

SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

G.H. RAISONI COLLEGE OF ENGINEERING AND MANAGEMENT

G H RAISONI COLLEGE OF ENGINEERING AND MANAGEMENT, GAT NO.
1030, AT. POST. CHAS, TAL. NAGAR, DIST. AHMEDNAGAR, PIN-414005,
MAHARASHTRA

414005

<http://ghrcemahm.raisoni.net/>

SSR SUBMITTED DATE: 06-01-2018

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

January 2018

NAAC

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

G. H. Raison College of Engineering & Management, Ahmednagar was established in 2008. The mission of college is to impart quality and value based education to raise satisfaction level of all stake-holders. The college is Linguistic minority Institution and self-financed.

The college is affiliated to the University of Pune and approved by AICTE. It is running five UG courses, two PG courses and two Diploma course. It is located in rural area. The campus is spread over the area of 10 acres. of land. It has boy's hostel with capacity of 240 inmates and one girl's hostel with capacity of 120 inmates. We have sufficient facilities for teaching learning process.

Objectives:

- To provide Secular, Caring, Disciplined & Ethical Environment that encourages the students & staff to be the best that they can be.
- To strengthen Institute – Industry Interaction.
- To develop Teamwork.
- To develop Entrepreneurship qualities in the Students & ultimately mould them to become good human beings.
- To adopt progressively new Technologies in the teaching & Learning Process.
- Pursue growth in harmony with the global community through innovative management.
- Develop enthusiastically satisfied customers all of the time.
- Provide a great work environment and treat each other with respect and dignity.

Vision

To achieve excellent standards of quality education by keeping pace with rapidly changing technologies and create technical manpower of global standards with capabilities of accepting new challenges.

Mission

Our efforts are dedicated to impart quality and value based education to raise satisfaction level of all stake holders. Our strength is directed to create competent professionals. Our Endeavour is to provide all possible support to promote research and development activities.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Our Institute is governed by a very strong group in engineering education with proactive management.
- Harmonious relationship among the members of the management, staff, students and parents.

- The infrastructural support offered by the College to students can compare with the best in this part of the country.
- The College has a dedicated faculty, highly efficient support staff, and a team of monastic members who are available in the campus round the clock and take care of all aspects of the campus, the academic and the personal.
- Laboratories are well equipped with instruments, trainers, software and computing facilities.
- Orientation of Institute towards Research and emphasis on overall development of faculty for quality through research activity and faculty development program.
- Adherence to academic calendar is followed.
- LMS tool like RAMS/AIMS, ICT tools, etc are used for effective teaching learning and student feedback mechanism.
- Feedback of all stake holders are collected, analyzed and used for overall development/modification of processes.
- The College has an active alumni association which works in close co-operation with the College administration.
- Industry sponsored and agriculture based projects are carried out in the college which helps the stake holders to enhance the use of technology in agricultural industry and motivate students to become entrepreneur.

Institutional Weakness

- Institute is located little far away from main city which creates travelling inconvenience.
- Students having average marks in the qualifying examination are mostly taking admission.
- The socio-economic background of many of the students admitted in the College is responsible for poor language competence. This leads to an unsatisfactory level of comprehension and communication.
- Lack of senior and experienced faculty, particularly doctorates and retention ratio is poor.

Institutional Opportunity

- Ahmednagar is located near Pune, Nashik, Aurangabad and Mumbai with good linkages to invite visiting/expert faculty.
- It is possible to have collaboration with R&D Organizations, TIFR, NCL and COEP for research collaboration.
- Industry experts can be involved for enhancement of skills, updating and upgrading of knowledge of the faculty and students.
- Location advantage for strengthening extension activities with nearby rural areas.
- Undertaking industry based and industry related projects by UG and PG students to improve the quality of projects.
- Faculty members can be further motivated for the higher education/research work.

Institutional Challenge

- Poor communication skills of the students.
- Hunting, employing and retaining the qualified and experienced faculty.
- Placements are not up to the mark and hence a big challenge.

- Inadequate public awareness in rural areas for engineering profession and job opportunities.
- To attract good and meritorious students for admission and also to improve the admission count.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The Institute is affiliated to Savitribai Phule Pune University (SPPU) and follows curriculum provided by them. All the examinations are conducted by SPPU. The examinations are semester based. Curriculum comprises of lectures, practicals, tutorials and online exams. Evaluation is carried through written examinations, practical examinations, viva voce and online examination by SPPU. Some subjects have term-work, seminar and mini project report as fulfillment of curriculum. In addition to this, students have to do mini project in third year and major projects final year.

