are available to the students and staff to carry out the work LCD projectors Web Camera are used for teaching-learning and research

Infrastructure facilities available for Curricular and co-curricular activities:

Table No4.1:Infrastructure Facilities for Mechanical Engineering Department

Sr. No.	Description	Numbers	Area
1	Classrooms	06	Avg. size > 66 m^2
2	Technology enabled learning space	1 class room have a LCD and internet facility	
3	Seminar hall	01	152.71m^2
4	Laboratories	08	Avg. size > 66 m2
5	Workshop	01	214.39m2, 216.02m2
6	Computer Lab	01	175.00m2
7	Specialized facilities and equipment for teaching learning	Institute has provided LCD projectors to each department There is a digital library with Wi-Fi internet used for teaching- learning.	

Table No 4.2:Infrastructure Facilities for Electrical Engineering Department

Sr. No.	Description	Numbers	Area
1	Classrooms	03	Avg. size > 66 m2
2	Technology enabled learning space	1 class room have a LCD and internet facility	
3	Seminar hall	01	152.71m2
4	Laboratories	07	Avg. size > 66 m2
5	Computer Lab	01	66.00m2

| 6 | Specialized facilities and equipment for teaching learning | Institute has provided LCD projectors to each department
There is a digital library with Wi-Fi internet used for teaching- learning. | |

Table No4.3:Infrastructure Facilities for Civil Engineering Department

Sr.No.	Description	Numbers	Area
1	Classrooms	03	Avg. size > 66 m2
2	Technology enabled learning space	1 class room have a LCD and internet facility	
3	Seminar hall	01	152.71m2
4	Laboratories	10	Avg. size > 66 m2
5	Computer Lab	01	66.00m2
6	Specialized facilities and equipment for teaching learning	Institute has provided LCD projectors to each department There is a digital library with Wi-Fi internet used for teaching- learning.	

Table No4.4:Infrastructure Facilities for Computer Engineering Department

Sr. No.	Description	Numbers	Area
1	Classrooms	03	Avg. size > 66 m2
2	Technology enabled learning space	1 class room have a LCD and internet facility	
3	Seminar hall	01	152.71m2

4	Laboratories	08	Avg. size > 66 m2
5	Computer centre	01	175.00m2
6	Specialized facilities and equipment for teaching learning	Institute has provided LCD projectors to each Department. There is a digital library with Wi-Fi internet used for teaching- learning.	

Table No 4.5:Infrastructure Facilities for Electronics And Telecommunication Engineering Department

Sr. No.	Description	Numbers	Area
1	Classrooms	03	Avg. size > 66 m2
2	Technology enabled learning space	1 class room have a LCD and internet facility	
3	Seminar hall	01	152.71m2
4	Laboratories	07	Avg. size > 66 m2
5	Computer Lab	01	66.00m2
6	Specialized facilities and equipment for teaching learning	Institute has provided LCD projectors to each department There is a digital library with Wi-Fi internet used for teaching- learning.	

Table No 4.6:Centralized Facility

Sr. No.	Description	Numbers	Area
1	Boys common room	01	100m2
2	Girls common room	01	115.66m2
3	Stationary store	01	40.55m2
4	Reprography	01	23.63m2
5	Ladies washroom	01	42.69m2
6	Gents washroom	01	29.49m2
7	Counseling room	01	123.43m2
8	Drawing hall	01	179.04m2
9	Garden	01	332.39m2
10	Library and reading room	01	601.64m2

Table No 4.7:Administrative Infrastructures

Sr. No.	Description	Numbers	Area
1	Board Room	1	123.43m2
2	Cabin for Registrar	1	20.27m2
3	Central Store	1	40.55m2
4	Administrative Office	1	20.27m2
5	Exam Control Office	1	41.09m2
6	Departmental Office All	6	301.63m2
7	House Keeping	1	12.76m2
8	Maintenance	1	12.76m2
9	Canteen	1	162.75m2
10	Placement Office	1	41.25m2
11	Principal Office	1	31.67m2
12	Security	1	10.52m2

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

The details of the facilities available with the institution are as under:

Facilities available for Extra-curricular activities:

- College strikes a balance between the "Knowledge is Power" and "Health Is Wealth". The institute promotes sports and games, as it offers the individual an opportunity to enhance self-knowledge, expression, personal development, courage and social interaction. The students of all departments are given equal opportunity to participate and prove their talents. Students are encouraged to participate in intercollegiate sports and games. Students have excelled in sports meets organized by various engineering colleges. The Institute provides Sports Kit and Sports Material for students who participate in Inter-State/National Level, intercollegiate sports and games.

- Apart from curriculum, the Institute gives importance to extracurricular activities. Institute emphasizes on student fitness, soft skill development, social obligations, cultural activities and their participation in sport events.

Table No 4.8: Categories Of Events

Sr. No.	Academic	Aesthetics	Cultural
1	Debate	Bridge making	Dance competition
2	Paper presentation	Poster competition	Singing competition
3	Mock test	Flower show	Fashion show
4	Technical Quiz	Robo Race	Drama
5	Blind C	Model Exhibition	Rangoli
6	Circuit Design		
7	iQuest		
8	Making of Transformer		

Sports (outdoor and indoor games):

The college always encourage students for participation in various inter University, University level, zonal, state, national, inter college tournaments. College provides following indoor and outdoor games facility to student.

The college has well equipped hall having chess, carom as indoor games, outdoor games like cricket, football, volleyball, basketball etc .

- Fields and equipments for outdoor games – All games kit is supplied to the student. For playing various sports

1. Sports Student List

Table No 4.9: Yearly Sports Achievements (Mechanical Engineering Dept.(2013-14)

Sr. No.	Name of Student	Name of Sport	Sem/Year	Achievement and level	Remarks
1	Akash Dhoke	Kabaddi	4thSem/Second	**Inter Collegiate (University level)**	Participate
2	Pratik Dhoke	Kabaddi	4thSem/Second		
3	Mohd. AllauddinDaraj Sheikh	Kabaddi	4thSem/Second		
4	SagarPatade	Kabaddi	4thSem/Second		
5	ShubhamSathawne	Kabaddi	4thSem/Second		
6	PrafulGhate	Kabaddi	4thSem/Second		
7	PritamGedam	Kabaddi	4thSem/Second		
8	Himanshu Gupta	Badminton	4thSem/Second		
9	Pawan Kale	Badminton	4thSem/Second		
10	Noor Ahmad	Badminton	4thSem/Second		
11	ChandrashekharBhoyar	Volleyball	4thSem/Second		
12	Saurabh Barmase	Volleyball	4thSem/Second		
13	Jeetendra Kumar Singh	swimming	6thsem/Third		
14	GorakhnathJha	swimming	6thsem/Third		
15	ShubhamKhode	Badminton	6thsem/Third		
16	Akash Meshram	Athletics	6thsem/Third		
17	AlpeshGhayawat	Athletics/Football	8th sem/Final		

Sr. No.	Name	Sport	Sem/Year
18	ShrikantGawande	Football	8th sem/ Final
19	Rohit Tiwari	Athletics/ Football	8th sem/ Final
20	KrunalMahakale	Football	8th sem Final
21	Saurabh Warghat	Football	8th sem/ Final
22	Rahul Kukade	Football	8th sem/ Final
23	Manmohan Warghane	Kabaddi	8th sem/ Final
24	PrarthanaBanorkar	Athletics	8th sem/ Final

Table No 4.10: Yearly Sports Achievements (Mechanical Engineering Dept.(2014-15)

Sr. No.	Name of Student	Name of Sport	Sem /Year	Achievement and level	Remarks
1	Ali Sayyad Ahefaz	Archery	4th Sem/Second		
2	Bhupesh Lange	Football	4th Sem/Second		
3	Hemant Hulke	Football	4th Sem/Second		
4	Shoeb Raza	Football	4th Sem/Second		
5	Ashish Dhande	Football/ Kabaddi	4th Sem/Second		
6	Anmol Patil	Football	4th Sem/Second		
7	BadalKuhikar	Football	6th Sem/ Third		
8	Naval Lanjewar	Football	6th Sem/ Third		
9	Balwant Gupta	Football/ Kabaddi	6th Sem/ Third	**Inter Collegiate(University level)**	Participate
10	Akash Dhoke	Cricket/Kabaddi	6th Sem/ Third		
11	Pratik Dhoke	Cricket/ Kabaddi	6th Sem/ Third		
12	Rahul Chatap	Cricket	6th Sem/ Third		
13	PranitDandwate	Cricket	6th Sem/ Third		
14	AkshayTulankar	Cricket/ Kabaddi	6th Sem/ Third		
15	BhaskarJha	Chess	6th Sem/ Third		
16	Abhishek Gupta	Chess	6th Sem/ Third		
17	Himanshu Gupta	Badminton	6th Sem/ Third		
18	Noor Ahmad	Badminton	6th Sem/ Third		
19	Pawan Kale	Badminton	6th Sem/ Third		

20	PranitDandwate	Swimming	6thSem/ Third		
21	MohitBhoj	Swimming	6thSem/ Third		
22	Prakash Pande	Kabaddi	6thSem/ Third		
23	AllauddinDaraj Sheikh	Kabaddi	6thSem/ Third		
24	ShubhamSathawne	Kabaddi	6thSem/ Third		
25	SagarPatade	Kabaddi	6thSem/ Third		
26	Swapnil Khetade	Kabaddi	6thSem/ Third		
27	PritamGedam	Kabaddi	6thSem/ Third		
28	BrijeshTripathi	Kabaddi	6thSem/ Third		
29	Dhananjay Kumar	Kabaddi	6thSem/ Third		
30	Sunil Singh	Kabaddi	6thSem/ Third		
31	Prakash Singh	Kabaddi	6thSem/ Third		
32	PrafulGhate	Kabaddi	6thSem/ Third		
33	AnkushBhongade	Athletics	8thSem/ Final		
34	NishantDangore	Athletics	8thSem/ Final		
35	Ashish Fulzele	Football	8thSem/ Final		
36	ShubhamKhode	Chess/Badminton	8thSem/ Final		
37	Harish Khante	Swimming	8thSem/ Final		
38	GorakhnathJha	Swimming	8thSem/ Final		

Table No 4.11: Yearly Sports Achievements (Mechanical Engineering Dept.(2015-16)

Sr. No.	Name of Student	Name of Sport	Sem /Year	Achievement and level	Remarks
1	Akash Kalamkar	Kabaddi	4thSem/Second	**Inter Collegiate (University level**	Participate
2	SagarRathod	Kabaddi	4thSem/Second		
3	Munna Mishra	Cricket	4thSem/Second		
4	YashChimurkar	Football	4thSem/Second		
5	Dipak Vinchurkar	Athletics	4thSem/Second		
6	Shubham Tiwari	Athletics	4thSem/Second		
7	ShubhamJibhkate	Chess	4thSem/Second		
8	ShadabAlam	Chess	4thSem/Second		
9	Saurabh Khekare	Tug of war	6thSem/ Third		
10	UjwalKolhe	Tug of war	6thSem/ Third		
11	Bhupesh Lange	Football	6thSem/ Third		
12	PranayDuragkar	Football	6thSem/ Third		
13	Ashish Dhande	Football	6thSem/ Third		

14	Anmol Patil	Football	6thSem/ Third		

14	Anmol Patil	Football	6thSem/ Third		
15	Shoeb Raza	Football	6thSem/ Third		
16	KunalNishad	Football	6thSem/ Third		
17	Ali Sayyad Ahfaz	Archery	6thSem/ Third		
18	Ajay Jangid	Badminton	6thSem/ Third		
19	SachinChintalwar	Volleyball	6thSem/ Third		
20	DheerajMahule	Handball	6thSem/ Third		
21	Dilip Gupta	Handball	6thSem/ Third		
22	PranayTajane	Handball	6thSem/ Third		
23	SarangSambhe	Handball	6thSem/ Third		
24	Prashant Meshram	Handball	6thSem/ Third		
25	SachinJadhav	Cricket	6thSem/ Third		
26	DurgeshWayzode	Cricket	6thSem/ Third		
27	AllauddinDaraj	Kabaddi	6thSem/Final	**Inter Collegiate (University level**	Participate
28	Akash Dhoke	Kabaddi	6thSem/Final		
29	PritamGedam	Kabaddi	6thSem/Final		
30	PrafulGhate	Kabaddi	6thSem/Final		
31	ShubhamSathawne	Kabaddi	6thSem/Final		
32	Swapnil Khetade	Kabaddi	6thSem/Final		
33	Pratik Dhoke	Kabaddi	6thSem/Final		
34	SagarPatade	Kabaddi	6thSem/Final		
35	Prakash Pande	Kabaddi	6thSem/Final		
36	PiyushAswar	Kabaddi	6thSem/Final		
37	TusharPounikar	Tug of war	6thSem/Final		
38	VikkyShende	Tug of war	6thSem/Final		
39	AkshayBawane	Tug of war	6thSem/Final		
40	Dhananjay Kumar	Tug of war	6thSem/Final		
41	Atal Jambhulkar	Tug of war	6thSem/Final		
42	Antara Ahirkar	Tug of war	6thSem/Final		
43	Naval Lanjewar	Football	6thSem/Final		
44	Balwant Gupta	Football	6thSem/Final		
45	Himanshu Gupta	Badminton	6thSem/Final		
46	Pawan Kale	Badminton	6thSem/Final		
47	Swapnil Khetade	Badminton	6thSem/Final		
48	Abhishek Gupta	Badminton	6thSem/Final		
49	PranitDandwate	Swimming	6thSem/Final		
50	BhaskarJha	Swimming/Chess	6thSem/Final		
51	Saurabh Barmase	Volleyball	6thSem/Final		
52	Rahul Chatap	Volleyball	6thSem/Final		
53	Tejas Gupta	Wrestling	6thSem/Final		
54	NiteshWadaskar	Wrestling	6thSem/Final		
55	AkshayTulankar	Cricket	6thSem/Final		
56	ShubhamBhende	Cricket	6thSem/Final		
57	RiteshDeshmukh	Chess	6thSem/Final		
58	Rahul Taywade	Athletics	6thSem/Final		

59	ShubhamDharmik	Athletics	6thSem/Final		
60	BhushanChaudhari	Athletics	6thSem/Final		
61	Akash Shriwas	Athletics	6thSem/Final		
62	MohitBhoj	Athletics	6thSem/Final		
63	Prem Kumar	Athletics	6thSem/Final		
64	AkshayBawane	Athletics	6thSem/Final		
65	Amit Kumar	Athletics	6thSem/Final		
66	Suresh Gaurkar	Athletics	6thSem/Final		
67	Chaitanya Malwe	Athletics	6thSem/Final		
68	ShwetaleeDhandole	Athletics	6thSem/Final		
69	VaishaliKorde	Athletics	6thSem/Final		

Table No 4.12:Yearly Sports Achievements (Electrical Engineering Department)

(2013-2014)

Sr. No.	Name of Student	Name of Sport	Sem /Year	Achievement and level	Remarks
1	Prashan Bawanwade	Volleyball	4th	**Inter Collegiate (University level)**	Participate
2	Pawan Tawade	Football, Cricket	6th		

Table No 4.13:Yearly Sports Achievements (Electrical Engineering Department)

(2014-2015)

Sr. No.	Name of Student	Name of Sport	Sem /Year	Achievement and level	Remarks
1	Gesuka Rewade	Chess, Badminton	4th	**Inter Collegiate (University level)**	Participate
2	Mayor Kawale	Cricket	4th		
3	Kapil Ghatole	Football	6th		
4	Pawan Tawade	Football , Cricket	8th		
5	Atish Gedam	Volleyball	8th		
6	Smita Padole	Chess	4th		

Table No 4.14:Yearly Sports Achievements (Electrical Engineering Department)

(2015-2016)

Sr. No.	Name of Student	Name of Sport	Sem /Year	Achievement and level	Remarks
1	Nitin Bhoskar	Badminton	6th	Inter Collegiate (University level)	`Participate
2	Mahesh Bhute	Cricket	6th		
3	Pradip Shimgade	Volleyball	6th		
4	Chetan Mate	Handball	6th		
5	Sneha Ninave	Badminton	6th		
6	Vikas Shastrakar	Chess	6th		
7	Smita Padole	Chess	6th		
8	Sayali Bhobade	Chess	6th		
9	Palash Bhurle	Chess	6th		
10	Gesuka Rewade	Chess , Tug of war	6th		

Table No 4.15:Yearly Sports Achievements (Civil Department)

(2013-2014)

Sr. No.	Name of Student	Name of Sport	Sem /Year	Achievement and level	Remarks
1	Akshay Daf	Kabaddi	4TH sem	Inter Collegiate (University level)	Participate
2	Sagar Sawan Sukha	Football	4th sem		
3	Prajakt Modak	Swimming freestyle 50 m	4th sem		
4	Basin Paul	Badminton	6th sem		
5	Amol Morekar	Badminton	6th sem		
6	Samir Kambdi	Volleyball	6th sem		
7	Sneha Chaudhary	chess	8th sem		

Table No 4.16:Yearly Sports Achievements (Civil Department)

(2014-2015)

Sr. No.	Name of Student	Name of Sport	Sem /Year	Achievement and level	Remarks
1	Samiksha Dongre	Tug of war	4th sem		
2	Sagar Sawan Sukha	Football	6th sem		
3	Vicky Shambharkar	Cricket	6th sem	**Inter Collegiate (University level)**	Participate
4	Priyanka Waghade	Badminton	6th sem		
5	Kunal Dahake	Cricket	8th sem		
6	Basil Paul	Badminton	8th sem		
7	Amol Morekar	badminton	8th sem		

Table No 4.17:Yearly Sports Achievements (Civil Department)

(2015-2016)

Sr. No.	Name of Student	Name of Sport	Sem /Year	Achievement and level	Remarks
1	Nohil Wankhede	Football	4th sem		
2	Anjali Patil	Kho-kho	6th sem		
3	Gayatri Rehpade	Tug of war	6th sem		
4	Nidhi Tidke	Tug of war	6th sem		
5	Nidhi Tidke	Kho-kho	6th sem		
6	Rakshanda Thaware	Tug of war	6th sem		
7	Rakshanda Thaware	Kho-kho	6th sem	**Inter Collegiate (University level)**	Participate
8	Riddhi Gulhane	Tug of war	6th sem		
9	Riddhi Gulhane	Kho-kho	6th sem		
10	Yogesh Talmale	Handball	6th sem		
11	Pawan Milmile	Athletics	8th sem		
12	Prajakt Modak	Tug of war	8th sem		
13	Priyanka Waghade	Badminton	8th sem		
14	Pooja Raut	Kho-kho	8th sem		
15	Ravina Kawale	Kho-kho	8th sem		

| 16 | Sagar Sawan Sukha | Swimming | 8th sem | | |
| 17 | Vicky Shambharkar | cricket | 8th sem | | |

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).

To keep pace with the needs and requirements, additional infrastructure has been added and the following buildings have been constructed:

- Wi-Fi Campus: **YES**
- Language Lab: **YES**
- Green Boards: **Yes**
- Rainwater Harvesting System: **YES**
- Indoor sports facility: **YES**

The newly existing infrastructure is furnished with adequate furniture and equipment to facilitate teaching, learning and research.

Table No 4.18:Furniture Details /Department (Mechanical Engineering Department)

Sr. no.	CLASS ROOM NO.	NO. OF DESK
1	ROOM NO. F-01	22
2	ROOM NO. F-02	32
3	ROOM NO. F-11	32
4	ROOM NO. F-15	32
5	ROOM NO. F-35	32
6	ROOM NO. F-37	32
	TOTAL	182

Table No 4.19:Furniture Details /Department (Electrical Engineering Department)

Sr. no.	CLASS ROOM NO.	NO. OF DESK
1	ROOM NO. S-46	30
2	ROOM NO. S-47	30
3	ROOM NO. S-48	30
	TOTAL	90

Table No 4.20:Furniture Details /Department (Civil Engineering Department)

Sr. no.	CLASS ROOM NO.	NO. OF DESK
1	ROOM NO. F-19	31
2	ROOM NO. F-20	22
3	ROOM NO. F-25	31
	TOTAL	84

Table No 4.21:Furniture Details /Department (Computer Engineering Department)

Sr. no.	CLASS ROOM NO.	NO. OF DESK
1	ROOM NO. F-30	15
2	ROOM NO. F-29	18
3	ROOM NO. F-32	25
	TOTAL	58

Table No 4.22:Furniture Details /Department (Electronics &Telecommunication Engineering Department)

Sr. No.	CLASS ROOM NO.	NO. OF DESK
1	ROOM NO. F-36	15
2	ROOM NO. F-38	18
3	ROOM NO. F-35	12
TOTAL		45

4.1.4 How does the institution ensure that the infrastructure facilities meet the

requirements of students with physical disabilities?

The following facilities are provided for physically disabled:

➢ Washroom facilities are provided.

➢ Institute is planning for lift.

➢ Wheel chair is provided.

➢ Ramps are provided.

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

• **Hostel Facility – Accommodation available**

• **Recreational facilities, gymnasium, yoga center, etc.**

• **Computer facility including access to internet in hostel**

• **Facilities for medical emergencies**

• **Library facility in the hostels**

• **Internet and Wi-Fi facility**

• **Recreational facility-common room with audio-visual equipments**

• **Available residential facility for the staff and occupancy**

• **Constant supply of safe drinking water**

• **Security**

Sick Room: YES

Library: The College has a reading room cum library for extra reading and study (magazines, newspapers, periodicals, etc.)

Hygiene facilities: Water cooler with UV purified water with constant supply of safe drinking water is available in the college.

Security: Watchman shed has been made near the gate for proper security at the college.

Facilities for medical emergencies:-Avalible with Dr. Gillurkar Multispeciality Hospital.

Internet and Wi-Fi facility:-Avalible with 10 Mbps Speed.

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?

The Multispecialty Hospitalis situated at Sakkardara square and for any emergency students is given medical aid with immediate effect and Dr. Gillurkar is appointed to render his services time and again on honorary basis.

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 College has clearly marked space for the common facilities available on the campus. These facilities include IQAC (Internal Quality Assurance Cell), Grievance Redressal unit, Women's Cell, Counseling and Career Guidance cell, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, and provision of auditorium etc. the details of such facilities are here as under:

Table No. 4.23: Common Facilities in Campus

SR NO.	UNIT	AVAILABILITY	PLACE OF LOCATION
1	IQAC	YES	Second Floor
2	Grievance Redressed Unit	YES	Second Floor
3	Women's Cell	YES	Second Floor
4	Counseling And Career Guidance Cell	YES	Ground Floor
5	Placement Unit	YES	Ground Floor
6	Canteen	YES	Main Campus
7	Recreational Spaces For Staff	YES	Second Floor
8	Recreational Spaces For Students	YES	Second Floor

9	Safe Drinking Water Facility	YES	All Floor
10	Auditorium	Proposed	_

4.2 LIBRARIES 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?

Ans:-

Yes, the institution has a very effective and efficient Library Advisory Committee.

Table No. 4.24:Library Advisory Committee

Principal	Chairman
Vice-principal	Vice-chairman
Librarian	Member Secretory
Head of dept. from all branches	Members

• The committee is intended to plan and coordinate the execution of the requisite procedures for the functioning of the library.

• It takes up the process of identifying, planning, and procurement of the books journals, manuals etc.

• It ensures the up gradation of the library to keep pace with the technological developments.

Significant Initiatives of the Committee:

• The committee monitors the allocation of funds for the books, journals, manuals etc. and the digital processing of information, including online journals.

• It is also expected to monitor the student and staff utilization of the library.

- The committee shall take into consideration all the procurement criteria, and rules and regulations of the library management, including cataloguing and access-administration.

- The committee shall look into the indents of the departments and the purchase mechanism with multiple volumes wherever necessary.

- The committee is expected to submit the minutes of its meetings along with observations, suggestions, if any and resolutions to the college management committee for further processing. The chairman and the members of the committee shall undertake all the operations in coordination with the Librarian and other Library personnel.

The following issues fall under the preview of the committee:

- Ascertaining the number of books and journals available in the library

- Ascertaining whether the catalogue is up to date or not

- Budget planning for the year.

- Distribution of funds allocated for books, journals, periodicals etc.

- Purchase mechanism for the central library

- Infrastructure like tables, chairs, shelves, book racks etc. And their maintenance, fund

- Allocation for the infrastructure and its utilization.

- Student and faculty utilization of the library.

- Effectiveness of the open access system.

- Student behavior with the books.

- Timings of the library and any suggestions.

- Awareness activities of the library.

- Areas that need to be improvised in the library

4.2.2 Provide details of the following:

* Total area of the library (in Sq. Mts.)

* Total seating capacity* Working hours (on working days, on Holidays, before examination days, during examination day during Vacation)

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

Ans: - The details of working hours and seating capacity of library are as follows:

Table No. 4.25: Library Details

Sr. No.	Description		Details
1	Total area of the library		601.64 Sq. Mts.
2	Total seating Capacity		220
3	Working Hours (daily)		
	a)	Non-Examination days	10.30 am to 5.15 pm
	b)	During Examination days	
	c)	Vacations	
	d)	Prescribed holidays and Sundays	Closed
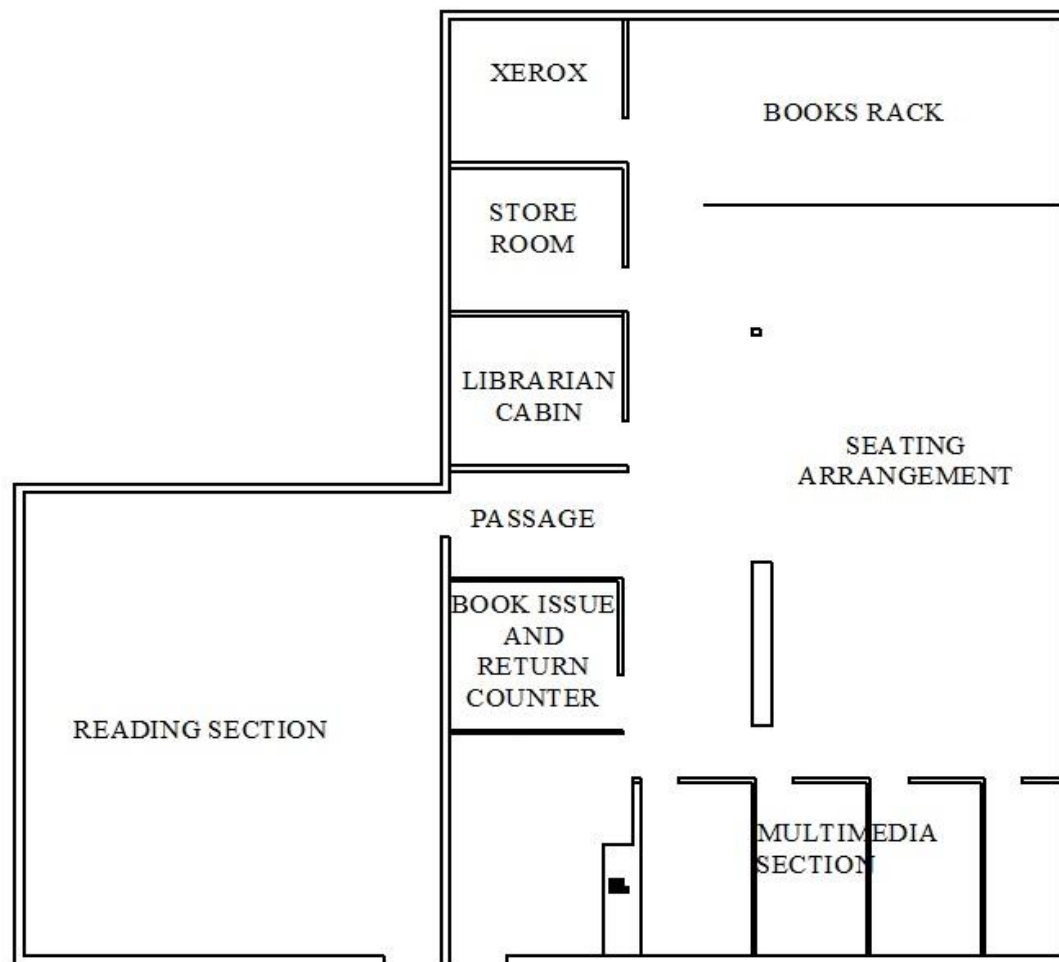
Figure 4.1: Library Layout

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.

Ans:-

The procedure adapted for purchase of various Library resources is as follows:

- Cross departmental stock verification of books are carried out in the summer vacations as per the committee constituted by the Principal.

- If any deficiency is noticed then appropriate measures is taken as per the recommendations of the advisory committee. Similarly, periodicals including print & e-journals are ascertained for its renewal / new subscription.

- Student, Faculty &HOD recommends books for purchasing. The amount spent on procuring new books etc. during the last four years is as under:

Table No 4.26: Annual Amount Spent On Library

Library Holding	Year 2013-2014		Year 2014-2015		Year 2015-2016		Year 2016-2017	
	No.	Total cost (in Rs.)	No.	Total cost (in Rs.)	No.	Total cost (in Rs.)	No.	Total cost (in Rs.)
Text book and reference book	1742	5,57,073	620	4,43,427	1151	4,09,927	394	1,13,837
Journals	36	59,367	26	42,383	33- N 7- I	53,551 56,100	37- N 17- I	54835 56100
e-journals	-	-	-	-	-	-	DELNET	16500
e-resourses (CD's and DVD's)	83	Freely available	96	Freely available	70	Freely available	32	Freely available
News Paper	4 per day		4 per day		4 per day		4 per day	

`Information of current titles is given to the faculty members based on the recommendation of teachers and Head of the department books are procured in library.

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

* OPAC

* Electronic Resource Management package for e-journals

* Federated searching tools to search articles in multiple databases

* Library Website

* In-house/remote access to e-publications

* Library automation

* Total number of computers for public access

* Total numbers of printers for public access

* Internet band width/ speed 10 Mbps

* Institutional Repository

* Content management system for e-learning

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

Ans:-

With ICT, it becomes very easy to access the library resources quickly. The bar code based book identification makes it very convenient for library staff and students to locate the book which saves time.

Table No. 4.27: Library Facilities

SR. NO.	PARTICULARS	AVAILABILITY
1	Online Public Access Catalog (OPAC)	Freely available OPACFacility is available through Library Management Software.
2	Electronic Resource Management Package For E-Journals	No
3	Federated Searching Tools To Search Articles In Multiple Databases	No

4	Library Website	Yes
5	In-House/Remote Access To E-Publications	Yes
6	Library Automation	Library ManagementSoftware database and OPAC is available forUsers
7	Total Number Of Computers For Public Access	09
8	Total Numbers Of Printers For Student And Staff Access	01
9	Internet Band Width/ Speed	10 mbps
10	Institutional Repository	Article Repository:Published researchpaper/article of the facultyMembers 427 nos.Thesis/Project Reports Repository : Thesis/Projectreports of student areavailable
11	Content Management System For E-Learning	No
12	Participation In Resource Sharing Networks/Consortia (Like Inflibnet)	No

4.2.5 Provide details on the following items

* **Average number of walk-ins**

* **Average number of books issued/returned**

* **Ratio of library books to students enrolled**

* **Average number of books added during last three years**

* **Average number of login to OPAC**

* **Average number of login to e-resources**

* **Average number of e-resources downloaded/printed**

* **Number of information literacy trainings organized**

* **Details of weeding out of books and other materials**

Ans:-

The following observations are made since the library is fully utilized

Table No. 4.28: Library Utilization

Sr. no.	Description	Observation
1	Average number of walk-ins	1120 per month
2	Average number of books issued/returned	1061 per month
3	Ratio of library books to students enrolled	12:1
4	Average number of books added during last four years	1227
5	Average number of login to OPAC	30-40 per day
6	Average number of login to e-resources	No
7	Average number of e-resources downloaded/printed	No
8	Number of information literacy trainings organized	2
9	Details of ―weeding out‖ of books and other materials	No

4.2.6 Give details of the specialized services provided by the library

* **Manuscripts**

* **Reference**

* **Reprography**

* **ILL (Inter Library Loan Service)**

***Information deployment and notification (Information Deployment and**

Notification)

* **Download**

* **Printing**

* **Reading list/ Bibliography compilation**

* **In-house/remote access to e-resources**

* **User Orientation and awareness**

* **Assistance in searching Databases**

* **INFLIBNET/IUC facilities**

Ans:-

List of specialized services provided by the Library.

- Manuscript: 427 nos. of publication are published by faculty.

- Reference: Reference section within the Library comprises of each title available in the Library, project reports, previous University examination papers & model answer papers.

- Reprography: Reprographic facility is provided to students in the library to get the photocopies of the resource material from reference section.

- ILL (Inter Library Loan Service) : No

- Information deployment and notification (Information Deployment and Notification) : The information of library collection is available through web online public access catalogue (OPAC) and library notice board. Library awareness programs.

- Download: Users can readily access & download NPTEL video lectures of IIT.

- Printing : Laser printer to Print the study material

- Computer terminals with internet facility: To download the study material.

- Reading list/ Bibliography compilation: Library has maintained digital catalogue (OPAC) which provides all the details about the books. The library has Index to Project work of the students and Staff

- User Orientation and awareness : User orientation programs are conducted at the time of every academic year for students of first year and directly admitted to second year

- Assistance in searching Databases : The library staff assists the users in searching the desired information available with various sources (OPAC).

- Any other facility: Bound volumes of journals are available.

- Sack server: SOFTLIB software.

-

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

Ans: - Library staffs are cordial in supporting the teachers and students to facilitate in accession of books and periodicals.

- New arrivals of textbooks, publications, journals, etc. are informed to the user by displaying them in new arrival section.

- Novels and motivational books are also available in new arrival section.

- Assistant Librarian helps in finding physical location of the text books.

- UG & Diploma students can borrow three books.

- Book-bank facility is offered to the students.

- Reprographic facility is provided to students in the library to get the photocopies of the resource material from reference section.

- Paper sets of previous examination papers are kept for reference.

- Library staff helps maintain study conducive; calm, quite and disciplined atmosphere

- Library has well furnished Students Study Centre.

- Call facility for demand on book is available in library.

- Library staff displays the important media notifications.

- Library organizes book exhibition for students & staff.

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

Ans:-The location of library is conducive for easy access since it is located at ground floor.

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 analysed and used for further improvement of the library services?)

Ans:- Library gets feedback of the users from suggestion box of the library. The comments and suggestions received are used for improving the library services. Major suggestions received from the users are also discussed in the library advisory committee. In addition to this, every year parents used to visit library and are welcomed to give suggestions.

4.3 IT Infrastructure

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

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

- **Computer-student ratio**

- **Stand alone facility**

- **LAN facility**

- **Wi-Fi facility**

- **Licensed software**

- **Number of nodes/ computers with Internet facility**

- **Any other**

Ans:-Details of the Computing facilities:

MECHANICAL ENGINEERING DEPARTMENT

Total Number of Computers: 45

Internet Band Width/Speed: 10 Mbps BSNL

Number of Computers with Configuration: 45

Computer-student ratio UG: - 1:6

Stand alone facility: CCTV is available in Campus.

LAN facility: Office, Central Library, HOD cabin are connected through LAN (Gigabit for Backbone and 100Mbps for End terminals.)

Wi-Fi facility: - YES

Table No. 4.29:Details of PC Configuration are as follows:

Sr. No.	Name of pc	Numbers	Configuration
1	DELL	15	INTEL i3 PROCESSOR, 4GB RAM, 1GB GRAPHICS, 500GB HDD
2	ASSEMBLE	30	P4, 1GB RAM, 160GB HDD

ELECTRICAL ENGINEERING DEPARTMENT

Total Number of Computers: 22

Internet Band Width/Speed: 10 Mbps BSNL

Number of Computers with Configuration: 22

Computer-student ratio UG: 1:6

Stand alone facility: CCTV is available in Campus.

LAN facility: Office, Central Library, HODcabin are connected through LAN (Gigabit for Backbone and 100Mbps for End terminals.)

Wi-Fi facility:- No

Table No. 4.30:Details of PC Configuration are as follows:

Sr. No.	Name Of Manufacture	Numbers	Configuration
1	DELL	11	Dual Core PROCESSOR, 1GB RAM, 1GB GRAPHICS, 160 GB HDD
2	HP	5	Dual Core PROCESSOR, 1GB RAM, 1GB GRAPHICS, 160 GB HDD
3	Zebronic	6	Dual Core PROCESSOR, 1GB RAM, 1GB GRAPHICS, 160 GB HDD

CIVIL ENGINEERING DEPARTMENT

Total Number of Computers: 14

Internet Band Width/Speed: 10 Mbps BSNL

Number of Computers with Configuration: 14

Computer-student ratio UG: 1:6

Stand alone facility: CCTV is available in Campus.

LAN facility: Office, Central Library, HOD cabin are connected through LAN (Gigabit for Backbone and 100Mbps for End terminals.)

Wi-Fi facility:- YES

Table No. 4.31:Details of PC Configuration are as follows:

Sr. No.	Name of pc	Numbers	Configuration
1	HCL Info system	3	Pentium dual core processor, G31 chipset board, 1gb DDR2 RAM, 160GB HDD, 47 cm (18.5) HCL WIDE LCD MONITOR WITH SPEAKER, HCL OPTICAL MOUSE
2	ASSEMBLE	11	P4, 1GB RAM, 160GB HDD

COMPUTER ENGINEERING DEPARTMENT

Total Number of Computers: 200

Internet Band Width/Speed: 10 Mbps BSNL

Number of Computers with Configuration: 200

Computer-student ratio UG: 1:6

Stand alone facility: CCTV is available in Campus.

LAN facility: Office, Central Library, HOD cabin are connected through LAN (Gigabit for Backbone and 100Mbps for End terminals.)

Wi-Fi facility: - YES

Table No. 4.32: Details of PC Configuration are as follows:

Sr. No.	Name of pc	Numbers	Configuration
1	HCL Info system	100	Pentium dual core processor, G31 chipset board, 1gb DDR2 RAM, 160GB HDD, 47 cm (18.5) HCL WIDE LCD MONITOR WITH SPEAKER, HCL OPTICAL MOUSE
2	ODYSUS COMPUTER	50	P4 2.88 G2 PROCESSOR, 2GB RAM DDR3, 40GB HDD, SIMTRON MB, G41, ODYSYS CABINET, KEYBOARD AND MOUSE, 17" SQUARE HP.TFT
3	BEETEL COMPUTER	50	P4 2.88 G2 PROCESSOR, 2GB RAM DDR3, 160GB HDD, SIMTRON MB, G41, ATX BEETEL CABINET, KEYBOARD AND MOUSE, 17" SQUARE HP.TFT

ELECTRONIC AND TELECOMMUNICATION ENGINEERING DEPARTMENT

Total Number of Computers: 26

Internet Band Width/Speed: 10 Mbps BSNL

Number of Computers with Configuration: 26

Computer-student ratio UG: 1:6

Stand alone facility: CCTV is available in Campus.

LAN facility: Office, Central Library, HODcabin are connected through LAN (Gigabit for Backbone and 100Mbps for End terminals.)

Wi-Fi facility:- No

Table No. 4.33:Details of PC Configuration are as follows:

Sr. No.	Name of pc	Numbers	Configuration
1	DELL	25	INTEL® CORE ™ 2 DUO CPU, 2GB RAM, 120GB HDD
2	HCL	1	PENTIUM DUAL CORE PROCESSOR, 2GB DDR2 RAM, 160GB HDD, (19.5) HCL WIDE LCD MONITOR WITH SPEAKER, HCL OPTICAL MOUSE, WINDOWS 7

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

Ans:-

• Internet service is available in the Institute for faculty and students.

• Almost every computer in the campus is connected to Internet facility.

• The Principal cabin, Office, HOD, computer centre and computer labs in every department have the facility of Internet.

• The ratio of computer and the students is approximately 1: 6.

• The students and the society have a free access to the college website, www.scetngp.com as well as departmental website.

• Notices and other information are published on to college web site.

• Computers are made available to the users with internet facility, 10 Mbps speed with UPS back-up facility is available.

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

Ans:-Institutional plans and strategies for deploying and upgrading the IT infrastructure are as follows:

- Planning for Screening Facility on campus so as to facilitate students to enhance their language skills using audio video aid.

- Institute Planning for unique e-mail ID to students and faculties (Google Apps Educational Account).

- Institute plans to create necessary arrangements to conduct online examinations as per the requirements of University (OES – Online Exam System).

- Planning to procure and install industry specific software and to train students on these platforms to enable them to become industry-ready products.

- Planning to increase the bandwidth of internet facility. To ensure uninterrupted access to students for teaching material on campus and off campus using dedicated servers for LMS (Learning management system).

- Proposed dedicated e-learning facilities for faculty for FDP (Faculty Development Program).

- Every sem. proposed minimum one workshop for student and faculty.

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)

Ans:-Annual budgetary provision for procurement, up-gradation, deployment and maintenance of the computers and their accessories.

Table No 4.34: Annual budgetary provision for up gradation

Sr no.	Financial year	Provision budget (Rs.)	Utilization (Rs.)
1	2015-16	7,21,000	5,20,680
2	2014-15	7,55,000	6,35,320
3	2013-14	6,30,500	5,14,270
4	2012-13	6,50,000	5,60,970

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?

Ans:-

• Faculty member uses laptop and LCD projector in the classroom as a teaching aid.

• The institution has adequate computer facility for its faculty. Faculty rooms are provided with internet facility in their respective departments for preparation of teaching learning materials.

• Faculty is encouraged to use power point presentations for delivering lectures and technical talks.

• For effective teaching, faculty members refer NPTEL open source online lectures during preparation of subject notes. He/she even motivates students to refer NPTEL lectures for their study.