SPPU has introduced the online exam pattern, in 2012-13 for first year and second year of engineering students. University has provided flexibility in curriculum by introducing four electives / optional subjects in the final year with each elective having three options. Some of the electives are interdisciplinary and multidisciplinary. The students are taking benefit of these particular schemes. Teaching faculties are invited by Board of Studies (BOS), of faculty of engineering, of SPPU for revision and designing of curriculum.

Feedback received from all stake holders is analyzed and used for further improvement. The college proactively arranges workshops, seminars and expert lectures to keep the students updated with latest modern technology and practices not included in curriculum.

Teaching-learning and Evaluation

Institute is concerned about the efforts to work for students from different environments and levels by productive and interactive teaching learning techniques to create higher order thinking in students by using various tools and resources. For enrolling students, institute strictly adheres to the rules and regulations of government of Maharashtra (DTE) and other regulatory authorities. The norms regarding the eligibility criteria, admission policies for different reservations, courses and facilities offered by institute are published in information brochure by institute in well advanced. The institute takes special efforts for initial assessment of enrolled students from diverse backgrounds to understand their learning levels and accordingly plans various activities for their overall development. For this, various teaching learning techniques are implemented by institute which includes synergistic, participative and collaborative approaches through learning management systems and practicum.

Institute maintains teachers' quality by decorous recruitment process and upgrades their quality through different training programs. To accelerate the effectiveness and efficiency of understudies the institute makes reforms in continuous internal evaluation process for outcome based education. The institute monitors the evaluation process by testing quality of exam questions, regular conduction of examination, timely declaration of results and redressal mechanism for grievances.

To achieve the graduate traits in students the institute conducts various activities by considering POs, PSOs, COs. For continuous improvement in teaching learning process institute takes various feedbacks like, student, parents, teachers, alumni and employer feedback. Thus, Teaching-learning criteria cater for overall

development of students and institute tries to makes ideal technocrats.

Research, Innovations and Extension

During the last five years institute received grants of 123.124 lakhs for research projects (73) sponsored by Government and non-government sources such as industry, corporate house.

Institution has created an ecosystem for innovations including incubation center to promote startup and entrepreneurship innovations development along with PM YUVA YOJANA. Also other initiatives taken for creation and transfer of knowledge like Industry Institute Interactions, Guest Lecture, Industrial Visit, and Industry sponsored projects, motivation to faculty member and students for publications, professional membership etc. Seminars have been arranged for IPR. Institute has stated code of ethics to check malpractices and plagiarism in research.

Institute provides incentives to teachers who receive state, national and international recognition/awards. Faculties have published 2 books; 27 research paper in UGC notified journals; and 107 paper published in nation/international conference- proceedings.

The college has significantly contributed in extension activities and outreach programs under corporate social responsibilities like blood donation, tree plantation, street lighting, 'swatchha bharat abhiyan', visit to old-age home, computer awareness program for village women, TIU, career guidance to nearby school and high school students, Yoga day, art of living, traffic awareness program etc. The institute also organized various activities through NSS, Rotary Club. Due to above contribution to the society, institute has received various awards from Governments and Non-Government agencies.

Through various linkages like internship, field trip, live field projects, and collaborations, MoUs with industries, corporate houses etc. the institute focused to bridge gap between industry and institution during last five year.

Infrastructure and Learning Resources

Institute has well developed infrastructure in 10 acre area. The institution has provided adequate facilities for teaching– learning, viz., classrooms, laboratories, computing equipment, etc. as per the AICTE, State Government and SPPU norms. Institute is also focused on providing sports facilities for indoor and outdoor games, facilities for cultural, yoga Centre, etc. Institute has ICT facilities and are effectively utilized. Institute has also established one smart class room to make students more aware of recent teaching techniques. Institute is also more focused on infrastructure augmentation, yearly average budget allocated for infrastructure augmentation is 7.02%.

Library is well developed along with digital library and reading room. Library has sufficient number of books and other data resourses. It is also enriched with rare books, special reports, manuscript, NPTEL video lectures. The Library is automated with *SyNchRoniK* software, which is annually updated from service provider. The institute has membership of e-journals to make students and faculties up to date with current research. Institute has taken subscription from DELNET for availability numerous e-books, journals, etc along with that institute has preserve wide database of various e-resources like e-books/pdf books, NPTEL video lectures, etc.

Institute regularly updates the various IT facilities. Institute has internet facility through lease line from Vodafone and BSNL. Institute has adequate number of computers. Average expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years is 42%. Institute has established SOP'S for maintaining physical, academic and support facilities.

Student Support and Progression

Institute assists the students to avail the benefit of scholarships that are at government & non-government level. For student's-welfare various committees in college are formed, that takes care of circular & extra circular activities. At institute level various expert lectures, and workshops for career guidance, competitive and entrance examinations are organized. Technical event 'PAROKSHA' is organized every year by institute. Besides organizing extra classes, Institute organizes personality development and communication skill enhancement workshops. Institute supports student to excel in different domain such as awards in academics, sports, placement and higher education.

In order to give opportunity and platform to talented students and sportsman, college organizes Annual sports meet and social & cultural gathering 'ANTARAGNI' every year. These are organized by Students and sports committees. Institute takes effort to make atmosphere friendly under the scheme of mentor-mentee. It provides necessary support in academic professional and professional needs.

G.H RaisonI Alumni foundation has been formed & maintain to provide platform for its alumni to connect lifelong connection through "YAADEIN". Alumni meets are conducted every year by college. Alumni contributes in teaching & learning process like expert lectures, arranging industry visits. T& P department is formed that provides training in technical aptitude & personal competency & facilitates job placements.

Governance, Leadership and Management

Institute vision and mission is stated and to achieve it various decision making levels are structured. Participative management from each level is executed using decentralization.

As per the strategic plan, solar power plant project has described in detail with deployment documents. Organizational structure defines the functions of various levels. According to the area of e-governance, software likes RAMS, AIMS, and SyNcHrOnIk are used. Various bodies/cells/committees work effectively according to need.

Different welfare measures for teaching and non-teaching are stated and provided. Financial support is provided to teaching staff members for attending different technical programs. Institute has organized 52 professional development programs for teaching staff members. Performance appraisal system for teaching and non-teaching staff has been described in detail.

Various internal and external financial audits carried out regularly. We have stated different institutional strategies, policies and procedures for mobilization of funds.

Benefits, strategies and processes of IQAC has helped institute in improving quality standards. Teaching learning process, methodologies of operations and learning outcomes are stated. Institutional reviews and teaching learning reforms described with the help of outcome base teaching learning and CIA evaluation

process. According to the suggestions given by NAAC peer team in year 2015, Institute has accomplished incremental improvements to provide the quality education. Under the IQAC quality initiatives has been taken.

Institutional Values and Best Practices

During the last five years institute has organized 27 Gender Equity program in the campus. For providing safety and security CCTV-cameras installed, Counseling done and common room facility provided. 2983-kWH solar power energy has been used in last year. We have replaced 139-LED bulbs instead of CFL bulbs.

Solid waste and sewage water is used as fertilizer for plants. Around 3-Lac liters Water is charged into the groundwater by successfully implementation of Rainwater harvesting practice. We regularly conduct different activities for green initiatives like Tree plantation, Plastic free campus. Green audit has been done.

We have facilities for Divyangjan like wheelchair, Ramps, Braille software, Rest Rooms, Common Rooms, scribes for examination and Ambulance.

We implemented total 21 programs during last 5 years like adaptation of chas village TIU program sweet and cloths distributed to orphanage home, Woman's day, traffic awareness program etc. We organized a skit on 'Swacha Bharat Abhiyan', visited firodiya oldage home and computer training given to village woman. The institute organizes different programs for the improvement of Human values and Professional ethics. Institute encourages to celebrate national festivals in order to pay homage to the nation like Independence-Day, Tiranga Ralley, Janjagruti-abhiyan for voters.

The institute maintains transparency in financial, academic and administrative work by using AIMS, RAMS and SynchRonik Software's.

To scrutinize Eco-system for academic development institute introduced mentor-mentee program, RAMS, AIMS and feedback from stake holders is taken to improve the overall progress of institute. Technical projects are developed for development of agriculture industry.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	G.H. RAISONI COLLEGE OF ENGINEERING AND MANAGEMENT
Address	G H Raison College of Engineering and Management, Gat No. 1030, At. Post. Chas, Tal. Nagar, Dist. Ahmednagar, Pin-414005, Maharashtra
City	Ahmednagar
State	Maharashtra
Pin	414005
Website	http://ghrcemahm.raisoni.net/

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Chandrashekar V. Ghule	0241-2570123	9323135702	0241-2570110	ghrcemahm@raisoni.net
IQAC Coordinator	Vishal P. Bhope	0241-2570086	8554035553	-	vishal.bhope@raisoni.net

Status of the Institution	
Institution Status	Private

Type of Institution	
By Gender	Co-education
By Shift	Regular Day Evening

Recognized Minority institution	
If it is a recognized minority institution	Yes
If Yes, Specify minority status	
Religious	
Linguistic	Hindi
Any Other	