• To make teaching & learning even more effective & interesting, the faculty members makes use of models wherever possible.

• Institute has facility of Academic Monitoring System to monitor attendance of students, course completion & work plan execution.

• Communication between faculty members & students are made easy by providing unique e-mail IDs by the college.

• Dedicated server is provided to students for accessing pdf and NPTL lectures and other open source to students.

• Computer facilities are extensively used for technical training.

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.

Ans: - Institute is well equipped with adequate equipments required for implementing modern teaching metHODs to be pursued by the faculties in classroom teaching.

Faculties use it extensively while delivering lectures along with chalk & board metHOD. Laptop and internet connectivity modem are provided to the faculty members of the institute. Faculty refers textbooks, online NPTEL lectures from IIT's, and any other effective material available online to prepare the subject.

- ICT enabled classrooms are functioning for improving teaching learning process.

- Faculty members introduce the authenticity & importance of NPTEL lectures to the students beforehand.

- Faculty members prepare power point slides in a simple and effective form.

- Institute insists and assists the faculties to refer project reports, thesis at other universities for value addition to teaching –learning process.

- Institute promotes the faculties to utilize open source learning platform.

- Along with this, the resources provided by institute are utilized by teachers in creating an environment of NPTEL based learning.

- The students have open access to this and they are motivated to refer the information.

- Net connectors are available to facilitate teaching learning process.

4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating University? If so, what are the services availed of?

Ans: - Yes.

- The affiliating RTM Nagpur University library facilities are offered to the students and faculty members.

- NPTEL is used regularly.

4.4 MAINTENANCE OF CAMPUS FACILITIES

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

Yes, the specific person for maintenance of building includes electrification, class room and laboratories.

For the maintenance of class rooms and laboratories; each department is responsible for the maintenance of their class room, laboratories. Any discrepancy will be reported the maintain office through the principal and the maintenance work carried out regularly.

Table No. 4.35:The amount utilized for maintenance during the last four years is as follows:

YEAR	2013-14 (Amount Spend In Lakhs)	2013-14 (Amount Spend In Lakhs)	2014-15 (Amount Spend In Lakhs)	2015-16 (Amount Spend In Lakhs)
Lab consumable maintenance	2.08	5.57	12.75	9.84
Electrical	6.03	5.62	7.27	5.46
Generator and fuel expenses	8.67	6.04	9.05	8.75
Garden expenses	2.8	3.32	7.80	6.83
Housekeeping cleaning and maintenance	1.44	5.83	7.80	5.83
Repair and maintenance	5.01	25.32	38.45	21.75
Internet expenses	1.17	1.85	2.90	3.85
Telephone	1.56	0.69	0.77	0.71

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

The mechanism for maintenance and upkeep of the infrastructure, facilities and equipment of the college is as follows:

- An electrician is appointed, he visits daily to check the needs related to electricity

- Major maintenance requirements are solved through our Parent society.

- Maintenance of Garden and Ground is looked after by Gardener and class IV staff.

- For the safeguard of the whole infrastructure, security staff has been allotted.

- Since maintenance is a part of regular expenditure, separate budget is not allotted for the same. However the expenditure is done as per requirement from the amount allotted under the head of miscellaneous expenditure.

- Maintenance of the college building, classrooms and furniture by management from time to time.

- Plumber visits to check the problem related to water supply.

Sample of Preventive maintenance schedule is as follows:

Table No. 4.36: Preventive Maintenance Checklist – Infrastructure Format

Period from _____ to _____ 201_

	Head	Follow-up
	Washroom	
	Toilets and basins are clean and not leaking	
	Drains are not clogged	
	Walls ,tiles and flooring are clean	
	Lighting and exhaust fan are functional	
	There are no stinking smell	
	Administrative Office	
	Flooring	
	Air conditioner	
	Washroom	
	Furniture – sofa, chair and interior	

	Crockery is in good condition	
	General Interior (Classroom)	
	Flooring is in good condition	
	Paint is in good condition	
	Windows, window frame and curtains	
	Windows and door checked for sliding/cracks	
	Light and fans are checked for working	
	Furniture and black board are in good condition	
	General Exterior Floor Wise	
	Exterior paint and wood work are in good condition	
	Steps are in good condition	
	Flooring are in good condition	
	Signage ,directions and dustbins are in good condition	
	There is no graffiti on the building or signs	
	The garbage box clean	
	Roof, gutters and eaves-trough are clean and in good condition	

Prepared by:-_____   Checked by: - _____

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

- Each head of the department keeps record of maintenance of the instruments. At the beginning of each term, equipments/instruments are tested and repaired from the concerned person if defect is found.

- The laboratory equipments, computers and electronic devices are maintained and repaired through the funds available in the institution.

- We have a qualified technical staff for maintaining computers and networking facilities.

- Electrical, Carpentry, House-keeping, Plumbing, Painting, Security, Generator, UPS maintenance etc. services are hired as and when required.

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

- UPS has been provided to computers in library, office and departments.

- Constant water supply is maintained through Bore well and overhead water tanks in college premises.

- Free maintenance of equipments is done by the supplier for one year. Thereafter, their services are utilized as and when required.

- Computers, sophisticated instruments are maintained through Service Engineer.

- Sophisticated machines that require space and ventilation are installed at appropriate places with ventilation in the laboratories.

- The laboratories are provided with exhaust fans etc.

Constant supply of water: College needs continuous supply of water for drinking, practical, etc. which is fulfilled by taking separate connection of water from Bore well. Water purifiersareavilable for staff and students.

Other sensitive stuff:

- **Scientific instruments:** The laboratory staff keeps a strict vigil regarding the maintenance and upkeep of the scientific instruments. Their repair or replacement or another required upkeep is fully undertaken in their supervision. Cease fire equipments are installed in laboratory, library, office to ensure safety of students, important documents, instruments etc.

- **Scrap material:** To avoid fire hazard, college sells out scrap papers and material time to time.

Any other relevant information regarding Infrastructure and Learning Resources which the college would like to include.

- In learning resource procurement, college is a step ahead of other institutions. Expert lectures on various topics are available free of cost as NPTEL videos as a learning resource.

- Institute provides all the required facilities to all disciplines in accomplishing their minor and final year major projects.

- A step towards resource generation is by offering and executing testing and analysis facilities at our laboratories to facilitate diversified user applications.

- Institute offers students to pursue their entrepreneurship programme in the campus, using the available infrastructure & human resource facilities.

- The college has a lush green playground having outdoor sports facilities under the physical education instructor.

- The college has specious facility for indoor games.

- The college has an open air theatre are proposed (Amphi theatre) for conducting cultural programmes.

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?

Ans : - Yes. The institution publishes its updated prospectus annually. The information disseminated in the prospectus is:

1. Goals / objectives

2. Courses Offered

3. Eligibility Criteria

4. Training & Placement Cell

4.1 Our Major Recruiters

4.2 AICTE sponsored Industry Institute Partnership Cell (IIPC)

4.3 Collaborations and MOUs signed under IIPC

5. Summer Internship

6. Achievements

6.1 Institutional Achievements

6.2 Students Achievements

7. Campus & Facilities

8. GATE, GRE, TOFEL, Professional Societies for students and staff.

9. Competitive Exam Training Centre

10. GATE, GRE Study Circle.

11. Activities for UG Students

12. Students-centric Approach

12.1 Teacher Guardian Scheme

12.2 Pro-Excellence

13. Seminars & Workshops

14. Conferences

The institute implements the programs which are published in the prospectus meticulously. Any changes in infrastructure or staff, system and process are reflected in the prospectus for the coming academic year. The institute is publishing prospectus and handbook annually after ensuring its commitment towards the stakeholders. The commitment made in the prospectus is the responsibility and accountability of the admission cell and the registrar of the institution. The review committee publishes its next year prospectus after due consideration towards the amendments if any.If any shortcomings are noticed, these are corrected. In short what is being promised is provided to the stakeholders. The college provides academic calenders to each student for their current academic year planning. Mentorship scheme is the hallmark of the institution. The institute has various committees such as Women Grievance Redressal Cell, Students Council, Teacher- Guardian Scheme and Anti Ragging Cell which takes care of student's welfare. This creates a cordial relationship among faculty members and students in our institution

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?
Ans : -
Institute gives facility to pay fees in installments to the needy students. All the financial aid is made available promptly through the Central Administrative Office. Merit scholarship is given to the topper students of each department.
Number of Students selected for Merit Scholarship is as follows-

Table 5.1: List of Merit Scholarship Students

Sr.No.	Academic Session	Department	Year	Name of Student	Amount given
1	2013-14	Electrical Engineering	2nd	RavindraSelote	2000/-
			3rd	Pratik Akhand	2000/-
			4th	RoshanKhapre	2000/-
2	2014-15	Electrical Engineering	2nd	SmitaPadole	2500/-
			3rd	RavindraSelote	2500/-
			4th	PrashantWarghare	2500/-
3	2015-16	Electrical	2nd	PawanVishwkarma	3000/-

Sr.No.	Academic Session	Department	Year	Name of Student	Amount given
		Engineering	3rd	SumitRatHOD	3000/-
			4th	RavindraSelote	3000/-
1	2013-14	Mechanical Engineering	2nd	AntaraAhirkar	2000/-
			3rd	ShubhamKHODe	2000/-
			4th	DhanrajDongarkar	2000/-
2	2014-15	Mechanical Engineering	2nd	AshutoshZade	2500/-
			3rd	AntaraAhirkar	2500/-
			4th	AnkushBhongade	2500/-
3	2015-16	Mechanical Engineering	2nd	AkashGaurikar	3000/-
			3rd	AshutoshZade	3000/-
			4th	AkshayUkey	3000/-

Sr.No.	Academic Session	Department	Year	Name of Student	Amount given
1	2013-14	Civil Engineering	2nd		2000/-
			3rd	DeepaliChoudhari	2000/-
			4th	Monica Jain	2000/-
2	2014-15	Civil Engineering	2nd	RiddhiGulhane	2500/-
			3rd	RavindraBandewar	2500/-
			4th	DeepaliChoudhari	2500/-
3	2015-16	Civil Engineering	2nd	ParasSangole	3000/-
			3rd	RiddhiGulhane	3000/-
			4th	RavindraBandewar	3000/-

Sr.No.	Academic Session	Department	Year	Name of Student	Amount given
1	2013-14	ETC Engineering	2nd	Priyanka Gore	2000/-
			3rd	Nikhil Khohade	2000/-

			4th	VaishaliWaghare	2000/-
2	2014-15	ETC Engineering	2nd	Rita Chapale	2500/-
			3rd	Priyanka Gore	2500/-
			4th	Nikhil Khohade	2500/-
3	2015-16	ETC Engineering	2nd	Simaran Thakur	3000/-
			3rd	Rita Chapale	3000/-
			4th	AshwiniNandankar	3000/-

Sr.No.	Academic Session	Department	Year	Name of Student	Amount given
1	2013-14	Computer Engineering	2nd	AnkushZatale	2000/-
			3rd	AshleshaChakole	2000/-
			4th	PiyushDonghare	2000/-
2	2014-15	Computer Engineering	2nd	KarishmaDhople	2500/-
			3rd	AnkushZatale	2500/-
			4th	AshleshaChakole	2500/-
3	2015-16	Computer Engineering	2nd	PriyankaZade	3000/-
			3rd	KarishmaDhople	3000/-
			4th	PoojaSoni	3000/-

In addition Concession scholarship is also given to the needy students of the institute under the NRDRS scholarship scheme. Also the financial aid was disbursed on time.

5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

Ans: - The financial assistance from State and Central Government are as follows-

Table 5.2: Details of scholarship

Sr. No.	Academic year	Name of Programme	Percentage of students receives financial assistance from State Government		
			SC,ST,SBC,OBC, NT scholarship	EBC scholarship	Minority scholarship
1	2013-14	B.E.	622	25	10
2	2014-15	B.E.	554	40	09
3	2015-16	B.E.	601	41	27
4	2016-17	B.E.	551	67	06

Table 5.3: Details of Admissions

Sr.No.	Academic Year	No. of students admitted in			
		B.E.		Polytechnic	
		New Admitted	Total Admission	New Admitted	Total Admission
1	2013-14	374	729		
2	2014-15	306	794		
3	2015-16	258	811	47	
4	2016-17	303	812	194	201

Legend- SC-Schedule Class, ST- Schedule Tribe ,OBC-Other Backward Class, SBC-Special Backward Class, NT-Nomadic Tribe, EBC- Economically Backward Class.

5.1.4 What are the specific support services / facilities available for

1. Students from SC/ST, OBC and economically weaker sections

2. Students with physical disabilities

3. Overseas students

4. Students to participate in various competitions / National and International

5. Medical assistance to students: health centre, health insurance, etc.

6. Organizing Coaching for competitive examination & Skill development (spoken English, computer literacy, etc.)

7. Support for "slow learners"

8. Exposures of students to other institution of higher learning /corporate/business house, etc.

9. Publication of student magazines

Ans: -

1. Students from SC/ST, OBC and economically weaker sections

- Financial aid is facilitated as per Government directives. Apart from this, the college provides all the necessary support for the upliftment of SC, ST, OBC and other weaker sections of students by providing them.

- Books & Book Bank Facility is provided to the students of all departments.

- Financial assistance with the concession in fees is provided to the students.

- Facility to pay fees in installment

- Extra coaching in difficult subjects are few measures adopted by the institute.

- Students are encouraged to participate in National/International competitions/conferences with generous financial support at institutelevel.

2. Students with physical disabilities

- Separate parking facilities are available for students with physicaldisabilities and provisions are made for them to write the exams andattend classes in a comfortable way.

- Scholarship is also given to physically disabled students.

3. Students to participate in various competitions / National and International -

- Institute encourages students by reimbursing the travel expenses,registration fees and rewarding them with prize money matching to the money won by them, for participating in various technical events and competitions in other institutes/universities.

- Institute rewards the students who have achieved ranks at various technical competitions with —Best Achievement Awards by giving cash prizes and certificates.

- Students participating in co-curricular, literary, cultural or sports events outside the college are being considered for attendance.

- The students from the institution have participated in various State, National and International level competitions and have given valuable contribution in the field of academics.

- Institution has signed MOUs with several industries, which offers various learning facilities like project competition, trainings etc.

- The students are offered internships by the industries.

- Students have published research papers in several National and International journals and conferences due to the encouragement and guidance by the faculty members.

- Financial Assistance is provided to the students to participate in various competitions.

4. Medical assistance to students: Medical centre, health insurance,etc.

- First Aid Kit is available in College.

- Doctor is made available during emergency.

- On call ambulance service is made available for the students.

- Free-Dental and Free Health check up camps are held in the institute.

- Institute arranges blood donation camp every year.

- Periodic check-up for the faculties and students is carried out by the physician.

5. Organizing Coaching for competitive examination & Skill development (spoken English, computer literacy, etc.)

- The institution is organising coaching for competitive examination beyond the syllabus by arranging special soft skill training programs for students on a regular basis by the internal and external experts.

- Each department provides guidance to their students for competitive Examinations like GATE/CAT/GRE/TOFEL.

- The college has sufficient library books for GATE/CAT/GRE/TOFEL.

- The ―Pro-Excellence Department‖ organizes presentation, essay and debate competition to enhance the spoken English skill for the students.

- The institute recently started ―Technical Training Session‖ for the students by the trained faculty members who took training in various industries.

- Well equipped computer laboratory is available for the students during working hours.

- L.C.D. projectors are used by the students for seminar presentations.

- Bridge and remedial coaching is organized for students.

- Students are benefitted by Technical Seminars, Workshops, Expert

- Guest Lectures, Industrial Tours and Training sessions to improve their overall technical knowledge so that they can survive in competitive world.

- Communication skill lectures are arranged for improving the communication for the weak students.

- All students are trained to obtain user level proficiency in MS-Office, DBMS and Basic programming languages.

- Language lab is the backbone of our institute to develop the English language skill.

6. Support for "slow learners"

- Based on the internal examination and marks obtained, slow learners are identified and special guidance, along with remedial classes is arranged during the second half of the academic semester.

- Personal care is taken by individual faculty members for the students.

- Remedial classes, extra-hour classes, frequent tests and assignments are arranged on regular basis.Question-Answer Models are provided to the students for necessary preparation.

- Apart from this University question papers and written answer notes are provided to the students.

- Individual counseling by the Heads of the department, class teachers and teacher guardian is carried out every week.

7. Exposures of students to other institution of higher learning/corporate/business house, etc.

- The students are encouraged to attend national and international seminars workshops and symposia, conducted at various universities and research institutes.

- Guest lectures by eminent speakers are organized to help the students to keep pace with the recent developments in their subjects.

- Industrial visits and educational tours help to keep abreast with the latest developments.

- Students visit various business/ corporate houses for completion of their projects.

- Faculty training on updated technologies is arranged by the college so that trained faculty members can to impart training to the students.

- Experts are also conducting Seminars.

8. Publication of student magazines

Institution not only believes in students academic development but also emphasizes on the co-curricular and extracurricular developments. Each department has its own Magazine, forum activity portal run by the students in association with faculty members, producing creative works.

Institute publishes its annual student magazine called **"PRATIBIMB",** which includes-

- Creative articles

- Inspirational and information giving articles by the faculties

- Magazine also highlights details of activities conducted like annual social gathering, sports activities

- Tour and industrial visits

- Orientation programs

- Parents Meet

- Paper competitions

- Project competitions
- Placement data
- Toppers record
- Achievements of students

5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial Skills, among the students and the impact of the efforts.

Ans : -Efforts made by institute:

The college has an active Entrepreneurship Development Cell (EDC).

Objectives of EDC:

Firstly, Recognizing the Opportunities –

- To create a greater awareness of the opportunities and benefits of entrepreneurship in order to encourage more students to start a business
- To grow the heritage business through innovative products and procedures
- To develop a greater entrepreneurial culture within our institution.
- To encourage entrepreneurship among the aspirant students.
- Guiding students for identifying business opportunities and preparing projects relating to entrepreneurship.
- The various department of the institute organizes workshops on skill development with Training and Placement Cell to encourage the students for self – employment

Secondly, Creating Enterprises –

- To create a greater number of sustainable start-up businesses with potential for further growth, particularly by core–technology represented groups of society such as Future Technocrats.
- New business project development
- Training on sources and application of funds.
- New market identification and market penetration strategies

Thirdly, Going for Growth –

- To increase the number of businesses that grow in India, thereby creating wealth, employment and opportunity.
- To facilitate entrepreneurial skills among the students and to encourage and develop entrepreneurial skills among the students.

5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and cocurricular 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

Ans : -

- The institute has well equipped sports complex.
- Encouraging participation in inter-collegiate tournaments conducted in Cricket, Volleyball, Football, Kabaddi, Kho-Kho, Athletics, tug of war, soft ball etc.
- Presenting merit certificates and mementoes to winners and runners in various competitions for boys & girls at interdepartmental level annual association day celebrations.
- Encouraging and guiding the students to participate in co-curricular activities like paper presentations, seminars, project competitions, quiz and debate competitions.
- Encouraging the winners by reimbursing the registration fees and also rewarding them with prize money matching to the money won by them.
- Participation in cultural activities such as Skit, Dance, one-act play, singing, traditional day, slow bike racing and fashion show.

JALSA - The Annual Fest organized by the institute is a symbol of glorious culture of this college. Many popular celebrities have visited and performed during **JALSA**. The students have shown their budding talentin various cultural fields in sports and cultural activities like singing, dance, skits, mimicry etc., are conducted in the college.

Additional academic support, flexibility in examinations

- Due consideration in respect of attendance for the students participating in important cultural or sports events outside the college.
- Awarding incentive marks for extracurricular and co-curricular activities to promote participation in NSS and Continuing Adult Education and Extension programme and Blood Donation Camp to benefit student.
- Personal teaching, assignments and question banks are provided to the students.
- Extra lectures are arranged for direct second year and first year to cope up with the missed portion of the syllabus by the students are provided.

Special dietary requirements, sports uniform and materials

- Special food packets are arranged by the Institute for the participating students.
- Sports uniform is also provided from the Institute for the participating students.
- Sport materials and accessories are provided throughout the year like football, net, cricket bats, tennis balls, pad stump, volley ball,badminton etc.

Any other facilities

- Volley ball court
- Cricket ground
- Foot ball ground
- Tennis court
- Kho-kho and kabaddi ground
- Athletics ground
- Chess & Carom boards

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-CSIRNET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central /State services, Defense, Civil Services, etc.

Ans: - The Training and Placement department provides the necessary training for the students in preparing for the competitive examinations is as follows.

- Special training programs, lectures, workshops are conducted for competitive exams and Campus Recruitment Training (CRT).
- Seminars are arranged that highlight the strategies of cracking the competitive exams.
- Teachers counsel the students; create awareness & guides students for preparation of competitive examinations.
- Institute displays notification of competitive exams in the campus.
- Aptitude and Personality Development classes are conducted on regular basis.
- Mock interview and group discussion session are also conducted.
- Good number of books on career guidance and competitive examinations is available in Library.
- GATE, crash course is also arranged regularly for the students.
- The following is the list of students qualified in various competitive exams due to the support and guidance given by the faculty members:

Table 5.4: List of qualified studens in various competitive exams

Name of Department: - Electrical Engineering

Sr.No.	Academic Session	No of students appeared	No. of students qualified	Name of Exam
1	2013-14	06	-	Gate Exam
2	2014-15	08	-	Gate Exam
3	2015-16	10	-	Gate Exam
4	2014	01	01	Distribution

Name of Department: - Mechanical Engineering

Sr.No.	Academic Session	No of students appeared	No. of students qualified	Name of Exam
1	2013-14	12	Nil	Gate Exam
2	2014-15	08	01	Gate Exam
3	2015-16	23	Nil	Gate Exam

Name of Department: - Civil Engineering

Sr.No.	Academic Session	No of students appeared	No. of students qualified	Name of Exam
1	2013-14	16	01	Gate Exam
2	2014-15	16	01	Gate Exam
3	2015-16	38	02	NICMARK

Name of Department: - Electronics &Telecommunication

Sr.No.	Academic Session	No of students appeared	No. of students qualified	Name of Exam
1	2013-14	12	Nil	Gate Exam
2	2014-15	15	Nil	Gate Exam
3	2015-16	12	Nil	Gate Exam

Name of Department: - Computer Engineering

Sr.No.	Academic Session	No of students appeared	No. of students qualified	Name of Exam
1	2013-14	01	Nil	Gate Exam
2	2014-15	03	Nil	Gate Exam
3	2015-16	02	Nil	Gate Exam

5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social, etc.)

Ans: - The teaching faculty of the Department is assigned with the task of academicmonitoring and counseling the student groups. They act as advisors, interact with their respective group of students regularly, appraise the weaker students of their performance and provide remedial action to their setbacks by means of additional instructional classes. Periodic meetings between the various advisors with the HOD take place, issues are discussed and conclusions are drawn based on which recommendations are made and plans executed for the benefit of students. Persons of eminence in the society like personality development trainers, social activists and philanthropists are invited to inspire and influence students to become socially responsible citizens.

Academic counseling:

- One to one counseling

- Parent teacher meetings

- Guidance of academic nature is provided at class level.

- Teaching Plans for each subject are prepared by the faculty members and display it on notice board so that students can get the idea about regular teaching topics. This policy benefits teachers as well students to smoothly complete their syllabus within time duration.

- Expert lectures are arranged subject-wise after the completion of syllabus.

- Specific Teaching Modules are prepared by faculty members and extra sessions are conducted for students.

- Semester wise Parent Teachers meeting are organized by the departments.

- Regular unit test series, midterm & end term examinations are conducted for students of all semester to understand the level of their understanding and to prepare them for their final examinations.

- Faculty members advice students about the plan of study at the beginning of year, suggest various reference books for different papers, provide guidance for the preparation of the notes.

- Teachers give information about weight age to different chapters/topics in syllabus and also discuss about the nature of questions on the each topic.

- For every 15-20 students, one faculty member is assigned to take up the role of faculty counselor / mentor whose primary activity is to monitor the academic progress of the students under his/her care and to take corrective measures for any aberration in their progress in academic pursuits. This also helps to check absenteeism

Personal Counseling:

- Personal Counseling is necessary because large numbers of students are either from nearby villages where such guidance cannot be availed from parents. Teachers from our college are always aware of this situation. The teachers also help the students to solve their personal problems, if any.

- The mentors maintain secrecy of any personal information and takes necessary corrective steps in consultation with senior official staffs, thereby addressing personal problems.

- A Grievance Redressal Cell is also constituted to address the grievances of the students and to attend to their problems.

Psycho-social counseling:

- The institute strongly believes that counseling is the best metHOD to help students overcome the difficulties either in academics or in acquiring appropriate etiquette. Particularly at the age of adolescence, when the behavior of student is shaped by various positive and negative factors, counseling is the best way to put them in the right direction.
- The problems relating to social factors affecting student's mental health viz. peer pressure, no financial support from parents, cultural and religious hindrances, socioeconomic status, and interpersonal relationships are addressed through their mentors.
- Special committees are set up to help strengthen students' personality and psychological makeup. Psychological Counseling is done especially
- To handle crises in relationships and to deal with stress.
- To resolve fears, panics and anxieties and to cope with continuing family problems
- To overcome depression and sadness due to breakup.

Career counseling:

Various career oriented programmes are conducted through Training & Placement Cell. These are as follows

- Special aptitude and technical sessions are organized on regular basis by the internal and external experts.
- Mock Interviews are arranged to benefit students.
- Elegance department prepares students for presentation skills, essay and debate competitions to enhance the spoken English language capabilities among students.
- Technical Training by trained faculty members is arranged for extra courses beyond syllabus such as MAT-LAB, PRO-E, PLC-SCADA, Networking, .NET, CCNA, AUTO-CAD etc.
- Well equipped computer laboratory is available for projects and R & Dworks.

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 to 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).

Table 5.5: Training & Placement Cell activities

Sr. No.	Title	Activity
1	Workshop on Personality Development	Workshop on persnality development by Dr. Sanjay Raghtate was organised on 12th Jan 2017.
2.	Workshop on Industrial Orientation Training	Workshop on Industrial Orientation Training by Mr. Sushil Pudke(M.D. Axiom Solutions PVT Ltd.) was organised.
3	Workshop on opportunities in Gulf Countries	Workshop on opportunities in Gulf Countries by Dr.Pravin Khapre was organised.
4	Technical seminar	A technical seminar by Dr. M. K. Sonpimple from PCOE was conducted by Mechanical Department .
5	Technical seminar	A technical seminar by Mr. Mahesh sahare from PCOE

		was conducted by Mechanical Department .
6	Technical seminar	A technical seminar by Dr. M. K. Sonpimple from DCS Pvt. Ltd. was conducted by Mechanical Department .
7	Technical seminar	A technical seminar by Mr. Syed Abdul Gaffar from KG-Mech Hydrabad was conducted by Mechanical Department .
8	Technical seminar	A technical seminar by Mr. Surendra Chopde from CADCAMGURU , Nagpur was conducted by Mechanical Department .
9	Technical seminar	A technical seminar by Mr. Sandeep Sonaskar from V.S Informatics was conducted by Electrical Department .
10	Technical seminar	A technical seminar by Mr. UmeshKubde from L Tech Labs was conducted by Electrical Department .
11	Technical seminar	A technical seminar by Mr. Amit Basware from Jetking, Nagpur was conducted by Computer Department .

Table 5.6:Competitive Examination Preparation Classes was Conducted

For Students as per following schedule

Date	Day	Subject	Lecture MPSC Batch Schedule
16/12/16	Friday	Introduction of MPSC & strategy to clear	Mr.Ram Wag & Mr.Prashant Wawge
17/12/16	Saturday	History	Mr.Yogesh Korde
23/12/16	Friday	Geography+agri	Mr.Khitij Barve
24/12/16	Saturday	Polity and law	Mr.Yogesh Pikalmunde
30/12/16	Friday	Economics	Mr.Ashwin Choudhary
31/12/16	Saturday	Science & Tech.	Mr.Ashish Gadkari
06/01/17	Friday	Environment	Mr.Ashish Gadkari
07/01/17	Saturday	History	Mr.Yogesh Korde
13/01/17	Friday	Geography+agri	Mr.Khitij Barve
14/01/17	Saturday	Polity and law	Mr.Yogesh Pikalmunde
20/01/17	Friday	Economics	Mr.Ashwin Choudhary
21/01/17	Saturday	Science & Tech.	Mr.Ashish Gadkari
27/01/17	Friday	Environment	Mr.Ashish Gadkari
28/01/17	Saturday	English	Nighot Madam
03/02/17	Friday	Marathi	Gomase Sir
04/02/17	Saturday	English	Nighot Madam
10/02/17	Friday	Marathi	Gomase Sir
11/02/17	Saturday	Maths	Atul Koche
17/02/17	Friday	Reasoning	Navghare Madam
18/02/17	Saturday	Maths	Atul Koche
24/02/17	Friday	Reasoning	Navghare Madam
25/02/17	Saturday	Economics	Mr.Ashwin Choudhary
03/03/17	Friday	Polity	Mr.Yogesh Pikalmunde
04/03/17	Saturday	Test	Mr.Yogesh Pikalmunde

Table 5.7: No. Of students placed of different branches.

Sr. No.	Name of Industry	Package(Lac)	Department	TOTAL
1	CEAT Nagpur	2.3	Mechanical Engineering	1
2	KJV Alloy Conductors Pvt Ltd, Nagpur	1.8		2
3	Maruti Suzuki India Ltd Gurgaon	3.2		1
4	GMR Raikheda	1.8		2
5	Rattan India Power Ltd Amravati	2.5		2
6	SpannkraftHydrosystemsPvt Ltd Nagpur	1.8		7
7	VedantPapercraftPvt Ltd Nagpur	1.8		2
8	ZF Steering GearsIndia Ltd Pune	1.8		24
9	TCS Trivendrum	3.2		1
10	Smart Software Solution Pvt Ltd	1.2	Computer Engineering	6
11	TribroSoftechPvt.Ltd	1.5		2
12	Unitechnosys	1.8		2
13	Eureka Forbes	1.2	Electrical Engineering	1
14	Unitechnosys	1.0		1
15	Indiabulls Power Ltd.	1.2		3
16	Honeywell	1.0		2
17	RattanIndia Power Ltd Amravati	1.1		5
18	Premier Plant Services	1.0		6
19	SpannkraftHydrosystemsPvt Ltd Nagpur	1.2		1

20	Smart Software Solution	1.2		1
21	Indiabulls Power Ltd.	2.5		2
22	TribroSoftechPvt.Ltd	2.0		1
23	Eureka Forbes	2.0		2
24	AAKG	2.5	Electronics and Telecommunication	2
25	Axiom Care Tech Ltd.	2.0		1
26	LG	2.5		1
27	Smart Software solution Pvt.Ltd.	2.0		6

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 fouryears?

Ans: -

Yes, the College has a Students Grievance Redressal Committee to resolve the grievances of students belonging to all classes. The institution has constituted a Grievance Redressal Cell. The committee details are as follows.

Students Grievance Redressal Cell

As per AICTE's Notification No. 37-3/Legal/2012 dated 25.05.2012 A Grievance Redressal Cell is constituted in order to ensure transparency in working of the institution for the matters concerning students and with paramount objectives of preventing unfair practices and to provide a mechanism to students for redressal of their grievances.The Cell will be working towards the fulfillment of the objectives specifiedunder aforementioned Notification thereby ensuring that no grievances ofstudents are unaddressed and unresolved. The committee should formulate a procedure for implementation of the guidelines laid therein.

Table 5.8: Students Grievance Redressal Cell

Sr. No	Category	Name	Department	Designation
1	Faculty Members	Dr. Santosh Chede	Principal	Chairman
2		Prof. Vivek Parhate	Vice-Principal	Member secretary
3	Students From Each Department	Mr. Ajay Jangid	Mechanical	Member
4		Mr. Aniket Kawale	Civil	Member
5		Mr.Nitin Bhoskar	Electrical	Member
6		Ms. Apurva Ambagade	Computer	Member
7		Mr.Alkesh Jalte	ETC	Member
8		Mr. Vaibhav Gahukar	1st year	Member
9		Mr. Sahil Nawghare	Poly Mech	Member
10		Ms. Manjiri Charde	Poly Civil	Member

Students' Grievance Redressal Committee Objectives-

The Committee is entrusted to deal with the following complaints of the aggrieved students-

- Making admission to a particular branch of engineering contrary to the merit list displayed on the notice board in accordance with the declared admission policy of the Institute.

- Breach of the policy for reservation quota for the admission by students from schedule caste, schedule tribes, OBC, Women, Minority or disable categories.

- Non-payment or delaying payment of scholarships to any students that such Institution is committed, under the conditions imposed by AICTE, or by any other authority.

- Travelling provided at the institute level.

- Non transparent or unfair evaluation practices for giving internal marks.

- Harassment and victimization of students including sexual harassment. Initially institute has received some of the grievance from students which were addressed by the redressal committee and are as followed.

- The first grievance was about the inferior quality of food at the canteen. Canteen Food Verification Committee was formed, through which every day food quality is verified and it was found the students' complaints has been solved.
- The canteen contract was terminated based on students complaint of non availability of variety of food items in the canteen and the college management took over canteen. Now the quality of food is improved.
- In 2013-14, students complained about the college uniform which was later changed by the management.

5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

Ans: - Anti Sexual Harassment Committee is established as per the directives of University of Nagpur. It is reconstituted every year. It functions as the guardian against sexual harassment of female staff and students. The Head of Anti Sexual Harassment Committee looks into all matter related to harassment of the women faculty and students

Functions and Responsibilities of Anti Sexual Harassment Committee**:**

- Cell formed at the beginning of every academic year.
- Although no such event / incident have been reported so far in the past 7 years, since the inception of the institution, a Women Grievance Redressal cell has been constituted headed by a senior (female) faculty member.
- Other members are drawn from the lady faculty of all departments.
- Functioning mechanism of the cell is based on the complaints by the students and staff (if any) that can be brought to the notice of the Convener directly or to any of the members of the Redressal cell.
- Issues that can be addressed range from eve teasing, ragging, and humiliation to sexual abuse & harassment, personal problems and psychological /medical cases.
- Opportunity is given for the complaints to present their points of view and their problems.
- From the discussions and the facts presented, decisions will be taken to solve the problems.

- In case of necessity, the issue will be referred to the Principal and Management for their decision.

- Suitable corrective measures will be taken in the best interests of the students and the faculty based on the instructions of the Principal and the Management.

- Sexual harassment cell takes care of Grievance and its redressal. Anti Sexual Harassment Committee is as follows –

Table 5.9: Anti Sexual Harassment Committee

Sr. No.	Name	Designation
1	Prof. Rasika Manapure	Chairperson
2	Dr.Sharad Suraywanshi	Vice-President of Nagpur District Kendra Bharati (NGO), Nagpur
3	Ms. Pratibha Ghode	Member secretary
4	Ms. Ujwala Marghade	Member
5	Ms. Sujata Giripunje	Member
6	Ms. Chetana Hinge	Member

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?

Ans: - The institution has an anti ragging committee which includes members from

faculty as well as students and this campus is a ragging free campus.

Functions / Responsibilities:

- Appraising the students about the contents of the anti-ragging act and advising them to involve in the incidents of ragging.

- Making frequent visits in the campus to prevent any act of ragging.

- Visiting class rooms and explaining the students about the severe punishments and the consequences likely to be imposed as per the act

- Faculty members accompany the students in college buses to control them.

- Conducting surprise visits to students rooms residing outside the campus.

- Making regular visits to the hostel during night hours.

- Display boards, charts and banners depicting the seriousness of actions to be taken in case of any ragging incident and give wide publicity by displaying those boards, charts and banners at prominent locations inside and outside the campus.

- Constituting flying-squads to keep track to eradicate/minimize the ragging menace.

Anti-Ragging Committee is as follows -

Table 5.10: Anti-Ragging Committee

Sr. No.	Name	Designation
1	PI.Atul Gunwantrao Ingole	Police Inspector(Hudkeshwar Police Station, Nagpur)
2	Mr.Virendra Ranade	Dy.General Manager, Thr Indian Express Pvt. Ltd., Nagpur Loksatta.
3	Dr.Sharad Suraywanshi	Vice-President of Nagpur District Kendra Bharati (NGO), Nagpur
4	Dr. Santosh Chede	Principal
5	Prof. Vivek Parhate	Vice Principal
6	Prof. Vijay Nagpurkar	Faculty Member
7	Prof. Ram Wayzode	Faculty Member
8	Prof. Archana Dupare	Faculty Member
9	Prof.Amol Musale	Faculty Member
10	Prof. Rasika Manapure	Faculty Member

5.1.13 Enumerate the welfare schemes made available to the students by the institution.

Ans: - The welfare schemes available at the institute for students:

- Canteen, Indoor games, Reading room and common rooms for boys and girls separately.
- Provision of giving Scholarships/ fee Waiver by the Management.
- The college provides fees concessions to needy candidates.
- Merit scholarships, Akash Scholarship, cash awards for best progress.
- The placement training programme organized in the campus is extended to all students.
- NSS programme for students – Plantation, Campus cleaning, Blood Donation, Old cloth donation to Missionaries, Fund donation etc.
- In case of accidents or other financial difficulties, the institute takes initiative to arrange blood and/or financial assistance as collected from the students and staff members of the Institute.
- Canteen facility is provided.
- Students are given easy access to computer and internet facility.
- The faculty members address and respond to all the academic and nonacademic challenges of the student.
- In collaboration with the Bank of India, Abhudya, and the college issues Zero Balance Account to the students. It empowers students to transact through the bank in the globalized world. It is also helpful to avail educational loan.
- Grievance Redressal Cell interacts with the students to help them to sort out their grievances. It attends to both registered and unregistered grievances of the students.
- Students are availing the benefit of health insurance scheme.
- Students are sponsored to attend conferences, workshops and competitions at outside organisation.
- Students are sponsored to attend conferences, workshops and competitions at outside organisation.

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?

Ans: -

The institute has a alumni association.

The Alumni Association has been constituted and its activities and contributions are as follows-

The aim of the Alumni Association is to provide a forum for former students to make invaluable contributions.

- To build and maintain positive relationship between the college and Alumni by serving the needs and interests of Alumni and encourage. Alumni to play an active role in the future pursuits of the college.

- To keep track of the achievements of its Alumni, one of the senior faculty members is appointed as the coordinator of Alumni association.

- The college has decided to give an award to its alumni, who have shown a high level of achievement in their respective field. All the outgoing students are the members of the Alumni Association.

- The alumni members are helping in the student's recruitment process.

- The institute has its own Alumni Association which look after all the activities related to the Alumni of college. Even the records are maintained by this committee. Following committee members are deputed for alumni-

Students' Alumni Association is as follows –

Table 5.11: Students Alumni Association

Sr. No.	Category	Name	Designation
1	Facultu Members	Dr. Santosh Chede	Chairman
2		Prof. Vivek Parhate	Member secretary
3		Mr. Saurabh Kathale	President
4	Students From	Ms. Shrushti Dikshit	Member
5	Each Department	Ms. Dipali Chaudhary	Member
6		Ms. Anurag Mahi	Member

Major contributions and activities-

Students Alumni Association is a body of ex-students of the college. This Association will be acting as a link between the industries / organizations they are working with and the Institution. Moreover they will also work to strengthen the network of alumni of this institution who are serving in different parts of the world. They will be visiting colleges for guiding existing students about the recent trends in industries, skill enhancement and for sharing their experiences. They will work for the better of their alma mater and its stakeholders.

5.2 Students Progression

5.2.1 Providing the percentage of the students progressing to higher education or employment (for the last four batches) highlight the trends observed.

Ans: -

Table 5.12:

The percentages of U.G. students progressing to higher education are as follows:

Name of Department: - EE (Electrical Engineering)

Student Progression	Academic Year	Number of Students	% of Students
UG to PG	2013-2014	1	5.88%
	2014-2015	0	0%
	2015-2016	1	3.03%
	2016-2017	0	N.A
Campus Recruitment	2013-2014	7	29.4%
	2014-2015	5	20%
	2015-2016	7	21.2%
	2016-2017	0	N.A
Other Campus Recruitment	2013-2014	17	-
	2014-2015	25	-
	2015-2016	33	-
	2016-2017	63	-

Name of Department: -Mechanical Engineering

Student Progression	Academic Year	Number of Students	% of Students
UG to PG	2013-2014	02	5.40
	2014-2015	01	3.03
	2015-2016	04	4.12
	2016-2017	--	--
Campus Recruitment	2013-2014	03	8.10
	2014-2015	08	24.24
	2015-2016	09	9.27
	2016-2017	--	--
Other Campus Recruitment	2013-2014	--	--
	2014-2015	--	--
	2015-2016	--	--
	2016-2017	--	--

Name of Department: - Civil Engineering

Student Progression	Academic Year	Number of Students	% of Students
UG to PG	2013-2014	3	
	2014-2015	5	
	2015-2016	7	
	2016-2017		
Campus Recruitment	2013-2014		
	2014-2015		
	2015-2016		
	2016-2017		
Other Campus Recruitment	2013-2014		
	2014-2015		
	2015-2016		
	2016-2017		

Name of Department: - Electronics & Telecommunication

Student Progression	Academic Year	Number of Students	% of Students
UG to PG	2013-2014	-	-
	2014-2015	-	-
	2015-2016	-	-
	2016-2017	-	-
Campus Recruitment	2013-2014	3	16.66%
	2014-2015	1	5%
	2015-2016	6	60%
	2016-2017	-	-
Other Campus Recruitment	2013-2014	-	-
	2014-2015	-	-
	2015-2016	-	-
	2016-2017	-	-

Name of Department: - Computer Engineering

Student Progression	Academic Year	Number of Students	% of Students
UG to PG	2013-2014	Nil	-
	2014-2015	01	10%
	2015-2016	Nil	-
	2016-2017	-	-
Campus Recruitment	2013-2014	04	33.33%
	2014-2015	Nil	-
	2015-2016	06	50%
	2016-2017	-	-
Other Campus Recruitment	2013-2014	-	-
	2014-2015	-	-
	2015-2016	-	-
	2016-2017	-	-

5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (course wise/batch wise as stipulated by the University)? Furnish programmes-wise details in comparison with last of the previous performance of the same institution and that of the college of the affiliating University within the city/district.