Establishment Details				
Date of establishment of the college	27-07-2008			
University to which the college is affiliated/ or which governs the college (if it is a constituent college)				
State	University name	Document		
Maharashtra	Savitribai Phule Pune University	View Document		
Details of UGC recognition				
Under Section	Date			
2f of UGC	06-12-2016			
12B of UGC				
Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	10-04-2017	12	

Details of autonomy	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	Yes
If yes, has the College applied for availing the autonomous status?	No

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

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	G H Raison College of Engineering and Management, Gat No. 1030, At. Post. Chas, Tal. Nagar, Dist. Ahmednagar, Pin-414005, Maharashtra	Rural	10	20837.02

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Civil Engineering	48	XII Science PCM and CET with non zero score	English	240	141
UG	BE,Mechanical Engineering	48	XII Science PCM and CET with non zero score	English	420	242
UG	BE,Electrical Engineering	48	XII Science PCM and CET with non zero score	English	240	60
UG	BE,Computer Engineering	48	XII Science PCM and CET with non zero score	English	120	62
UG	BE,Electronics And Telecommunication Engineering	48	XII Science PCM and CET with non zero score	English	120	30
PG	ME,Civil Engineering	24	Graduation in Civil and non zero GATE score	English	48	26
PG	ME,Mechanical Engineering	24	Graduation in Mechanical and non zero GATE score	English	48	10

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	4				11				83			
Recruited	3	0	0	3	0	0	0	0	63	20	0	83
Yet to Recruit	1				11				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				29
Recruited	28	1	0	29
Yet to Recruit				0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				23
Recruited	19	4	0	23
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	3	0	0	0	0	0	0	0	0	3
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	52	18	0	70

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	13	0	0	13

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
PG	Male	30	1	0	0	31
	Female	7	0	0	0	7
	Others	0	0	0	0	0
UG	Male	441	1	0	0	442
	Female	99	0	0	0	99
	Others	0	0	0	0	0
Diploma	Male	161	0	0	0	161
	Female	21	0	0	0	21
	Others	0	0	0	0	0
Certificate	Male	157	0	0	0	157
	Female	63	0	0	0	63
	Others	0	0	0	0	0

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

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	8	10	11	5
	Female	2	2	7	1
	Others	0	0	0	0
ST	Male	0	1	1	0
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	12	37	42	38
	Female	7	7	10	9
	Others	0	0	0	0
General	Male	34	122	128	97
	Female	10	19	23	16
	Others	0	0	0	0
Others	Male	7	23	46	13
	Female	2	3	3	5
	Others	0	0	0	0
Total		82	224	271	184

3. Extended Profile

3.1 Programme

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

Response : 13

Number of self-financed Programmes offered by college

Response : 9

Number of new programmes introduced in the college during the last five years

Response : 7

3.2 Student

Number of students year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
935	1451	1382	1196	914

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

2016-17	2015-16	2014-15	2013-14	2012-13
337	337	337	251	164

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

2016-17	2015-16	2014-15	2013-14	2012-13
430	485	320	281	159

Total number of outgoing / final year students

Response : 280

3.3 Academic

Number of teachers year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
135	145	114	113	96

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

2016-17	2015-16	2014-15	2013-14	2012-13
117	117	114	113	96

Number of sanctioned posts year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
135	145	114	113	96

Total experience of full-time teachers**Response : 691****Number of teachers recognized as guides during the last five years****Response : 4****Number of full time teachers worked in the institution during the last 5 years****Response : 364****3.4 Institution****Total number of classrooms and seminar halls****Response : 32****Total Expenditure excluding salary year wise during the last five years (INR in Lakhs)**

2016-17	2015-16	2014-15	2013-14	2012-13
856.79	845.14	847.24	1107.00	828.46

Number of computers

Response : 394

Unit cost of education including the salary component(INR in Lakhs)

Response : 1.267

Unit cost of education excluding the salary component(INR in Lakhs)

Response : 0.728

NAAC

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

We adopt the curriculum provided by the Savitribai Phule Pune University for UG and PG courses and MSBTE Board for Diploma. The Institution has developed a structured and effective implementation of the curriculum.

Following are the various means through which the curriculum planning and implementation is executed:

Principal Meeting:

- Such meetings are held once in one month.
- Head of the Departments discusses their action plans to achieve an optimal outcome by adopting various effective ways of planning & delivering curriculum.

HOD's Meeting:

- HOD's Meetings are held once in 15 days.
- Head of the Department discuss their action plans with the staff members and implement the action plan discussed in principal's meeting.