Table 5.11: Comparative Statement of U.G. Pass percentage of Various Colleges

Sr.No.	Name of Department	Name of Institution	Academic Session %Result		
			2013-2014	2014-2015	2015-2016
1	Mechanical	Suryodaya	97.05%	100%	85.56%
		AGPCOE			
		TGPCOE			
2	Electrical		88.23	79.16	68.75
3	Civil	Suryodaya	93.75%	93.33%	89.47%
		AGPCOE			
		TGPCOE			
4	Electronics and telecommunication		100	72.72	80
5	Computer Engineering		100	45	91.66

5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

Ans: - The institution facilitates student progression to higher level of education and employment is as follows:

For Higher Studies

- Comprehensive Training sessions are held for 2nd and 3rd year BE students by the in-house trainers as well as outside trainers, with a special focus on Verbal ability, Aptitude, Personality Development,Communication and Soft Skills.
- Special Technical Training Sessions are arranged for the students.

- GATE, GRE, TOEFL, CAT Training sessions are conducted for the registered students of 3rd / 4th year B.E, in the college beyond the college hours.

- Training in Aptitude is imparted by Trainers.

- Students are provided with material that helps them to manage time and resources.

- Mock Tests are conducted to infuse confidence among them.

- Regular practice of Group discussions on various topics is given to the students.

- Students are encouraged to speak in English and special training sessions are being conducted for them.

For Employment

Training Programmes that promote Industry-readiness and Social awareness in students:

- In addition to its regular routine, T & P cell arranges expert lectures by academicians, Industry persons and those proficient in various fields of engineering.

- Special training modules for eligible students are conducted with reputed Software organizations to enable students to face today's competition confidently.

Training for Trainers:

- The members of training department, skilled and experienced in their respective areas of teaching, are sent to participate in various workshops and trainer-training programmes for continuous up gradation of their awareness and knowledge.

- Some of them also go out and present papers and lectures in seminars and workshops conducted by other institutions. This way, they get abreast of the emerging trends in educational and professional fields, and could guide their students on the right path to success.

5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

Ans: - Special supports are given on behalf of each and every department of this institute for those students who are academically weak. Special remedial classes are arranged for them. Also they can practice and assess themselves with mock tests.

The following efforts are made to minimize dropout rate and failures and facilitate the students to complete the course.

- **Additional coaching** – Personal guidance, remedial coaching and question bank is provided to the students.

- **Evaluation schemes** – Test Series for students is used as a means of evaluation of students and to test their knowledge. It also ensures practice before the actual examination.

- **Financial help** – Book Bank Facility, Model-Question Answer sets, CDs, University Question Papers, Fee concessions, payment of fees in installment etc. facilities are provided to students to reduce drop out over financial reason.

- **Counseling** – Personal counseling, motivation, career counseling, Parent Teacher meeting, remedial coaching is given for different subjects. To deal with the social, emotional and behavioral problems of the students the Counseling Cell and Grievance Redressal Cell are formed.

- **Attendanc**e - Regular attendance is taken for all the subjects separately. Defaulters list is displayed on notice-board for all subjects in every month and parents are called and counseled in case of serious defaulters.

- **Admission** – In spite of lower percentage in the previous examination, rural students are given preference over admission, especially in the Engineering discipline. Since the Nagpur city has rich cultural and educational heritage, students may change the stream of education and might even go for distance mode of learning, but they do not dropout. Hence the dropout rate is almost negligible.

- **Backlog Classes** – Backlog classes are arranged for the students those who are at the risk of failure and also for ATKT students.

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 programme calendar.

Ans: - A variety of indoor and outdoor sports & cultural facilities are available to the students and faculty members are as follows:

i. Indoor Games:-

- Carom

- Chess

- Badminton

ii. Outdoor Games:-

- Cricket

- Volleyball

- Football

- Tug of war

- Kho-kho

- Box cricket

iii. Cultural Activities:-

- Skit

- Folk dance

- Mimicry

- Script

- Singing

- Rangoli

- Poster making

- Easy writing

- Debate

- Story writing

- Quiz

iv. Other Extra Curricular activities:-

- Annual Social Gathering- JALSA

- SAMBHAV

- TECHTRENDS(National Paper Presentation)

Every year event calendar is prepared and large numbers of students have participated in almost all of the above mentioned sports and cultural events.

Details of Student Participation in Sports Competition is as follows -

Table- 5.12: Student Participation in Sports Competition

Mech. Dept.

Sr. No.	Academic Year	Name of Sport	Name of Organizer	Level	No.Of Students Participated
1	2015-16	Kabaddi	RTMNU,Nagpur	Inter Collegiate	12
2		Cricket			05
3		Football			09
4		Chess			04
5		Athletics			14
6		Tug Of War			08
7		Archery			01
8		Badminton			05
9		Volleyball			03
10		Handball			05
11		Swimming			02
12		Wrestling			02

Sr. No.	Academic Year	Name of Sport	Name of Organizer	Level	No.Of Students Participated
1	2014-15	Kabaddi	RTMNU,Nagpur	Inter Collegiate	16
2		Cricket			05
3		Football			09
4		Chess			03
5		Athletics			02
6		Archery			01
7		Badminton			04
8		Swimming			04

Sr. No.	Academic Year	Name of Sport	Name of Organizer	Level	No.Of Students Participated
1		Swimming			02
2		Athletics			03
3		Kabaddi			08
4	2013-14	Football	RTMNU,Nagpur	Inter Collegiate	06
5		Badminton			03
6		Volleyball			02

EE Dept.

Sr. No.	Academic Year	Name of Sport	Name of Organizer	Level	No.Of Students Participated
1		Badminton	RTMNU	UNIVERSITY	03
2	2015-16	Chess	RTMNU	UNIVERSITY	07
3		Volleyball	RTMNU	UNIVERSITY	03
1		Football	RTMNU	UNIVERSITY LEVEL	01
2	2014-15	Tug of War	RTMNU	UNIVERSITY LEVEL	01
3		Hockey	RTMNU	UNIVERSITY LEVEL	01
4		Chess	RTMNU	UNIVERSITY LEVEL	02
1	2013-14	Football	RTMNU	UNIVERSITY	02

Ist YearDept.

Sr. No.	Academic Year	Name of Sport	Name of Organizer	Level	No.Of Students Participated
1		Football			02
2		Cricket			01
3	2015-16	Kho-Kho			04
4		Badminton			01
1		Football	RTMNU ,Nagpur	Inter Collegiate	02
2		Kabbadi			01
3	2014-15	Cricket			01
1		Kabbadi			02
2	2013-14	Football			06
3		Badminton			02
4		Vollyball			04

5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular, cultural & technical activities at different levels: University / State / Zonal / National/International, etc. for the previous four years.

Table 5.13: Mech. Dept :Student Participation in Cultural activity

Sr. No.	Academic Year	Name Of Events	Position /Remark	Events Organized by	No.of Students
1		Dance Competition	Winner	SCET	07
2		Dance Competition	2nd	Wanjari	04

3		Dance Competition	3rd	Cuttak	05
4	2015-16	Singing	Winner	SCET	03
5		Singing	2nd	YCC	01
1		Dance Competition	Winner	Chhattisgarh	05
2	2014-15	Dance Competition	2nd	SCET	02

Major Achievement of students in extracurricular and cultural activities

Sr. No.	Academic Year	Activity	Name of Organizer	Level	No.of Students	Position
1		Dance	Cuttak	National	05	3rd
2		Debate	K.D.K.C.O.E	National	01	Winner
3	2015-16	Kabaddi	R.T.M.N.U	Inter Collegiate	12	Zonal Runnerup
1		Dance	Chhattisgarh	National	05	Winner
2	2014-15	Archery	R.T.M.N.U	Inter Collegiate	01	Zonal Winner
3		Tug Of War	K.D.K.C.O.E	National	06	Winner

Civil Dept.: Student Participation in Cultural activity

Sr. No.	Academic Year	Name Of Events	Position /Remark	Events Organized by	No.of Students	Name of Students
1	2014-15	Dance Competition	2nd rank	KDKCE, Nagpur	01	RavinaKawade
1		Debate	Participated	The Institution of	01	DeepaliCho

	2013-14	Competition		Engg ,Nagpur		udhari
2		Poster Competition	2nd Rank	The Institution of Engg ,Abhyudaya	01	DeepaliChoudhari

Table 5.14:Major Achievement of students in extracurricular and cultural activities

Sr. No.	Academic Year	Activity	Name of Organizer	Level	No.of Students	Position
1	2015-16	Paper Presentation	Ramdeobaba College of Engg	National Level	01	Participated
1		Dance Competition	K.D.K.C.E, Nagpur	National Level	01	02 Rank
2		Paper Presentation	Anjuman College	National Level	01	01
3		Paper Presentation	K.D.K.C.E, Nagpur	National Level	01	Participated
4		Mock Test	K.D.K.C.E, Nagpur	National Level	01	1st Rank
5	2014-15	Bridge Making	PBCOE,Nagpur	National Level	06	Participated
6		Bridge Making	PBCOE,Nagpur	National Level	06	Participated
7		Paper Presentation	PCOE,Nagpur	National Level	04	Participated
8		Paper Presentation	K.D.K,Nagpur	National Level	01	Participated
9		Paper Presentation	PCOE,Nagpur	National Level	03	Participated
1		Paper Presentation	JLCOE	National Level	01	Participated
2		Paper	JLCOE	National	01	Participated

3	2013-14	Paper Presentation	Anjuman College	National Level	03	Participated
4		Paper Presentation	RGCOE,Nagpur	National Level	06	Participated
5		Paper Presentation	Ramdevbaba College of Engg	National Level	01	Participated

Ist Year Dept.

Sr. No.	Academic Year	Name Of Events	Position /Remark	Events Organized by	No.of Students
1	2015-16	Creativity-2016	2nd	VIT College	01
			Participation	VIT College	02
			Participation	VIT College	02
1	2014-15	Aalap	2ndParticipation	St.V.Palloti	01
2			2ndParticipation	GovindraoWanjari COET	01

Major Achievement of students in extracurricular and cultural activities

Sr. No.	Academic Year	Activity	Name of Organizer	Level	No.of Students	Position
1	2015-16	Dance	Cuttak	National	01	2nd
2	2014-15	Knowledge Knockout	YCCE	National	01	Participation

5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

Ans: - Yes**.** The institution takes the feedback from Alumni and Parents.

The following is the feedback system we follow**:**

- Institute has designed a feedback mechanism that can help enhance and upgrade our academic practices. We receive regular feedback from our alumni through a website created

solely for this purpose. The inputs thus received are examined by a team of teachers from all departments, conclusions are drawn and recommendations are made.

- We also get feedback from the employees of our alumni regarding the selection criteria and employability requirements of students and the observations of them are also duly considered in planning our future policies in making our students more employable and skilled.

- We conduct parents meet periodically and receive feedback as well as apprise them of their children's progress.

a) Based on the feedback of the Alumni & Employers, the following measures have been taken

- Establishment of Elegance department consisting of English faculties

- Regular industrial visits have been arranged to make the students realize the work place culture and systematic functioning of an industry.

- Special focus on imparting soft skills, technical skills and Aptitude training.

b) Based on the feedback of the Parents, the following measures have been taken

- Computers with Internet facility were installed in college campus to facilitate the students to work on their projects even after the college hours.

- Bus facility is provided from all parts of Nagpur.

5.3.4 How does the college involve and encourage students to publish material like catalogues, wall magazines, college magazines and other material? List the publication / materials brought out by the student during the previous academic session.

Ans: -

- The extracurricular activities of the students are highly encouraged in the institution. Each department has its own wall magazine. The interested students post their poetry, story, article and other materials.

- Photography exhibition have been conducted in the college which showed inner talents of the students.

- The college publishes an annual magazine **"PRATIBIMB"** to encourage literary qualities amongst students.

- Magazine Committee and student members encourage students to contribute articles, stories, poems, write-ups, etc. They keep on motivating students through written notices, organizing essay competitions etc.

- Students are encouraged to prepare articles by providing library facility.

- Students are given topics by teachers and guide to write articles for magazines and departmental publications.

Publications of technical papers by students in last the academic session are as follows–

Table-5.15: Publications of technical papers by students

Number of Technical Paper presentation by students

Sr. No.	Name of Student	Name of Paper	Department	year	National /International
01	Dhanraj Dongarkar, Saurabh Warghat, Roshan Gomase, Rahul Tale, Chetan Kalode, Vishal Charpe	Techno-economic design and development of physiotherapy treatment table.	Mechanical	2013-14	National
02	Aakash Meshram, Aniket Rotke, Harish Khante Pawan Bhoyar Piyush Jambhulkar, Shubham KHODe	Fabrication of wheelchair model operated using android device.	Mechanical	2014-15	National
03	Ankush Bhongade, Nishant Dangore, Nitish Kumar, Shashank Tiwari, Vijay Bhoyar,	Fabrication of Eco-Friendly railway toilet system	Mechanical	2014-15	National

	Sumit Watkar				
04	Abhishek Gupta, Brijesh Tripathi, Dhananjay Kumar, Himanshu Gupta, Lokesh Kalkotwar, Nilesh Belsare Manish Verma,	Design And Analysis Of high torque continuous torqueing tool	Mechanical	2014-15	National
05	Antara Ahirkar, Akash Ukey Akshay Bawane, BAlvant Gupta, Bejoy Kattaickal, Naval Lanjewar Pritam Gedam	Design And Fabrication of Multi-Acting Can Crushing Machine	Mechanical	2015-16	National
06	Allauddin Shaikh, Pawan Kale, Pramit Dandwate, Rahul Taywade, Sagar Yeole, Tushar Pounikar, Vikky Shende	Techno-economic design and Fabrication of stair Climbing WheelChair	Mechanical	2015-16	National
07	Abdul Pathan, Tushar Deshmukh, Harun Qureshi, Ashish Kanorkar, Akshay Hedau , Ashish Badgevar, Vaibhav Ganthale	Performance and evaluation of diesel engine by using modified air filter	Mechanical	2015-16	National
08	Abhishek Itankar,	Design and fabrication of	Mechanical	2015-16	National

	Akahay Khobragade, Kushal Chimurkar, Mangesh Raut, Niteshesh Wadaskar	cable Laying Machine			
09	Chandrashekar Bhoyar Akash Dhoke, Atul Deshbhratar Pratik D. Dhoke Hemant Shende Kapil Shende	Fabrication And Development of heat pump water heater coupled with domestic refrigerator	Mechanical	2015-16	National
10	Aksh shriwas, Atal jambhulkar, Bhusha n Choudhary, Mayuri Wankhede, Mohit Bhoj Nikhil Gondane	Design and fabrication of magnetic levitated vertical axis AC wind turbine	Mechanical	2015-16	National
11	Akahsy titarmare Piyush dongare Vighnesh chavhan	Implementation of cloud computing security : from single cloud to multi cloud	Computer	2013-14	National
12	Neha bhoyar Pranju lokhande	Predictive search engine for document searching	Computer	2013-14	National
13	Pankaj b. Meshram Minesh g. Meshram	Novel approach geo spacial matching for image retrieval	Computer	2013-14	National

14	Ankita r. Suryawanshi Sapna r. Badge Shailesh r. Barapatre	Novel approachi for human machine interaction using hand gesture recognition techniques	Computer	2013-14	National
15	Yogesh ghuse Chetan harshe	Web filtering with sql injection	Computer	2014-15	National
16	Oshin m. Rangari Sapna n. Kose Swati d. Shirbhate	An approach for efficient query processing for materialized view selection and maintenance	Computer	2014-15	National
17	Karishma Chakole Tejaswini s. Malokar Pranali r. Jaiswal	Security in data storage and transmission in cloud computing	Computer	2015-16	National
18	Anand tembhurne Pratik kaste Vighnesh chavhan	Implementation of network monitoring as a g- host	Computer	2014-15	National
19	Ashlesha r. Chakole Shweta r. Chetule Akash v. Mohadikar	Design and implementation of secured data access control in cloud computing	Computer	2014-15	National

20	Amol b. Deshpande Samir d. Nagpure Abhilasha m. Zodape	A supar- resolution based image inpainting in the advertence of exemplar technique	Computer	2015-16	National
21	Ankush zatale Tejas thorat Shubhangi chafle	Energy efficiency data gathering using shortest tranjectory in wireless sensor network	Computer	2015-16	National
22	Pooja S. Soni Gaurav N. Suryawanshi Ratnadip P. Kawale	Online editor for compiling and executing different languages source code	Computer	2015-16	National
23	Budhan Thool Akshay Shrote Nitesh Jibhkaye Roshan Tayade	Experimental Investigation on self-compacting concrete by using miner affective	Civil	2013-14	National
24	Sumit Thakre Dhanjay Telrandhe Suraj Babre Rashmi Gaikway	Desgine of water treatment plant	Civil	2013-14	National
25	Snehay Mendhe Sneha Chaudhari Rahul Jambhulkar\ Nehal Akhtar	Study of Waste water treatment Plant	Civil	2013-14	National
26	Aasil Danish Deepali Sangolkar	Earthquake Resistant Construction Techniques	Civil	2014-15	National
27	Ruchi Thakur Amol Murhekar Kumar Dhahake Chetan Barne	Effect of intermitant using on compressive strength of concrete	Civil	2014-15	National

28	Deepali Choudari Basil Paul	Stabilization of black cotton soil by using rice husk ash and lime	Civil	2014-15	National
29	Sagar Sawnsukha Vicky Shambharkar Priyanka waghase Sourabh Lakhamapure Rakesh Ingili Komal Chawan	Optimization techniquae used in waste water treatment	Civil	2015-16	National
30	Gulzar Babrah Shaileshkumar Rawate Palash Kurvey Aafaque Ansari Pravin Tumlam Nikhil Kambale	Partial Replacement of Aggregate by recycled plastic waste	Civil	2015-16	National
31	Prashant Rahanddale Satish Gite Nilesh Mendke Nikhil Gotambare Shivshankar Meshram Tushar Kambhalkar	Comparative Study of Design of liquid retaining structure using IS 3370 (1965) and IS 3370 (2009)	Civil	2015-16	National
32	Minakshi Kankye Nikhil Dofe Mukesh KAmriya Ravindra Bandewar Vilas Pingare	Comparative Analysis of Manufacturing process of Various types of bricks.	Civil	2015-16	National
33	Gunkar Bhise Puja Raut Tushar Wandile Ravina Kawade	Variation of Strength of concrete by partial replacement of corner with rise ash coarse aggregate	Civil	2015-16	National

		by furnace slage			
34	Avinash Chande Sureskha Gaykwad Tanmay Surkar Vinay Kajne	To Study the effect of acid on concrete	Civil	2015-16	National
35	Avinash Fulzale Amol pawar Hitesh BhatkHODe	Spy and Survivor Robo For Detecting Faults	Electrical	2013-14	National
36	Sachin Bomidwar Roshan Khapre Pankaj Vaidya	Inverter With Solar Battery Charger	Electrical	2013-14	National
37	Amar Muneshwar Umesh Lilore Vaishali Mendhule	Electrostatic Precipitator Using Vibrator	Electrical	2013-14	National
38	Abhay Bhilkar Akhil Ghotekar Ankit Darwade Krunal Boke	Multi Auto Mations To Control DC Motor Speed	Electrical	2013-14	National
39	Nishant Khobragade Pratik Akhand Pranay Selwate Nilesh Gaikwad	Effect Of Load Charges On Transmission Utility	Electrical	2014-15	National
40	Amol Nagpure Swapnil Hedau Chetan Thakre Harshal Mankar	Programmable AC Power Control	Electrical	2014-15	National
41	Vikas Nimgade Somendra Thakre Harshal Mankar	Auto Power Supply Control 4 Different Source Solar Mains Generator & Invertor To	Electrical	2014-15	National

		Ensure No Break Power			
42	Achal Gedam Amol Amdhure Aatish Gedam Badal Doifode Braj Bhushan Kumar	Power Generator Through Permanent Magnetic Motor	Electrical	2014-15	National
43	Bhimesh Kumar Harinkhede Gitesh Deshmukh Kapil Ghatole Nikesh Maywade Roshan Kuhike Ravindra Selote	Closed Loop Speed Control Of BLDC Motor	Electrical	2015-16	National
44	Ritesh Deshmukh Prashant Barsagade Sushil Nagpure Sanjay Nandanwar	Maximum Power Point Tracking Of Surface Mount Permanent Magnet Synchronous Machine Based Wind Energy Conservation System Using Matlab Control	Electrical	2015-16	National
45	Komal Moon Mayuri Dhawale Priya Choudhary Monali Bharne Pooja Tripathi Sarika Wasekar	Auto Power Supply Control From Different Sources Using Microcontroller To Ensure Uninterrupted Power Supply	Electrical	2015-16	National

5.3.5 Does the college have a student council or any similar body? Give details on its selection, constitution, activities and funding.

Ans: - Yes the college has constituted Student Council and departmental forum as mentioned below.

Table 5.16: Student council Committee

Sr.No.	Name of Student	Department	Designation
1	Mr.Pranay Duragkar	Mechanical	President
2	Ms.Apoorva Ambagade	Computer	Secretary
3	Mr.Nitin Bhoskar	Electrical	Technical Head
4	Mr.Vishnu Yelne	Civil	Cultural Head
5	Mr.Alkesh Jalte	ETC	Sports Head

Departmental Forum

Selection & Constitution:

The final and pre final year students are selected by H.O.D. on the basis of curricular and co-curricular performance. These students then fill up the online nomination form. These students are informed about the specified date for declaration of nomination results. On the basis of maximum votes different forum incharge and office bearer are selected.

Funding- Students register themselves by giving the required membership amount. By this forum account all the activities are conducted.

5.3.6 Give details of various academic and administrative bodies that have student representative on them.

Ans: - The student representatives perform various tasks such as making announcement in the class to encourage the students for participation in various events, collecting names of the student from the class, programme planning, stage arrangement, comparing, organizing the events etc. For smooth and sound conduct of various activities of the college following committees are formed at the college level. Student representatives are appointed on the following committees:

- Students Welfare & Disciplinary Committee

- Students Council

- Grievance Redressal Committee

- Women Grievance Redressal Committee

- Library Committee

- Cultural Committee

- Magazine Committee

- Sports Committee

- Alumni Committee

- Canteen Committee

- Transport Committee

- Student Forum

- Professional society of ISTE

- Professional society of IEI

- CSI Chapter Society

- Result Analysis Committee

- Academic Calendar Committee

- Practical Monitoring Committee

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution?

Any other relevant information regarding student support and Progression which the college would like to include.

Ans: - The institution collaborates for improvement with alumni and former faculty members as follows-

Alumni association

- College has a registered Alumni Association which keeps in touch with all ex- students and their current employment status.

- Alumni meet is arranged once in an academic year, which gives updated information about alumni.

- The staff of the institute maintains contact with the teachers who have left the organization. These former faculties are invited for giving guest lectures.

- We communicate with Alumni through social networks like Facebook and Linkedin.

- We are collecting their latest data every year through Google docs

Former faculty

- The former faculty members share their views about the activities in their institution and academic metHODology adopted at their institute which helps in interexchanging the ideas of different work culture.

- The institute greets former faculty members by sending greeting cards and messages on special occasions.

- During cultural programme/Alumni meet of the institute former faculty members are invited.

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

Suryodaya College of Engineering & Technology is a motivational institution and comes under the roof of National Rural Development and Research Society. The primary aim of the college is to motivate & give students an endless opportunity towards getting better & best technical education in the central region of india.

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.?

Ans:-

Vision

➢ To be recognized among the leading institutions, imparting quality engineering education to produce world class professional who posses knowledge, skill & necessary value that help them to face challenges at global level.

Mission

➢ To impart quality technical education which is line with the latest global requirement & to develop all round abilities of the student.

Objectives

➢ To promote & stimulate the educational quality to bring high moral standards.

➢ To incorporate the latest technical art & skill development modules along with Universitycurriculum.

➢ To provide an absolute & complete education without any religious bias.

➢ To create self discipline among all the students.

➢ To provide the right conditions for new & imaginative ideas for research.

➢ To provide good training to the students for better employment prospects.

➢ A majority of students are exposed to Industrial training knowledge about the working of an industry.

➢ The Institution seeks to make technical Engineers with sound technical knowledge and also with achievement of desire, moral principles and social responsibilities.

Future Vision

- ➢ Undergoing accreditation at National and International levels.
- ➢ Becoming self governing & sovereign to offer Industry specific programs.
- ➢ Becoming proficient in use and promoting modern technology aided teaching.

Distinct characteristics of the college

- ➢ Committed, customized and prompt staff members.
- ➢ Provision of inspiring working conditions and inducement incentives.
- ➢ Inter-disciplinary approach towards teaching.
- ➢ Dust free and green campus.
- ➢ Effective teaching-learning process.

6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

Ans: - The policy of the Institute is brought forward from the Vision and Mission statements which have been designed by the Top Institutional members.

For execution & enactment of the quality policy, planning related to academic & curricular activities is prepared collectively by the Principal and the Heads of Departments. According to the planning prepared, specific roles are assigned to management, Principal and faculty members.

Role of the Top Management: -

Committees (such as Administrative, Academics, Financial& Admission) are formed for smooth functioning of the institute. All these committees work together to ensure proper execution of work smoothly & efficiently.

Decisions regarding adhering to the action plan are taken by the respective committees.

Exclusively, the Financial Committee of the Management provides estimate of income & expenditure required as per the Managementpolicy. For example, estimate for the new infrastructure, for maintenance and improvement of infrastructure, for faculty recruitment and developments, for research work etc.

The Management regularly interacts with the Principal to review the implementation process of the quality plans.

The Management regularly takes review of various academic, administrative and other functions in the entire institute.

The Management inspires, motivates & gives confidence to the Principal and the faculty members to visit renowned national institutes to develop their vision for quality policy.

The Management's meetings with Principal, Vice Principal, Director and HOD's are conducted for the review of action plan and policy decisions.

Role of the Principal:

The Principal is a vital member in deciding the quality policy and making the action plans.

When the action plan is to be implemented & executed within the Institute, the Principal leads the faculty, provides guidance to the faculty and co-ordinates with the faculty members.

The Principal communicates the opinions of the Top Management to the faculty members regarding the action plan assigned to each member of the college.

The Principal contributes to develop the means and tools for measuring the quality through the Internal Quality Assurance Committee (IQAC).

The Principal takes weekly meeting with the HODs, with specific agenda throughout the year.

At these meetings, the actual implementation of this quality policy is discussed at length, in terms of quality of teaching & learning process, evaluation processes, discipline, R&D achievements of faculties & students, Placement of students, Co- curricular and extracurricular activities of the students.

The Principal proposes new initiatives to Top Management to strengthen to the quality policy.

The responsibility of actual implementation of the plans rests on the shoulders of HODs.

Role of Vice - Principal:

His responsibilities include the areas of Students Performance and Activities as follows:

- ➢ Monitor and act to improve the punctuality and the attendance record of the students.
- ➢ Planning of department wise co-curricular activities.
- ➢ Planning of extra-curricular activities at district, state & national level.
- ➢ Ensure the discipline of students on and off the campus.
- ➢ Develop the students potential by scheduling and organizing classes in English language and personality development sessions, both within and beyond the University curriculum and ensure fullest utilization of faculty and other resources.
- ➢ Work towards the development of the students through continued interactions with students and guide students about their future.

Role of Heads of Departments:

Head of the Department is a leader of the members of the department.

The HODs communicate & distribute the action plans formulated in the meetings with the higher authorities to the faculty members of the department through Department faculty meetings. The minutes of the weekly meetings of the Principal and the HODs are also circulated to the faculty members of the Department to keep them informed about the decisions taken and plans made at the administrative level and the role of the individual in implementing the quality policy.

The responsibilities of the Head in the academic and administrative matters are as follows:

- ➢ Plan, organize, monitor & execution of the academic activities according to the academic calendar.
- ➢ Subject allocation to faculty members.
- ➢ Monitor coverage of the syllabus.
- ➢ Analysis of student's performance in internal assessment process.
- ➢ Ensure departmental students discipline.
- ➢ Observe and analyze faculty's teaching metHODology and provide them with necessary suggestions for improving the teaching skills.
- ➢ Procurement of equipment / accessories for departmental laboratories.
- ➢ Encourage the faculty members to present research papers and publish research articles.
- ➢ Arrange industrial visits / training and guest lectures by distinguished & renowned personalities per semester.
- ➢ Conduct Departmental Meetings regularly and also as per need for adequate interaction with the faculty and staff.
- ➢ Possible candidates for Entrepreneurship and support to be extended to them

Role of the faculty:

The faculty plays a important role in the implementation of the quality policy. The ground reality of implementing all the formulated plans and the quality policy lays entirely in the hands of the faculty members as they translate plans into action. The faculty members adopt ingenious, sensible and philosophical strategies to ensure that the Mission of the College is achieved. Their role is as follows.

- ➢ Planning and executing the delivery plan as per the quality policy.

- To develop themselves as role models for the students and to upgrade themselves continuously.
- Adopting innovating teaching and evaluation techniques.
- Designing experiments that trigger the thought process of the students.
- Mentoring the students.
- To develop quality measures for the evaluation of various processes.
- To take initiative to associate themselves with eminent research organizations, academicians, professional bodies and industries.
- Planning and guiding the co- curricular and extracurricular activities of students.
- Marshalling the students towards training & Placement for campus recruitment.

The list is in no way exhaustive and the faculty by their intimate commitment to quality, help in the overall growth of each student.

6.1.3 What is the involvement of leadership in Ensuring?

- **The policy statement and action plans for fulfillment of the stated mission.**
- **Formulation of action plans for all operations and incorporation of the scheme into the institutional strategic plan.**
- **Interaction with the stakeholders.**
- **Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders.**
- **Reinforcing the culture of excellence.**
- **Champion the organization change.**

Ans:-

The policy statements and action plans for fulfillment of the stated mission

The structural components of leadership are well defined and the leadership at different levels is totally involved in ensuring the policy statements for the fulfillment of the stated mission.

The president himself takes active participation in planning & resource development. Regular meetings are held between the President, Director and the Principal to monitor the implementation of processes and systems. The plans are executed by the HODs supported by the faculty members. The process is not hierarchical; rather cyclic, to affirm attainment of the Mission of the College.

The Principal in the weekly meetings convey the expectations of the

Management in realizing the policies to the HODs and discusses the means and modes by which the policies can be integrated into the academic processes. HODs in the departmental meetings explain the policies of the Management and help the faculty prepare action plans that will end in desired outcomes.

While formulating the policy statements and action plans, sufficient attention is paid to the following aspects:

- ➢ The academic terms, phases of teaching and examination programs are properly planned to meet the academic demands.
- ➢ Listing the Program Outcomes.
- ➢ Sports and cultural programs are planned and executed as per the rules and regulations of the University.
- ➢ Fixing and achieving targets.
- ➢ Review of action plans at regular intervals.
- ➢ Many of the students are from the rural background, there is a need to stress on improving their communication skills and make them job oriented by the time they leave the college.
- ➢ Established EESDP (Employment Enhancement Skill Development Program) & T&P department to strengthen the communication, aptitude and technical skills apart from the syllabi.

Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan

Based on the policy statements, the management advises the staff to accomplish the strategic plans through various activities.

The success of different activities is ensured through strict adherence to the action plans by monitoring following features:

Lesson and course plans and Academic calendar for the college which deals with the curricular activities Semester wise and event wise for co-curricular and extracurricular activities by individual departments.

Interaction with stakeholders

Recognizing the stakeholder's gratification is the primary step to sustained development and success of the College. Students, faculty, parents and society are focused by the management about various aspects of College functioning through a number of ways:

- ➢ Class Committee Meetings for students to share the strengths and weaknesses of the teaching-learning process.
- ➢ Interacting and getting the opinion of the students through formal & informal feedback, counseling etc.
- ➢ Once a semester feedback by students on the efficacy of the faculty.
- ➢ Organizing parent – Teachers meeting during the academic session once a semester. Interaction with the parents during P-T meet and obtaining the views and suggestions of parents.
- ➢ Recording the opinions of the academicians and other eminent people when they visit the college.
- ➢ Interaction with faculty members through various formal and informal meetings and also by obtaining feedback from them.
- ➢ Alumni are the best source to obtain un-biased feedback based on their academic experience with in the college and also their exposure to the external world.
- ➢ Industry – institute interaction to expose the students to the current industrial scenario.
- ➢ Signing MoUs with industries for student and collaborative projects.

Proper support for policy and planning through needs analysis, research inputs and consultations with the stakeholders.

Management is very keen about maintaining transparency and keeping stakeholders well informed about activities of the institute. Every activity at the institute is in line with vision and mission of the institute.

The management regularly interacts and consult the stakeholders, and the feedback received from them enable the leadership to make necessary changes in their outlook and strategy and accordingly they provide active support for the implementation of policy and planning through: -

- ➢ Identification of specified areas.
- ➢ Reallocation of resources.
- ➢ Employer feedback.

- ➢ Alumni feedback.
- ➢ Holistic development of students.
- ➢ Research and Development.
- ➢ Placement scenario.
- ➢ Consultation with stakeholders.

Reinforcing the culture of excellence

The Culture of excellence is impressed by enforcing the practice of following goals:

1. Uncompromising regularity and punctuality.
2. Academic excellence.
3. Depth in subject and general Knowledge.
4. Suitable placement or higher education or entrepreneurship.
5. Curiosity of learning, research and development.
6. Proficiency in Communication skills.
7. Professional values and Social ethics.
8. Keeping good health and following good habit.

The culture of excellence is sustained by the best practices of the college such as

- ➢ The management appreciates the faculty / staff for academic achievements by arranging special programs.
- ➢ Cash Awards for class toppers in every semester.
- ➢ The management invites eminent academicians, scientists, industrialists and others to enlighten the staff on issues of the invitee's expertise.
- ➢ Rewarding the contest winners with equal prize money
- ➢ Rigorous training to enhance the students, so that their employment and entrepreneur skills are developed.
- ➢ Prepare the students to progress to higher education in renowned institutions.
- ➢ Directors, Principal and Head of Departments play a vital role in instilling the culture of excellence in every student through Teacher Guardian and Parent teacher scheme.

Championing the organizational change

Vision and Mission of the college have been restated with a foresight to match the changing scenario in the academic as well as employment.

The College pioneers in the field of changes in organizational set up by becoming an outward looking organization with focus on benchmarking against the best.

Appointing a Placement Officer and bringing employers for on campus selections to the college campus from the third set of out - going students.

The College is always open for change in policy and also helps other colleges in their quest for excellence.

Thus a change for the better has always been welcomed and adapted to without second thoughts.

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?

Ans: - The institution has put various procedures to monitor and evaluate policies and strategic plans. The meetings are conducted once in a year. In these meetings, developments and budgets are reviewed.

The procedures adopted by the institution to monitor and evaluate policies and plans of the institution are as follows:

➢ Monthly meeting of the HODs called by the Principal in presence of Secretary.

➢ Various committees are formed and portfolios are assigned.

➢ The Principal's meetings with Vice Principal, and HODs are conducted every week to monitor all academic and student related activities.

➢ Academic Excellence cell monitors and modify the teaching-learning process.

➢ Meeting of the placement coordinators with the Placement officer to update the tactics for placement training.

➢ Weekly/ biweekly/ monthly Faculty meetings are conducted in every Department frequently to convey plans and instructions discussed in HOD meeting and initiate their implementation as well as take feedback about the plans being implemented.

➢ End of the academic year performance assessment of the faculty by self, HOD and the Management to make certain that the quality of teachers is not compromised.

The outcome of the above mentioned procedures ensure that the policies and procedures of the institution are monitored and evaluated for effective implementation and improvement.

6.1.5 Give details of the academic leadership provided to the faculty by the top management?

Ans: - The Management's policy is very democratic, believing in decentralization of power and delegation of authority to faulty at all levels. The allocation of responsibility helps faculty develop democratic leadership qualities and build a balanced and confident personality.

The freedom and the support will motivate faculty in developing creative and innovative practices with mutual coordination and team work.

Some of the committees and the responsibilities are mentioned below:

- ➢ Mentor
- ➢ Module co-ordinator
- ➢ Course co-ordinator
- ➢ Class In charge
- ➢ NAAC Co-ordinator
- ➢ Entrepreneurship Development Cell coordinator
- ➢ Discipline Committee
- ➢ Alumni Association
- ➢ Time Table Committee
- ➢ Anti-Ragging Committee
- ➢ Hostel Committee
- ➢ Grievance Redressal Cell
- ➢ Department Association Coordinator
- ➢ Extra- Curricular Clubs coordinators/ Advisors

6.1.6 How does the college groom leadership at various levels?

Ans: - The College believes in decentralization of administration and transparency of governance. Freedom is given to all HODs in planning, organizing and implementing various activities in the department. The HODs in turn will delegate the authority and support to the faculty in taking up various departmental activities.

To develop leadership skills, it encourages the staff to attend training programs.

The Management also adopts the practical way of giving responsibilities to a person to enhance the leadership capabilities.

At student level:

By providing opportunities for students to take active participation in various Programmes, Committees, Seminars and Conferences inside and outside the college, the confidence level and leadership characteristics are taken to a higher platform. Samples of the offices delegated to students are

- Class committee members.
- Class representatives.
- Department Association representative.
- Extra-Curricular clubs office bearers.
- Seminars, Conferences, and Symposia organizers.
- Placement Coordinators.
- Professional Society activity in-charges.
- Sports representative.
- Cultural Representative.

At Faculty level:

Faculty are groomed by assigning work at different levels

- Class in charges.
- Module coordinators.
- Department Association Advisors / Coordinators/ conveners.
- Placement Coordinators.
- Coordinators of NAAC works.
- Industrial Coordinators.
- Discipline Coordinators.
- Guest lecture Coordinators.
- Anti-Ragging Committee in charge.

At H.O.D Level:

The HODs are accountable to all the academic and co-academic activities of the department. Leadership programs are arranged periodically to redefine leadership qualities and refresh the

outlook towards leadership. HODs are given additional college level responsibilities to help them groom as multitalented and fair leaders.

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?

Ans:-

The top management hardly interferes in the day to day administration of the academic and other functions.

The college delegates authority and provides operational autonomy to the departments to work towards decentralized governance system. The policies largely aim at reducing central management size, reorganizing delivery, expanding private initiatives, and creating new partnerships. Academic responsibilities are fairly divided among all the staff members.

The Management gives sufficient freedom to the Principal, who is the academic head of the institution to function in order to fulfill the vision and mission of the institution. The college delegates authority and provides operational autonomy to the departments to work towards decentralized governance system.

There is complete autonomy in the teaching – learning process for the HODs and the teachers and any trouble shooting is immediately addressed in the weekly HOD meeting and setting right mechanism arrived at in consultation with the Principal and the Secratory.

The HODs are at liberty to formulate the modalities for effective functioning of the department including work allocation and delegation of responsibility. Again, the HODs do not take an autocratic approach but a participatory approach in making decisions and every teacher has the opportunity to express his /her views.

The teachers are therefore able to make plans suited to their course and execute the plans in a congenial atmosphere. This enhances the productivity to a large extent.

The organizational chart, given below, explains the delegation of authority at different levels and flow of work.
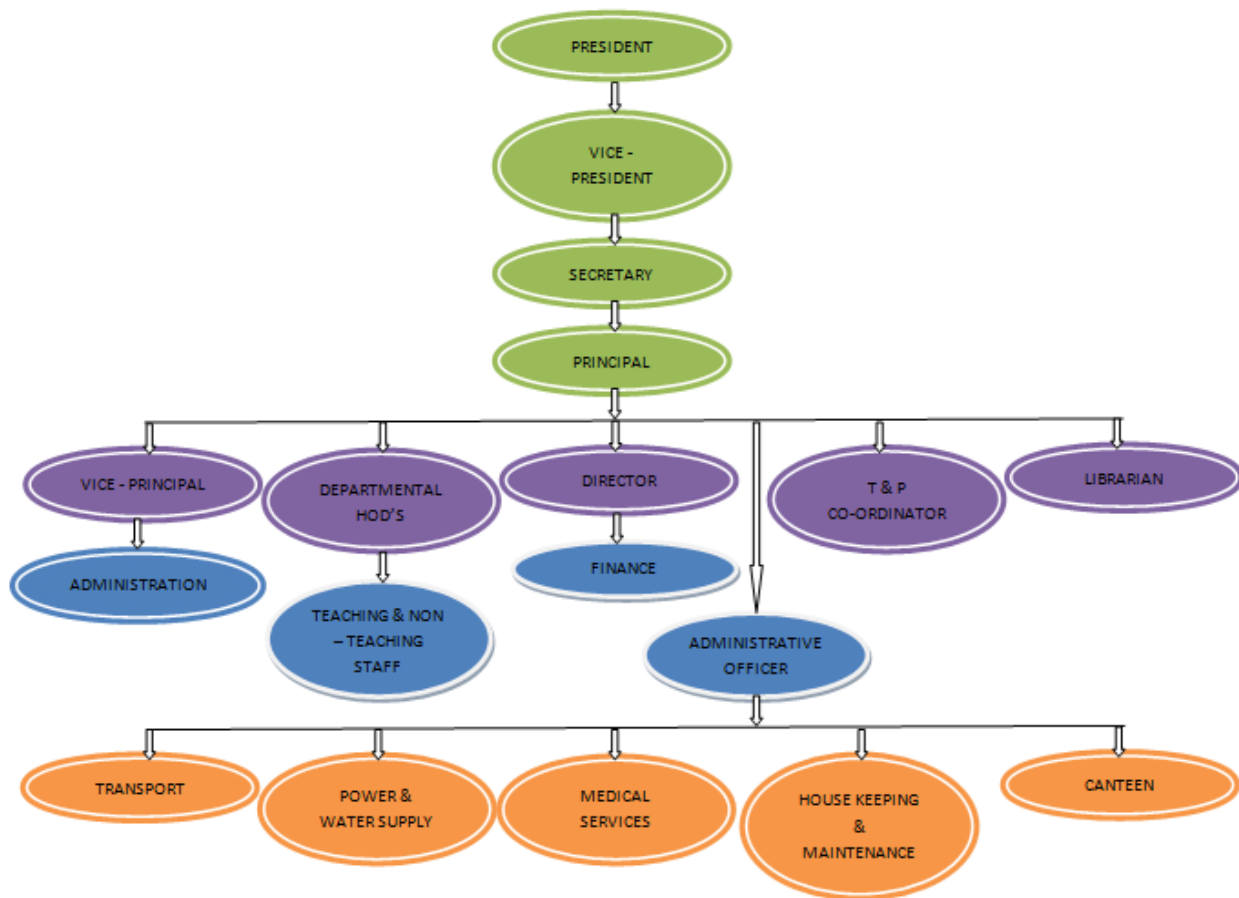
6.1.8 Does the college promote a culture of participative management? If yes, indicate the levels of participative management.