Academic Calendar:

- Academic Calendar of the Institute is approved by IQAC Cell.
- Academic Calendar and Activity Calendar are prepared in line with Savitribai Phule Pune University & MSBTE academic calendar/schedule; various activities such as technical, sports, cultural are taken care of in this calendar.
- Content beyond curriculum is planned at the beginning of the semester.

Course Delivery:

- Apart from the regular faculty of the institution, the College invites industry experts, academicians from various universities and research bodies to deliver lectures and to interact with students.

- The college has MOUs with industries and organizations for internship, student projects, guest lectures & placements .
- Seminars and Workshops based on the curriculum are conducted for the academic enrichment of the students.
- Poster Presentation Competitions, Quizzes, etc. are conducted by the departments in relevant fields in connection with the curriculum.
- Interactive classrooms have been set up for the more effective dissemination of knowledge .
- All classes are equipped with ICT facilities for easy and effective delivery of the curriculum.
- Teachers are given periodic training to update their technical know-how on recent developments in academic areas.
- In addition to the central library, Department libraries have been set up to provide students with specialized knowledge in the concerned disciplines .
- Lesson plans are prepared in the standard format provided by the institution.
- Apart from the regular curriculum topics contents bridging the curriculum gaps & real life applications are emphasized during lectures.
- Course files for theory & lab courses are maintained by concerned faculty. These course files mention the attainment of PO's, PSO's & CO's.

Teaching Methodologies:

- The classroom sessions will be interactive and supplemented with PowerPoint presentations and will encourage the students to think independently and inspire their creativity.

Laboratory:

- Training and practical based learning is implemented in order to train the students in making a study design, Developing basic laboratory skills, enhancing technical communication, and presentation skills . The lab curriculum meets the industry expectations.

1.1.2 Number of certificate/diploma program introduced during the last five years

Response: 21

1.1.2.1 Number of certificate/diploma programs introduced year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
5	8	5	3	0

File Description	Document
Details of the certificate/Diploma programs	View Document

1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/

Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years**Response:** 65.68

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
86	88	68	65	60

File Description	Document
Details of participation of teachers in various bodies	View Document
Any additional information	View Document

1.2 Academic Flexibility**1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years****Response:** 53.85

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

Response: 7

File Description	Document
Any additional information	View Document
Details of the new courses introduced	View Document
Minutes of relevant Academic Council/BOS meetings.	View Document

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented**Response:** 100

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

Response: 7

File Description	Document
Name of the programs in which CBCS is implemented	View Document
Any additional information	View Document

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

Response: 30.27

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

2016-17	2015-16	2014-15	2013-14	2012-13
618	181	472	182	214

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

1.3 Curriculum Enrichment

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

Response:

The cross-cutting issues like Gender, Environmental sustainability, Human Values and Professional Ethics etc., finds an ample space when it comes to applying them positively into the curriculum. We believe in maintaining healthy environment for all students.

Cross cutting issue relevant to Gender:

1. Uniform is there for all students (Girls and Boys) and non-teaching staff members. Dress code for all teaching staff members.
2. Equal participation of girls and boys in various cultural programs like Antragini, Ganesh-ustav, Kojagiri Pournima Celebration, Kite festival and etc.
3. Participation in indoor and outdoor sports activity by all students/staff irrespective of gender.
4. Girls and Boys can sit together in the class without any restrictions.
5. Technical events like Paroksha, TRPCS right from the organizing committee to participation involvement of girls and boys is there.

6. Industrial Projects and Internship programs and practical batches are in common.
7. Girl's representation in Hostel Committee, Ladies Representative and other respective committees.
8. Training and placement assistance is provided to all the students irrespective of the gender.
9. Women Grievances Committee is formed to solve girl's related problems and headed by ladies faculty.

Environment and Sustainability:

1. The curriculum includes a Subject "Environmental Studies" in which students understand the importance of Environment.
2. Institute organizes Tree Plantation programmes in the Institute as well in nearby Villages.
3. Institute has organized 'Swachha Bharat Abhiyan' in campus and nearby villages.
4. Institute has setup the solar power units to provide clean source of energy.
5. Solar water heaters are installed in girls and boys hostels.
6. Waste Management steps including:- Solid waste Management, Liquid waste Management, E-Waste Management
7. Rain water harvesting structures and utilization in the campus

Human Values:

Day/Duration/Frequency	Title of the Programme/Activity
15-Aug	Independence day
26-Jan	Republic Day
21-Jun	Yoga Day
Once in a year	Blood Donation Camp
03-Nov	Awareness About Traffic Rules
31-Oct	Sardar Vallabh Bhai Patel Jayanti
19-Feb	Chhatrapati Shivaji Maharaj Jayanti
02-Oct	Mahatma Gandhi Jayanti
14-Apr	Dr. Babasaheb Ambedkar Jayanti
01-May	1 May Maharashtra Day
15-Sep	Engineer's Day
05-Sep	Teacher's Day
03-Jan	Savitribai Phule Jayanti
14-Jan	Kite Festival
05-Jun	Environment Day
Once in a year	Teacher In You Program
31-May	Tobacco Free Society