Ans: - Yes, the college consistently promotes a culture of participative management.

The President convenes a meeting with Principal, Vice - Principal and HODs whenever a major administrative change, policy change or modification in administration is deemed necessary. Such meetings of President directly with the HODs / faculty members in various capacities are one of the major steps towards participatory management.

Participative management allows collaboration and cooperation between departments and functionaries thereby improving the quality of accomplishment of task.

➢ The Management is always open to discussion with the teaching and non-teaching staff which, in turn, encourages the involvement of the staff for the improvement of effectiveness and efficiency of the institutional process.

➢ The HOD's meeting with principal will be held and the views of all HOD's will be taken into consideration before a decision is taken.

- Similarly, department faculty meetings are held at regular intervals where internal issues within the department are discussed and the deliberations of HOD's meeting are discussed.

- The concerns of faculty, if any, will be again brought to the notice of the Principal in the next HOD's meeting. The suggestions and concerns of staff are duly acknowledged and received by the heads of the department and in turn the suggestions of heads of the department are received well by the top management.

- Leadership in the institute always recognizes the significance of listening and interpreting the views of all the employees and practices this culture meticulously.

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?

Ans: - Yes, the institute has a formally stated quality policy which is as follows –

Suryodaya College of Engineering and Technology is highly committed to provide quality education to students, introducing & implanting human values and grooming them to achieve greater heights, through continuous Evaluation improvement.

Quality policy clearly states the objectives of the institution, their process of progress towards the achievement of objectives and its contribution to the society. All these strategies are monitored by the institute. This policy is developed by the Top Management in line with its vision and mission and after the assessment of the needs of the society. The faculty and Heads are made aware regarding the quality policy and efforts for implementation.

Strategic plan and action plan are designed in such a manner that this quality policy is driven and deployed during every process. Each process is regularly reviewed by a monitoring mechanism associated with each process. The quality policy is effectively communicated to all faculty and students through college hand book, notice boards, college website etc.

The **driving forces** of the quality policy are:

1. Uncompromising regularity and punctuality.

2. Academic excellence.

3. Depth in subject and general Knowledge.

4. Suitable placement or higher education or entrepreneurship.

5. Curiosity of learning, research and development.

6. Proficiency in Communication skills.

7. Professional values and Social ethics.

8. Keeping good health and following good habits.

These goals are attainable on an everyday basis and once attained synchronizes with the quality policy.

The Principal and the Heads of the Department continuously ensure that the quality policy is **deployed** efficiently by

1. Providing excellent infrastructure facilities.

2. Promoting value based quality education with ethical values.

3. Encouraging tie- up with Industry through MoU's.

4. Organizing programs to increase the employability.

5. Augmenting library and computer facilities.

6. Appointing highly qualified and experienced faculty members.

7. Encouraging participation of students in diversified activities to help them grow physically, emotionally and intellectually.

8. Conducting the internal assessment tests diligently.

9. Encouraging faculty to upgrade their knowledge to line with latest technology.

10. Promoting Research & Development culture among faculty and students.

The annual **review** of the implementation of quality policy is proficiently carried out in / by

  ➢ Governing Council meeting
  ➢ Academic Assessment by principal
  ➢ Weekly HOD's Meeting by Principal
  ➢ Departmental Meeting by HOD
  ➢ Class Committee Meeting
  ➢ Stock verification
  ➢ Performance appraisal meetings

In all such meetings the overall performance of the institution, the quality of education, academic performances are reviewed and discussed. Strategies for further improvements are designed. The

feedback from the students, parents and suggestions made by the faculty are considered for reviewing the quality policy.

6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Ans: - Yes, the institute has perspective plan for development. The institute takes effort in finding the key performance indicators from various perspectives for performance assessment and development.

The management of the institution has a clear vision and futuristic goals with plans for the various perspectives encompassing the complete structure of the system.

The Perspectives of the Institution are
- Academic Perspective
- Stakeholders Perspective
- Institutional Perspective

From the academic perspective the aspects considered for inclusion in the plan are
- Excellence in Academics on par with international standards.
- Establishing Centers of excellence in frontier areas of research.
- Empowering the students for higher education.
- To encourage faculty for Research work leading to Ph. D.

From the stakeholders' perspective
- Increasing the number students placed in well reputed companies with dream offers in campus placements.
- 100% Placement of eligible candidates.
- Accreditation of the Institution by national accrediting bodies like NBA, NAAC etc.
- MoU's with Leading Industries for Training of students and Faculty and bilateral collaborations.

From the Institution's perspective

➢ To attract students from all over the state and the country and elevate the entry level of students.

➢ To offer courses on par with international standards that will entice employers to the campus rather than the other way about.

➢ To increase the network interaction and participation with Industry and Alumni

➢ To empower faculties by creating an atmosphere of academic excellence

➢ Increase no of placement & Annual package for students.

➢ To create a national recognition in the field of Engineering education & establish the institute as a leading technology institute.

All the above aspects find a place in the perspective plans of the college.

6.2.3 Describe the internal organizational structure and decision making processes.

Ans: - Yes. The College has a formal policy to ensure quality. The institute has implemented the quality Management system on par with high standards to improve the quality of education to produce better results.

The organizational chart is as below -
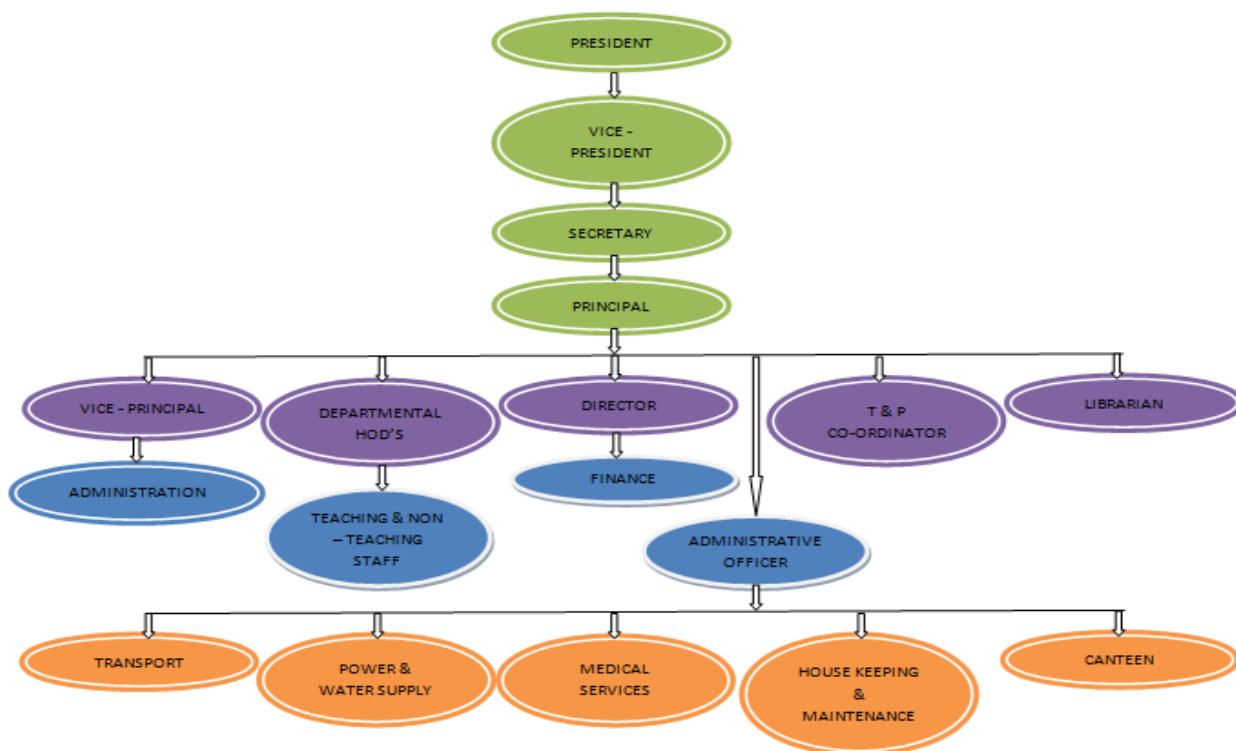
Decision Making Process:

The decision making process of the institution also takes place at different levels and these decisions are communicated through both top and bottom up channels. However the channels are in no way rigid but flexible enough to focus on the best to be offered to the stake holders.

Table: - 6.1:Decision making process

Levels:	Nature of Decision:
Top Management	Strategic decisions involving policies and planning.
Principal &HODs	Planning for execution of policies. Preparation of targets and mechanisms and Reviews
Faculty & Staff	Operational decisions

6.2.4 Give a broad description of the quality improvement strategies of the Institution for each of the following

Teaching & Learning

Research & Development

Community engagement

Human resource management

Industry interaction

Ans:-

Teaching- Learning

The institution follows the Outcome Based Education, which focuses on student-centric approach. Although the curriculum is prescribed by the University, the approach to delivering the curriculum is out come based. Teaching plans are prepared for a semester. These get verified and checked at different stages in accordance with syllabus and scheme of examination given by RTMNU. The teaching – learning process is facilitated through qualified, trained and experienced faculty. Apart from class-room teaching, students are encouraged to use library and internet facilities. The teaching staff maintains log and record daily instruction delivered, practical conducted and other such activities performed. The effectiveness of teaching – learning process is reviewed on regular basis.

The inputs for such review may be from:

- ➢ Students' feedback.
- ➢ Results of internal Examinations.
- ➢ Quality of assignment submitted.
- ➢ Final results of term / year.

The teaching and learning process is reviewed by head of the department for the concerned teaching faculty and the feedback is communicated. The concerned faculty then plans for improvements which are monitored on a regular basis for their effectiveness.

Research and Development

Research has been considered as an important integral part of the academic endeavors in our College. Many Seminars and workshops are organized by the College to provide expert information on research methodology. The College promotes faculty participation in research by granting them leave, helping them in participation of faculty improvement programmes and arranging for books required by them.

An R & D coordinator coordinates the research activities of the departments and also collaborates between the top management and the faculty undertaking research

The following are the strategies adopted by the college to keep up the research culture

- ➢ Faculty members who have registered for research are given flexibility in the time table to carry out data collection and analysis, library work and laboratory experiments
- ➢ Releasing the overhead charges stipulated by the funding agencies for enhancing the infrastructural facilities, supply of continuous electricity and water for research work
- ➢ Providing adequate infrastructure and human resources
- ➢ Authorizing study leave/special leave for Research Programmers
- ➢ Sanctioning purchase of books related to areas of research.
- ➢ Establishing link with industry and corporate sector

Community Engagement

The college has clear cut ideas about students not being kept in ivory towers but come down to brass tracks and experience the real world with its needs and wants. To make this a reality, various programs under different banners are organized by the various clubs for the students

- ➢ Blood Donation Camps

- National voters Day -
- Republic Day Celebration
- A one-day special camp was organized jointly by the NSS.

  The following activities were carried out

  - Awareness program on education.

  - Distribution of amount to old age nursery.

  - Conduct of games for the children and the villagers.

- Computer Awareness Workshop
- Hosting the National level science project contest competition as "TECHTRENDS" for polytechnic & engineering students.
- Hosting "MOCK TEST" for higher secondary students of different schools as practices for "MH–CET" free of cost.

Human Resource Management

The institution has clearly stated HR policy to guide its human resource management which involves recruitment of faculty –teaching and non –teaching, retention of recruited personnel and recognition of service through promotion and other developmental opportunities.

The following are the strategies for Recruitment of quality personnel:

- HODs prepare the number of vacancies for teaching and non- teaching staff and the work description.
- Principal take record of the faculty requirements from the entire HOD's.
- With the approval of the Management, advertisement published in the leading Newspapers calling for applications from suitable candidates.
- Based on the applications received, short listed candidates are called for interviews.
- University approves & appoints a Selection committee for recruitment in each department in concern with department head and one or two subject experts from other colleges.
- Interview and demo sessions are conducted by the Selection Committee and recommendation of suitable candidates are made to the management.
- The Management reviews the candidates based on the HR policy of the college.
- Appointment orders are issued to selected candidates. The College has adopted a mandatory Self-Appraisal MetHOD to evaluate the performance of the faculty in teaching.

Industry Interaction:

- ➢ Frequent interaction with industries by the faculty.
- ➢ Inviting experts from industry for guest lectures, including well known Industrialists in the Governing Council.
- ➢ Arranging for more number of in- plant training and internships for students.
- ➢ Industrial visits.
- ➢ Consultancy.
- ➢ Research activities in collaboration with industries.

6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

Ans: -

- • The day to day functioning of the institution is reported by the Head of the Institution to the Top Management.
- • The information to be disseminated to the stakeholders is posted on the college web site.
- • Meeting with Parents is conducted once every semester (i.e. twice a year).
- • Alumni meeting once a year ensures that alumni are updated with the college activities and feedback taken from alumni is compiled and presented to the Management.
- • Communication with the affiliating RTM Nagpur University establishes that necessary information is sent to the University.
- • Principal's report in the meeting with the Management well informed about the functioning of the college. This includes the activities and highlights of the college on the Annual College day celebrations, attended by parents, invitees and other members of the society, brings to spot light the accomplishments of the students and faculty. Comments from these stakeholders are always welcome and interested stakeholders can directly communicate with the Management.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

Ans: - The Management through the Principal involves the staff members in various activities related to the development of the college. Faculties are assigned additional responsibilities to involve them in the institutional processes. Such as mentors, Module/course coordinators, placement coordinators etc. Faculty are at liberty to plan and organize programs/ training sessions to improve the performance level of the students and necessary financial aid is provided by the management.

Innovative suggestions and ideas brought out by the faculty in department meetings are duly brought to the notice of the Principal and the Management in the weekly meetings and during the meetings with the president. The viable ideas are immediately implemented. This gives an impetus to other faculty members to actively involve themselves in improving the effectiveness and efficiency of the institutional processes.

Any laboratory and other equipment requested by the faculty members for effective delivery of course content are heeded by the Management and procured without any delay.

Inclusion of additional and new activities in co-curricular and extracurricular is supported and necessary assistance is given by the management.

Thus, every individual employee makes constructive contribution for the development of the College.

6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

Ans: - The Management of our College has been indeed very active, supportive and co-operative. The office-bearers are available on the College premises every Wednesday and Saturday, where staff members can meet them and freely express their views, suggestions and grievances. The Management refers these to the appropriate committees/ office, through the Principal, for necessary action. The meeting of the Management with the Staff has always been purpose oriented. Some of the resolutions that were taken to enhance institutional performance were:

• To upgrade computer labs (in process)

• To have an interior painting (in process)

• To initiate the process of felicitating best performing teachers (in process)

• To apply for awards offered by various authentic academic bodies (in process)

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?

Ans: - Yes. University offers autonomy to institutions having completed more than 10 years. Acquiring Autonomous status is on the agenda of the future plans of the college.

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?

Ans: - The College has a Grievance Redressal Cell.

Grievances can be communicated to teachers by the students verbally or written application. The problems by the students are reported to the Principal and suitable actions are taken.

Apart for the Grievance Redressal Cell, following are the committees that are formed to facilitate prompt action pertaining to sensitive issues –

- ➢ Grievance Redressal Cell
- ➢ Feedback from students / stakeholders
- ➢ Class Committee meetings
- ➢ Parents meetings
- ➢ Exit Survey from students
- ➢ Canteen Committee
- ➢ Alumni interaction
- ➢ Students Council
- ➢ Library Committee
- ➢ Cultural committee.
- ➢ Magazine committee.

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?

Ans: - No, there have not been any major instances of court cases filed by and against the institute.

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?

Ans:-

Yes; the Institution has a mechanism for analyzing the student feedback on institutional performances. The feedback from the students regarding the staff members, facilities and other issues are received twice a semester.

➢ By conducting the class committee meeting the difficulties faced by the students are collected.

➢ Student exit feedback is collected at the time of course completion

➢ During alumni meet the feedback on the Institution from alumni is collected.

The feedback obtained from different quarters are collated and analyzed. The requests/ suggestions/ grievances are duly recorded and taken up for discussion in the meeting of the HODs with the Principal. The recommendations of the meeting are conveyed to the Management. Issues that could be resolved or suggestions that could be implemented immediately are executed without delay. Those that involve financial implications are discussed further in Management meeting and final decision is taken.

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?

Ans:-

The Institution has always been keen on the professional development of the teaching and non-teaching faculty. Some of them are as follows:

➢ All faculty members are encouraged to pursue higher studies. The Management extends financial assistance to faculty pursuing higher studies by way of one day per month on duty leave for research work.

➢ Technical training for Faculty is provided to keep pace with syllabus and corporate sector.

- Faculty development programs in various areas and subjects are regularly conducted in the college.
- Faculties are encouraged to attend the Faculty Development Programs (FDP), seminars and conferences related to their area of specialization and / or areas of recent developments.
- Institution approves of any proposal for the conduct of Seminars and FDPs which serve dual purpose of getting exposed to experts in various fields and of interaction with participants from different institutions.
- Advance against approved seminar / conference grants is extended for smooth conduct of such programs. .
- Non-teaching staffs are encouraged to attend various hands on training both within and outside the college to get exposed to new technologies, tools, machineries etc.
- M.S. Office training was given to non-teaching staff to make them work more efficiently.
- Encouragement is given to non- teaching staffs who wish to further their education by distance learning mode / part time study and their achievements are duly acknowledged.

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?

Ans: - The College maintains the record of the faculty in Faculty Profile detailing education, experience and training. Staff members also work as members of committees under a senior staff member.

- Training and Motivational programs are conducted to the faculty belonging to the different cadres.
- Due recognition is given for paper presentations and publications in National/International conferences in the promotion policy of the institution
- Free transport facility is offered for all the teaching faculty members.
- Regular payments of incentives and increments boost the morale of the staff.
- Faculties are also sent to nearby industries to update practical knowledge. This is done through various MOUs executed on College and Group level.
- Free consultation for self and family in Dr. Gillurwar hospital.

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.

Ans: - Student feedback is taken on semester basis and staff members are given a summarized report of the feedback. The feedback form is designed in a way to facilitate extracting of maximum information from the students.

Staff members meet the Principal along with the HOD and necessary corrective measures are discussed. Based on the feedback of students and the HOD, appraisal is considered.

The Principal also interacts with the students and staff informally to make the students comfortable and interactive so as to get unbiased and comprehensive information about the institute from the student's perspective.

Full transparency is maintained and ensured in the process.

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?

Ans: -

On review of the appraisal reports, the Management arrives at conclusions and decisions for each faculty.

Where ever the situation warrants – for example, the application for promotion of raise in salary has not been considered – the individual faculty is called for a personal discussion and the appraisal and the decision is taken by the management is communicated to the concerned faculty.

Faculties who have consistently been sub - standard in their performance are replaced.

Faculties who have consistently been outstanding in their performances are appreciated in person and rewarded with hike in salary.

Retention of faculty in the same level is also decided based on the level of performance and this is communicated to each faculty in person by the Management.

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?

Ans: - Following are some of the benefits extended by the institute towards the welfare of the staff –

Type of Scheme Beneficiaries

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

1. The ward of a staff member will be provided with a concession of 50% in tuition fees will be given to the first ward and concession of 25% in tuition fees will be given to other ward, if he/she is willing to take admission in the institute run by national rural development and research society.

2. Facilities shall be promoted for consultancy projects. Amounts received will be shared in the proportion of 60:40 proportions between the Faculty and the institute respectively.

3. Employee provident fund facility is provided to all regular staff.

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

Ans: -

The Institution spares no effort in recruiting faculty of eminence and reputation in order to serve the primary stake holders – its students, In order to attract and retain such faulty the measures taken by the institution are

- Providing salary as per AICTE Norms.
- Extending full support for the r & D work of such faculty
- Bestowing other prestigious responsibilities on faculty recognizing their talents and qualities
- Concession in fee structure for the wards if they are admitted into the college for higher studies.
- Flexibility in adjusting the period of vacation to facilitate the faculty who wish to travel abroad.
- Also, faculties are actively involved in important decision making activities.

6.4 Financial Management and Resource Mobilization

6.4.1 What is institutional mechanism to monitor effective and efficient use of available financial resources?

Ans:-The College has very effective mechanism to monitor effective use of financial resources.

The Principal of the College ensures that expenses are incurred for the purpose of implementing institutional plans. For any requirement for equipment or other major items, requisition is submitted to purchase committee which is headed by the Principal. Quotations are then invited from various suppliers.

Their quotations are evaluated, comparative statement is prepared, suppliers are called for personal discussion and after comparing all aspects from various suppliers, orders are placed. This ensures that right equipment is purchased at most competitive price.

Further, accounts of the institution are subject to regular audit.

Also, budget is prepared at the beginning of the year and actual expenses incurred during the year are compared with budget and any major variation is discussed by the principal with concerned person.

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.

Ans:-The accounts of the College are audited regularly as per the Government rules. An internal auditor audits accounts on half yearly. The internal audit covers examination of revenues and payments. The external auditor conducts statutory audit at the end of financial year. The report of external auditor along with audited Balance Sheet and Income & Expenditure account are available for reference.

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 reserve fund/corpus available with institution if any.

Ans:-Students tuition fees and Schlorships are the major sources of receipts/funding to the institute. Audited income and expenditure statements of the previous four years are available.

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

Ans: - The College is making various efforts in securing additional funding .The College has applied for grants to AICTE.

<p align="center">Table 6.2: Project proposals submitted to AICTE under AQIS.</p>

Sr. No	Type	Title of Project	Name of Coordinator	Funding Agency	Grant Received (in Rs/-)	Duration	Status
1	National	Skill & Personality Development Programme Centre for SC/ST Student	Dr. Santosh Chede	AICTE	-	3 Years	Proposal Submitted (2016-17)
2	National	FDP on Multidisciplinary approach for Technical knowledge enhancement	Dr. Santosh Chede	AICTE	-	2 Weeks	Proposal Submitted (2016-17)
3	National	Workshop on Optimization Technique and its application in mechanical and civil engineering	Prof. V. G. Parhate	AQIS AICTE	--	I Week	Proposal Submitted
4	National	Conference	Asst.	AQIS	--	2 Days	Proposal

		on GIS , Remote Sensing and Its Application in Civil Engineering	Professor Ashtashil V. Bhambul kar	AICTE			Submitte d
	National	FDP on Analysis and Design of Earthquake Resistance Structure	Asst. Professor Ashtashil V. Bhambul kar	AQIS AICTE	--	2 weeks	Proposal Submitte d

Table 6.3: Faculty Development Program Completed

Sr.No	Name Of Program	Name of Guest	Year
1	Faculty development on Physics	Dr. R V Kshirsagar (Priyadarshani Collage of engineering Nagpur)	2013
2	Power System Reliability & Security	Dr. HariKumar Naidu, Dr. S Chandekar(SCET Nagpur), Prof Pravin Jangle(GHRAET, Nagpur)	2014
3	Control System Engineering	Dr. HariKumar Naidu, Dr. S Chandrashekhar, Prof Pravin Jangle (GHRAET, Nagpur)	2015
4	Effective Teaching	Dr. Nanoti (Priyadarshani Collage of engineering Nagpur)	2015
5	Teacher in You	Dr. Sanjay Raghtate	2016
6	Teacher in You	Dr. Sanjay Raghtate	2016

6.5 Internal Quality Assurance System (IQAS)

6.5.1 Internal Quality Assurance Cell (IQAC)

a. Has the institution established an Internal Quality Assurance Cell (IQAC)? If yes, what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?

Ans: - Yes, the Institute is having its Internal Quality Assurance Cell (IQAC). This Cell was established in the month of April, 2016 and functions on the basis of the guidelines set forth by NAAC & NBA. Even though officially IQAC is formed currently, all the processes / task related to IQAC is systematically handled by a group comprising of HODs, Principal and management representative (CEO). This group works towards improving and maintaining the quality of education, identifying and suggesting new ideas for quality improvement.

The Quality Policy of the Institute is as follows:

"To achieve excellence in providing Quality Education through continuous improvement in all concerned processes and resources, for creating competent professionals with sound academic foundation and strong values."

Table 6.4: IQAC committee members

Sr. No	Category	Name	Designation
1	Principal	Dr. Santosh Chede	Chairman
2	Management	Mr. Ranjit Chafle, Secretary, NRDRS, Nagpur	
3		Mr. Abhshek Belkhede, Director, SCET, Nagpur	Director
4	Seven Senior Teachers	Prof. V G Parhate, Vice. Principal	Member
5		Prof. Ram Wayzode, HOD Mechanical	Member
6		Prof. Vijay Nagpurkar, HOD First Year	Member
7		Prof. Pratibha GHODe, HOD Computer	Member
8		Prof Asthashil Bhambulkar, HOD Civil	Member
9		Prof. Pravinkumar Jangale, HOD Electrical	Member

10		Prof. Sachin Mhalke, HOD Electronics & Telecommunication	Member
11	Administration	Mr. Manoj Guhe, Resistar	Member
12	Local Society	Dr. Sanjay Raghatate, Director, Oxford Speakers Academy, Nagpur	Member
13	Industry	Shri. Jeevan Ghime, Hon. Secretary, Butibori MIDC Association	Member
14	Alumini	Mr. Shashank Tiwari, TCS	Member
15		Ms. Dipali Chaudhary, Infosys	Member
16	Student	Mr. Ajay Jangid	Member
17		Ms. Apurva Ambagade	Member
18	Invitee	Dr. Chandrashekhar Gillurkar	Invitee Member

The institutional policy with regard to quality assurance and the way it contributes in institutionalizing the quality assurance processes are as follows:

1. Preparation of academic plan and calendar

2. Execution and monitoring of academic plan/activities

3. Conducting internal assessment tests

4. Collecting feedback from students and alumni

5. Mentoring the students.

6. Organization of workshops, seminars on quality related themes

7. Developing infrastructure

8. Resource mobilization

9. Conducting activities for overall development of students as per need of industry and society

10. Improvement through internal audit

b. How many decisions of the IQAC have been approved by the management/ authorities for implementation and how many of them were actually implemented?

Ans: - IQAC reviews the Institutional Processes and gives suggestions for quality assurance. The suggestions given by the IQAC are generally appreciated and approved by the Management.

Table 6.5: Suggestions by IQAC

Sr.No.	Suggestion given by IQAC	Approved by the Management Yes/No	Implemented Yes/No
1	To iniciate the process of Social reform Computer Awareness in nearby Villages	Yes	Yes
2	To improve Teaching Learning Process by upgrading in Qualification like PhD	Yes	Yes
3	To increase the Guest lecturs and Expert from Industry in each department	Yes	Yes

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

Ans:-Yes, IQAC has two external members in the IQAC committee.

➢ Firstly, Mr. Shri. Jeevan Ghimeis a member of the committee. He has suggested replacing sodium vapour lights with LEDs. The suggestion was appreciated by the Management. It has been directed by the Management to replace sodium vapour lights with LEDs.

➢ The other external member is Dr. Sanjay Raghatate, Member. He has suggested the changing of the form filling procedures to make it hassle free for the students. The suggestion was appreciated and the form filing procedures has been changed.

d. How do students and alumni contribute to the effective functioning of the IQAC?

Ans: - There was a mechanism for taking feedback from alumnae and implementation of important points, even when IQAC was not formed. The students and alumnae plays vital role in the effective

functioning of the IQAC. The feedbacks are taken from students and alumnae and the suggestions are reviewed by IQAC. Some of the suggestions given by students and alumnaeare as follows:

- Students have suggested the use of ICT aids in Teaching Learning Process to grasp the topics effectively.
- Alumnae have suggested enhancing the Industry Trainings and Internships.
- Alumnae have suggested motivating students for enhancing their preparation for GATE, CAT, GRE, TOEFL competitive exams, at the Institute.
- Alumnae have also suggested enhancing the activities of Entrepreneurship Development Cell (EDC).

e. How does the IQAC communicate and engage staff from different constituents of the institution?

Ans: - IQAC conducts meeting once in every semester. The Head of the Institute is a chairman of IQAC. The Head of the Institute conveys the suggestions discussed, with all the Head of the departments during meetings. Faculty and staff members from different constituents of the Institute are communicated through the Heads of respective departments.

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.

Ans: - YES.Guidelines regarding the course syllabi, pattern of examination and passing criteria have been provided by the University of Nagpur/UGC. Term wise/year wise activities are arranged and classes are planned according to course design. As per plan, in particular academic semester, the faculties ensure syllabus completion. The activities listed below are planned by the College authorities with the help of different committees:

- Academic calendar
- Teaching plan
- Workload plan and allocation of resources
- Class wise timetable
- Examination schedule including tutorials
- Seminar/workshop/Industrial visit schedule
- Annual plan for sports and extracurricular activities.

Teaching Plan and Learning Process (TLP):

Teaching plans are prepared for a term which are get verified / checked at different stages in accordance with syllabus and scheme of examination given by RTMNU/UGC.

With support from office staff the qualified, trained and experienced faculty facilitates the teaching-learning process. Along with the classroom studies, students are encouraged to use library and internet facilities available in the institute.

The records and logs of daily instructions delivered, classes and practical conducted and other such activities performed are maintained by the teaching staffs.

The review is taken on regular basis for the effectiveness of teaching-learning process. These reviews are taken from the following inputs.

- Students feedback
- Results of internal tests
- Quality of assignment submitted
- Final results of term

The teaching-learning process is reviewed by HOD for the concerned teaching faculty and feedback communicated. The concerned faculty then plans for improvements which are monitored on a regular basis for their effectiveness. The various operational committees manage the students' educational needs and college administrative needs. These committees have representatives from the faculty, staff and students. Each committee frames plan for its activities, schedules and monitors these activities to meet determined requirements. Principal will approve the plans and gives suggestions regularly regarding the activities which has to be carried out. The final outcome/document of work in consultation with principal will be released by the authorized convener of the committee. In this way the College has an integrated framework for quality assurance of the academic and administrative activities.

6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If yes, give details enumerating its impact.

Ans: - In accordance with the requirements of UGC and University, the training is given to the staff. Feedback which is taken from the faculty plays an important role in the training. The faculties are trained by the counselor through various case studies based training programs.Training to

specific staff members pertaining to academic related software are also given to expertise them so that it can be forwarded to the students through special sessions.

These training programs are evaluated for effectiveness at regular intervals. The impact of the training is that the performance of the staff was much improved who underwent the training. The feedback has taken from the trainee who underwent the training and found that individuals were satisfied with that.

These training programs are evaluated for effectiveness at regular intervals. The impact of the training is that the performance of the staff was much improved who underwent the training. The feedback has taken from the trainee who underwent the training and found that individuals were satisfied with that.

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?

Ans: - The Institution adopts different strategies for academic audit. These cells/ bodies that undertake the academic audit are

1. Academic assessment cell

2. Department Advisory Committee

3. Class Committee

By seeking the help from these internal committees, academic audit is carried out by the Vice-Principal. This audit is done in three stages. Semester plan for conduct of theory and practical classes are submitted to the Head of Departments by all the respective faculty members. Monthly reports are collected from the teaching staff where teachers gave information regarding coverage of syllabus during that particular month. The teachers are advised accordingly in case the syllabus is not covered as per schedule. During the internal audit, the teaching staff submits the portion covered sheets at the end of the semester. The committee then scrutinized whether the entire portion has completed as per the initial planning and appropriate steps initiated. A road-map towards planning lecture and fulfilling the requirements is given by Teaching-Learning process. The steps followed to review the academic provisions are:

- To make entire procedure transparent, the students are provided with a copy of Academic calendar.

- Extra lectures are planned if the gap is found in the teaching-learning.

- Monitoring sheets helped the HODs to monitor the lecture delivery.

- The teachers have improved their teaching techniques and fulfilled the students' requirement with the help of feedback of students.

- Guest lectures are organized from the industry people to address students on the latest industry trends.

- Audit has been carried out of the examination results and course teachers take remedial actions on result analysis.

- Extra remedial classes and revision classes are taken before exams to clear the doubts of students regarding course.

6.5.5 How is the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

Ans: - As per norms as specified by regulatory authorities i.e. AICTE, DTE, and RTMNU, internal audits are done. For College processes, external audits are conducted. Internal audits are intermittently conducted to ensure that the direction is uniform and in keeping with management requirements. Approved core faculties are engaged for the audits as they are most aware with the organizational policies and metHODologies.

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?

Ans: - The mechanisms to continuously review the teaching learning process are:

The effectiveness of teaching metHODs is evaluated by the College authority.

Teaching Plan and Learning Process (TLP):

Teaching plans are prepared for a term which are get verified / checked at different stages in accordance with syllabus and scheme of examination given by RTMNU/UGC.

Qualified, trained and experienced faculty facilitates the teaching-learning process. Along with the classroom studies, students are encouraged to use library and internet facilities available in the institute.

The records and logs of daily instructions delivered, classes and practical conducted and other such activities performed are maintained by the teaching staffs. Short term responsibilities like extra lecture, duties for seminar etc. are properly informed and recorded to concerned authorities.

The review is taken on regular basis for the effectiveness of teaching-learning process. These reviews are taken from the following inputs.

- Students feedback
- Results of internal tests
- Quality of assignment submitted
- Final results of term

The teaching-learning process is reviewed by HOD for the concerned teaching faculty and feedback communicated. The concerned faculty then plans for improvements which are monitored on a regular basis for their effectiveness.

Student feedback is taken for all the courses. The question banks are distributed to all sections and students. Feedback forms are scrutinized and a report is compiled there from. These reports are confidential.

The faculty is made aware about the feedback.

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.

Ans: - The College communicates its quality assurance policies mechanisms by placing quality policy board at various places in the college premises for internal stakeholders (students and staff) and also through the College Website quality policies and outcomes are published for external stakeholders. The institution constantly looks for opportunities leading to improvement in Quality Management System. Data from various sources are collected, analyzed and actions initiated. The following points are reviewed after collecting data:

- Quality policy, Quality Objectives and its monitoring.
- Audit findings (External and Internal)
- Management review meetings
- Corrective and Preventative action
- Students' feedback.

Based on the above data action plans are initiated and their status is monitored.

Other Relevant Information

To systematize and streamline all the processes (academic, exam related, unfair means inquiry, scholarships, admissions, attendance, library, training of teacher, Teaching-Learning process etc.) for effective implementation, the College initiated the process of audit.

The idea of participative management is believed and promoted by the College management.

The college had planned on quality objectives to be met within one academic year. They are:

- To increase the number of students falling in the category of more than 75% attendance.
- To maximize the result and minimize the backlogs.
- To enhance and encourage Industry-Institute partnership.
- To extend better library facility with enhanced book-bank scheme and improve multimedia assistance.

CRITERION VII: INNOVATIONS & BEST PRACTICES

7.1 Environment Consciousness

➢ The institution always takes care and gives importance for developing eco – friendly atmosphere in the campus.

➢ The College has adopted various measures to maintain the campus greenery.

➢ The main focus of institute is Green and Clean College Campus.

➢ The campus have beautiful green environment with lawn and flowery plants.

➢ Our strategic plans for development are always driven by the concern for eco-friendly environment and sustainability of life giving resources like energy, water, and greenery and pollution free environment.

➢ Rain water harvesting system.

- **Committee for Environmental Issues:-**

1) Mr. V. G. Parhate	Chairman
2) Mr. A. Bambulkar	Member Secretary
3) Mr. V.S. Nagpurkar	Member Secretary
4) Mr. P. Jangle	Member
5) Mr. P. Balbudhe	Member
6) Ms. P. Nagdeve	Member

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

Ans: - No, the institute does not conduct a Green Audit of its campus and facilities.

 Butthe institute is very conscious about its responsibilities towards the greeny and pollution free environment.

Theinstitution maintains a checklist of the following in connection with Green

Audit:

➢ Optimum utilization of water consumption for institutional purpose which is utilized without polluting the environment.

- Collection of service records as waste materials/solid waste/condemned equipments are disposed without affecting the environment.
- Environmental sustainable principles, practices and studies are part of Curriculum.
- The Gardeners take care of the lawn and plants in the college.
- Swacha Bharat Abhiyan is followed in our campus.

The following subjects are included in the student's community to develop the awareness about the environment issues.

Table 7.1: List of environmental study subject of various departments

Sr. No.	Department	Semester	Name of subject
1	Mechanical Engg.	4th Sem	Environmental Studies
2	Electrical Engg.	4th Sem	Environmental Studies
3	Civil Engg.	3rd Sem	Environmental Engineering-I
4	Civil Engg.	3rd Sem	Environmental Engineering-I (Practical)
5	Civil Engg.	6th Sem	Environmental Engineering-II
6	Computer Engg.	3rd Sem	Environmental Engineering-I (Audit Course)
7	Electronics & Telecommunication Engg.	4th Sem	Environmental Studies

7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?

Ans:-The college has taken initiative for energy conservation , usage of renewable energy, water harvesting, Carbon neutrality etc. as follows-

Energy conservation:

The following Schemes are implemented for the conservation of energy:-
- Replacement of resistance regulator with electronic regulator.
- Replacement of CRT monitors with LCD monitors, and replacing DOT matrix printers with Laser jet printers.

> Lights and fans are switched off by floor peons and staff after completion of the last lecture of the day.

> Classrooms are made with sufficient cross ventilation and light so that the uses of electricity are minimized. This shows the institution's commitment towards energy conservation.

The conservation of energy was undertaken by replacing tube light, chokes with electronic chokes which are as follows:-

Table 7.2: Installation of electronic chokes

Sr. No.	Session	Fans (With Eletronic Regulator)
1	2010-11	300
2	2011-12	100
3	2012-13	100
4	2013-14	100
5	2014-15	52

The conservation of energy was undertaken by replacing CRT monitors, DOT matrix printers with LCD monitors and Laser jet printers respectively which are as follows:

Table 7.3: Installation of LCD monitors and Laser jet printers

Sr. No.	Session	LCD monitors	Laser jet Printers
1.	2010-16	300	11

Use of renewable energy:

> Energy club has been established to create awareness about energy conservation and to encourage the usage of renewable energy.

> Management has taken a decision for usage of solar energy in future.

> The College is planning to install solar panels. Awareness guest lectures are organized on renewable energy sources.

Water harvesting:

➤ The drinking water in the campus is being analysis by the chemistry department once in a year.

➤ Soak pits are provided in the institution for raising the water level of the ground.

➤ The waste water is diverted towards rain water harvesting pit.

Efforts for Carbon neutrality:

➤ College building in the campus is surrounded by trees and in front and middle. There is a lawn in campus.

➤ The leaves are buried in the soil itself and the papers are disposed off.

➤ The dead leaves and waste paper are not burnt in the campus and instead they are put into compost pits.

➤ The campus is totally plastic free.

Plantation:

The college has

➤ Garden supervisors

➤ A gardener

➤ A comprehensive set of garden equipments

The campus has ornamental plants and shady trees making the campus green and beautiful.

The college is having pollution-free ambience which has created environment.

Various trees and plants are planted in campus.

Hazardous waste management:

➤ There are no hazardous chemicals used in the college laboratory.

➤ The minimal wastage is drained after reasonable treatment so as to make it non hazardous.

➤ Water based chemical reactions are carried out minimizing hazardous solvent chemical usage.

➤ Polythene bags and other non-decomposable are seperated and sold to vendors who do the recycling.

E-Waste management:

➤ Non-working computers, monitors and printers are discarded and scrapped on a systematic basis. If some parts are useful in other systems they are kept aside for future use obsolete computers, printers and other equipments are sold to vendors who do the recycling.

➤ The E-waste management committee was formed to reduce wastages:

The following committee is monitoring the process of E-Waste management:

Table 7.4: E-waste management committee

	Name & Designation	
1	Mr. Abhishek Belkhede(Director)	Chairman
2	Mr. Manoj Guhe (Administrative Officer)	Member Secretary
3	Ms. Pratibha Ghode (HOD, Computer Dept.)	Member

The equipments are available with the college for the following session:-

Table 7.5: Equipments for Gardeners

Sr. No.	Session	Name of equipment	Total no. of equipment
1	2011-12	Cutter	02
2	2011-12	Aari	02
3	2011-12	Seizer	04
4	2011-12	Kurad	02
5	2013-14	Lawn Machine	01

The Gardeners take care of the lawn and plants in the college.

Table 7.6: List of Garden maintenance staff

Sr.No.	Session	Name of Gardner	Maintenance
1		Ashok Deshmukh	Incharge
2	2015-16	Kaduji Khedekar	Worker
3		Karan Thakare	Worker
4		Ajabraoji Raut	Worker

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.

Ans: - The institute in its quest for excellence has introduced a spectrum of innovative options to satisfy the complex needs of its stakeholders.

7.2.1 Innovation in Academic system

- Faculty concerned for every subject and explained their objectives and outcomes.
- Topics are covered beyond the curriculum in both theory and practical to give wider knowledge base to the students
- Contents for preparation are made available to all the students.
- All handouts with lecture plan, assignment questions and references are distributed to the students at the beginning of the semester.
- Regular monitoring of academic activities is done through College Academic Monitoring Committee such as Class Monitoring committee meetings are held in every semester, HOD monitor topics taught every day, Close monitoring of course coverage is ensured through frequent meetings of HOD with faculty members.
- A very effective and regular monitoring of attendance of students is followed to improve the attendance percentage.
- Remedial classes and bridge courses to make up for weak and slow learners.
- Students feedback collection on individual subject teachers in every semester is obtained
- Training & Placement Cell to guide the students in their campus placement. Attitude building is taught to the students to ensure appropriate attitude for lifelong learning
- Teachers as guardians are allotted for every 15-20 students well-being.
- Parent's meets are conducted about the performance of students after every internal examination.
- Industrial visit are regularly arranged to every semester to get industrial depth knowledge.
- Guest Lectures are regularly arranged to bridge gap between Institute and Industry.

Innovation in Administrative system:

- The college server is an internet web portal available all around the campus for various purpose
  - Library details
  - Feedback of students
  - Club activities with committee members list
- Maintenance of all buildings and other infrastructure is entrusted to maintenance team under a supervisor.
- Administrative committee cell is to address the problems of students.

Innovation in Student evaluation:
- Every department arranged two PUT (Pre-University Test) for 40 marks are conducted for evaluation of students.
- Procedure and guidelines of evaluation are given to the staff for both theory and practical exams. Corrected answer data of internal exam are shown to the students.
- Internal practical examination conducted at the end of the semester which is continuous evaluation of the practical is done under subject teachers.
- Teachers are encouraged the students to express their doubts and if any irregularities observed, in the evaluation then notice to concerned teacher and to the HOD, if necessary.
- Slow learners and poor students are identified and necessary measures are taken by the faculty member to improve their performance. The results are monitored by the HOD.

Innovations in Research and Development and Celebration
- The project innovation competition is conducted as intra department contest for all students to present their innovative ideas in modern era. If the idea stated is valuable, then they are encouraged to implement it.

National Events
- National Certification events are conducted for students as well as faculty on different technical topics and they are encouraged to get national Certification.

- The institute conducts a technical and cultural festival called TECHTRENDS and SAMBHAV, JALSA etc., in which the students from all engineering colleges from the entire state participate to exhibit their talents in various technical, cultural and sports events.

Infrastructure Planning

- Smart Classrooms are implemented for education, which have a computer along with the Audio Visual equipments allowing the Professors to teach with wide variety of media.
- Wall journal in the library help in academic schedule and bridge courses
- Computer labs, E-classrooms, English language laboratory, Digital library, well maintained seminar halls for faculty and students knowledge improvement.

Celebration

- Our college is celebrating Independence Day, Engineers Day, Teachers Day, Environment Day, Digital week, Women's day, etc. every year on corresponding dates. On these days, the students and staffs exhibit their creative and technical skills and lectures are delivered.
- **Innovations in Industry- Institute Interaction**
- The various departments of our college have arranged guest lecturers, industrial visit and singed MoUs with industries for benefits of students and faculty members.

Table 7.7: Industrial visit

Academic Session	Department	Industrial Name	Address	Contact Person
2013-2014	**Electrical Engineering**	IIM	Ahmedabad	-
		ANAND DAIRY	Jodhpur	-
	Mechanical Engineering	Bajaj Steel Pvt.Ltd	Immamwada, Nagpur	Mr.Ashish Aswar
		IIM	Ahmedabad	-
		ANAND DAIRY	Jodhpur	-
	Civil Engineering	Ple Chemie	Buttibori Nagpur	Mr.B. Patil
	Computer Engineering	Master software	Master software Nandanwan Mihan Nagpur	-
		HADC Mihan	Mihan	-

	Electronics And Telecommunication	IIM	Ahmedabad	-
2014-2015	**Electrical Engineering**	GEM Empire Home Application pvt. Ltd.	Chandigarh	-
	Mechanical Engineering	Bajaj Steel Pvt.Ltd	Immamwada, Nagpur	Mr.Ashish Aswar
		GEM Empire Home Application pvt. Ltd.	Chandigarh	-
	Civil Engineering	Gorewada WTP Bhandewadi WWTP RMC Unit	Buttibori, Nagpur.	-
	Electronics And Telecommunication	RTTC ,BSNL	Seminary Hills Nagpur	Mr. N.Pillewar
2015-2016	**Electrical Engineering**	HVDC chandrapur	Chandrapur	Mr.R. Taywade
		ANAND DAIRY	Jodhpur	-
	Mechanical Engineering	Bajaj Steel Pvt.Ltd	Immamwada, Nagpur	Mr.Ashish Aswar
		IIM	Ahmedabad	-
	Civil Engineering	Apple Chemie	Buttibori Nagpur	Mr. B.patil
	Computer Engineering	Jetking	Jetking Nagpur	Mr.Amit Basware
	Electronics And Telecommunication	MRSAC	VNIT Campus VRCE GATE NAGPUR	Mr. Sanjay Aturkar
		Doordarshan Kendra	Nagpur	-
2016-2017	**Electrical Engineering**	HVDC chandrapur	Chandrapur	Mr.R. Taywade
		Load dispatch Center	Nagpur (Ambazari)	Mr. Kuthe
		Power Gride	Bhadrawati	Mr. S. kumar

		Corporation		
		Suzlon Energy Pvt Ltd	Chilkhaldara	Mr. S Kailas
	Mechanical Engineering	Mahindra & Mahindra	Nagpur	-
	Civil Engineering	Apple Chemie	Buttibori, Nagpur	Mr. B.Patil
	Computer Engineering	Jetking	Nagpur	Mr. A. Basware
		Vanrasoft Technology	Nagpur	Mr.T. Mehtani

Table 7.8: Guest Lecture

Academic Session	Department	Subject Topic	Date	Contact Person
2013-2014	**Electrical Engineering**	Power Electronics	11-09-2013	Dr.M. Renge
		FACTS	26-02-2014	Irfan Ahmed
	Mechanical Engineering	Machine and Mechanism	07- 07- 2014	Dr.M.K. Sonpimple
		CAD /CAM/CAE	10-06- 2014	Mahesh Sonare
	Civil Engineering	Engineering Geology	03-08-2013	Petkar
	Computer Engineering	Training and placement	14-08-13	S.R. Kulkarni
	Electronics And Telecommunication	VLSI Technology	03-09-2013	Prof.S. Shamkuwar
		JAVA Technology	12-01-2013	Prof. P. Shukla
2014-2015	**Electrical Engineering**	FACTS	26-02-2014	
		MPSC-UPSC	2014	MR.Wagh
	Mechanical Engineering	Introduction of finite	31-07-2015	Mr.Ashish Bawankar
		Personality development and communication skill	24-08-2015	Vishal Chaudhari
		Refrigeration and Air conditioning on fire	09-09-2015	Mr. Syed Abdul Gaffar

		fighting		
	Civil Engineering	Engineering Geology	29-08-2014	Petkar
	Computer Engineering	Computer Network	14-02-2014	Mr.Chandu Vaidya
	Electronics And Telecommunication	Communication Engineering	22-08-2014	Prof. P. Bokade
		Rasberry-PI	07-09- 2014	Prof. U. kabade
		Telecommunication Switching System	27-03-2015	Prof.S. Shamkuwar
2015-2016	**Electrical Engineering**	English Speaking	30-01-2016	Chaitanya Kanoria
		English Speaking	02-02-2016	Sanjay Raghute
		Automation (PLC – SCADA)	12-09-2015	Deeepak Shriwastava
		Seminar on Guidance on preparation of GATE examination.	13-07-2015	Amol Khadse
	Mechanical Engineering	Carrier in Design Automotive Design CAD/CAM	08-10-2016	Mr. M. Sahare
	Civil Engineering	Engineering Geology	28-09-2015	Petkar
		HWR	29-09-2015	K.S. Jadho
	Computer Engineering	Compiler Construction	08-10-2015	Prof.N.G. Mungale
	Electronics And Telecommunication	UPSC-MPSC Banking Preparation	07-08-2015	Mr.Ram Wagh
		Introduction to Lab View	01-08-2015	Mr.Sameer Taksande
2016-2017	**Electrical Engineering**	Series Compensation MetHOD	12-11-2016	Dr.M. Renge
		Guidelines for competitive Exams		Mr.Ram Wagh
		Solar Panel – V.S. Informatics		Sandeep Sonaskar
	Mechanical Engineering	Techniques in Production		Dr. P. Khope
		Oppurtunities in Gulf		Dr. P. Khapne

		for Mechanical Engineer		
	Civil Engineering	Engineering Geology	28-09-2015	Petkar
		HWR	29-09-2015	K.S. Jadho
	Computer Engineering	Carrier Guidance	09-09-2016	Mr.Amit Baswase
		Compiler Construction	10-10-2016	Prof. N.G. Hungale
	Electronics And Telecommunication	Personality Development	07-08-2016	Mr. G. Shetti
		Advance of DM Technniqyes	03-09-2016	Prof. B.R. Thakre
		IOT Infrastructure	22-09-2016	Mr.Ashish Labde

Table 7.9: MoUs Signed

Sr. No.	Department	Company Name	Year	MoU Signed Date
1	CSE	JETKING PVT LTD	2016	11/11/2016
2	EE	Electronics Designer	2015	13/12/2015
3	ME	AXIOM SOFTWARE PVT LTD	2016	31/12/2016
		DCS PVT LTD,NAGPUR	2011	19/09/2011
		THREE M SOFTWARE SOLUTION,NAGPUR	2012	17/08/2012
		THREE M SOFTWARE SOLUTION,NAGPUR	2013	19/08/2013
		THREE M SOFTWARE SOLUTION,NAGPUR	2014	17/07/2014
		THREE M SOFTWARE SOLUTION,NAGPUR	2015	23/03/2015

Innovation in Teaching Learning Process

I) Smart Classroom

- Smart Classrooms are proposed for education, which have a computer along with the Audio Visual equipments allowing the Professors to teach with wide variety of media.

II) E-learning

- E-learning provides a platform for students to improve their technical knowledge through e resources. The e-resources include the e-books of various courses of each department, NPTEL videos and LCD Projectors.

III) Seminar MetHOD& Project-based learning:

- Project Based learning is a teaching metHOD in which students gain knowledge and skill by working for an extended period of time to investigate and respond to an authentic, engaging and complex question, problem, or challenge

- Being a technical institute, this metHOD is extensively used to provide practical evidence of the theory learned. Students are asked to prepare projects with a clear concept of the principles learned.

IV) Installation of latest configuration computers

- All the computers inside the campus are provided with latest configuration and software. This helps the students and faculty members to educate themselves on research and to enrich knowledge on other technical concepts.

Following are the latest configuration computers as follow

Table 7.10:Computer configurations

Type 1 m/c	Type 2 m/c
Configuration- WINDOWS 7 1GB RAM DUEL CORE PROCESSOR 160GB HARDDISC	Configuration- WINDOWS 7 2 GB RAM CORE TO DUEL PROCESSOR 160GB HARDDISC
Total numbers of Computers = 300	

7.3 Best Practices

SCET follows many best practices that have contributed to the achievement of the Institutional objectives and Quality improvement of the core activities of the college as listed below:

- Promotion of Research
- Senior Faculty Retention,
- Student Motivation
- Best Outgoing Student Award,
- Academic Audit,
- Student centric activities with regards to rapid development in technology
- Building innovative Library Facilities.

Best Practice – I

Title of the Practice: Promotion of Research

Goal of this practice: The main focus is to inspire the faculty to pursue higher studies and promote for Research in order to improve their skills and for that several efforts are made by the management of the college.

The Context:
- Incentive will be paid to faculties for publishing research papers in International Journals and Conferences.
- Faculty is motivated for attending the workshops, conferences, seminars by paying Registration fee.
- After the completion of Ph.D. program significant increase in the pay is given.

Impact of the practice:
- Due to efforts taken by the Management, several staff members are motivated to register for Ph.D. program.
- Publication of research papers in reputed journals with high impact Factor motivates the faculty in research.

Resources Required: Provision is made in the Budgetary Allocations.

Best Practice- II

Title of the Practice: Student Motivation

Goal of this practice: To encourage students for participating in curricular and co-curricular activities**.**

The process:

The students are likely to be good in academics and should have good industrial experience. Apart from academics, they also required to update their knowledge with the latest developments in technology related to their research field.

➢ Along with good academic record, the students need to develop leadership qualities and good communication skills and soft skills.

➢ For these aspects, experienced faculties and prominent personalities from various reputed institutes and industries are invited to impart the practical exposure to the students through workshops, seminars, guest lectures, etc.

➢ The students are motivated to share their ideas with the outside world by presenting their work in National / International Journals & Conferences.

Best Practice No- III

Title of the Practice: Training &Placement

Goal of this practice:

• To persuade the students to possess a sound technical knowledge in the area of technical research.

• To enhance the programming skills of students.

• To help students excel in language and communication skills.

• To prepare the students for different levels of selection process such as group discussions and one-to- one interviews.

• To help boost the students' confidence level through soft training skills.

• To groom the students to the corporate level

• To ensure that all eligible students are employed by the end of the final year of study.

Part E: EVALUATION REPORT OF THE DEPARTMENT

Evaluative Report of the Mechanical Engineering Department

1. Name of the Department : Mechanical Engineering Department.

2. Year of Establishment : 2010-11

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

The following programmes are offered in the Mechanical Engineering Department.

Sr. No.	Name of the Program	Establishment Year & Approval Letter	Academic Year	Intake
1	**Degree:** Bachelor Degree in Engineering	**2010**	**2010-11**	**60**
2	**Discipline:** Mechanical Engineering department	**2011**	**2012-13**	**Increased to 120**

4. Name of Interdisciplinary courses and departments involved:

The list of interdisciplinary courses which are common to various departments is mentioned in the table below:

B.E – Mechanical Engineering			
Sr. No.	**Semester**	**Course Title**	**Department**
1	I/II/III/IV	Engineering Mathematics – I Engineering Mathematics – II Engineering Mathematics – III Engineering Mathematics – IV	Science & Humanities
	I/II	Engineering Physics	Science & Humanities
	I	Basic Electrical Engg.	Electrical Engg.

	I/II	Engineering Chemistry	Science & Humanities
	I	Computer concepts & C Programming	Computer Science & Engineering
	II	Engineering Mechanics	Civil engineering
	VI	Mechatronics	Electronics & Telecommunication Engg.
	VI	Functional English	Science & Humanities

5. Annual/ semester/choice based credit system (programme wise):

The UG Programs follow the R.T.M. Nagpur University guidelines with **(Credit based)** semester system.

Semester	Lecture credit	Practical credit	Tutorial credit	Total credit
III	15	6	7	28
IV	15	5	5	25
V	15	4	7	26
VI	17	6	7	30
VII	15	6	5	26
VII	15	9	5	29

6. Participation of the department in the courses offered by other departments:

The Department of Mechanical Engineering is participating in courses offered by other departments are:

Sr. No.	Semester	Course Name	To Department
1	I/II	Engineering Graphics – I Engineering Graphics - II	All Departments
2	I/II	Basic Workshop Lab	All 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:

The Mechanical Department has well qualified and Experienced Faculty and the statistics of teaching posts sanctioned and filled is as mentioned in the table M.E 1.6

Teaching Post(UG)	Sanctioned	Filled
Professors	3	Nil
Associate Professor	6	Nil
Asst. Professors	23	28

10. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./Ph.D./M.Phil., etc.)

Faculty profile is as mentioned in the table below:

Sr. No.	Name	Specialization	Qualification	Designation	No. of Years of Experience
1	Prof. V. G. Parhate	Production	PHD (Pursuing)	Vice-Principal	16
2	Mr. R. R. Wayzode	Mechanical Engineering Design	M-Tech	H.O.D	8
3	Mr. A. Belkhede	Mechanical	MBA	Asst. Professor	7
4	Mr. K. K. Tonpe	Mechanical	M-Tech	Asst. Professor	4

		Engineering Design			
5	Mr. N. P. Padghan	Mechanical Engineering Design	M-Tech	W/S Superintendent	4
6	Mr. P. D. Deshpande	CAD/CAM	M-Tech	Asst. Professor	4
7	Mr. N. R. Sontakke	Heat Power/ Thermal	M-Tech	Asst. Professor	7
8	Mr. A. S. Yawalkar	Heat Power/ Thermal	M-Tech	Asst. Professor	5
9	Mr. M. N. Gaijbhiye	Thermal & Fluids Engineering	M-Tech	Asst. Professor	2
10	Mr. M. S. Baseshankar	Mechanical Engineering Design	M-Tech	Asst. Professor	9
11	Mr. R. R. Yempreddiwar	Mechanical Engineering Design	M-Tech (Pursuing)	Asst. Professor	2
12	Ms. V. Lakhorkar	Heat Power/ Thermal	M-Tech	Asst. Professor	4
13	Mr. P. K. Nagpure		M-Tech	Asst. Professor	2
14	Mr. S. Channe	Mechanic	M-Tech	Asst. Professor	5

		al Engineering Design			
15	Mr. D. Dongarkar	Mechanical Engineering Design	M-Tech (Pursuing)	Asst. Professor	2
16	Mr. Abhinav Aherkar	Heat Power/ Thermal	M-Tech	Asst. Professor	3
17	Mr. Piyush Patil	Mechanical Engineering Design	M-Tech	Asst. Professor	2
18	Mr. Ritesh Bais	CAD/CAM	M-Tech	Asst. Professor	3
19	Mr. Mohammade Mushtaq Shaikh	Thermal & Fluids Engineering	M-Tech	Asst. Professor	2
20	Mr.Vijay Bhoyar	Mechanical Engineering Design	M-Tech (Pursuing)	Asst. Professor	2
21	Mr. Bushan Pradhan	Machine Design	M-Tech	Asst. Professor	2
22	Mr. Prashant Wanjari	Industrial	M-Tech	Asst. Professor	2
23	Ms. Niru Khobragade	Heat & Power	M-Tech	Asst. Professor	2
24	Mr. Vijay S. Nagpurkar	Chemistry	M. Sc.	Asst. Professor	9

25	Mr. Ravindra Chavan	Physics	M. Sc.	Asst. Professor	9
26	Ms. Rasika Phate	Social Science	M.A.	Asst. Professor	9
27	Mr. Rupesh Pohane	Mathematics	M. Sc.	Asst. Professor	5
28	Mr. P. K. Khapre	Mechanical	BE	Adjunct Faculty	18
29	Mr P. K. Belkhade	Mechanical	BE	Adjunct Faculty	10
30	Mr. R. K. Katakwar	Mechanical	BE	Adjunct Faculty	15
31	Mr. V. K. Gupta	Mechanical	BE	Adjunct Faculty	14
32	Mr. Y. M. Kalkotwar	Mechanical	BE	Adjunct Faculty	16

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):

Student Teacher ratio Programme wise has been mentioned in the table below:

Sr. No.	Programme	No. Of Students	No. Of Teachers	Student Teacher ratio
1	UG (B.E-MECH)	480	32	15:1

14. Number of academic support staff (Technical) and administrative staff: sanctioned and filled.

The below given table gives the cadre wise structure of academic support:

	Sanctioned	Filled
Administrative Staff	1	1
Technical	7	7

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

Sr. No.	Qualification	Total Number of Staff
1	Ph.D	--
2	Ph.D Pursuing	01
3	PG.	26

16. Number of faculty with ongoing projects from National, International funding agencies and grants received:

Sr. No	Type	Title of Project	Name of Coordinator	Funding Agency	Grant Received (in Rs/-)	Duration	Status
1	National	Workshop on Optimization Technique and its application in mechanical and civil engineering	Prof. V. G. Parhate	AQIS AICTE	--	I Week	Proposal Submitted

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) by faculty and students.

Sr. No.	Name of Department	No. of paper published in journals	No. of paper published in National conferences	No. of paper published in International conferences	Total
1	Mechanical Engineering	21	08	02	31

Paper Published by faculty:

List of Journals

Sr. No.	Name of Faculty	National/International Journal
01	Prof. V. G. Parhate	"Mechanical Effect Of Physiotherapy Traction: A Review Of The Literature" (Ijitr) Internatioanl Jouranl Of Innovative Technology And Research ,Volume No. 3, Issue No. 4 June-July 2015,2341-2345
		" Maximum Equipment Utilization By Combining Techniques Of Physiotherapy For Optimal Performance" International Conference On Quality Up-Graguation In Engineering Science & Technology (Icquest-2015) Isbn: 978-81-923623-1-1
02	Prof. Ram R. Wayzode	"Calculation Of Setup Variable For Process Of Bending And Rolling Operation Using Analytical Approach & Finite Element MetHOD" (Irjsse)/Volume :2 /Issue : 2/ June. 2014
		Ram.R.Wayzode, P. G. Mehar, V. N. Mujbaile, (2012). Modelling, Analysis

		And Comparison Of Forged Steel And Cast Iron Crankshaft. *Indian Streams Research Journal,* Vol. Ii, Issue. Vii, Doi : 10.9780/22307850
03	Prof. Ketan K. Tonpe	"Design & Performances Of Coconut De-Shelling Machine" (Ijera) Int. Journal Of Engineering Research And Application, Issn : 2248-9622. Vol. 4, Issue 7 (Version 3), July 2014, Pp. 39-44
		"Performance Analysis Of Coconut De-Shelling Machine " Jetir Journal of Emerging Technologies and Innovative Research (Issn-2349-5162) Pp.108-115.
		"Design and Development of Coconut De-husking Machine" International Journal of Engineering Research and Technology 3 (7 (July-2014)) Vol. 3 - Issue 7 (July - 2014) e-ISSN: 2278-0181
		"Performance analysis of coconut de-husking machine" Journal of Emerging Technologies and Innovative Research 1 (2 (August-2014)) Volume 1 Issue 2 eISSN: 2349-5162
04	Prof. Nitin P. Padghan	"Calculation Of Setup Variable For Process Of Bending And Rolling Operation Using Analytical Approach & Finite Element MetHOD" (Irjsse)/Volume :2 /Issue : 2/ June. 2014
		" Force Analysis Of Metal Sheet In Bending Operation On Sheet Bending Machine"(Ijert) Issn 2278-0181, Vol. 4 Issue 01, Janurary-2015
05	Prof. Prafulla D. Deshpande	"Design & Analysis Of Feedershaft/Opener Shaft For Ginning Machine" (Ijarse) Issn 2319-8354, Vol. 4 Issu 07, July-2015
		"Analysis Of Power Transmission System For Ginning Machine With Feeding Mechanism Using Fea" (Iosr-Jmce), Issn 2278-1684, Pp 23-32.
06	Prof. Manoj Baseshankar	Design , Development And Fabrication Of Advance Wire Rope Making Machine International J. Of Engg. Research & Indu. Appls. (Ijeria). Issn 0974-1518, Vol.3, No. Iv (November 2010), Pp. 193-216
		Estimating The Error Of Field Variable For Numerical Approximation Techniques Using Matlab *Int. J. Mech. Eng. Issn 2278 – 0149 Www.Ijmerr.ComVol. 3, No. 1, January 2014*

*   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.) :   --

       * Monographs   :

       * Chapter in Books   :

       * Books Edited   :

*   Books with ISBN/ISSN numbers with details of publishers

       * Citation Index   :   --

       * SNIP   :   --

       * SJR   :   --

       * Impact factor   :   1.5 to 3.5

       * h-index   :   --

20. Areas of consultancy & income Generated:

Sr. No.	Area of Consultancy	Income Generated (Rs.)
1	CAD	15000/-

21. Faculty as members in

    a) **National committees**   :

    b) **International Committees**   :

    c) **Editorial Boards**   :

    d) **Faculty Membership for ISTE**   :

List of faculty members having Professional society membership for Indian Society of Technical Education (ISTE) is given

Sr. No.	Name of Faculty	Membership	Membership No.
1.	Prof. V. G. Parhate	ISTE	LM33611

22. Student projects:

Students are encouraged to carry out research oriented projects which are of social relevance involving state of art and inclusive technology. Students get an opportunity to use latest tools and technical knowhow in the process of executing the project.

Students are provided the required infrastructure to do their projects (in house). Risks are discussed at each project progress review meeting.

The Department keeps track of the progress of the project in terms of completion, time and costs.

To enforce team work, students are asked to form a group of 7 to 8 members to carry out the project work. This enables them to build team spirit and helps in co-ordinating various activities.

Sr. No.	Year	Percentage of Student who have done in house projects including inter departmental/Programme	Percentage of Student Placed for Project in organization outside the institute i.e., in Research laboratory/Industry/to agencies
1	2013-14	100%	NIL
2	2014-15	96%	4%
3	2015-16	98%	2%

23. Awards/ Recognitions received by faculty and students :

- Faculties: NIL
- Students

Technical Achievements /Non-Technical Achievements:

Sr. No.	Academic Year	Name of Activity	Name of Organizer	Position	Achievements
1		National Level Dance Competition	Prayaas Team, Gondiya	I	Best Anchor Award
2	2016-17	Space Quiz	Engineering Forum, Nagpur	II	Runner Up
3		Dance Competition	All India Global Movement of Dance Competition, Cuttak	III	Best Dancer Award
4	2015-16	Tug of War	KDK,Nagpur	I	Winner
5		Archery	RTMNU	III	Selected in University Team
6	2014-15	Kabaddi	RTMNU		Zonal Runner up

24. List of eminent academicians and scientists/visitors to the department :

Sr. No.	Name of the Academicians and Scientists / Visitors	Designation	Organization	Purpose of Visit
1	Dr. M. K. Sonpimple	Associate Professor	Priyadarshini College of Engg.	Technical Seminar
2	Mr. Mahesh sahare	Senior Executive officer	DCS Pvt. Ltd.	Technical Seminar

3	Mr. Syed Abdul Gaffar	CEO	KG-Mech Hydrabad	Technical Seminar
4	Dr. A. V. Wanalkar	Associate Professor	KDK, Nagpur	Technical Seminar
5	Mr. Surendra Chopde	Head	CADCAMGURU, Nagpur	Technical Seminar

25. Seminars/ Conferences/Workshops organized & the source of funding

a) **National** : **03**

b) **International** :

c) **State Level** :

Sr. No.	Topic of seminar / Workshop /conference	Name of Expert Faculty	Designation	Source of funding
1	HVAC System	Mr. Abdul Gaffar,	Educational Director-HRO, KG MECH Electro-Mechanical Pvt. Ltd.	Self financing
2	CAD/CAM	Mr. Mahesh Sahare	Senior Executive officer, DCS Pvt. Ltd.	Self financing
3	NX Software	Mr. Salim Khan & Mr. Monish Survanshi	Senior Executive officer, 3M Software Solution	Self financing

26. Student Profile Programme/course wise:

Statistical information regarding admission in first year and direct second year is given in table

Name of the Course	Academic Year	Application Received	Selected Seat		Pass Percentage
			Male	**Female**	
BE	2016-17	Centralized Admission process as per the rules and regulation of DTE	92	1	Eligibility criterion is 40% for SC/ST and 45% for others
	2015-16		78	1	
	2014-15		106	0	
	2013-14		135	1	

27. Diversity of Students :

Name of the Course	Academic Year	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
BE	2016-17	Nil	94.63	5.37	Nil
	2015-16	Nil	96.21	3.79	Nil
	2014-15	Nil	95.29	4.71	Nil
	2013-14	Nil	97.8	2.20	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

Sr. No.	Academic Session	No of students appeared	No. of students qualified	Name of Exam
1	2013-14	12	Nil	Gate Exam
2	2014-15	08	01	Gate Exam
3	2015-16	23	Nil	Gate Exam
4	2016-17	31	N.A.	Gate Exam

29. Student Progression

Student Progression	Academic Year	Number of Students	% of Students
UG to PG	2013-2014	02	5.40
	2014-2015	01	3.03
	2015-2016	04	4.12
	2016-2017	--	--
Campus Recruitment	2013-2014	03	8.10
	2014-2015	08	24.24
	2015-2016	09	9.27
	2016-2017	--	--
Other Campus Recruitment	2013-2014	--	--
	2014-2015	--	--
	2015-2016	--	--
	2016-2017	--	--

30. Industrial Visit:

Academic Session	Department	Industrial Name	Address
2013-14	**Mechanical Engineering**	Bajaj Steel Pvt.Ltd	Immamwada, Nagpur
		IIM &	Ahmadabad
		Anand dairy	Jodhpur
2014-15	**Mechanical Engineering**	Bajaj Steel Pvt. Ltd	Immamwada, Nagpur
		GEM Empire Home Application Pvt. Ltd.	Chandigarh
2015-16	**Mechanical Engineering**	Bajaj Steel Pvt. Ltd	Immamwada, Nagpur
		Anand dairy	Jodhpur

31. Details of Infrastructural facilities

   a) **Departmental Library Book:**

Total Books	No. of Title	No of Journals	No of Magazines	No of Newspaper	No of e-Journals
2252	265	05	--	6	--

b) Internet facilities for staff and students:

The college has Internet connectivity of 10 Mbps leased line. Internet facility is provided for both students and staff.

c)Class rooms with ICT facility &Laboratories :

      There are 6 class rooms in the department to conduct the lecture. All the class rooms are equipped with overhead projector and internet through high speed wi fi connection. In the view of ICT following teaching aids have been managed by the department. PPT

presentation based on the curriculum.Instructor material from the publisher. Student material from the publisher

Sr. No.	Description	Numbers	Shared/ Exclusive	Capacity	Room Equipped with
1	Classrooms	06	Exclusive	72	Green Board
2	Tutorial room	02	Exclusive	40	Green Board
3	Seminar hall	01	Exclusive	200	Audio/video system, LCD Projector, Screen
4	Drawing hall	01	Shared	72	Green Board

d) Laboratories For UG:

Mechanical Engineering: State of Art Laboratory Facility is Available inThe Department

Sr. No.	Laboratory Name	Laboratory Cost (in INR)
1	Heat Transfer Lab	289110/-
2	Mechanical Measurement and Metrology Lab	123370/-
3	CAD LAB(40 Computers with Accessories)	1245154/-
4	Engineering Metallurgy Lab	70660/-
5	Refrigeration and air Conditioning Lab	318986/-
6	Energy conversion /I.C Engine Lab	477255/-
7	Mechatronics Lab	210710/-
8	Dynamics of machine	279922/-
9	Workshop	137998/-

Note: All the Laboratories are well equipped and well maintained

32. Number of students receiving financial assistance from college, University, government or other agencies

The various students received the scholarship under different categories. The statistical information is given in table

Sr. No.	Academic Session	Government Scholarship					
		SC	ST	NT/VJ	SBC	OBC	EBC
1	2013-2014	60	04	07	21	139	08
2	2014-2015	58	07	09	23	126	15
3	2015-2016	62	04	10	21	144	19
4	2016-2017	26	00	04	09	81	25

33. Details on student enrichment programme (special lectures / workshops/seminar) with external experts

Sr. No.	Academic Year	Activity	Name of the Speaker	Details of Speaker
1	2013-14	Personality Development	Mr.Vikas Hiranwar	T&P Incharge SCET,Nagpur
2	2013-14	Seminar on Advance Manufacturing Process	Dr. Khope	Associate Professor PCE,Nagpur
3	2013-14	Guidance on PPT Presentation	Mr. Vikas Hiranwar	T&P Incharge SCET,Nagpur
4	2014-2015	Seminar on Dynamics of Machine	Dr. C. N. Sakle	Associate Professor PCE,Nagpur
5	2014-2015	Guest Lecture on Personality Development & Communication Skill	Mr.Vishal Choudhary	CEO

6	2014-2015	Seminar on machine & mechanism	Dr. M. K. Sonpimple	Associate Professor, Priyadarshini College of Engg.
7	2014-2015	Seminar on Fire fighting	Mr. Syed Abdul Gaffar	CEO, KG-Mech, Hydrabad
8	2015-16	Guest Lecture on Introduction of FEM by Using ANSYS Software	Mr. Atish Bhawankar	Senior Executive officer,CADD Mastree
9	2015-16	Seminar on Static Force Analysis	Dr. A. V. Wanalkar	Associate Professor KDKCOE,Nagpur
10	2015-16	Seminar on current scenario of CAD/CAM/CAE software & job opportunities	Mr. Mahesh sahare	Senior Executive officer, DCS Pvt. Ltd.
11	2016-17	Carrier Opportunities in Seimens Software	Mr. Salim Khan	Senior Executive officer, 3M Software Solution
12	2016-17	Carrier Opportunities in GULF Countries	Dr. P. K. Khapre	QHSE Auditor, OMAN
13	2016-17	Personality Development	Dr. S. C. Raghatate	Oxford Speaker Academy

34. Teaching metHODs adopted to improve student learning –

- Effective black board teaching
- Expert Seminar on important topic
- Tutorial session on subject
- NPTEL e-learning material for teaching Use of LCD
- Case study oriented teaching

35. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Tree Plantation
- Blood Donation
- Medical awareness program
- Traffic awareness program

36. SWOC analysis of the department and Future plans :

Strengths:

Wide ranging and multidisciplinary research

Teams able to implement test environments

Strong process expertise and systemic thinking

Good industry cooperation and networks, good ability to react to new research needs

Weaknesses:

Inadequate culture of publishing research results

Weak researcher mobility and other exposure

Early stages of research career hampered by insufficient supply of dissertation opportunities

Opportunities:

Creating critical mass and increasing exposure through concurrent effects of Academy

Utilising the ability to react swiftly in research into emerging topics and needs

Increasing international research collaboration

Stepping up cooperation.

More University agreements on collaboration.

Challenges:

Loss of production chains decreasing the number of research topics

Culture trumps technology among young people, makes student recruitment more difficult

Ever tighter budgets due to economic uncertainty

Funding directed at standing themes

Research fields trimmed based on performance indicators

Future plans:

NBA Accreditation.

To Develop the research centre specialising the advance materials development.

To start the Add-on course like HVAC, Piping design, Modelling like Pro-e, Catia courses.

To depute faculty members on seniority basis for pursuing PhD.

Evaluative Report of the Electrical Engineering Departments

1. **Name of the department**: - ELECTRICAL ENGINEERING

2. **Year of Establishment**: - 2010-2011

3. **Names of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

Name of the Program	Year of establishment	Intake
UG (Electrical Engineering)	2010 – 2011	60

4. **Names of Interdisciplinary courses and the departments/units involved**: -

The list of interdisciplinary courses which are common to various departments is mentioned in the table below:

Sr.No	Name ofInterdisciplinary Course	Semester	Department
1	Applied Mathematics-I	I	Science & Humanities
2	Applied Mathematics-II	II	Science & Humanities
3	Engineering Physics	I/II	Science & Humanities
4	Engineering Chemistry	I/II	Science & Humanities
5	Mathematics-III	III	Science & Humanities
6	Mathematics-IV	IV	Science & Humanities
7	Electronics Devices&Circuits (TH+PR)	III	Electronics& Telecommunication Engineering
8	Digital LinearElectronic Circuit(TH+PR)	IV	Electronics& Telecommunication Engineering
9	Environmental studies(TH)	IV	Science & Humanities
10	Microprocessor &interfacing (TH+PR)	V	Electronics& Telecommunication Engineering

11	EngineeringEconomics & IndustrialManagement (TH)	VI	Science & Humanities
12	FunctionalEnglish(TH)	VI	Science & Humanities

5. **Annual /semester/ choice based credit system (programme wise)**-

The UG Program follows the Rashtrasant Tukadoji Maharaj NagpurUniversity (RTMNU) guidelines with **Credit Based system (CBS).**

Semester	Lecture credit	Practical credit	Tutorial credit	Total credit
III	20	3	4	27
IV	19	3	5	27
V	18	6	5	29
VI	20	4	5	29
VII	19	6	5	30
VIII	14	8	4	26

6. **Participation of the department in the courses offered by other departments**: -

The department is participating in the courses offered by other departments aregiven in table.

Sr. No	Name of Inter disciplinary Course	Semester	Department
1.	Basic ElectricalEngineering	I	Science & Humanities
2.	Advanced Electrical Engineering	II	Science & Humanities
3.	Power Devices & Machines	IV	Electronics& Telecommunication Engineering
4.	Network Analysis	III	Electronics& Telecommunication Engineering
5.	Control system (TH)	VI	Electronics& Telecommunication Engineering

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: - Nil

8. Details of courses/ programmes discontinued (if any) with reasons: - Nil

9.Numberof teachingposts: - For UG

	Sanctioned	Filled
Professors	1	0
Asso. Professors	3	0
Asst.Professors	12	16

10.Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt. /Ph.D./M.Phil.etc.): -

Sr. No	Name of Faculty	Qualification	Designation	Specialization	No. ofYears of Experience
1.	Mr. PRAVINKUMAR JANGLE	M.Tech	Assistant Professor	Integrated Power System	14
2.	Ms. ARCHANA DUPARE	M.Tech	Assistant Professor	Integrated Power System	10
3.	Ms. SHITAL YENDE	M.Tech	Assistant Professor	Integrated Power System	02
4.	Mr. RAHUL DEKATE	M.Tech	Assistant Professor	Industrial Drives and Control	05
5.	Mr. NIKHIL UPADHYE	M.Tech	Assistant Professor	Power electronics and drives	01
6.	Mr. ASHISH BALA	M.Tech	Assistant Professor	Power electronics and drives	01
7.	Mr. SHILPAK	M.Tech	Assistant	Integrated Power	01

	KATHANE		Professor	System	
8.	Ms. MONICA MANKAR	M.Tech	Assistant Professor	Integrated Power System	02
9.	Ms. NEHA DENGE	M.Tech	Assistant Professor	Integrated Power System	01
10.	Ms. AMRUTA REWATKAR	M.Tech	Assistant Professor	Integrated Power System	02
11.	Mr. PRAKASH YEMDE	M.Tech	Assistant Professor	Integrated Power System	14
12.	Mr. RAHUL JOGE	M.Tech	Assistant Professor	Electrical Power System	02
13.	Ms. GEETANJALI MANEKAR	M.Tech	Assistant Professor	Integrated Power System	02
14.	Mr. SUMIT DILIP DEO	B.E	Adjunct Faculty	Electrical Engg.	10
15.	Mr. AMAR B LIKHAR	B.E	Adjunct Faculty	Electrical Engg.	12
16.	Mr. SUSHANT G PRAHATE	B.E	Adjunct Faculty	Electrical Engg.	21

11.   List of senior visiting faculty: - Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: - 00%

13.   Student – Teacher Ratio (programme wise): -

Programme	Student Teacher ratio
Under Graduate	15 : 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: -

Available Academic support Staff (Technical) – 02

Available Administrative support staff - 01

15. QualificationsofteachingfacultywithDSc/D.Litt/Ph.D/MPhil/PG.

Sr.No	Qualification	Total Number of Staff
1.	Ph.D.	0
2.	PG	13

16. Number of faculty with ongoing projects from

a)National: - Nil

b)Internationalfunding agencies andgrantsreceived: - Nil

17. Departmentalprojectsfundedby DST-FIST;UGC, DBT, ICSSR,etc.andtotal grantsreceived: - Nil

18. ResearchCentre/facilityrecognizedbytheUniversity: - No

19. Publications:

Sr. No.	Name of Department	No. of paper published in journals	No. of paper published in National conferences	No. of paper published in International conferences	Total
1	Electrical Engineering	06	01	09	16

Publication per faculty:

List of Journals

Sr. No.	Name of Faculty	National/International Journal
01	Ashish Bala	Investigation in Induction motor starting &speed control with variable frequency drive. IRJET Vol.3, Issue: 2 Feb-2016
		A novel approach to the performance of Induction motor with variable frequency drive. IJSRD Vol.4 Issue:2 April 2016
02	Nikhil V. Upadhye	Design of Hybrid Controller for Direct Torque Control of Induction Motor Drive. IRJET Vol.3, Issue: 4 April-2016
		Modeling and simulation of Direct Torque Control of Induction Motor Drive. IJSER Vol.6 Issue:12 December 2015
03	Rahul D. Dekate	Investigation in Induction motor starting &speed control with variable frequency drive. International journal paper presentation(IOSR)
04	Shital Yende	Optimal location of STATCOM for improvement of power system performance by using Genetic Algorithm International Conference TechEd-2015
05	Dhammadip Wasnik	Dynamic stability improvement of grid for different types of wind generator connected using STATCOM. International Conference ICRTEE-2016
06	Geetanjali Manekar	Trends in modeling of three phase induction motor. National conference
		Modeling metHODs of three phase induction motors. National conference

		Functional modeling of PWM inverter feed induction motor drive using VBR modeling and simulink. International Conference ICEECS -2016

- ➤ 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.): -
  - Monographs   : - Nil
  - Chapter in Books   : - Nil
  - Books Edited   : - nil
- ➤ Books with ISBN/ISSN numbers with details of publishers
  - Citation Index   : - Nil
  - SNIP   : - Nil
  - SJR   : - Nil
  - Impact factor   : - 2.75 to 4.45
  - h-index   : - Nil

20. Areas of consultancy and income generated: - Nil

21. Faculty as members in

a) Nationalcommittees: - Nil

b)InternationalCommittees: - Nil

c)EditorialBoards: - Nil

List of faculty members having Professional society membership Indian Society of Technical Education (ISTE) is given in table

Sr. No	Name of Faculty	Membership	Membership No.
1.	Mr. PRAVINKUMAR JANGLE	Indian Society of Technical Education (Life Member)	LM 58711

22. Student projects

Sr. No.	Year	Percentage of Student who have done in house project including inter departmental/Programme	Percentage of Student Placed for Project in organization outside the institute i.e., in Research laboratory/Industry/to agencies
1	2013-14	100%	NIL
2	2014-15	100%	NIL
3	2015-16	100%	NIL

23. Awards/Recognitionsreceivedbyfacultyandstudents: - Nil

24.Listofeminentacademiciansandscientists/visitorstothe department

Sr. No.	Name of the Academicians and Scientists / Visitors	Designation	Organization	Purpose of Visit
1	Dr.M.M Renge	Professor	Ramdeobaba College of Engg.	Technical Seminar
2	Mr Irfan Ahmed	Assistant Professor	Anjuman College of Engineeing	Technical Seminar
3	Mr. Deepak Shriwastava	DGM	Mahindra & Mahindra	Technical Seminar
4	Mr. sandeep Sonaskar	Director	V.S Informatics	Technical Seminar
5	Mr. Umesh Kubde	Director	L Tech Labs	Technical Seminar

25.   Seminars/Conferences/Workshopsorganized&thesourceoffunding

a)National

Sr. No.	Topic of seminar / Workshop /conference	Name of Expert Faculty	Designation	Source of funding
1	Seminar on "Solar Panel Designing".	Mr. sandeep Sonaskar	Director	Self Finance
2	Seminar on "Making of Transformer".	Mr. Umesh Kubde	Director	Self Finance
3	Workshop on "Making of Transformer".	Mr. Umesh Kubde	Director	Self Finance

b) International: - Nil

26.   Student profile programme/coursewise: -

Name of the Course/ programme	Course	Applications received	Selected	Enrolled *M	*F	Pass percentage
2013-2014		26 Centralized	26	36	16	Eligibility criterion
2014-2015	B.E (EE)	Admission	17	48	10	is 40% for SC/ST
2015-2016		process as	22	23	12	and
2016-2017		per the rules and	5	51	8	45% for others

*M=Male, *F=Female

27.   Diversityof Students

Name of theCourse	Year	% of students from the same state	% of students from other States	% of students from abroad
B.E (EE)	2013-14	100%	0%	0%
	2014-15	100%	0%	0%
	2015-16	100%	0%	0%
	2016-17	100%	0%	0%

28.   Howmanystudentshaveclearednationalandstatecompetitiveexaminationssuch asNET,SET,GATE,Civilservices,Defenseservices,etc.?: -

Sr.No.	Academic Session	No of students appeared	No. of students qualified	Name of Exam
1	2013-14	10	Nil	Gate Exam
2	2014-15	12	Nil	Gate Exam
3	2015-16	22	Nil	Gate Exam
4	2016-17	21	Result Awaited	Gate Exam

29.   Studentprogression

Student Progression	Academic Year	Number of Students	% of Students
UG to PG	2013-2014	1	5.88%
	2014-2015	0	0%
	2015-2016	1	3.03%
	2016-2017	0	N.A
Campus Recruitment	2013-2014	7	29.4%
	2014-2015	5	20%
	2015-2016	7	21.2%
	2016-2017	0	N.A
Other Campus	2013-2014	17	-

Recruitment	2014-2015	25	-
	2015-2016	33	-
	2016-2017	63	-

30. Industrial Visit:

Academic Session	Department	Industrial Name	Address
2013-14	**Electrical Engineering**	IIM	Ahmedabad
		ANAND DAIRY	Jodhpur
2014-15	**Electrical Engineering**	GEM Empire Home Application pvt. Ltd.	Chandigarh
2015-16	**Electrical Engineering**	HVDC chandrapur	Chandrapur
		ANAND DAIRY	Jodhpur
2016-17	**Electrical Engineering**	HVDC chandrapur	Chandrapur
		HVDC, PGCIL,	Bhadravati, Dist: - Chandrapur
		LDC, Ambazari	Dist; - Nagpur
		Wind Power plant, Motha	Tah.: - Chikhaldhara, Dist: - Amravati.