Professional Ethics into Curriculum:

1. Workshops on “Personality Development” and Employability skills” are conducted for students.
2. Group Discussion activities are also taken for students by the faculties.
3. Motivational Speech by Mr. Mangesh Kulkarni on the occasion of Engineer's day.
4. Soft skill development program by Mr. Ajay Mehta.
5. Communication Development programs
6. Core subjects like Soft skills, Professional Practices-I, II and III are in the curriculum.
7. In-house FDP has been organized by all departments.
8. The following committees are functioning:
 1. Anti-Ragging Committee
 2. Discipline Committee
 3. Library committee
 4. Music Club Committee
 5. Sports Club Committee
 6. Drama Club Committee
 7. Dance Club Committee
 8. Sexual Harassment Committee
 9. Examination related Grievance Redressal Committee
 10. Students Grievance Redressal Committee
 11. Hostel Committee

1.3.2 Number of valued added courses imparting transferable and life skills offered during the last five years**Response:** 12

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

Response: 12

File Description**Document**

Details of the value-added courses imparting transferable and life skills

[View Document](#)**1.3.3 Percentage of students undertaking field projects / internships****Response:** 20.24

1.3.3.1 Number of students undertaking field projects or internships

Response: 154

File Description	Document
Institutional data in prescribed format	View Document
List of students enrolled	View Document

1.4 Feedback System

<p>1.4.1 Structured feedback on curriculum obtained from 1) Students 2) Teachers 3) Employers 4) Alumni 5) Parents For design and review of syllabus semester wise/ year wise</p> <p>A.Any 4 of the above</p> <p>B.Any 3 of the above</p> <p>C. Any 2 of the above</p> <p>D. Any 1 of the above</p> <p>Response: A.Any 4 of the above</p>	
File Description	Document
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View Document
Any additional information	View Document
URL for stakeholder feedback report	View Document

<p>1.4.2 Feedback processes of the institution may be classified as follows:</p> <p>A. Feedback collected, analysed and action taken and feedback available on website</p> <p>B. Feedback collected, analysed and action has been taken</p> <p>C. Feedback collected and analysed</p> <p>D. Feedback collected</p> <p>Response: A. Feedback collected, analysed and action taken and feedback available on website</p>	
File Description	Document
URL for feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrolment and Profile

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

Response: 1.57

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

2016-17	2015-16	2014-15	2013-14	2012-13
6	18	25	25	19

File Description

Document

List of students (other states and countries)

[View Document](#)

Institutional data in prescribed format

[View Document](#)

2.1.2 Average Enrolment percentage (Average of last five years)

Response: 35.53

2.1.2.1 Number of students admitted year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
140	195	293	263	190

2.1.2.2 Number of sanctioned seats year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
648	732	774	546	438

File Description

Document

Institutional data in prescribed format

[View Document](#)

2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

Response: 58.63

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

2016-17	2015-16	2014-15	2013-14	2012-13
133	173	265	156	101

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

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

The institute has streamlined mechanism for continuous monitoring and evaluation of the students. To find out the learning levels of students, institute does following summative and formative evaluation, based on which they are identified as slow and advance learners.

Formative Evaluation:

Formative evaluation summarizes the student's development during outcome based continuous assessment in following ways:

- Question answer session during lectures.
- Tutorials
- Assignments
- Chapter Test/ Unit Test
- Surprise test
- Technical quiz

Summative Evaluation:

Summative evaluation refers to the assessment of students where the focus is on the outcome of a program. The following approach is adopted for assessment:

- Previous semester/year result analysis

If students score less than 40% in summative and formative evaluation then they are identified as slow

learners. And if they score more than 60% in same then they are categorized as advance learners.

Based on the formative and summative evaluation, the institute has structured following activities for both groups.

- **Activities for Advanced Learners:**

To enhance the knowledge of advance learners the faculty has adopted the following measures:

1. Advanced learners are encouraged to participate in seminars and paper presentations conducted at college level and university level.

2. Mentors monitor bright students and guide them for live project work/industrial projects, software training, research, soft skills & higher studies.

3. They are encouraged to participate in the national/international conferences and technical symposia.

4. Meritorious students are motivated to strive for excellence by rewarding them with certificates, and displaying their names on college notice board and website.