31. Details of Infrastructural facilities

b) Departmental Library Book:

Total Books	No. of Title	No of Journals	No of Magazines	No of Newspaper	No of e-Journals
1460	**212**	**04**	-	**06**	-

b) Internet facilities for staff and students:

The college has Internet connectivity of 10 Mbps leased line. Internet facility is provided for both students and staff.

c)Class rooms with ICT facility &Laboratories:

There are 3 class rooms in the department to conduct the lectures. In the view of ICT following teaching aids have been managed by the department

- PPT presentation based on the curriculum
- Instructor material from the publisher
- Student material from the publisher

Sr. No.	Description	Numbers	Shared/ Exclusive	Capacity	RoomEquipped with
1	Classrooms	03	Exclusive	72	Green Board
2	Tutorial room	01	Exclusive	30	Green Board
3	Seminar hall	01	Exclusive	200	Audio/video system, LCD Projector, Screen

d) Laboratories For UG:

Electrical Engineering: State of Art Laboratory Facility is Available in the Department

Sr.No.	Laboratory Name	Laboratory Cost (in INR)
1	Basic Electrical Engineering Laboratory	241900/-
2	Network Analysis Laboratory	49161/-
3	Electrical Measurement & Instrumentation Laboratory	163180/-
4	Electrical Machines Laboratory	3,36,480/-
5	Electrical Workshop Laboratory	176060-
6	Computer Centre Laboratory	85360/-
7	Power Electronics Laboratory	103980/-
8	Control System Laboratory	176060-

9	High Voltage Laboratory	849612/-
10	Switchgear & Protection Laboratory	3,21,413/-

Note: - All the Laboratories are well equipped and well maintained

32. Number of students receiving financial assistance from college, University, government or other agencies: -

The various students received the scholarship under different categories. The statistical information is given in table

Sr.No.	AcademicSession	Government Scholarship					
		SC	ST	NT/VJ	SBC	OBC	EBC
1	2013-2014	41	02	08	10	82	04
2	2014-2015	34	04	12	07	70	10
3	2015-2016	24	02	10	04	72	05
4	2016-2017	23	0	11	01	48	09

36. Details on student enrichment programme (special lectures / workshops/seminar) with external experts

Sr. No.	Academic Year	Activity	Name of the Speaker	Details of Speaker
1	2013-14	Seminar on Power Electronics	Dr.M.M Renge	Professor, RKNEC
2	2014-2015	Seminar on facts Devices	Irfan Ahmed	A.P, ACOET
3	2015-16	Seminar on Guidance on preparation of GATE examination.	Amol Khadse	AOM,H.R.Mentors

4	2016-17	Seminar on "Solar Panel Designing".	Mr. sandeep Sonaskar	Director
5	2016-17	Seminar on "Making of Transformer".	Mr. Umesh Kubde	Director
6	2016-17	Workshop on "Making of Transformer".	Mr. Umesh Kubde	Director

34. **Teaching metHODs adopted to improve student learning**: -
- Effective black board teaching
- Expert Seminars
- Interactive environment is developed so that maximum number of
- students can be involved in teaching & learning process
- NPTEL e-learning material for teaching
- Use of Projectors

35. **Participation in Institutional Social Responsibility (ISR) and Extensionactivities**: -
- Tree Plantation
- Blood Donation camp at every year
- Street play for social awareness (problem of domestic violence,cleanness and alcoholism)
- Cleanness campaign

36. **SWOC analysis of the department and Future plans**: -

Strength:

- Dedicated, young and qualified faculty members.

- Expertise in multidisciplinary areas

- Adaption of innovative teaching-learning metHODologies

- Educational tours & Industrial Visits to fill the gap of theory andpractical knowledge.

- Effective mentoring

- Good infrastructure.

- Well-equipped laboratories, library and IT facilities.

- Summer Internship in Industries for students.

- Collaborative interaction of students with Industry Experts.

- Personality Development, Leadership and Soft Skill Training tostudents

- Workshops and Expert seminars to upgrade knowledge of faculties andstudents.

Weaknesses:

- Professional skills needs to be further improved among the students.

- Communication skills among rural based students need to beimproved.

- Needs to develop the Knowledge (Research) Centre.

Opportunities:

- Department has scope to start PG courses

- Scope for starting consultancy identifying the industry needs

- Scope for Inter disciplinary research.

- Leader in providing quality engineering education clubbed with PlacementsIndustry oriented training.

- An opportunity to interact with eminent personalities

- Involvement of students in research activities in association withfaculty members.

- Motivating faculty members to attend Conferences, Workshops andFaculty Development Program.

- Procurement of funds from potential funding agencies like DST, UGC,AICTE, VTU etc.

- Developing good relationships with alumni.

Challenges:

- Declining interest in engineering.

- Inadequate public awareness for engineering profession and jobopportunities.

- Quality of incoming students (language, analytical thinking,motivation).

- Advanced technology or changes in industrial domain to get exposure

- Retention of faculty members.

- Challenges of faculty members updating with latest technologies

Future Plan:

- NBA Accreditation.

- Organize conferences (National and International)

- To establish the consultancy services for the department.

Evaluative Report of the Computer Engineering Department

1. Name of the Department: Computer Engineering Department.

2. Year of Establishment   : 2010-11

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

The following programmes are offered in the Computer Engineering Department.

Sr. No.	Name of the Program	Establishment Year & Approval Letter	Academic Year	Intake
1	**Degree:** Bachelor Degree in Engineering **Discipline:** Computer Engineering department	**2010**	**2010-11**	**60**

4. Name of Interdisciplinary courses and departments involved:

The list of interdisciplinary courses which are common to various departments is mentioned in the table below:

B.E – Computer Engineering			
Sr. No.	Semester	Course Title	Department
1	I/II/III/IV	Engineering Mathematics – I Engineering Mathematics – II	Science & Humanities

		Applied Mathematics – III Discrete Mathematics and Graph Theory	
2	I/II	Engineering Physics	Science & Humanities
3	I	Basic Electrical Engg.	Electrical Engg.
4	I/II	Engineering Chemistry	Science & Humanities
5	II	Engineering Mechanics	Civil engineering
6	V	Industrial Economics and Entrepreneurship Development	Science & Humanities
7	VI	Functional English	Science & Humanities

5. Annual/ semester/choice based credit system (programmewise):

The UG Programs follow the R.T.M. Nagpur University guidelines with **(Credit based)** semester system.

Semester	Lecture credit	Practical credit	Tutorial credit	Total credit
III	19	3	5	27
IV	19	4	5	28
V	19	3	5	27
VI	18	4	5	27
VII	16	5	4	25
VIII	16	7	4	27

6. Participation of the department in the courses offered by other departments:

The Department of Computer Engineering is participating in courses offered by other departments are:

Sr. No.	Name of Inter disciplinary Course	Semester	Department
1	Computational Skills	I	First Year Engineering
2	Computer Application-I	V	Mechanical Engineering
2	Computer Application-II	VI	Mechanical Engineering

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:

The Computer Department has well qualified and Experienced Faculty and the statistics of teaching posts sanctioned and filled.

Teaching Post(UG)	Sanctioned	Filled
Professors	1	Nil
Associate Professor	2	Nil
Asst. Professors	13	16

10. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./Ph.D./M.Phil., etc.)

Faculty profile is as mentioned in the table below:

Sr.No.	Name	Qualification	Designation	Specialization	No.ofYears of Experience
1	Ms. Pratibha S.	M.Tech	Assistant Professor	CSE	8 Years
2	Mrs. Ruchira Selote	M.Tech	Assistant Professor	CSE	5 Years
3	Mr. Pravin O. Balbudhe	M.Tech	Assistant Professor	CSE	5 Years
4	Mr. Pradip O. Balbudhe	M.Tech	Assistant Professor	CSE	5 Years
5	Mr. Shrikant Dhawale	M.Tech	Assistant Professor	CSE	3 Years
6	Mr.Ashish K. Kushwah	M.Tech	Assistant Professor	CSE	4 Years
7	Mr. Sachin Lakde	M.Tech	Assistant Professor	CSE	4 Years
8	Mr. NayanKumar G. Hargule	M.tech	Assistant Professor	CSE	6 years
9	Ms. Shurti Zalke	M.tech	Assistant Professor	CSE	4 years
10	Mr. Poojashri shrirao	M.tech	Assistant Professor	CSE	6 years
11	Ms. Manjushreee Kaware	M.tech	Assistant Professor	CSE	6 years
12	Ms. Sangita Itankar	M.Sc(Phy	Assistant Professor	Physics	9 years
13	Ms. Punam Thakur	M.Sc(Mat	Assistant Professor	Mathematics	5 Years
14	Mr. Gajanan Bhad	B.E	Adjunct Faculty	CSE	6 years
15	Mr.Jaypal Rangari	M.tech	Adjunct Faculty	CSE	6 years
16	Mr. Ishan Anil Singh	Msc(Che	Adjunct Faculty	Chemistry	4 Year

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):

Student Teacher ratio Programme wise has been mentioned in the table below:

Sr. No.	Programme	No. Of Students	No. Of Teachers	Student Teacher ratio
1	UG (B.E-CME)	240	16	15:1

14. Number of academic support staff (Technical) and administrative staff: sanctioned and filled.

The below given table gives the cadre wise structure of academic support:

	Sanctioned	Filled
Administrative Staff	1	1
Technical	2	2

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

Sr. No.	Qualification	Total Number of Staff
1	Ph.D	--
2	Ph.D Pursuing	--
3	PG.	15

16. **Number of faculty with ongoing projects from National, 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:**

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

Sr. No.	Name of Department	No. of paper published in journals	No. of paper published in National conferences	No. of paper published in International conferences	Total
1	Computer Engineering	25	17	04	46

Publication per faculty:

List of Journals

Sr. No.	Name of Faculty	National/International Journal
01	Prof. Pratibha S. GHODe	" SST Techniques to implement Keyless Image Encryption : IEEE, Sponsored International Conferences on Empowering Emerging Trends in Computer information Technology & Bio-information(IJCITB) 2014 ISSN: 2278-7593,Volume-2,Issue-2
		"A Keyless approach to Lossless Image Encryption" International Journal of advanced Research in computer Science and Software Engineering(IJARCSSE) 2014
		"A Review on Keyless User defined Reversible Encryption for Color Image" IJCSMC, Volume-2 No-10 30 dec 2013
		"Web Filtering With SQL Injection" International Journal of Science and Research ISSN: 2319-7064,Volume-4,Issue-4, April 2015
		"Security in Data Storage and Transmission in Cloud Computing" International Journal of Advanced Research in Computer Science and Software Engineering Volume 6, Issue 3, March 2016
02	Prof. Ruchira N. Selote	"Remote Data Backup and Privacy Preserving Data Distribution in the Cloud: A Review" International Journal of Computer Science and Mobile Applications, ISSN:2321-8363,Volume-2, issue-11, nov-14
		Secure Data Storage on cloud for remote data backup server with user authentication. International Conference on Emerging Trends in Computer Engineering.

		Data security and privacy in cloud using RC6 algorithm for remote data back-up server International conference/Journal of Engineering Science & Advanced Technology, Vol-5, issue-2,mar-apr-15
		Remote Data backup and privacy preserving data distribution in Cloud International Journal of Engineering science & research technology, ISSN: 2277-9655, July-2015
03	Prof. Pravin Balbudhe	Novel Approach of Human computer Interaction using Brain Waves Electric Signals International Journal of Engineering & Scientific Research ISSN:2347-6532 Volume 2 Issue:10 Oct:2014
		"An Approach for Efficient Query Processing For M.V Selection and Maintenance" International Journal of Computer Science and Informatiom Technology Research ISSN 2348-120X(online)
		Novel Approach of Man Machine Interaction Using Brain Waves Electric Signal International Journal on Recent and Innovation Trends in Computing and Communication
04	Prof. Pradip Balbudhe	Implementation of Network Monitoring As a G-Host International Journal of Computer Science and Information Technology Research ISSN 2348-120X, Vol. 3, Issue 2, April - June 2015
		Cloud Storage Reference model for Cloud computing IJIEASR, M-2013 Volume-2, Issue 3
		Overview of sinktrul protocol for energy efficient data gathering in Cosn IJRITCC, May 2014 volume, issue 5
		Implementing Virtual Private Prive Using cloud O.S IJMIE, June 2012 volume-2 Issue 6

		Novel approach of man machine Interaction using brain wave electric Signal IJRITCC, June 2014 volume-2, issue 16
		Novel approach of man machine Interaction using brain wave electric Signal IJMRA, July 2014 volume -7, Issue -4 Impact Factor-3.46
05	Prof. Shrikant Dhawale	Analysis of Location Monitoring Techniques with Privacy Preservation in WSN CSNT-2014 (IEEE)-International Conference Print ISBN-978-1-4799-3069-2
		A Secured Dynamic Location Monitoring System in WSN IJRCCT –Volume 3 Year- 2014
06	Prof. Nayan Hargule	DDOS Detection Using Attack Model International Journal of Advance Research in Computer Science and Software Engineering

* 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.) :   --

* Monographs   :

* Chapter in Books   :

* Books Edited   :

* Books with ISBN/ISSN numbers with details of publishers

* Citation Index   :   --

* SNIP   :   --

* SJR   :   --

* Impact factor   :   1.5 to 3.5

* h-index   :   --

20. Areas of consultancy & income Generated: NIL

21. Faculty as members in

     e) **National committees**   **:NIL**

     f) **International Committees**   **:NIL**

     g) **Editorial Boards**   **:NIL**

     h) **Faculty Membership for ISTE**   **:NIL**

22.   Student projects:

Students are encouraged to carry out research oriented projects which are of social relevance involving state of art and inclusive technology. Students get an opportunity to use latest tools and technical knowhow in the process of executing the project.

Students are provided the required infrastructure to do their projects (in house).Risks is discussed at each project progress review meeting.

The Department keeps track of the progress of the project in terms of completion, time and costs.

To enforce team work, students are asked to form a group of 3 to 4 members to carry out the project work. This enables them to build team spirit and helps in co-ordinating various activities.

Sr. No.	Year	Percentage of Student who have done in house projects including inter departmental/Programme	Percentage of Student Placed for Project in organization outside the institute i.e., in Research laboratory/Industry/to agencies
1	2013-14	100%	NIL
2	2014-15	100%	NIL
3	2015-16	100%	NIL

23. **Awards/ Recognitions received by faculty and students :**

- Faculties: NIL
- Students

Technical Achievements /Non-Technical Achievements:

Sr. No.	Academic Year	Name of Students	Name of Activity	Name of Organizer	Position	Achievements
1		Ms. Priyanka Zade and Group	National Level Paper Presentation 2016	Cummins College of Engg., Nagpur	1st prize	Winner
2	2015-16	Ms. Priyanka Zade and Group	Paper Presentation	Abhyuday 2016	2nd prize	Runner -Up

24. List of eminent academicians and scientists/visitors to the department:

Sr. No.	Name of the Academicians and Scientists / Visitors	Designation	Organization	Purpose of Visit
1	Prof. Chandu Vaidya	Assistant Professor	RGCOER Nagpur.	Technical Seminar
2	Prof. N.G. Mungale	Assistant Professor	U.C.O.E Umrer	Technical Seminar
3	Mr. Amit Basware	Director	Jetking, Nagpur	Technical Seminar
4	Prof. S.R. Kulkarni	Assistant Professor	R.C.O.E.M Nagpur	Technical Seminar

25.Seminars/ Conferences/Workshops organized & the source of funding

d) **National** : 03

e) **International** : -

f) **State Level** : -

Sr. No.	Topic of seminar/ Workshop /conference	Name of Activity	Source of funding
1	Paper Presentation	Techtrends	Self-financing
2	Blind C	Techtrends	Self-financing
3	Poster Presentation	Digital India	Self-financing

26.Student Profile Programme/course wise:

Statistical information regarding admission in first year and direct second year is given in table

Name of the Course	Academic Year	Application Received	Selected Seat		Pass Percentage
			Male	**Female**	
BE(Computer Engineering)	2016-17	Centralized Admission process as per the rules and regulation of DTE	27	17	Eligibility criterion is 40% for SC/ST and 45% for others
	2015-16		26	29	
	2014-15		13	12	
	2013-14		24	12	

27.Diversity of Students :

Name of the Course	Academic Year	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
BE(Computer Engineering)	2016-17	Nil	99.00	1.00	Nil
	2015-16	Nil	100	Nil	Nil
	2014-15	Nil	97.8	2.20	Nil
	2013-14	Nil	97.8	2.20	Nil

28.How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

Sr.No.	Academic Session	No of students appeared	No. of students qualified	Name of Exam
1	2013-14	01	Nil	Gate Exam
2	2014-15	03	Nil	Gate Exam
3	2015-16	02	Nil	Gate Exam
4	2016-17	10	N.A.	Gate Exam

29.Student Progression

Student Progression	Academic Year	Number of Students	% of Students
UG to PG	2013-2014	Nil	-
	2014-2015	01	10%
	2015-2016	Nil	-
	2016-2017	-	-
Campus Recruitment	2013-2014	04	33.33%
	2014-2015	Nil	-
	2015-2016	06	50%
	2016-2017	-	-
Other Campus Recruitment	2013-2014	-	-
	2014-2015	-	-
	2015-2016	-	-
	2016-2017	-	-

30. Industrial Visit:

Academic Session	Department	Industrial Name	Address
2013-14	Computer Engineering	IIM	Ahmadabad
		Anand dairy	Jodhpur
		M.A.D.C Mihan	Mihan Nagpur
		Master's Software	Nandanwan Nagpur
2014-15	Computer Engineering	GEM Empire Home Application Pvt. Ltd.	Chandigarh
2015-16	Computer Engineering	Anand dairy	Jodhpur
		Jetking Pvt Ltd.	Mahal Nagpur
2016-17	Computer Engineering	VANRASOFT Technologies	IT-Park Nagpur
		Jetking Pvt Ltd.	Mahal Nagpur

31. Details of Infrastructural facilities

c) Departmental Library Book:

Total Books	No. of Title	No of Journals	No of Magazines	No of Newspaper	No of e-Journals
887	195	4	-	6	-

b) Internet facilities for staff and students:

The college has Internet Connectivity of 10Mbps leased line connection 1:1(BSNL)+ 100 MBPS LAN enabled connectivity and over 4 access points for wireless connectivity throughout campus. Internet facility is provided for both student and staff. A dedicated computer center for students with internet facility is available under CE department.

d)   Class rooms with ICT facility&Laboratories :

There are 3 class rooms in the department to conduct the lecture. All the class rooms are equipped with overhead projector and internet through high speed wi-fi connection. In the view of ICT following teaching aids have been managed by the department PPT presentation based on the curriculum Instructor material from the publisher Student material from the publisher

Sr. No.	Description	Numbers	Shared/ Exclusive	Capacity	RoomEquipped with
1	Classrooms	03	Exclusive	66	Green Board
2	Tutorial room	02	Exclusive	40	Green Board
3	Seminar hall	01	Exclusive	200	Audio/video system, LCD Projector, Screen

d) Laboratories For UG:

Computer Engineering:

Sr. No.	Laboratory Name	Laboratory Cost (in INR)
1	Lab-I (A) Database Management System Lab-I (B) TCP/IP & Java Programming	7,69,675/-
2	Lab-II(A)Distributed System &Grid Computing Lab-II(B) Cryptography & Network Security	9,12,000/-
3	Lab-III(A) C/C++Lab Lab-III(B)Computer Graphics	72,15,00/-
4	Lab-IV (A) Unix &Shell Programming Lab-IV(B) Project Lab	57,74,70/-
5	Central Computer Facility	1362380/-

Note: All the Laboratories are well equipped and well maintained

32. Number of students receiving financial assistance from college, University, government or other agencies

The various students received the scholarship under different categories. The statistical information is given in table

Sr.No.	AcademicSession	Government Scholarship					
		SC	ST	NT/VJ	SBC	OBC	EBC
1	2013-2014	22	0	04	04	26	01
2	2014-2015	16	0	04	02	21	02
3	2015-2016	20	0	05	04	52	07
4	2016-2017	13	0	03	02	26	17

33. Details on student enrichment programme (special lectures / workshops/seminar) with external experts

Sr. No.	Academic Year	Activity	Name of the Speaker	Details of Speaker
1	2013-14	Guest Lecture on Computer Network	Prof. Chandu Vaidya	Assistant Professor RGCOER ,Nagpur
2		Guest Lecture on "Training & Placement"	Prof. S.R. Kulkarni	Assistant Professor R.C.O.E. Nagpur
3	2014-15	Seminar on Gate Exam	Managing Director	I.C.E. Gate Exam
4		Workshop on Troubleshooting & Network Implementation	Mr. Prabuddha Sanyal	Managing Director ITNetworkZ

5		Workshop on Linux programming	Mr. Bhawesh	Managing Director ITNetworkZ
6	2015-16	Guest Lecture on Complier Construction	Prof. N.G. Mungale	Assistant Professor U.C.O.E ,Nagpur
7		Workshop on EISCP	Mr. Arpit Maheshawari	Icloudjunction Presents, Delhi
8		Seminar on carrier Guidance's	Mr. Amit Basware	Jetking, Nagpur
9	2016-17	Workshop on Hands-on session on 'C' technology	Mr. Santosh Selokar	SSIT Nagpur
10		Guest Lecture on Complier Construction	Prof. N.G. Mungale	Assistant Professor U.C.O.E ,Nagpur

34.Teaching metHODs adopted to improve student learning –

- o Effective black board teaching

- o Expert Seminar on important topic
- o Tutorial session on subject

- o NPTEL e-learning material for teaching, Use of LCD

o Case study oriented teaching

35. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Tree Plantation
- Blood Donation
- Health Check-up camp
- Visit to Old Age Home
- Computer awareness Program for school students
- Digital India Program

36. SWOC analysis of the department and Future plans:

Strengths:
- Hard working & Enthusiastic Faculties
- Strong mentoring scheme for students
- Innovative teaching-learning metHODologies
- Well-equipped laboratories Computing Facility
- Regular Guest lecture, Seminar, workshop, tests(Programming & Aptitude) and other co-curricular activities for 360 degree grooming of students

Weaknesses:
- Students Placement Ratio
- Less Experienced Faculty Members

Opportunities:
- To increase the Percentage of placement of students.
- To provide industrial expected training to students.
- Involvement of students in research activities in association with faculties.

Challenges:

- Good quality of students.

- To improve Student's employability ratio.

- Improve student placement in IT industries

Future plans:

- NBA Accreditation.

- Organize conferences (National/International)

- Conduct regular technical skill development programmes

- To develop the research centre specialising the advance materials development.

- To depute faculty members on seniority basis for pursuing PhD.

Evaluative Report of the Electronics &Telecommunication Engineering Department

1. Name of the Department : Electronics& Telecommunication Engineering Department.

2. Year of Establishment   : 2010-11

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)   Bachelor of Engineering

The following programmes are offered in the Electronics &Telecommunication Engineering Department.

Sr. No.	Name of the Program	Establishment Year & Approval Letter	Academic Year	Intake
1	**Degree:** Bachelor Degree in Engineering	**2010**	**2010-11**	**60**

4. Name of Interdisciplinary courses and departments involved:

The list of interdisciplinary courses which are common to various departments is mentioned in the table below:

B.E – Electronics & Telecommunication Engineering			
Sr. No.	Semester	Course Title	Department
1	I/II/III/IV	Engineering Mathematics – I Engineering Mathematics – II Engineering Mathematics – III	Science & Humanities

		Engineering Mathematics – IV	
	I/II	Engineering Physics	Science & Humanities
	I	Basic Electrical Engg.	Electrical Engg.
	I/II	Engineering Chemistry	Science & Humanities
	I	Computer concepts & C Programming	Computer Science & Engineering
	II	Engineering Mechanics	Civil engineering
	IV	PDM	Electrical Engineering
	VI	Functional English	Science & Humanities

5. Annual/ semester/choice based credit system (programmewise):

The UG Programs follow the R.T.M. Nagpur University guidelines with **(Credit based)** semester system.

Semester	Lecture credit	Practical credit	Tutorial credit	Total credit
III	20	3	4	27
IV	20	4	4	28
V	20	3	4	27
VI	18	5	5	28
VII	19	5	4	28
VIII	18	8	3	29

6. Participation of the department in the courses offered by other departments:

The Department of Electronics & Telecommunication Engineering is participating in courses offered by other departments are:

Sr. No.	Semester	Course Name	To Department
1	III	Electronics Devices & Circuit	Electrical Engineering
2	IV	Digital &Linear Electronics Circuit	Electrical Engineering
3	IV	Digital Circuit	Computer Engineering
4	V	Microprocessor & Interfacing	Electrical Engineering
6	VI	Mechatronics	Mechanical Engineering

7. Courses in collaboration with other universities, industries, foreign institutions, etc:

NIL

8. Details of courses/programmes discontinued(ifany)withreasons :

NIL

9. Number of Teaching posts:

The Electronics & Telecommunication Engineering Department has well qualified and Experienced Faculty and the statistics of teaching posts sanctioned and filled is as mentioned in the table ETC 1.6

Teaching Post(UG)	Sanctioned	Filled
Professors	1	1
Associate Professor	2	Nil
Asst. Professors	13	16

10. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./Ph.D./M.Phil., etc.)

Faculty profile is as mentioned in the table below:

Sr. No.	Name	Specialization	Qualification	Designation	No. of Years of Experience
1	Dr. Santosh Chede	Electronics	ME	Professor (Principal)	23.8
2	Mr.SachinMalke	ESC	ME	Asst.Professor(HOD)	4
3	Ms.RasikaManapure	ECE	M-Tech	Asst. Professor	6
4	Ms.MadhuriNinawe	ECE	M-Tech	Asst. Professor	3
5	Ms.PoojaPote	ECE	M-Tech	Asst. Professor	5
6	Mrs.RoshniWawge	Electronics	M-Tech	Asst. Professor	8
7	Ms.UjwalaM.Marghade	ECE	M-Tech	Asst. Professor	6
8	Mr.NitishKamble	Electronics	M-Tech	Asst. Professor	7
9	Mr.PrafulKothe	Electronics	M-Tech	Asst. Professor	5
10	Mr.GopalPranjale	Electronics	M-Tech	Asst. Professor	8 month
11	Ms.PallaviShelke	ECE	M-Tech	Asst. Professor	4
12	Ms. Kiran Bawane	Chemistry	MSc	Asst. Professor	2
13	Mr. Amol Musale	English	MA	Asst. Professor	8
14	Mr. Arti Nichat	Math	MSc.	Asst. Professor	2
15	Mr. Sameer Taksande	ESC	ME	Adjunct Faculty	3
16	Mr.UmeshKubade	ETC	BE	Adjunct Faculty	3
17	Ms. Dipti Jamkar	Physics	MSc	Adjunct Faculty	2

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):

Student Teacher ratio Programme wise has been mentioned in the table below:

Sr. No.	Programme	No. Of Students	No. Of Teachers	Student Teacher ratio
1	UG (B.E-ETC)	240	17	15:1

14. Number of academic support staff (Technical) and administrative staff: sanctioned and filled.

The below given table gives the cadre wise structure of academic support:

	Sanctioned	Filled
Administrative Staff	1	1
Technical	3	3

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

Sr. No.	Qualification	Total Number of Staff
1	Ph.D	1
2	Ph.D Pursuing	01
3	PG.	14

16. **Number of faculty with ongoing projects from National,International funding agencies and grants received:**

Sr. No	Type	Title of Project	Name of Coordinator	Funding Agency	Grant Received (in Rs/-)	Duration	Status
1	National	**Skill & Personality Development Programme Centre for SC/ST Student**	Dr. Santosh Chede	AICTE	-	3 Years	Proposal Submitted (2016-17)
2	National	**Multidisciplinary approach for Technical knowledge enhancement**	Dr. Santosh Chede	AICTE	-	2 Week	Proposal Submitted (2016-17)

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)by faculty and students.

Sr. No.	Name of Department	No. of paper published in journals	No. of paper published in National conferences	No. of paper published in International conferences	Total
1	Electronics & Telecommunication Engineering	31	7	32	70

Publication per faculty:

List of Journals

Sr. No.	Name of Faculty	National/International Journal
1	Dr. Santosh D. Chede	Design Overview of processor based Implantable Pacemaker" published in International journal of computers (Academy publisher) Vol.3.No.8, 2008, pp.49-57.
		" Algorithm to optimize code size and energy consumptioin in real time embedded system " published in International journal of computers (Academy publisher) Vol.3.no.6, 2008,pp.15-21.
		" A significance of VLSI techniques for low power real time system, published in IJFCA international journal,ISBN: 978-93-80746-20-3.
		"Overview and analysis of UWB for low power WPAN published in IJFCA international journal, ISBN: 978-93-80746-3.

		" Design and Improvement in WiMAX 3G using multiple keys" published in International journal of Engineering Science and Technology (IJEST), Vol.3, No.7, July 2011,pp 5964-5973,ISSN:095-5462.
		"Implementation and analysis of Traffic adaptive MAC protocol for wireless sensor network" International journal of Multidisciplinary research (IJMR), Vol.1, April 2012,pp.57-61, ISSN:2277-9302.
		" Detection and Removal of Black Hole in Mobile Ad-hoc Network (MANET)",International Journal of Electrical and Electronics Engineering (IJEEE), ISSN (PRINT): pp2231 – 5284 Vol-1 Iss-4, 2012
		"Detection of post operated copy more image forgery by Integrating Block Based and Feature MetHOD", International Journal of Advanced research in Computer science and Software Engg.(IJARCSSE), Vol.4,Issue 4,Jan.2014,pp 788-790 ISSN: 2277 128X,
		"Review on Efficient OFCDM Techniques", International Journal of Research in Advent Technology, Vol.2, No.2, February 2014 ,E-ISSN: 2321-9637
		"Efficient OFCDM Techniques in 4G",International Journal of Engineering Research and Application as well as for oral presentation at "International Conference on Industrial Automation and Computing (ICIAC-2014)" at Jhulelal Institute of Technology, Nagpur,ISSN 2248-9622,12-13 April,2014.
		"Overview of adaptive echo canceller based LMS and NLMS algorithm" International research journal of sustainable science and Engineering, ISSN:2347-6176,Vol.2,issue 4,April 2014.

		"Design strategies for classification of abnormalities in Retinal Images using ANFIS", International journal of Application or Innovation in Engineering and Management(IJAIEM),ISSN 2319-4847, Vol.3, Issue 3, March 2014.pp388-393.
		"Design of 32 Bit Floating point ALU with Universal Gate", International journal of Technological Exploration and Learning (IJTEL),ISSN 2319-2135,Vol.3,Issue 3,2014.
		"VHDL Implementation of Universal Asynchronous Transmitter", International Journal of Engineering and Research (IJERT),ISSN 2278-0181,Vol.3,Issue 06,June 2014.
		" Overview and Analysis of Floating point Multiplier using Wallace and Dadda Algorithm", International Research Journal of Sustainable Science and Engineering (IRJSSE),ISSN 2347-6176,Vol 2,Issue 4,April 2014.
		"Multicode Techniques in 4G", International journal of computer trends and Technology (IJCTT) ,ISSN 2231-2803, Vol.11,Issue 4,2014.
		"AMFM based Prediction of Multiple Sclerosis in Brain MRI Images", International journal of computer applications (IJCA),ISSN:10.5120/17682-8533, Vol.101,Issue 5,2014.
		"Wheeze Extraction Using Analog Filter For Asthma Patients", International Journal of Emerging Technologies in Engineering Research, Vol.1, Issue 1, July 2016.
		"Energy Efficiency of Wireless Sensor Network using Reactive and Proactive Protocol", International Journal of Computer Applications ,ISSN0975 – 8887) Vol. 105 – No. 1, November 2014.

		"A New Approach of Energy Efficient Role Assignment Algorithm for Maximizing Lifetime in Wireless Sensor Network", International Journal of Computer Trends and Technology (IJCTT) , Vol. 39 No.1 ,September2016.
		"An Overview on a Low Power Telemedicine System", International Journal on Recent and Innovation Trends in Computing and Communication ISSN: 2321-8169,Vol.3 ,Issue 5 , IJRITCC , May 2015pp. 258 – 262.
		"AM-FM based prediction of multiple sclerosis in brain MRI Images."publishedinInternational journal of computer application, ISSN: 0975-8887, Vol. 101 issue 5,Sept. 2014
		"Comparative Analysis of Different Classifiers to Detect the Disease in Brain MRI Images". published in International journal of Computer Trends and Technology(IJCTT) 2231
		"Performance evaluation of OFDM Based Wimax Physical layer under multipath Fading Channel with Different Modulation schemes and cyclic prefix",published in Global journal of Engineering , Jan
		Detection and Removal of Black Hole in Mobile Ad-hoc Networ(MANET)", International conference on Electrical and Electronics Engg.(ICEEE-2012),Nainital,20th May 2012,pp-11-13, ISBN:978-93-81693-97-1.
		" Security advances in WiMAX 3G using multiple keys" ICSE-2011, International conference at Rohtak, Haryana, January.21-23,2011, pp 107-111,ISBN:978-981-08-7931-0.
		" Mac module structure for secure simplification WIMAX ", ICICES-2011,International conference at Chennai,Feb.23-24,2011

		" WBAN based Health monitoring by using OMNeT++",ICICES-2011,International conference at Chennai,Feb.23-24,2011.
		" Software Related current/ Energy Estimation in Processor based Implantable Pacemaker", IICC-2008,IEEE International conference at IIT Kharagpur, Dec. 8-10, 2008.
		" Design overview of low power Implantable pacemaker using MSP 430 F 1612,SPIT-IEEE-2008, International conference at Mumbai,Feb. 4-5 .2008.Vol.2,pp.236-242.
		" Hardware/SAoftware co-design techniques in low power embedded system", (ICMECS-2007), International Multiconference of Engineers and Computer Scientists, Hongkong, March 21-23, 2007, pp. 1716-1721.
		" Object position detection strategy , analysis and control with Direct Digital Controller", (IASTED MSO-2004), International Conference on "Modeling, Simulation and optimization, at Kauai, Hawaii, USA, August 16-19, 2004,pp. 199-204.
		" The assessment of deteriorating level of transformer oil by (A) Ferrographic technique and (B) Thermal ageing failure data", CEIDP-1995, IEEE International conference "Conference on Electrical Insulation and Dielectric Phenomena," Oct.22-25, 1995, at Virginia (USA), pp. 313-315.
		" Efficient OFCDM Techniques in 4G",International Journal of Engineering Research and Application(IJERA) as well as for oral presentation at "International Conference on Industrial Automation and Computing (ICIAC-2014)" at Jhulelal Institute of Technology, Nagpur,12-13 April,2014.,ISSN2248-9622,pp.1-5.

		" Implantation and Analysis of a traffic adaptive MAC protocol for wireless sensor networks", International conference on Interdisciplinary research and Development in Management, Engg, Technology and social sciences, at Tuli imperial Nagpur,28-29th April,2012.
		"Lung Sound Analysis Based MetHODology to Identify Asthmatic Patient for Low Power Low Cost Embedded System ",IEEE International Conference on Energy Systems and Applications (ICESA 2015) ,Dr. D. Y. Patil Institute of Engineering and Technology, Pimpri, Pune, 30-31st October 2015.
		"Review on Wheeze Monitoring for Asthmatic Disorders", 2nd International Conference on Science and Technology for Society,(ICSTS-2015),19-21stMay 2015.
		"Identification of Asthma using Optimum WPT and it`s Coefficient for Development of Low Power Low Cost Embedded System",IEEE International Conference on Communication Networks (ICCN-2015),ITM University, Gwalior, Madhya Pradesh 19-21st November 2015.
		"Advanced Embedded System for Identification of Asthma", International Conference on Engineering and Material Sciences ,Jaipur National University, Jaipur.17-19th 2016.
		"Energy Efficiency of Wireless Network Using Balance Routing", 2015 International Conference on Computational Intelligence and Communication Networks,IEEE Computer society, 2015,pp100-104,pp.23-28.
		"Improving Lifetime of Wireless Networks Using Secure Hybrid Compression and Routing Techniques",International Conference on Engineering and Material Sciences , Jaipur National University, Jaipur.17-19th 2016.

		"Development of Low Power Cardiac Telemetry System",2015 IEEE International Conference on Communication Networks (ICCN)ITM University, Gwalior, Madhya Pradesh 19
		"Realization of Low Power Telemedicine System to Monitor Temperature and Heart Beats",International Conference on Energy Systems and Applications (ICESA 2015) at Dr. D. Y. Patil Institute of Engineering and Technology, Pune, India, 30 Oct
		"Application of FCM Clustering on AM-FM to Detect MRI Disease Progression For Multiple Sclerosis". published in IEEE Conference CICN-2015,12-14 Dec 2015.
		" Performance evaluation of Modulation Schemes for UWB " NCWC-2010National Conference on Advances in Wireless Communications,pp.143-146.
		" Current estimation in low powe Implantable pacemaker using MSP 430 F1612", IEEE conference at Pune, March 7-9, 2008.
		"Novel four step search algorithm for low bit rate video applications",NCDC-2006, National conference on Distributed computing organized by Dr.D.Y.Patil institute of Engineering, Pune.1-2 Sept.2006,pp.319-325.
		DVS and Dual VDD architecture for embedded SOC Design",(TSYGECA 2006), Natiioinal conference organized by Govt. College of Engg, Aurangabad, Jan.23-24,2006, pp.285-290.

		" Finger print recognition system",State Level IEEE conference on Signal processing and parallel computing.July 5-6,2003 at MIT Alandi, Pune.
		"Design of Floating Point Arithmetic Logic Unit with Universal Gate",National Conference on Ingenious Science, Technologies &Management,"SAMVID 2014", at SSITM,SSTC, Bhilaion 21st Feb 2014.
2	Prof. U G Marghade	"Wireless body area network for rural health care "I International journal of Technology Enhancement &imerging engineering research ,trends volume 3, issue 3 Jan 2015
		"A review on brain machin interface system with AI for person with disability". International journal of enginnering science and advance tyechnology (IJASET) jan-feb 2015
		"ECG signal classification & acquisition for brain machine interface system" Internastional conference on imergin\g trends in enginnering& technology. IJESAT/ITRSAT, april-may 2015.
		"brain machin interface system with AI for person with disability" International journal of enginnering science & research technology(IJASRT) July 2015
3	Prof. Rasika Manapure	"Study of STTCMC- CDMA system for wireless application" International conference of sunrise technology(ICOST) JAN 11.
		"Performance enhancement of MC-CDMA system using space time coding usig STC and MIMO International conference on information , communication and embedded system(ICICES) feb 2011

		An overview of smart antenna implementation using neural network International conference on information , communication and embedded system(ICICES) JAN 11
		Neural Network approach for modeling of adaptive antenna system International conference on information , communication and embedded system(ICICES)
4	Prof.Ms.Madhuri ninawe	Computation of CPU & GPU International journal of engineering science & advanced technology(IJESAT) Volume 6, 2015.
		. GPU Accerlated image processing using CUDA Internastional conference on imergin\g trends in enginnering& technology(IJESAT, ITRSAT) March 2015
		Design Of vehicular adhoc network using DSDV protocolInternational journal of recent scientific research International journal of recent scientific research
5	Prof. Roshni Bhokare	" Performance of Hiperlan/2 for 16 QAM with ¾ code rate with without sale model. International conference of sunrise technology(ICOST) Jan 2011
		Performance analysis ofHiperlan/2 for QPSK & BPSK mode with non-puntured convolution code. International conference on advances in communication embedded systems and computing(ICACE) 14-15 jan 2011.
		An approach to reduce nonlinearity ofHiperlan/2 system using neural network. International journal of research in computer & communication technology IJRCCT 2013.
		Comparision of performance of AWGN- Racian& Rayleigh channel for Hiperlan/2 system for reducing nonlinearity using neural network.AE international journal of science & technology AEIJST volume 1, Issue 1

6	Prof. Mr.Sachin Malke	The design & development of low cost Voip device using LINEX. Internation journal of engg research & application. March 2014.
		"Imlplementation of low cast Voip media stream encryption device using LINEX. International conference on industrial automation & computing ICICIAC, IJAAI journal April 2014
7	Prof. Gopal Pranjale	Electromyogram based control signal generation for mobility aid .CSIO-CSIR Research Conference.2015

*   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.) :   --

* Monographs   :

* Chapter in Books   :

* Books Edited   :

* Books with ISBN/ISSN numbers with details of publishers

* Citation Index   :   --
* SNIP   :   --
* SJR   :   --
* Impact factor   :   1.5 to 3.5
* h-index   :   --

20. Areas of consultancy & income Generated:Nill

21.Faculty as members in

    i) National committees   **:**

    j) International Committees   **:**

    k) Editorial Boards   **:**

    l) Faculty Membership for ISTE:

List of faculty members having Professional society membership for Indian Society of Technical Education (ISTE) is given

Sr. No	Name Of Faculty	Membership	Membership No.
1	Dr. Santosh Chede	ISTE	LM15012
2	Dr. Santosh Chede	IAENG	
3	Dr. Santosh Chede	Editorial Board Member International Journal for ElectroCopitational World Knowledge Interface, ISSN-2249-5428(Online), 2249-541X(Print)	-
4	Dr. Santosh Chede	Editorial Board International journal For Advancement in Technical Research & DevlopmentISSN-2277-405X	-

22.Student projects:

Students are encouraged to carry out research oriented projects which are of social relevance involving state of art and inclusive technology. Students get an opportunity to use latest tools and technical knowhow in the process of executing the project.

Students are provided the required infrastructure to do their projects (in house).Risks are discussed at each project progress review meeting.

The Department keeps track of the progress of the project in terms of completion, time and costs.

To enforce team work, students are asked to form a group of 3 to 5 members to carry out the project work. This enables them to build team spirit and helps in co-ordinating various activities.

Sr. No.	Year	Percentage of Student who have done in house projects including inter departmental/Programme	Percentage of Student Placed for Project in organization outside the institute i.e., in Research laboratory/Industry/to agencies
1	2013-14	100%	NIL
2	2014-15	100%	NIL
3	2015-16	100%	NIL

23.Awards/ Recognitions received by faculty and students :
- Faculties: NIL
- Students

Technical Achievements /Non-Technical Achievements:

Sr. No.	Academic Year	Name of Activity	Name of Organizer	Position	Achievements
1	2015-16	Athletics	RTMNU	-	-
2		Kho-kho	RTMNU	-	-
1		Tug of War	RTMNU	-	-
2		Model Exibition	Raman Science Center	Runner up	-
3	2014-15	Badminton	RTMNU	-	-
4		Cricket	RTMNU	-	-
1		Kabaddi Team	RTMNU	-	-
2		Swimnig	RTMNU	-	
3		Badminton	RTMNU	-	
4	2013-14	Chess	RTMNU	-	-

24. List of eminent academicians and scientists/visitors to the department :

Sr. No.	Name of the Academicians and Scientists / Visitors	Designation	Organization	Purpose of Visit
1	Dr. D K Agrawal	Ex-Director BCUD, RTMNU Nagpur	RTMNU Nagpur	Counsler
2	Dr. M D Chaudhary	Dean Engineering & Technology RTMNU Nagpur	RTMNU Nagpur	Counsler

25.Seminars/ Conferences/Workshops organized & the source of funding

g) **National**   : **03**

h) **International**   :

i) **State Level**   :

Sr. No.	Topic of seminar / Workshop /conference	Name of Expert Faculty	Designation	Source of funding
1	Advance Networking System	Mr. Sandeep SonasKar	Director-V S Informatics	Selffinancing
2	MATLAB	Mr. Kartik Ingeli	Assit Prof.	Selffinancing

3	Rasberri- Pi	Mr. Umesh Kubade	Director	Selffinancing

26.Student Profile Programme/course wise:

Statistical information regarding admission in first year and direct second year is given in table

Name of the Course	Academic Year	Application Received	Selected Seat		Pass Percentage
			Male	**Female**	
BE	2016-17	Centralized Admission process as per the rules and regulation of DTE	12	12	Eligibility criterion is 40% for SC/ST and 45% for others
	2015-16		6	6	
	2014-15		15	6	
	2013-14		10	14	

27.Diversity of Students :

Name of the Course	Academic Year	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
BE	2016-17	Nil	83.34	16.66	Nil
	2015-16	Nil	83.34	16.66	Nil
	2014-15	Nil	Nil	Nil	Nil
	2013-14	Nil	Nil	Nil	Nil

28.How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

Sr.No.	Academic Session	No of students appeared	No. of students qualified	Name of Exam
1	2013-14	12	Nil	Gate Exam
2	2014-15	15	Nil	Gate Exam
3	2015-16	10	Nil	Gate Exam
4	2016-17	8	Nil	Gate Exam

29.Student Progression

Student Progression	Academic Year	Number of Students	% of Students
UG to PG	2013-2014	-	-
	2014-2015	-	-
	2015-2016	-	-
	2016-2017	-	-
Campus Recruitment	2013-2014	3	16.66%
	2014-2015	1	5%
	2015-2016	6	60%
	2016-2017	-	-
Other Campus Recruitment	2013-2014	-	-
	2014-2015	-	-
	2015-2016	-	-
	2016-2017	-	-

30. Industrial Visit:

Academic Session	Department	Industrial Name	Address
2013-14	**Electronic & Telecommunication Engineering**	IIM &	Ahmadabad
		Anand dairy	Jodhpur
2014-15	**Electronic & Telecommunication Engineering**	RTTC BSNL Nagpur	Nagpur
		GEM Empire Home Application Pvt. Ltd.	Chandigarh
2015-16	**Electronic & Telecommunication Engineering**	Durdarshan Kendra Prasar Bharti Seminary Hills Nagpur	Nagpur
		Maharashtra Remote sensing Application centre	Nagpur
		Anand dairy	Jodhpur

31. Details of Infrastructural facilities

e) Departmental Library Book:

Total Books	No. of Title	No of Journals	No of Magazines	No of Newspaper	No of e-Journals
1448	248	4	-	6	-

b) Internet facilities for staff and students:

The college has Internet connectivity of 10 Mbps leased line. Internet facility is provided for both students and staff.

c)Class rooms with ICT facility&Laboratories :

There are 6 class rooms in the department to conduct the lecture. All the class rooms are equipped with overhead projector and internet through high speed wi fi connection. In the view of ICT following teaching aids have been managed by the department

PPT presentation based on the curriculum

Instructor material from the publisher

Student material from the publisher

Sr. No.	Description	Numbers	Shared/ Exclusive	Capacity	RoomEquipped with
1	Classrooms	03	Exclusive	72	Green Board
2	Tutorial room	02	Exclusive	40	Green Board
3	Seminar hall	01	Exclusive	200	Audio/video system, LCD Projector, Screen

d) Laboratories For UG:

Electronics & Telecommunication Engineering: State of Art Laboratory Facility is Available inThe Department

Sr. No.	Laboratory Name	Laboratory Cost (in INR)
1	Digital circuit & Fundamental of Microp. Lab	1,48,768/-
2	Electronics Work shop Lab	1,77,942.50/-
3	Electronic Device & Cir/	1,56,490/-
4	Communication Electronic Lab	1,58,000/-
5	Analog Circuit design Lab	84,418/-
6	Microprocessor & Microcontroller Lab	24,446
7	UHF Lab	2,34,226/-
8	Television Engineering Lab	81,586/-
9	Computer Lab	4,26,646/-

Note: All the Laboratories are well equipped and well maintained

32. Number of students receiving financial assistance from college, University, government or other agencies

The various students received the scholarship under different categories. The statistical information is given in table

Sr.No.	AcademicSession	Government Scholarship					
		SC	ST	NT/VJ	SBC	OBC	EBC
1	2013-2014	14	0	03	04	47	03
2	2014-2015	09	0	02	03	25	02
3	2015-2016	07	0	03	01	144	01
4	2016-2017	05	0	02	0	16	03

33. Details on student enrichment programme (special lectures / workshops/seminar) with external experts

Sr. No.	Academic Year	Activity	Name of the Speaker	Details of Speaker
	2013-14	Guest Lecture on VLSI Tech	Mr.SwapnilShamku ware	Professor
2	2013-14	Guest Lecture on JAVA Tech	Mr.Pratap Shukla	Professor
3	2014-15	Guest Lecture on Communication Engineering	Prof P Bokade	Professor
4	2014-2015	Guest Lecture on TSS	Mr.SwapnilShamku ware	Professor
5	2015-2016	MPSC/ UPSC Guidance	Mr. Ram Wagh	Director
6	2015-2016	Introduction to LABVIEW	Mr. Sameer Taksande	Engineer
7	2016-2017	Guest Lecture on Personality development	Mr. GuruprakashShetti	Assistant General Maneger
8	2016-2017	Advance of Digital modulation Technic	Prof. B. R Thakre	Professor
9	2016-2017	Seminar on IOT Infra structure	Mr. Ashish Labde	Engineer

34. Teaching metHODs adopted to improve student learning –

- o Effective black board teaching
- o Expert Seminar on important topic
- o Tutorial session on subject
- o NPTEL e-learning material for teaching Use of LCD
- o Case study oriented teaching

35. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Tree Plantation
- Blood Donation
- Medical awareness program
- Traffic awareness program

36. SWOC analysis of the department and Future plans :

Strengths:

Wide ranging and multidisciplinary research

Teams able to implement test environments

Strong process expertise and systemic thinking

Good industry cooperation and networks, good ability to react to new research needs

Weaknesses:

Inadequate culture of publishing research results

Weak researcher mobility and other exposure

Early stages of research career hampered by insufficient supply of dissertation opportunities

Opportunities:

Creating critical mass and increasing exposure through concurrent effects of Academy

Utilising the ability to react swiftly in research into emerging topics and needs

Increasing international research collaboration

Stepping up cooperation.

More University agreements on collaboration

Challenges:

Loss of production chains decreasing the number of research topics

Culture trumps technology among young people, makes student recruitment more difficult

Ever tighter budgets due to economic uncertainty

Funding directed at standing themes

Research fields trimmed based on performance indicators

Future plans:

NBA Accreditation.

To Develop the research centre specialising the advance materials development.

To start the Add-on course like Automation based on PLC & SCADA.

To depute faculty members on seniority basis for pursuing PhD.

Evaluative Report of the Civil Engineering Department

1. Name of the Department: Civil Engineering Department.

2. Year of Establishment   : 2010-11

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

The following programmes are offered in the Civil Engineering Department.

Sr. No.	Name of the Program	Establishment Year & Approval Letter	Academic Year	Intake
1	**Degree:** Bachelor Degree in Engineering **Discipline:** Civil Engineering department	2010	2010-11	60

4. Name of Interdisciplinary courses and departments involved:

The list of interdisciplinary courses which are common to various departments is mentioned in the table below:

B.E – Civil Engineering			
Sr. No.	Semester	Course Title	Department
1	I/II/III	Engineering Mathematics – I Engineering Mathematics – II Engineering Mathematics – III	Science & Humanities
2	I	Engineering Physics	Science & Humanities
3	II	Advanced Physics	Science & Humanities

4	I	Basic Electrical Engg.	Electrical Engg.
5	I	Engineering Chemistry	Science & Humanities
6	II	Material Chemistry	Science & Humanities
7	I	Computational skills & communication Skills	Computer Science & Engineering
8	II	Engineering Graphics	Mechanical engineering
9	II	Advanced Electrical Engineering	Electrical Engg.
10	II	Ethical Science	Science & Humanities
11	II	Basic Workshop Lab	Mechanical engineering
12	V	CETW	Science & Humanities

5. Annual/ semester/choice based credit system (programmewise):

The UG Programs follow the R.T.M. Nagpur University guidelines with **(Credit based)** semester system.

Semester	Lecture credit	Practical credit	Tutorial credit	Total credit
III	16	8	5	29
IV	15	8	5	28
V	16	9	4	29
VI	12	15	4	31
VII	16	7	4	27
VII	13	8	4	25

6. Participation of the department in the courses offered by other departments:

The Department of Mechanical Engineering is participating in courses offered by other departments are:

Sr. No.	Semester	Course Name	To Department
1	I/II	Engineering Mechanics	All Departments
2	I/II	Basic Civil Engineering	All Departments

7. Courses in collaborate on with other universities, industries, foreign institutions, etc:

NIL

8. Details of courses/programmes discontinued (if any) with reasons :

NIL

9. Number of teaching posts:

The Civil Department has well qualified and Experienced Faculty and the statistics of teaching posts sanctioned and filled is as mentioned in the table

Teaching Post(UG)	Sanctioned	Filled
Professors	1	Nil
Associate Professor	3	Nil
Asst. Professors	12	16

10. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./Ph.D./M.Phil., etc.)

Faculty profile is as mentioned in the table below:

Sr. No.	Name	Specialization	Qualification	Designation	No. of Years of Experience
1	Ashtashil V.Bhambulkar	Env. Eng.	PhD (Pursuing)	H.O.D & Asst. Professor	6
2	Preeti Morey	Stru. Engg.	M.Tech	Asst. Professor	5
3	Priyanka Nagdeve	Stru. Engg.	M. Tech	Asst. Professor	7
4	Pradnya Wasnik	Stru. Engg.	M. Tech	Asst. Professor	5
5	Chaitanya Halmare	Stru. Engg.	M. Tech (Pursuing)	Asst. Professor	1
6	Pawan Barhate	Const. Man.	M. Tech	Asst. Professor	1
7	Sagar Nimkar	Tre. Engg.	M. Tech (Pursuing)	Asst. Professor	3
8	Rajat Meshram	Env. Engg.	M. Tech (Pursuing)	Asst. Professor	1
9	Deepali Choudhary	Env. Engg	M. Tech (Pursuing)	Asst. Professor	1
10	Bhushan Thool	Str. Engg	M. Tech	Asst. Professor	2
11	Basil Paul	Tre. Engg	M. Tech	Asst. Professor	1

12	Pankaj Wadhwani	Env. Engg	M. Tech	Asst. Professor	4
13	Honey Gour	Str. Engg	M. Tech	Asst. Professor	1
14	Amit Khandve	Civil Engg.	B.E.	Adjunct Faculty	10
15	Pankaj Pathak	Civil Engg.	B.E.	Adjunct Faculty	12
16	Sandip Kolhe	Civil Engg.	B.E.	Adjunct Faculty	13

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):

Student Teacher ratio Programme wise has been mentioned in the table below:

Sr. No.	Programme	No. Of Students	No. Of Teachers	Student Teacher ratio
1	UG (B.E-Civil)	240	16	15:1

14. Number of academic support staff (Technical) and administrative staff: sanctioned and filled.

The below given table gives the cadre wise structure of academic support:

	Sanctioned	Filled
Administrative Staff	1	1
Technical	1	1

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

Sr. No.	Qualification	Total Number of Staff
1	Ph.D	--
2	Ph.D Pursuing	01
3	PG.	08

16. Number of faculty with ongoing projects from National,International funding agencies and grants received:

Sr. No	Type	Title of Project	Name of Coordinator	Funding Agency	Grant Received (in Rs/-)	Duration	Status
1	National	Conference on GIS , Remote Sensing	Asst. Professor Ashtashil V. Bhambulkar	AQIS AICTE	--	2 Days	Proposal Submitted

		and Its Application in Civil Engineering					
2	National	FDP on Analysis and Design of Earthquake Resistance Structure	Asst. Professor Ashtashil V. Bhambulkar	AQIS AICTE	--	2 weaks	Proposal Submitted

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)by faculty and students.

Sr. No.	Name of Department	No. of paper published in journals	No. of paper published in National conferences	No. of paper published in International conferences	Total
1	Civil Engineering	15	7	0	22

Publication per faculty:

Sr. No.	Name of Faculty	National/International Journal
1	Ashtashil V. Bhambulkar	"Municipal Solid Waste Collection Routes Optimized With Arc GIS Network Analys",International Journal Of Advanced Engineering Sciences And Technologies, ISSN: 2230-7818 Vol No. 11, Issue No. 1, 202 - 207,2011pp 286 – 291
		"Effects of Leachate Recirculation on aLandfill",International Journal Of Advanced Engineering Sciences And Technologies, ISSN: 2230-7818 Vol No. 11, Issue No. 2,2011pp 286 - 291
		"Municipal Solid Waste (MSW) Collection Route for Laxmi Nagar By Geographical Information System (GIS)", International Journal of Advanced Engineering Technology, 2011.
		"Application of GIs in Transportation Engineering", International Journal of Engineering Research and Applications, ISSN: 2248-9622, Vol. 3, Issue 2, March -April 2013, pp.540-542.
		"Analysis and Design of flare Bridge "International Journal of Innovative Technology and Research Volume No. 1, Issue No. 6, October - November 2013, 588 - 590.
		"Aqua Plant -Based Sewage Treatment Plants: Review" Int. Journal of Engineering Research and Applications ISSN: 2248-9622, Vol. 3, Issue 5, Sep-Oct 2013, pp.1290-1301
		"Micro- Plant and Wastewater Treatment: Review of Practical Aspects "International Journal of Innovative Technology and Research Volume No. 2, Issue No. 4, Jun-July 2014, 1139- 1150
		"Construction And Design Of Cable-Stayed Bridges" International Journal of Innovative Technology and Research Volume No. 3, Issue No.1, December – January 2015, 1858 - 1859.
2	Priyanka nagdeve	Analysis of long span bridges by multi support excitation presented at international conference held at National Bridge Research and development center

		Progressive Collapse Analysis Of Building
3	Preeti Morey	Efecct of enhance temp. On propreties of concrete with partial replacement of coarse aggregate by Blast Furnace slag
		Presentation on " Review Progrecive collapse of Building" in QUARK-12
		Presentation on " Rehabilitation of Fire Damage Building- a case study" in KDKCOE.
		Presentation on " Technique of Bridge Rehabilitation" in Institute of Engineering, Nagpur Presentation on " Effect of Elevated temperature on Green Concrete" in KDKCOE-17
4	Pradnya Wasnik	Presentation on " Fibre Reinforce concrete " in BDCOE, Sewagram
		Presentation on " Prametric study of stucture" in KDKCOE , Nagpur.
5	Pawan Barhate	Rainwater harvesting around Ramtek area (pertaining to Dudhala lake) ISSN-2394-3696 Vol 2 issue 3
6	Amit Khandve	Seismic response of RC Frame building with soft storey ISSN-2248-9622
7	Mohit Chachere	Effect of various temperatures on the strength of concrete with partial replacement of cement by rice husk ash and partial replacement of coarse aggregate by blast furnace slag issn-**2349-5162**
8	Minakshi Yengale	Analysis of Water Distribution Network For Karanja Village- a Case Study ISSN No. 2248-9622

List of Journals

* 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.) :   --
* Monographs   :
* Chapter in Books   :
* Books Edited   :

Sr. No.	Name of Faculty	National/International Journal
1	Ashtashil Bhambulkar	Algae And Duckweed Based Wastewater Treatment: An Option

* Books with ISBN/ISSN numbers with details of publishers

* Citation Index	:	--
* SNIP	:	--
* SJR	:	--
* Impact factor	:	1.5 to 3.5
* h-index	:	--

Author	Title	Publication House
Ashtashil Vrushketu Bhambulkar	Geographic Information System (GIS) – An Effective Tool In Solid Waste Management **ISBN - 978-3-659-15969-5**	LAP (LAMBERT Academic Publishing) Gmbh& Co.UK.
Ashtashil Vrushketu Bhambulkar	Recycle And Reuse Of Waste Water For A Railway Station **ISBN - 978-3-659-40606-5**	LAP (LAMBERT Academic Publishing) Gmbh & Co.UK.
Ashtashil Vrushketu Bhambulkar	Application Of LCA Approach In Landfilling As Municipal Solid Waste Management Option **ISBN - 978-3-659-51088-5**	LAP (LAMBERT Academic Publishing) Gmbh & Co.UK.
Pawan Barhate	Project Affected ISNB-978-81-920622-1-9	RB publication

20. Areas of consultancy & income Generated:

Nil

21. Faculty as members in

a. **National committees** :

b. **International Committees** :

c. **Editorial Boards** :

d. **Faculty Membership for IWWA ,NICEE ,:**

List of faculty members having Professional society membership for Indian Society of Technical Education (ISTE) is given

Sr. No.	Name of Faculty	Membership	Membership No.
1.	Ashtashil V Bhambulkar	IWWA	
2	Pradnya Wasnik	NICEE	
3	Priyanka Nagdeve	NICEE	

22. Student projects:

Students are encouraged to carry out research oriented projects which are of social relevance involving state of art and inclusive technology. Students get an opportunity to use latest tools and technical knowhow in the process of executing the project.

Students are provided the required infrastructure to do their projects (in house).Risks is discussed at each project progress review meeting.

The Department keeps track of the progress of the project in terms of completion, time and costs.

To enforce team work, students are asked to form a group of 5 to 8 members to carry out the project work. This enables them to build team spirit and helps in co-ordinating various activities.

Sr. No.	Year	Percentage of Student who have done in house projects including inter departmental/Programme	Percentage of Student Placed for Project in organization outside the institute i.e., in Research laboratory/Industry/to agencies
1	2013-14	100 %	NIL
2	2014-15	100 %	NIL
3	2015-16	100 %	NIL

23.Awards/ Recognitions received by faculty and students :

- Faculties: NIL
- Students

Technical Achievements /Non-Technical Achievements:

Sr. No.	Academic Year	Name of Activity	Name of Organizer	Position	Achievements
1	2016-2017	Bridge making	JLCOE , Nagpur	Winner	
2		Dance Compition	KDKCOE, Nagpur	Winner	
3		Project compition	Communs College	Winner	
4	2015-2016	Dance	KDKCOE, Nagpur	Runner Up	
5	2014-2015				
6	2013-2014	PPT	Institute of Engineers	Runner Up	

24. List of eminent academicians and scientists/visitors to the department :

Sr. No.	Name of the academicians and scientists / visitors	Designation	Organization	Purpose Of Visit
1	Mr. V. D. Vaidya	Asst. Prof.	KDKCE, Nagpur	Technical Seminar
2	Mr. B. G. Godbole	Asst. Prof.	GHRCE, Nagpur	Technical Seminar
3	Miss. Priti Pusadkar	Asst. Prof.	KDKCE, Nagpur	Technical Seminar
4	Miss. Nilima Dhabe	Asst. Prof.	KDKCE, Nagpur	Technical Seminar
5	Miss. Vaishali Rajurakar	Asst. Prof.	Ramdeobaba, Nagpur	Technical Seminar

25.Seminars/ Conferences/Workshops organized & the source of funding

- a. **National** : 8
- b. **International** :
- c. **State Level** :

Sr. No.	Topic of seminar/ Workshop/ conference	Name of expert	Designation	Source of funding
1	GIS and GPS used in Civil Engineering	Mr. Vijay Sukhuja	Sr. ExE. Director, CADGuru	Self financing
2	Total station	Mr. Ravi Mukhade	Enterprener	Self financing
3	Workshop on Stadd-Pro	Mr.VinayakVaidya	Asst. Prof. KDKCE	Self financing

4	CPM and PERT used in Construction Engineering	Mr. B. Kalamkar	Project Manager	Self financing
5	Workshop on MS-Office	Mr.AvichalHarshe	Project Manager	Self financing
6	Highway planning and design	Dr. D. K. Parbat	Professor, GP Nagpur	Self financing
7	MSP (Microsoft project)	Mr. Shankar Banerjee	Project Manager	Self financing
8	Workshop on Primavera	Prof. Shankar Banerjee	Project Manager	Self financing

26.Student Profile Programme/course wise:

Statistical information regarding admission in first year and direct second year is given in table

Name of the Course	Academic Year	Application Received	Selected Seat		Pass Percentage
			Male	Female	
BE	2016-17	Centralized Admission process as per the rules and regulation of DTE	48	11	Eligibility criterion is 40% for SC/ST and 45% for others
	2015-16		45	17	
	2014-15		49	9	
	2013-14		44	36	

27.Diversity of Students :

Name of the Course	Academic Year	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
BE	2016-17	NIL	96	4	Nil
	2015-16	NIL	90	10	Nil
	2014-15	NIL	93	7	Nil
	2013-14	NIL	100	Nil	Nil

28.How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

Academic Year	Number of Students Appeared & Qualified in Examinations							
	GATE		GRE/GMAT/TOEFL		CAT/CET/CMAT		Any Other	
	Appeared	Cleared	Appeared	Cleared	Appeared	Cleared	Appeared	Cleared
2013-14	8	1	-	-	-	-	-	-
2014-15	7	1	-	-	-	-	-	-
2015-16	22	-	-	-	-	-	2	1
2016-17	40	-	-	-	-	-	-	-

29.Student Progression

Student Progression	Academic Year	Number of Students	% of Students
UG to PG	2013-2014	3	
	2014-2015	5	
	2015-2016	7	
	2016-2017		
Campus Recruitment	2013-2014		
	2014-2015		
	2015-2016		
	2016-2017		
Other Campus Recruitment	2013-2014		
	2014-2015		
	2015-2016		
	2016-2017		

30. Industrial Visit:

Academic Session	Department	Industrial Name	Address
2013-14	Civil Engineering	RMC unit	Butibori , Nagpur
		Waste Water treatment plant	Bhandewadi,
		Sewage treatment plant	Gorewada
		IIM	Ahmadabad
		Anand dairy	Jodhpur
2014-15	Civil Engineering	RMC unit	Butibori , Nagpur
		Waste Water treatment plant	Bhandewadi,
		Sewage treatment plant	Gorewada

		GEM Empire Home Application Pvt. Ltd.	Chandigarh
2015-16	**Civil Engineering**	Indira Sagar Dam	Gosekhurdh, Bhandara
		Waste Water treatment plant	Bhandewadi,
		Sewage treatment plant	Gorewada
		Anand dairy	Jodhpur
2016-17	**Civil Engineering**	Indira Sagar Dam	Gosekhurdh, Bhandara
		Waste Water treatment plant	Bhandewadi,
		Sewage treatment plant	Gorewada
		RMC unit	Butibori , Nagpur

31. Details of Infrastructural facilities

a)Departmental Library Book:

Total Books	No. of Title	No of Journals	No of Magazines	No of Newspaper	No of e-Journals
1430	222	4	-	6	-

b) Internet facilities for staff and students:

The college has Internet connectivity of 10 Mbps leased line. Internet facility is provided for both students and staff.

c) Class rooms with ICT facility & Laboratories:

There are 3 class rooms in the department to conduct the lecture. All the class rooms are equipped with overhead projector and internet through high speed wi fi connection. In the view of ICT following teaching aids have been managed by the department

PPT presentation based on the curriculum

Instructor material from the publisher

Student material from the publisher

Sr. No.	Description	Numbers	Shared/ Exclusive	Capacity	Room Equipped with
1	Classrooms	03	Exclusive	60	Black Board
2	Seminar hall	01	Exclusive	200	Audio/video system, LCD Projector, Screen
3	Tutorial Room	02	Exclusive	40	Black Board
4	Drawing hall	01	Shared	72	LCD Projector, Screen, Black Board

d) Laboratories For UG:

Civil Engineering: State of Art Laboratory Facility is Available in The Department

Sr. No.	Name of laboratory	Laboratory Cost (in INR)
1	Concrete Technology Lab	107821
2	Environmental Engineering Lab	144185
3	Engineering Mechanics Lab	112578
4	Engineering Geology Lab	36462
5	Fluid Mechanics Lab	420820
6	Geotech Engineering Lab	447031
7	Strength Of Material Lab	592848
8	Surveying Lab	133864
9	Structural Analysis Lab	204257
10	Transportation Engg. Lab	223798
Total Amount		**24,23,664**

Note: All the Laboratories are well equipped and well maintained

32. Number of students receiving financial assistance from college, University, government or other agencies

The various students received the scholarship under different categories. The statistical information is given in table

Sr. No.	Academic Session	Government Scholarship					
		SC	ST	NT/VJ	SBC	OBC	EBC
1	2013-2014	33	03	05	06	75	09
2	2014-2015	33	03	07	06	70	11
3	2015-2016	37	06	11	08	90	10
4	2016-2017	24	00	07	05	47	20

33.Details on student enrichment programme (special lectures / workshops/seminar) with external experts

Sr. No.	Academic year	Activity	Name of Speaker	Details of Speaker
1	2013-14	Personality Development	Mr. Vikas Hiranwar	Motivational Trainer, Disha Counselling Center
2	2013-14	AUTO-CAD	Mr. Abhishek Solanki	Instructur, CAD Center
3	2013-14	Guidance on PPT Presentation	Mr. Vikas Hiranwar	Motivational Trainer, Disha Counselling Center
4	2013-14	Mind Power	Mr. Yogesh Gajbhiye	Spiritual Trainer, Disha Counselling Center
5	2014-15	Total Station	Mr. Ravi Mokhade	Owner and Field Expert, Ravi Survey Agency

6	2014-15	Guest Lecture on Personality Development and Communication Skill	Mr. Vishal Chaudhary	Soft Skill Trainer, Global School
7	2014-15	AUTO-CAD	Mr. Abhishek Solanki	Instructur, CAD Center

34.Teaching metHODs adopted to improve student learning –

- o Effective black board teaching

- o Expert Seminar on important topic
- o Tutorial session on subject

- o NPTEL e-learning material for teaching Use of LCD

- o Case study oriented teaching
- o Interactive environment is developed so that maximum number of students can be involved in teaching & learning process
- o Use of Projectors
- o Faculty conducts difficulty sessions (extra lectures) for students.

35.Participation in Institutional Social Responsibility (ISR) and Extension activities

- Tree Plantation
- Blood Donation
- Medical awareness program
- Traffic awareness program
- Swatch Mission

36. SWOT analysis of the department and Future plans :

Strengths:

- ➢ The department is aesthetically built with required infrastructure and equipments required to meet the academic need of the students and staff.
- ➢ The department has a dedicated faculty and support staff to take care of all aspects of the curriculum, co-curricular and extra-curricular activities of the students as well as personal counselling.
- ➢ The department has perfect academic discipline.
- ➢ Adaption of innovative teaching-learning metHODologies.
- ➢ The department encourage students to develop passion about the area of their interest by providing them platform through various professional activities.
- ➢ Educational tours & Industrial visits to fill the gap between theoretical and practical knowledge.
- ➢ Summer Internship in Industries for students.
- ➢ Workshops and Expert seminars to upgrade knowledge of faculties and students.
- ➢ The department conducts regular Guest lectures, Seminars, workshops and other co-curricular activities for students to enhance the knowledge and character. This explains the existence of a healthy academic culture.
- ➢ The department is equipped with good learning resource.
- ➢ The department in consistently excelling in academics.

Weaknesses:

- ➢ The socio-economic background of many of the students admitted in the department is responsible for poor language competence (both in their mother tongue as well as English). This leads to an unsatisfactory level of comprehension and communication.
- ➢ The department has not been able to enter into either faculty exchange or student exchange programmes.
- ➢ As the region is lacking in the industrial development, student could not be fully exposed to culture of industry and new developments in the industry.
- ➢ The department needs to strengthen the research activities by starting a research center.

Opportunities:

- The level of academic excellence which the college has acquired makes it possible for our students to get entry into institutes of national and global repute.

- The new learning of the age requires greater proficiency in soft skills among students. The department has the necessary technical and infrastructural resources to take this to a higher level.

- The vision of the department makes it imperative to engage in socially relevant programmes such as organising voluntary blood donation camps, tree plantation camps, etc. The department with its resources and networking can ensure students' greater participation in these activities.

- Developing good relationships with alumni.

Challenges:

- To provide maximum placement to the degree holders.

- To provide industry based projects to students.

- To undertake collaborative project.

- To start research activities for the development of the faculty members with available facilities in collaboration with nearby Universities and research institutes.

Future Plan:

- NBA Accreditation.

- Development in research facilities and research laboratories.

- To start job oriented and self finance programmes.

- To start PG programmes.

- To work as a consultancy for civil engineering projects.

ANNEXURE - I

Affiliation of UG programs certificate issued by

RTMNU, Nagpur (2016-17)

Rashtrasant Tukadoji Maharaj Nagpur University   http://onlinebcudrtmnu.org/conti_1516/print_aff_letter.php?COLLEGE_I...

राष्ट्रसंत तुकडोजी महाराज नागपूर विद्यापीठ

(सेंट्रल प्रोव्हिसेंस शासन, शिक्षण विभागाची अधिसूचना क्रमांक ५१३ दिनांक १ ऑगस्ट, १९२३ द्वारा स्थापित, व महाराष्ट्र विद्यापीठ अधिनियम, १९९४ द्वारा संचलित राज्य विद्यापीठ)

महाविद्यालयीन शाखा

छत्रपती शिवाजी महाराज प्रशासकीय परिसर, रविंद्रनाथ टागोर मार्ग, नागपूर - ४४०००१
दुरध्वनी क्रमांक: ०७१२-२५२९९३२ फॅक्स नं: ०७१२-२५५५७०१, E-mail ID: ar-cs@nagpuruniversity.org

क्र.म.वि./११५७   दिनांक : 26-05-2015

प्रती,

प्राचार्य,
सुर्योदय कॉलेज ऑफ इंजिनिअरींग अॅन्ड टेक्नॉलॉजी
विहीरगांव, उमरेड रोड, नागपुर. ता.- नागपूर ग्रामिण, जि.- नागपूर - 441204

विषय :- निरंतर संलग्निकरण प्रदान करणेबाबत.

महोदय/महोदया,

महाराष्ट्र विद्यापीठ अधिनियम १९९४ च्या कलम ८३/८६/८७ अंतर्गत आपल्या महाविद्यालयातील चालु अभ्यासक्रमांचे निरंतर संलग्निकरण सत्र **२०१५-१६** करीता वाढविण्यासाठी आपण **दि.27-08-2014** ला पाठविलेल्या अर्जाच्या संदर्भात आपणांस कळविण्यात येते की, स्थानिय चौकशी समितीने महाविद्यालयास प्रत्यक्ष भेट देवून सादर केलेल्या अहवालावर छानन समितीने केलेल्या शिफारशीनुसार आपल्या महाविद्यालयाचा खालील प्रमाणे नमूद अभ्यासक्रमांचा निरंतर संलग्निकरण काळ वाढविण्यास विद्यापीठाच्या विद्वत परिषदेच्या वतीने मा. कुलगुरूंनी महाराष्ट्र विद्यापीठ अधिनियम १९९४ च्या कलम १४(७) अंतर्गत **दि.25-05-2015** ला मान्यता दिली आहे.

विद्वत परिषदेच्या वतीने स्विकृत केलेल्या शिफारशीनुसार उपरोक्त निरंतर संलग्निकरणाचा काळ सत्र **२०१५-१६** पासून **२०१६-१७** पर्यंत खालील अभ्यासक्रमाकरिता वाढविण्यास विद्यापीठाद्वारे मान्यता देण्यात येत आहे.

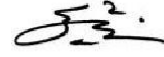| अ.क्र.	विद्याशाखा	अभ्यासक्रम / विषय / प्रवेश क्षमता	वर्ष
1	अभियांत्रिकी व तंत्रज्ञान	बी. ई. इन ईलेक्ट्रॉनिक्स अॅन्ड टेलिकॅम्युनिकेशन इंजिनिअरींग[अभ्यासक्रमाप्रमाणे]-60 विद्यार्थी, बी.ई.इन सिव्हील इंजिनियरींग[अभ्यासक्रमाप्रमाणे]-60 विद्यार्थी, बी.ई. इन कम्प्युटर इंजिनियरींग[अभ्यासक्रमाप्रमाणे]-60 विद्यार्थी, बी.ई. मेकॅनिकल इंजिनिअरींग[अभ्यासक्रमाप्रमाणे]-120 विद्यार्थी, बी .ई. इन इलेक्ट्रिकल इंजिनिअरींग[अभ्यासक्रमाप्रमाणे]-60 विद्यार्थी	सत्र २०१५-१६ ते २०१६-१७ पर्यंत

आपला विश्वासू,

(डॉ. अनिल हिरेखन)
उप कुलसचिव (म.वि.)
रा.तु.म. नागपूर विद्यापीठ,नागपूर

प्रत माहितीकरिता अग्रेषित :-

१. मा.सहसंचालक (अनुदाने) उच्च शिक्षण, नागपूर विभाग, नागपूर.

२. मा. वित्त व लेखा अधिकारी, रा.तु.म. नागपूर विद्यापीठ, नागपूर.

(डॉ.रमण मदने)
सहायक कुलसचिव (म.वि.)
रा.तु.म. नागपूर विद्यापीठ,नागपूर

SCET Self-Study Report   Page 425

Letter from AICTE for approval of UG programs
offered by the college
(2016-17)

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/1-2809746968/2016/EOA
Date: 05-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	1-2809746968
Name of the Institute	SURYODAYA COLLEGE OF ENGINEERING & TECHNOLOGY	Permanent Id	1-6595181
Name of the Society/Trust	NATIONAL RURAL DEVELOPMENT RESEARCH SOCIETY	Institute Address	SURVEY NO. 117/1 & 117/3 A, VIHIRGAON,, NAGPUR, NAGPUR, Maharashtra, 441204
Institute Type	Unaided - Private	Society/Trust Address	SURVEY NO. 117/1 & 117/3, AT- VIHIRGAON. UMRER ROAD, TAH. & DIST.- NAGPUR,NAGPUR,NAGPUR,Maharashtra,440024

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

Application Id: 1-2809746968			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
Program	Shift	Level								
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	CIVIL ENGINEERING	FULL TIME	The Rashtrasant Tukadoji Maharaj Nagpur	60	60	NA	NA	NA

Application Number: 1-2809746968
Note: This is a Computer generated Report.No signature is required.

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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

					University, Nagpur					
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	COMPUTER ENGINEERING	FULL TIME	The Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRICAL ENGINEERING	FULL TIME	The Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRONICS AND TELECOMMUNICATIONS ENGINEERING	FULL TIME	The Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	The Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	DIPLOMA	CIVIL ENGINEERING	FULL TIME	Maharashtra State Board of Technical Education	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	DIPLOMA	MECHANICAL ENGINEERING	FULL TIME	Maharashtra State Board of Technical Education	60	60	NA	NA	NA

The above mentioned approval is subject to the condition that SURYODAYA COLLEGE OF ENGINEERING & 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.

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

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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

Dr. Avinash S Pant
Vice - Chairman, 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,**
   Maharashtra State Board of Technical Education

4. **The Principal / Director,**
   SURYODAYA COLLEGE OF ENGINEERING & TECHNOLOGY
   SURVEY NO. 117/1 & 117/3 A, VIHIRGAON,,
   NAGPUR,NAGPUR,
   Maharashtra,441204

5. **The Secretary / Chairman,**
   NATIONAL RURAL DEVELOPMENT RESEARCH SOCIETY
   SURVEY NO. 117/1 & 117/3, AT- VIHIRGAON. UMRER ROAD, TAH. & DIST.- NAGPUR,
   NAGPUR,NAGPUR,
   Maharashtra,440024

6. **Guard File(AICTE)**

Application Number: 1-2809746968
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Letter from DTE for approval of UG programs offered

by the college

तंत्र शिक्षण संचालनालय, महाराष्ट्र राज्य,

३, महापालिका मार्ग, पत्र पेटी क्रमांक १९६७, मुंबई ४०० ००१.