5. Guidance for competitive exams such as GATE, civil services, etc., is given to advanced learners by expert faculty for professional growth.

6. Library services with respect to additional books, e-journals and e-data based access.

- **Activities for slow learners:**

Faculty members identify the struggle areas of borderline students and address their issues effectively.

1. Students are provided with highlighted tips for memorizing, effective writing, time management.

2. Remedial classes are engaged by respective faculty members in zero hours.

3. After remedial actions students are assessed with the same set of question papers to observe the improvement for the said syllabus.

4. Easy and simple books from the available stock (central/departmental library) are provided by respective staff members.

5. Model question-answers are provided for ease of practicing.

6. Subject related simple videos are suggested from the available e-data base, so that students can understand the concepts easily.

7. To boost their confidence level, students are applauded for their small achievements in tests, assignments, practical and other areas of evaluation.

File Description	Document
Any additional information	View Document

2.2.2 Student - Full time teacher ratio

Response: 8.85

File Description	Document
Institutional data in prescribed format	View Document

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.13

2.2.3.1 Number of differently abled students on rolls

Response: 1

File Description	Document
Institutional data in prescribed format	View Document
Any other document submitted by the Institution to a Government agency giving this information	View Document
List of students(differently abled)	View Document

2.3 Teaching- learning Process

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

Response:

Student centric teaching is our thrust for teaching-learning process. To meet this requirement the institute adopts the following practices:

Experiential learning:

To increase the practical knowledge institute practices the following:

- Institute encourages students for internship and supports them with the list of organizations and request letters to gain experience of industry environment.
- Institute arranges domain specific industrial visits to foster a closer relationship between academics and industry.
- Projects/mini-projects are selected and completed as per the domain specific /application requirement. In execution of projects technical support from concerned department/laboratory is provided.
- External sponsored projects are encouraged and relevant guidelines are provided to the students for getting said approval. Also, institute provides seed funding to the selected projects on yearly basis.
- For classroom based experiential learning institute supports case study, simulation, presentation, group work.

Synergistic/ Participative Learning:

To increase the knowledge through interactive and participative learning, following methods are practiced by the institute:

- Lectures are delivered using interactive methods such as discussion, brainstorming on question-answers and tutorials.
- Under continuous internal evaluation, interactive experimental learning in the laboratory is accomplished by students with the necessary guidelines by subject teacher.
- Expert lectures by academicians/industries are arranged for required subjects and advanced topics to enhance the concepts of the students.
- Students are encouraged to participate in group discussions, hands on sessions, exhibitions, workshops, technical events, seminars with required guidance to meet the outcome based education.
- Peer learning: Assignments/seminars are framed/arranged such that these are performed in groups for participative learning based outcomes.
- Various student forums/councils are formed for exploring the hidden potential of students.

Problem solving Methodologies:

The institute has adopted the following methods for problem solving learning:

- To effectively utilize the contact hours numerical based tutorials/assignments are provided and asked to complete in order to improve problem solving skills of understudies.
- Mathematical tricks and techniques are taught to understudies to speed up their problem solving abilities.
- Aptitude tests are conducted for final year to enhance their analytical thinking.
- To understand and reinforce concepts, the institute supports students to perform interactive simulations using modern design tools and software under the guidance of faculty.

- Mathematical formulae sheet, manuscripts are provided to the students by concerned faculty members.

File Description	Document
Any additional information	View Document

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 100

2.3.2.1 Number of teachers using ICT

Response: 86

File Description	Document
List of teachers (using ICT for teaching)	View Document
Any additional information	View Document
Provide link for webpage describing the " LMS/ Academic management system"	View Document

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

Response: 10.42

2.3.3.1 Number of mentors

Response: 73

File Description	Document
Year wise list of number of students, full time teachers and students to mentor ratio	View Document

2.3.4 Innovation and creativity in teaching-learning

Response:

To create a responsibility of learning in students and making learning as a process of knowledge construction, institute has taken following steps:

- Institute invites industry experts to take lectures for students on latest development & issues.
- Institute arranges domain specific industrial visits to bridge the gap between academia and industry.

A questionnaire is designed for the students, which is provided before and after the industrial visit to check their knowledge improvement.