दूरध्वनी – २२६२०६०१, २२६१०६०२, २२६४११५०/५१, फॅक्स – २२६९२१०२.

तार - EDUTECH   E-mail : Desk2@dte.org.in   Internet : http://www.dte.org.in

क्रमांक : २/एनजीसी/इंजि./मान्यता/२०१०/२७-५१

दिनांक : 30 DEC 2010

प्रति,

प्राचार्य,

सुर्योदय कॉलेज ऑफ् इंजिनिअरींग ऑण्ड टेक्नॉलॉजी,

विहिरगाव, उमरेर रोड,

जिल्हा नागपूर

(Institute Code 4613)

विषय : शैक्षणिक वर्ष २०१०-११ पासून विना-अनुदान तत्त्वावर नवीन अभियांत्रिकी
महाविद्यालय सुरु करण्यास परवानगी देण्याबाबत.

संदर्भ : १. अखिल भारतीय तंत्र शिक्षण परिषदेचे पत्र क्र. एफ नं.वेस्ट/१-६५९५१८९/२०१०/न्यू दि. १३/०७/२०१०
२. शासन निर्णय क्र.टिईएम-२०१०/(१६५/१०)/तांशि-४, दि. २६ जुले, २०१०.

उपरोक्त विषया संदर्भात आपणास कळविण्यात येते की, अखिल भारतीय तंत्रशिक्षण परिषदेने दिलेल्या मान्यतेस
अनुसरुन शासनाने वरील संदर्भाधीन शासन निर्णयान्वये आपल्या संस्थेला शैक्षणिक वर्ष २०१०-११ पासून विना-अनुदान तत्त्वावर
नवीन अभियांत्रिकी महाविद्यालय खाली दर्शविलेल्या प्रवेशक्षमतेसह सुरु करण्यास विहित अटींच्या अधिन राहून परवानगी
दिलेली आहे.

अ.क्र.	अभ्यासक्रमाचे नांव	प्रवेशक्षमता
१.	सिव्हिल इंजिनिअरींग	६०
२.	मेकॅनिकल इंजिनिअरींग	६०
३.	कॉम्प्युटर इंजिनिअरींग	६०
४.	इलेक्ट्रॉनिक्स ऑण्ड कम्युनिकेशन इंजिनिअरींग	६०
५.	इलेक्ट्रिकल इंजिनिअरींग	६०

सदर अटींपैकी आपण शासन निर्णयात नमूद केलेल्या अटी पालन करण्याचे नोंदणीकृत हमीपत्र रु.१००/- च्या
स्टॅम्पपेपरवर या संचालनालयास सादर केलेले आहे.

विहित केलेल्या अटींपैकी उरलेल्या खालील अटी व शर्तींच्या अधिन राहून शैक्षणिक वर्ष २०१०-११ पासून अभियांत्रिकी
पदवी अभ्यासक्रमाची नवीन संस्था विना अनुदान तत्त्वावर सुरु करण्यास व विद्यार्थ्यांस प्रवेश देण्यास या संचालनालयाकडून
अंतिम परवानगी देण्यात येत आहे.

१. सदर मंजूरी कायम विना-अनुदान तत्त्वावर राहील. सदर अभ्यासक्रमासाठी शासनाकडून आवर्ती व अनावर्ती अनुदान
कोणत्याही परिस्थितीत व कोणत्याही कारणास्तव मंजूर केले जाणार नाही.

२. शासन निर्णय, शिक्षण व सेवायोजन विभाग क्रमांक-टिईएम-३३८२/१११८३६/(१९०)/तांशि-१ अ, दिनांक २१ मे, १९८३ अन्वये
विना-अनुदान तंत्रशिक्षण संस्थांना शासनाने विहित केलेल्या अटी व शर्ती आपणास बंधनकारक असतील.

३. संस्थेने अभ्यासक्रम चालविण्यास पूर्णवेळ शिक्षक कर्मचारी नेमावेत व शासन व अखिल भारतीय तंत्रशिक्षण परिषद यांच्या
नियमाप्रमाणे वेतन व भत्ते कर्मचा-यांना देण्यात यावेत. शिक्षक व शिक्षकेतर कर्मचा-यांच्या वेतन व भत्ते इत्यादीबाबत तसेच
विद्यार्थ्यांकडून या संचालनालयाकडे तक्रारी आल्यास किंवा न्यायालयीन प्रकरण उद्भवल्यास संस्थेवर कडक कारवाई
करण्यात येईल व होणा-या परिणामास सर्वस्वी संस्था जबाबदार राहील.

४. संस्थेने अभियांत्रिकी महाविद्यालयासाठी नियतठेव म्हणून रु.१५.०० लाख युको बँक शाखा, अंजनी चौक, वर्धा रोड,
नागपूर येथे खाते क्र. १०८२७८, दि.११.११.२०१० अन्वये संस्थेचे अध्यक्ष व संचालक, तंत्रशिक्षण, महाराष्ट्र राज्य, मुंबई
यांच्या संयुक्त खात्यात ५ वर्षासाठी जमा केलेले आहेत. तसेच द्वितीय वर्षासाठी पुढील शैक्षणिक वर्ष सुरु होण्यापूर्वी रु.
१५.०० लाख संयुक्त खात्यात जमा करुन नियतठेवीची मूळप्रत पडताळणीसाठी या कार्यालयास सादर करणे आवश्यक
आहे याची नोंद घ्यावी.

५. आपल्या संस्थेला महाराष्ट्र शासन, तंत्रशिक्षण संचालनालय, महाराष्ट्र राज्य, मुंबई शिक्षण शुल्क समिती, मुंबई
प्रवेश नियंत्रण समिती, मुंबई व अखिल भारतीय तंत्रशिक्षण परिषद, नवी दिल्ली यांचेकडून वेळोवेळी विहित

D:\modak\final order\New Inst final order\Engineering.doo

करण्यात आलेले प्रवेश नियम, आरक्षण, शिक्षणशुल्क व इतर शुल्क या संबंधीच्या निर्णयाचे पालन करणे बंधनकारक राहील.

६. आपल्या संस्थेची फी निर्धारित करण्यासाठी शिक्षण शुल्क समिती, बांद्रा यांच्याकडे प्रस्ताव सादर करण्यांत यावा. सदर अभ्यासक्रमाचे शुल्क शिक्षणशुल्क समितीने मंजूर केल्याप्रमाणे आकारण्यात यावे. निर्धारित केलेल्या शिक्षण शुल्कापेक्षा जास्त फी आकारू नये. विद्यार्थ्यांकडून शिक्षण शुल्क समितीने निश्चित केलेल्या दरापेक्षा जास्त शुल्क आकारल्यास व याबाबत विद्यार्थी किंवा त्यांच्या मालकाकडून तक्रार प्राप्त झाल्यास किंवा न्यायालयीन प्रकरण उद्भवल्यास होणा-या सर्व परिणामास संस्था जबाबदार राहील.

७. संस्थेतील ग्रंथालयास आवश्यक ती पुस्तके, नियतकालिके इत्यादी अखिल भारतीय तंत्रशिक्षण परिषद व कुलसचिव, राष्ट्रसंत तुकडोजी महाराज नागपूर विद्यापीठ, नागपूर यांच्या मानकानुसार खरेदी करणे आवश्यक आहे. तसेच विद्यार्थ्यांना वाचनालयाचा पुरेपूर उपयोग होण्याचे दृष्टीने ग्रंथालयात विद्यार्थ्यांना अभ्यासिकेंची सोय करणे आवश्यक आहे.

८. संचालक किंवा त्यांचे प्रतिनिधी यांना अखिल भारतीय तंत्रशिक्षण परिषद/शासनाच्या मानकाप्रमाणे जागा, इमारत, शिक्षक व शिक्षकेतर कर्मचारी व इतर सोयीसुविधा उपलब्ध आहेत किंवा कसे याबाबत संस्थेत केव्हांही अचानक भेट देऊन तपासणी करण्याचे अधिकार राहतील.

९. तंत्रशिक्षण संचालनालय, महाराष्ट्र शासन किंवा , राष्ट्रसंत तुकडोजी महाराज नागपूर विद्यापीठ, नागपूर यांच्याकडून प्राधिकृत करण्यांत आलेले अधिकारी यांस त्यांनी संस्थेचे निरिक्षण करुन त्या निरिक्षणांती संस्थेत आढळून येणा-या उणीवांबद्दल उचित कार्यवाही करण्याचे अधिकार राहतील.

१०. सदर संस्था संचालक, तंत्रशिक्षण यांच्या नियंत्रणाखाली राहील व संबंधित अभ्यासक्रमांच्या परीक्षा कुलसचिव, राष्ट्रसंत तुकडोजी महाराज नागपूर विद्यापीठ, नागपूर यांच्याकडून घेतल्या जातील.

११. संस्थेला कुलसचिव, राष्ट्रसंत तुकडोजी महाराज नागपूर विद्यापीठ, नागपूर यांची सदर अभ्यासक्रमासाठी संलग्नता घ्यावी लागेल.

१२. सदर अभ्यासक्रमाचे प्रवेश शैक्षणिक वर्ष २०१०-११ साठी प्रवेश नियमात विहीत केलेल्या तरतुदीनुसार केंद्रिभूत प्रवेश प्रक्रियेद्वारे करण्यात येतील.

१३. विद्यार्थ्यांना प्रवेश देताना त्यांच्याकडून रकमेच्या स्वरुपात कॅपिटेशन फी किंवा इतर कोणत्याही स्वरुपात देणगी स्विकारता येणार नाही, तसेच प्रवेश गुणवत्तेनुसार करणे बंधनकारक आहे.

१४. रॅगिंग संदर्भात मा.सर्वोच्च न्यायालयाचे निर्देश व महाराष्ट्र प्रोव्हिबिशन ऑफ रॅगिंग अॅक्ट, १९९९ यांची कठोरपणे अंमलबजावणी करणे संस्थेला बंधनकारक आहे.

१५. शासनाने, या संचालनालयाने कुलसचिव, राष्ट्रसंत तुकडोजी महाराज नागपूर विद्यापीठ, नागपूर व अखिल भारतीय तंत्रशिक्षण परिषद नवी दिल्ली यांनी वेळोवेळी ठरवून दिलेल्या अटी व शर्तींचे संस्था उल्लंघन करीत असल्यास सदरची संस्था बंद करण्याचे अधिकार अखिल भारतीय तंत्रशिक्षण परिषदेच्या शिफारशीनुसार शासनास राहतील.

१६. संचालनालयाच्या माहिती तंत्रज्ञान कक्षांकडून दिलेल्या संकेत क्रमांक व पासवर्डद्वारे शिक्षण शुल्क समितीने निश्चित केलेल्या शुल्कासंबंधीत व संस्थेची इतर सर्व बाबींसंबंधींची माहिती संस्था वेळोवेळी अद्ययावत करतील.

उपरोक्त सर्व अटी व शर्ती आपणास बंधनकारक राहतील.

(डॉ.शुका महाजन)
प्र. संचालक,
तंत्रशिक्षण संचालनालय, म.रा., मुंबई.

प्रत,
१. मा. सचिव, महाराष्ट्र शासन, उच्च व तंत्रशिक्षण विभाग, मंत्रालय विस्तार भवन, मुंबई यांना संदर्भाधीन शासन निर्णयाच्या संदर्भात माहितीसाठी सादर.
२. मा.कुलसचिव, राष्ट्रसंत तुकडोजी महाराज नागपूर विद्यापीठ, नागपूर यांना माहिती व योग्य कार्यवाहीसाठी सादर.
३. सहसंचालक, तंत्रशिक्षण विभागीय कार्यालय नागपूर यांना माहितीस्तव,.
४. कार्यासन क्र.२-अ, मुख्य कार्यालय, मुंबई.
५. कार्यासन क्र.३, (आय.टी.सेल) मुख्य कार्यालय, मुंबई यांना माहिती व योग्य कार्यवाहीसाठी.
६. निवड नस्ती.

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16

तंत्र शिक्षण संचालनालय, महाराष्ट्र राज्य,

३ महापालिका मार्ग, पत्र पेटी क्रमांक १९६७, मुंबई ४०० ००१.

दूरध्वनी - २२६२०६०१, २२६९०६०२, २२६४११५०/५१, फॅक्स - २२६९२१०२.

तार - EDUTECH   E-mail : Desk2@dte.org.in Internet : http://www.dte.org.in

क्रमांक : २/एनजीसी/शुध्दीपत्रक/मान्यता/२०११/२८०६

दिनांक :

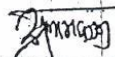शुध्दीपत्रक   - 3 मार्च 2011

विषय : शैक्षणिक वर्ष २०१०-२०११ पासून विना-अनुदान तत्वावर नवीन अभियांत्रिकी महाविद्यालय सुरु करण्यास परवानगी देण्याबाबत.

संदर्भ : १. या संचालनालयाचे पत्र क्रमांकः २/एनजीसी/मान्यता/२०१०/२४५९, दि.३०.१२.२०१०.
२. अखिल भारतीय तंत्रशिक्षण परिषद, नवी दिल्ली यांचे पत्र क्र. Corrigendum, F. No. West- 6595181/2010/New दिनांक ११/१/२०११
३. शासन निर्णय क्र. टिईएम-२०१०/(१६५/१०)/तांशि-४, दिनांक १४.२.२०११

उपरोक्त विषयाबाबत या संचालनालयाचे संदर्भाधिन पत्र कृपया पहावे.

सदर पत्रामध्ये सुर्योदय कॉलेज ऑफ इंजिनिअरींग ॲण्ड टेक्नॉलॉजी, उमरेर रोड, ता. व जि. नागपूर. या संस्थेला विहीत अटी व शर्तीच्या अधिन राहून शैक्षणिक वर्ष २०१०-११ पासून विना-अनुदान तत्वावर नवीन अभियांत्रिकी महाविद्यालय सुरु करण्यास मान्यता देण्यात आलेली आहे. तथापि सदर पत्रातील अनुक्रमांक ४ वर अभ्यासक्रमाचे नाव 'इलेक्ट्रॉनिक्स ॲण्ड कम्युनिकेशन इंजिनिअरींग'असे नमुद करण्यात आले आहे. त्या ऐवजी "इलेक्ट्रॉनिक्स ॲण्ड टेलिकम्युनिकेशन इंजिनिअरींग" असे वाचावे.

(डॉ.सु.का.महाजन)
प्र. संचालक,
तंत्रशिक्षण संचालनालय, म.रा., मुंबई.

प्रत :-

१.मा.सचिव, महाराष्ट्र शासन, उच्च व तंत्रशिक्षण विभाग, मंत्रालय विस्तार भवन, मुंबई यांना माहितीसाठी सादर.
२.मा.कुलसचिव,राष्ट्रसंत तुकडोजी महाराज, नागपूर विद्यापीठ, नागपूर यांना माहिती व योग्य कार्यवाहीसाठी.
३.सहसंचालक, तंत्रशिक्षण विभागीय कार्यालय, नागपूर यांना माहितीस्तव.
४.प्राचार्य, सुर्योदय कॉलेज ऑफ इंजिनिअरींग ॲण्ड टेक्नॉलॉजी, विहिरगाव, उमरेर रोड, जिल्हा नागपूर.
५.निवड नस्ती.

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तंत्र शिक्षण संचालनालय, महाराष्ट्र राज्य,
३, महापालिका मार्ग, पत्र पेटी क्रमांक १९६७, मुंबई ४०० ००१.
दूरध्वनी - २२६२०६०१, २२६९०६०२, २२६४११५०/५१, फॅक्स - २२६९२१०२.
तार - EDUTECH   E-mail : Desk2@dte.org.in Internet : http://www.dte.org.in

क्रमांक : २/एनजीसी/हंजि./मान्यता/२०१२/ ५०93
दिनांक :
                २ ७ JUN 2012

प्रति,
प्राचार्य,
नॅशनल रुरल डेव्हलपमेंट रिसर्च सोसायटीचे
सूर्योदया कॉलेज ऑफ इंजिनिअरींग ॲण्ड टेक्नॉलॉजी,
सर्व्हे नं. ११७/१ आणि ११७/३ए,
विहिरगाव, नागपूर ४४१ २०४.

(Institute Code 4613)

विषय : शैक्षणिक वर्ष २०१२-१३ पासून विना-अनुदान तत्वावर अभियांत्रिकी पदवी
       अभ्यासक्रमाच्या प्रवेशक्षमतेत वाढ करण्यास परवानगी देण्याबाबत.

संदर्भ : १. अखिल भारतीय तंत्रशिक्षण परिषदेचे पत्र क्र. वेस्टर्न/१-४९२३७०७९९/२०११/ईओए दि. १.९.२०११.
        २. शासन निर्णय क्र. टीईएस - २०१२/प्र.क्र.१८/तांशि-४, दि. ०९ फेब्रुवारी, २०१२.

उपरोक्त विषया संदर्भात आपणास कळविण्यात येते की, रिट याचिका क्र. ८८४७/२००७ प्रकरणी मा.उच्च
न्यायालयाने दिलेल्या आदेशान्वये अखिल भारतीय तंत्रशिक्षण परिषदेने दिलेली मान्यता दि. ३० जून २०११ नंतरची
असल्यानुळे सदर संस्थेस शैक्षणिक वर्ष २०१२-१३ पासून प्रवेशप्रक्रीया राबविणे शासनास अभिप्रेत आहे. त्यास अनुसरुन
शासनाने आपल्या संस्थेस शैक्षणिक वर्ष २०१२-१३ पासून पदवी अभ्यासक्रमाच्या प्रवेशक्षमतेत वाढ करण्यास मान्यता
दिलेली आहे.

अ.क्र.	अभ्यासक्रमाचे नांव	प्रवेशक्षमता बदल
१.	मेकॅनिकल इंजिनिअरींग	६० — १२०

सदर अभ्यासक्रमाच्या वाढीव प्रवेशक्षमतेसाठी यूको बँक, शाखा-मिड कॉर्पोरेट, नागपूर येथे पावती क्र.१०८४८१
दि.१९.०५.२०१२, अन्वये रु.१.५० लाख संयुक्त खात्यात १० वर्षासाठी जमा केलेले आहेत. तसेच १००/- च्या स्टॅम्प
पेपरवर शर्ती व अटी मान्य असल्याबाबतचे नोंदणीकृत हमीपत्र या संचालनालयास सादर केलेले आहे. तरी वरील
अभ्यासक्रमाच्या प्रवेशक्षमतावाढीस व विद्यार्थ्यांना प्रवेश देण्यास शैक्षणिक वर्ष २०१२-१३ पासून या संचालनालयाकडून
खालील अटी व शर्तीच्या अधिन राहून मंजूरी देण्यात येत आहे.

१. सदर अभ्यासक्रमाच्या वाढीव प्रवेशक्षमतेस कुलसचिव, राष्ट्रसंत तुकडोजी महाराज नागपूर विद्यापीठ, नागपूर यांची
   संलग्नता घ्यावी लागेल.

२. प्रवेशक्षमता वाढीस दिलेली मंजूरी विना-अनुदान तत्वावर राहील. त्यासाठी कोणत्याही प्रकारचे आवर्ती व ?
   अनुदान शासनाकडून मंजूर केले जाणार नाही.

३ विना-अनुदान पदवी अभ्यासक्रमाच्या बाबतीत वेळोवेळी राज्यशासन अखिल भारतीय तंत्रशिक्षण प
  संचालनालयाकडून करण्यांत आलेल्या/येणा-या नियमांचे, प्रवेश नियमांचे, आरक्षण, शिक्षण शुल्क व
  संबंधीच्या निर्णयांचे पालन करणे संस्थेस बंधनकारक राहील.

४. वाढीव प्रवेशक्षमतेसाठी विद्यापीठ व राज्यशासन यांच्या मानके व प्रमाणके नुसार शिक्षक व शि
   नियुक्त करण्यांत यावी व त्यांना नियमांप्रमाणे वेतन व भत्ते देण्यात यावेत.

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५. संचालक, किंवा त्यांचे प्रतिनिधी यांना अखिल भारतीय तंत्रशिक्षण परिषद/शासनाच्या मानकांप्रमाणे जागा, इमारत, शिक्षक व शिक्षकेतर कर्मचारी व इतर सोयीसुविधा उपलब्ध आहेत किंवा कसे याबाबत संस्थेत केव्हाही अचानक भेट देऊन तपासणी करण्याचे अधिकार राहतील.

६. रॅगिंग संदर्भात मा.सर्वोच्च न्यायालयाचे निर्देश व महाराष्ट्र प्रोव्हिबिशन ऑफ रॅगिंग ॲक्ट, १९९९ यांची कठोरपणे अंमलबजावणी करणे संस्थेला बंधनकारक आहे.

७. संचालनालयाच्या माहिती तंत्रज्ञान कक्षाकडून दिलेल्या संकेत क्रमांक व पासवर्डद्वारे शिक्षण शुल्क समितीने निश्चित केलेल्या शुल्कासंबंधील व संस्थेची इतर सर्व याबीसंबंधीची माहिती संस्था वेळोवेळी अद्ययावत करतील.

(डॉ. सुभाष महाजन)
प्र. संचालक,
तंत्रशिक्षण संचालनालय, म.रा., मुंबई.

प्रत.
१. मा.प्रधान सचिव, महाराष्ट्र शासन, उच्च व तंत्रशिक्षण विभाग, मंत्रालय विस्तार भवन, मुंबई यांना संदर्भाधीन शासन निर्णयाच्या संदर्भात माहितीसाठी सादर..
२. मा.कुलसचिव, राष्ट्रसंत तुकडोजी महाराज नागपूर विद्यापीठ, नागपूर यांना माहिती व योग्य कार्यवाहीसाठी.
३. सहसंचालक, तंत्रशिक्षण विभागीय कार्यालय, नागपूर यांना माहितीस्तव.
४. कार्यासन क्र.२-अ, मुख्य कार्यालय, मुंबई.
५. निवडनस्ती कक्ष.. (पश्चिमी बंगाल) यांना माहिती व योग्य कार्यवाहीसाठी.
६. निवड नस्ती.

① सरकारची Rs.४३ Receipt.
② Rs. 1600/- lay. ५१९ गी ८० Affi.
③ AICTE letter
④ Govt - G.R. copy
⑤ DTE copy.
NBA covering letter.
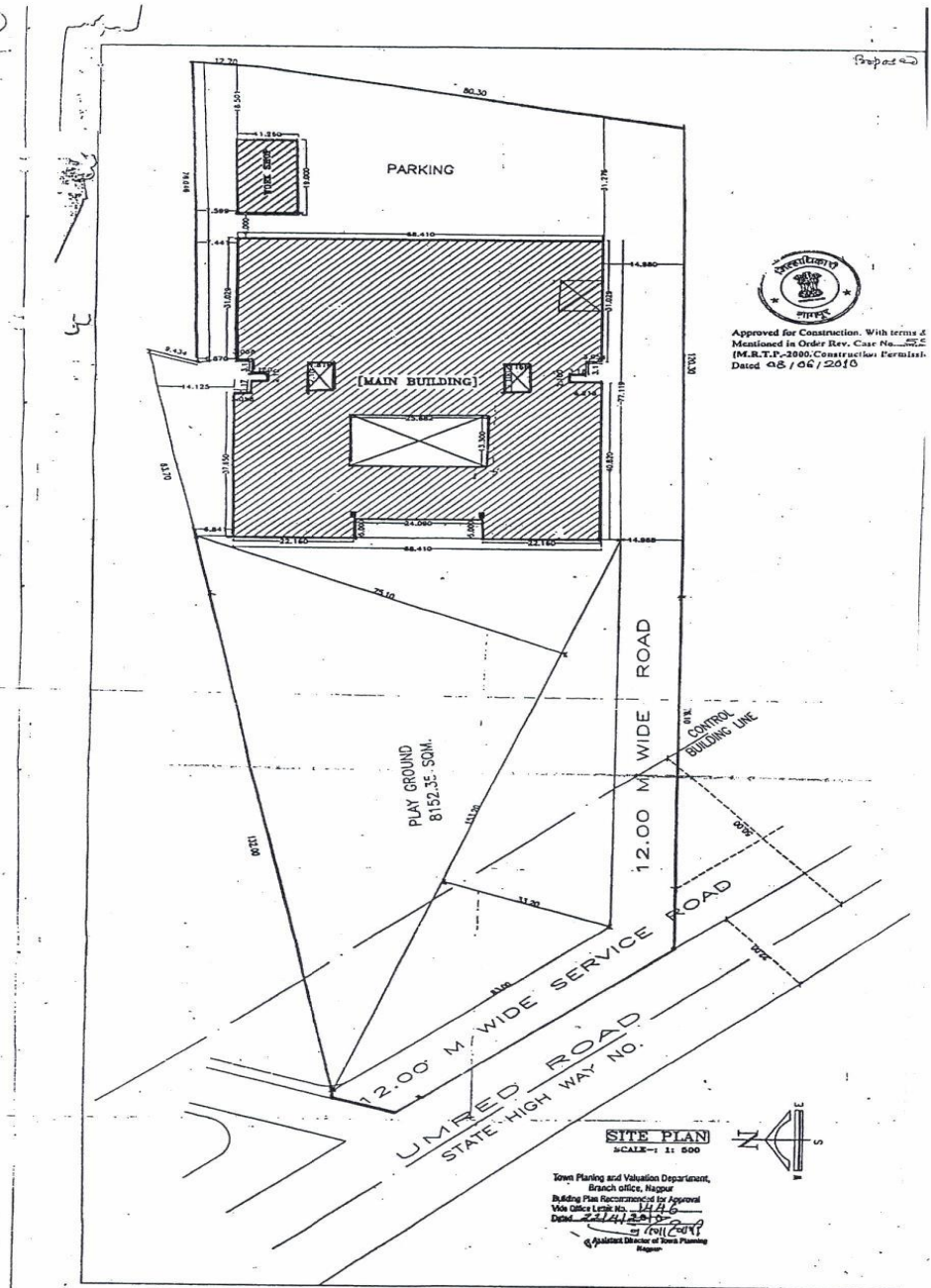
SITE PLAN

CERTIFICATE BY THE ARCHITECT[2]

The copies of approved site plan and building plans in respect of application submitted by **President of National Rural Development & Research Society, Plot No.4-B, Gurudeo Nagar, Hudkeshwar Road, Nagpur,** who is an applicant for establishment of new technical Institution **Suryodaya College of Engineering & Technology, at Survey No.117/1 & 117/3, Vihirgaon, Umrer Road, Tah. & Dist. Nagpur (M.S.)** were provided to me by **President of National Rural Development & Research Society, Plot No.4-B, Gurudeo Nagar, Hudkeshwar Road, Nagpur** for verification regarding their authenticity and appropriateness.

Details of Site Plan and Building Plans

Plans approved by	The Collector, Nagpur District, Nagpur
Approval Number	PRASTUT/Collector/KAVI-1096/2010
Date of Approval	08/06/2010

I hereby certify that:

1. The competent authority for approving the site plan and building plans of an educational Institute at the proposed site mentioned above is **The Collector, Nagpur District, Nagpur & Deptt. of Town Planning, Nagpur.**

2. I have verified the above-mentioned site plan and building plans from the office of **The Collector, Nagpur District, Nagpur & Deptt. of Town Planning, Nagpur.**

3. The above-mentioned site plan and building plans have been approved by the competent authority i.e. **The Collector, Nagpur District, Nagpur & Deptt. of Town Planning, Nagpur.**

4. The above-mentioned site plan and building plans are **authentic.**

5. Construction of building admeasuring with the following details has been completed in all respects as per the approved building plan.

Sr. No.	Room No	Room type (mention Class room / Lab/Toilet, etc.)	Carpet area (in sqm)	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
		INSTRUCTIONAL AREA				
1	G-17	Class Room – 1	66.25	Completed	Completed	Completed
2	G-22	Class Room – 2	76.74	Completed	Completed	Completed
3	G-26	Class Room – 3	78.70	Completed	Completed	Completed

OFFICE :- 106, Ram Apartment, First Floor, Tiranga Sq., Near Sangam Talkies, Nagpur-9.

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4	G-27	Class Room – 4	76.74	Completed	Completed	Completed
5	G-29	Class Room – 5	79.00	Completed	Completed	Completed
6	F-01	Class Room – 6	66.34	Completed	Completed	Completed
7	F-02	Class Room – 7	84.32	Completed	Completed	Completed
8	F-11	Class Room – 8	66.37	Completed	Completed	Completed
9	F-15	Class Room – 9	89.34	Completed	Completed	Completed
10	F-19	Class Room – 10	66.89	Completed	Completed	Completed
11	F-20	Class Room – 11	66.89	Completed	Completed	Completed
12	F-25	Class Room – 12	76.74	Completed	Completed	Completed
13	F-29	Class Room – 13	78.07	Completed	Completed	Completed
14	F-30	Class Room – 14	67.18	Completed	Completed	Completed
15	F-32	Class Room – 15	79.00	Completed	Completed	Completed
16	F-35	Class Room – 16	78.85	Completed	Completed	Completed
17	F-37	Class Room – 17	78.54	Completed	Completed	Completed
18	S-35	Class Room – 18	78.7	Completed	Completed	Completed
19	T-04	Class Room – 19	85.95	Completed	Completed	Completed
20	S-13	Class Room – 20	117.22	Completed	Completed	Completed
21	S – 36	Class Room – 21	60.39	Completed	Completed	Completed
22	S – 38	Class Room – 22	72.88	Completed	Completed	Completed
23	S-46	Class Room – 23	78.85	Completed	Completed	Completed
24	S-47	Class Room – 24	100.81	Completed	Completed	Completed
25	S-48	Class Room – 25	92.34	Completed	Completed	Completed
26	S – 15	Class Room – 26	67.18	Completed	Completed	Completed
27	S – 16	Class Room – 27	70.94	Completed	Completed	Completed
28	S – 17	Class Room – 28	84.87	Completed	Completed	Completed
29	S-14	Class Room – 29	109.32	Completed	Completed	Completed
30	S – 23	Class Room – 30	139.69	Completed	Completed	Completed
31	G-06	Tutorial - 1	41.25	Completed	Completed	Completed
32	G-07	Tutorial - 2	41.09	Completed	Completed	Completed
33	F-08	Tutorial - 3	40.55	Completed	Completed	Completed
34	F-12	Tutorial - 4	90.83	Completed	Completed	Completed
35	S-12	Tutorial - 5	74.3	Completed	Completed	Completed
36	S-20	Tutorial - 6	85.41	Completed	Completed	Completed
37	S – 21	Tutorial - 7	67.63	Completed	Completed	Completed
38	S - 22	Tutorial - 8	66.42	Completed	Completed	Completed

39	S – 24	Tutorial - 9	87.35	Completed	Completed	Completed
40	S – 25	Tutorial - 10	71.73	Completed	Completed	Completed
41	S-27	Tutorial - 11	66.05	Completed	Completed	Completed
42	S-28	Tutorial - 12	59.64	Completed	Completed	Completed
43	T-01	Tutorial - 13	67.55	Completed	Completed	Completed
44	T-02	Tutorial - 14	67.55	Completed	Completed	Completed
45	G-12	Lab - 1	40.55	Completed	Completed	Completed
46	G-13	Lab – 2	155.78	Completed	Completed	Completed
47	G-14	Lab – 3	91.05	Completed	Completed	Completed
48	G-15 A	Lab – 4	72.62	Completed	Completed	Completed
49	G-15 B	Lab – 5	97.50	Completed	Completed	Completed
50	G-16	Lab – 6	66.25	Completed	Completed	Completed
51	G-20 A	Lab – 7	88.37	Completed	Completed	Completed
52	G-20 B	Lab – 8	88.37	Completed	Completed	Completed
53	G-21 A	Lab – 9	68.74	Completed	Completed	Completed
54	G-21 B	Lab – 10	68.74	Completed	Completed	Completed
55	G-30	Lab – 11 (Computer)	175.00	Completed	Completed	Completed
56	F-03 A	Lab – 12	69.54	Completed	Completed	Completed
57	F-03 B	Lab – 13	69.54	Completed	Completed	Completed
58	F-06	Lab – 14	115.66	Completed	Completed	Completed
59	F-10	Lab – 15	117.25	Completed	Completed	Completed
60	F-13	Lab – 16	89.34	Completed	Completed	Completed
61	F-14	Lab – 17	89.34	Completed	Completed	Completed
62	F-16	Lab – 18	92.34	Completed	Completed	Completed
63	F-17	Lab – 19	92.34	Completed	Completed	Completed
64	F-18	Lab – 20	92.34	Completed	Completed	Completed
65	F-21	Lab – 21	137.72	Completed	Completed	Completed
66	F-22 A	Lab – 22	88.37	Completed	Completed	Completed
67	F-22 B	Lab – 23	88.37	Completed	Completed	Completed
68	F-23	Lab – 24	83.23	Completed	Completed	Completed
69	F-26	Lab – 25	100.00	Completed	Completed	Completed
70	F-33 A	Lab – 26	75.16	Completed	Completed	Completed
71	F-33 B	Lab – 27	75.16	Completed	Completed	Completed
72	F-33 C	Lab – 28	75.16	Completed	Completed	Completed

73	F-33 D	Lab – 29	75.16	Completed	Completed	Completed
74	F-34	Lab – 30	66.34	Completed	Completed	Completed
75	F-36	Lab – 31	65.72	Completed	Completed	Completed
76	S-01	Lab – 32	66.94	Completed	Completed	Completed
77	S-02	Lab – 33	66.94	Completed	Completed	Completed
78	S-03	Lab – 34	72.41	Completed	Completed	Completed
79	S-04	Lab – 35	72.41	Completed	Completed	Completed
80	S-07	Lab – 36	54.07	Completed	Completed	Completed
81	S-34	Lab – 37	53.29	Completed	Completed	Completed
82	S-39	Lab – 38	85.91	Completed	Completed	Completed
83	S-40 A	Lab – 39	66.02	Completed	Completed	Completed
84	S-40 B	Lab – 40	66.02	Completed	Completed	Completed
85	S-41	Lab – 41	98.41	Completed	Completed	Completed
86	T-05	Lab – 42	85.97	Completed	Completed	Completed
87	S-42	Lab – 43	65.00	Completed	Completed	Completed
88	S-43	Lab – 44	65.00	Completed	Completed	Completed
89	S-10	Lab – 45	64.14	Completed	Completed	Completed
90	S-44	Lab – 46	65.72	Completed	Completed	Completed
91	T-11	Lab – 47	145.71	Completed	Completed	Completed
92	WS-01	Lab – 48	207.27	Completed	Completed	Completed
93	WS-02	Lab – 49	216.02	Completed	Completed	Completed
94	WS-03	Lab – 50	214.38	Completed	Completed	Completed
95	WS-04	Lab – 51	200.27	Completed	Completed	Completed
96	WS-05	Lab – 52	211.20	Completed	Completed	Completed
97	T-09	Lab – 53	78.85	Completed	Completed	Completed
98	T-10	Lab - 54	65.72	Completed	Completed	Completed
99	T-06	Lab - 55	123.43	Completed	Completed	Completed
100	T-07	Lab - 56	166.99	Completed	Completed	Completed
101	T-08	Lab - 57	65.72	Completed	Completed	Completed
102	F-09	Drawing Hall (Mechanical)	179.04	Completed	Completed	Completed
103	F-38	Seminar Hall - 1 (Mech.)	197.61	Completed	Completed	Completed
104	S-18	Seminar Hall - 2 (Electrical)	188.64	Completed	Completed	Completed
105	S-19	Seminar Hall - 3 (ETC)	189.84	Completed	Completed	Completed

106	T-12	Seminar Hall - 4 (Civil)	152.71	Completed	Completed	Completed
107	T-13	Seminar Hall - 5 (Computer)	152.71	Completed	Completed	Completed
108	G-04	Others	113.61	Completed	Completed	Completed
109	G-19	Library	403.52	Completed	Completed	Completed
110	G-18	Reading Room	198.125	Completed	Completed	Completed
ADMINISTRATIVE AREA						
111	G-01	Principal Office	31.67	Completed	Completed	Completed
112	G-02	President Office	34.71	Completed	Completed	Completed
113	G-31	Board Room	123.43	Completed	Completed	Completed
114	G-03	Office	301.63	Completed	Completed	Completed
115	G-28A	Department Office - 1 (S&H)	22.13	Completed	Completed	Completed
116	F-07A	Department Office - 2 (Mech.)	20.27	Completed	Completed	Completed
117	F-24A	Department Office - 3 (Civil)	41.93	Completed	Completed	Completed
118	F-31A	Department Office - 4 (Com.)	26.94	Completed	Completed	Completed
119	S-37A	Department Office -5 (ETC)	33.04	Completed	Completed	Completed
120	S-45A	Department Office - 6 (Elect.)	35.02	Completed	Completed	Completed
121	G-28B	HOD Cabin - 1 (S & H)	22.13	Completed	Completed	Completed
122	F-07B	HOD Cabin - 2 (Mechanical)	20.27	Completed	Completed	Completed
123	F-31B	HOD Cabin - 4 (Computer)	26.94	Completed	Completed	Completed
124	S-37B	HOD Cabin - 5 (ETC)	33.04	Completed	Completed	Completed
125	S-45B	HOD Cabin - 6 (Electrical)	29.37	Completed	Completed	Completed
126	S-31	Maintenance	12.76	Completed	Completed	Completed
127	S-30	Housekeeping	12.76	Completed	Completed	Completed
128	G	Security	10.52	Completed	Completed	Completed
129	T-03	Faculty Room	136.87	Completed	Completed	Completed
130	S-29	Pantry for Staff	10.14	Completed	Completed	Completed
131	G-05	Placement Office	51.25	Completed	Completed	Completed
132	G-08	Examination Control Room	41.09	Completed	Completed	Completed
133	S-08 A	Department Office	25.19	Completed	Completed	Completed
134	S-08 B	HOD Cabin	20.27	Completed	Completed	Completed

135	S-09 A	Department Office	33.04	Completed	Completed	Completed
136	S-09 B	HOD Cabin	33.04	Completed	Completed	Completed
137	S-11	Faculty Room	86.58	Completed	Completed	Completed
138	S-26	Department Office	25.19	Completed	Completed	Completed
AMMENITIES AREA						
139	G	Cafeteria	162.75	Completed	Completed	Completed
140	G-10	Girls Common Room	115.66	Completed	Completed	Completed
141	G-11	Central Store	40.55	Completed	Completed	Completed
142	G-23	Boys Common Room	100	Completed	Completed	Completed
143	G-19	Reprography/ Stationary	23.63	Completed	Completed	Completed
144	G-32	First Aid cum Sick Room	22.94	Completed	Completed	Completed
145	G-09	Boys Toilet	26.75	Completed	Completed	Completed
146	G-33	Girls Toilet	31.03	Completed	Completed	Completed
147	G-24	Boys Toilet	29.48	Completed	Completed	Completed
148	G-25	Girls Toilet	42.68	Completed	Completed	Completed
149	F-04	Boys Toilet	26.75	Completed	Completed	Completed
150	F-05	Girls Toilet	31.03	Completed	Completed	Completed
151	F-27	Boys Toilet	29.48	Completed	Completed	Completed
152	F-28	Girls Toilet	42.68	Completed	Completed	Completed
153	S-05	Boys Toilet	26.75	Completed	Completed	Completed
154	S-06	Girls Toilet	31.03	Completed	Completed	Completed
155	S-32	Boys Toilet	29.48	Completed	Completed	Completed
156	S-33	Girls Toilet	42.68	Completed	Completed	Completed
157	G-34	Handicap Toilet (Boys)	10.625	Completed	Completed	Completed
158	G-35	Handicap Toilet (Girls)	10.625	Completed	Completed	Completed

Signature of the Architect:

Name of the Architect: Rajendra k. chindhe

Registration: CA/88/11408

Date: 31/1/2017

Seal

R. K. Chindhe
B.ARCH.
ARCHITECT & DESIGNER
Reg. No. CA/88/11408
NIT. Lic. No.384 Place:
NMC. Lic. No. R-43

R. S. Dadhe
B.E. (Civil)
Licensed Engineer
NIT. Lic. No. 523
NMC. Lic. No. NMC / L-51

Nagpur.

Office - First Floor, 106, Ram Apartment, Near Sang... Nagpur

NATIONAL RURAL DEVELOPMENT & RESEARCH SOCIETY'S

Suryodaya College of Engineering & Technology

Survey No. 117 / 1 & 117 / 3 Vihirgaon, Umrer Road, Tah. & Dist Nagpur (M.S.) 441 204

CERTIFICATE OF COMPLIANCE

This is to certify that **Suryodaya College of Engineering & Technology, Vihirgaon, Umrer Road, Nagpur – 441204 (M.S.)** fulfills all norms stipulated by the affiliating University Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur & the All India Council for Technical Education (AICTE) & the affiliation and recognition is valid on 30.03.2017.

In case the affiliation / recognition is conditional, then a detailed enclosure with regard 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.

Place: Nagpur

Date: 30.03.2017

Dr. Santosh D. Chede
Principal
Principal
Suryodaya College of Engineering
& Technology, Nagpur.

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NATIONAL RURAL DEVELOPMENT & RESEARCH SOCIETY'S

Suryodaya College of Engineering & Technology

Survey No. 117 / 1 & 117 / 3 Vihirgaon, Umrer Road, Tah & Dist Nagpur (M.S.) 441 204

Declaration by the 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.

Place: Nagpur

Date : 30.03.2017

Signature of the Head of the Institution
with seal:
Principal
Suryodaya College of Engineering
& Technology, Nagpur.

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