- Institute invites alumni students to have interaction with students to share views about the recent developments and current market requirements.
- Expertise faculty members create their own video lectures and the same are stored in e-data base. Students avail this facility repeatedly for understanding the concepts.
- Faculty members conduct workshops on recent trends and technologies using subject related modern tools and software.
- For interactive teaching-learning and visualization impact, institute supports students to create practical models of certain subjects to meet application based outcomes.
- For experiential learning, students attain the industry internship programs during vacation period in consideration with the institute. With the help of this activity understudies gain recent practical knowledge as well as become familiar with industry environment.
- Faculty members use modern practical tools like models, videos, pictorial material, smart app, and smart board for better understanding of course.
- Faculties take different kinds of brainstorming sessions like puzzle, educational games, aptitude test for students to create design and analytical thinking in the understudies.
- Peer learning with respect to understanding of concepts, project work, difficulties is promoted as per the requirement.

To improve the teaching techniques in faculty members and make the learning process more students centric, the institute has taken following steps:

- Institution organizes in-house training programs for faculty to sharpen their instructing and mentoring skills. Faculty members are encouraged and/or sponsored for technical as well as other training programs which help them to embrace new and innovative methodologies.
- Expert faculty members guide the budding teaching faculty members to improve conveyance techniques. The impact of these efforts is observed in enhanced academic performance.
- The institute promotes faculty members to attend FDP, STTP, research publications, etc., with necessary seed funding to galvanize their knowledge.

File Description	Document
Any additional information	View Document

2.4 Teacher Profile and Quality

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

Response: 93.47

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

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

Response: 2.26

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

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

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

2.4.3 Teaching experience of full time teachers in number of years

Response: 8.03

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

2.4.4 Average percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 10.64

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
32	21	7	2	0

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

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

Response: 8.07

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

2016-17	2015-16	2014-15	2013-14	2012-13
11	15	7	6	10

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

Response:

Continuous Internal Evaluation:

Continuous Internal Evaluation (CIE) system at the institutional level is in the following ways:

- Institute follows the SPPU and MSBTE evaluation schemes for unit test, In-sem exam, practical/oral exam, term-work and theory examination.
- The SPPU conducts In-sem exam, End-sem exams at institute and assess it at different CAP centers. In similar way, practical/oral exams are conducted by appointing external examiner by the university. Institute conducts term work assessment internally as per the guidelines from SPPU.
- The MSBTE has framed evaluation scheme for theory and practical exams of diploma courses. Institute assesses term work internally considering various assessment tools.
- The institute has structured a common pattern to assess the term work which includes weightage for attendance, performance in academic tests and assignments of respective subjects.
- As per the instructions of SPPU, the institute has appointed College Examination Officer (CEO), for the smooth conduction of various examinations with necessary time bound communication to SPPU. Results and related grievances for all examinations conducted by SPPU are declared and

communicated to students through CEO.

- The institute conducts academic test, mock practical/oral/ online examinations, as a regular practice for helping the students to prepare for university exams.

Reforms in the CIE:

To gauge the knowledge and skill acquired at various levels of program the institute has embraced the following evaluation reforms:

- From the academic year 2015-16 institute conducts aptitude test in each semester for outgoing students to enhance their reasoning and logical skills to improve their competency level.
- Institute has introduced chapter test in the form of MCQs instead of subjective unit test to upgrade the quality of questions to meet outcome based education from even semester of academic year 2015-16 as per guidelines from IQAC. These chapter tests are conducted after every two units of course. These tests are designed in accordance with outcome based education.
- Assignments are designed by referring course outcomes to promote learning outcomes.
- Industrial Visit Reform: The institute has initiated from academic year 2016-17 a questionnaire scheme for the students through which their knowledge is assessed before and after the industrial visit with the same set of questions. This reform is included in course file of subject teacher for mode of content delivery.
- Institute invites the industry expert as per requirement to evaluate project work done by final year students. The expert guidance helps them to make innovative changes in project.

File Description	Document
Any additional information	View Document

2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety

Response:

For maintaining transparency in internal assessment the following measures are taken by the institute.

- The examination pattern, marking scheme and term work assessment scheme are communicated to the students at the beginning of each semester by individual subject coordinators through discussion and displaying on the notice boards.
- The results of the internal assessment are declared and displayed on notice board within one week of conduction.
- The assessed answer books are shown to the students
 - To realize mistakes done by them while writing exam paper, to guide them the systematic way of writing answers in examination in order to score more.
 - Students can discuss their queries with the concerned faculty related to answer book and can submit grievances in written form to 'Department Examination Grievance Committee' if any.
- Institute informs the attendance and academic performance regularly to the parents. They are invited in college for 'Parents Teacher Meet' to know the progress report of their wards as well as

institute takes their feedback for continuous improvement.

- All these activities are executed as per the academic calendar of the institute.
- Methodology adopted for internal assessment is as follows:
 - Frequency: For internal assessment, two assignments and three chapter tests are conducted under each course.
 - Various tools for internal assessment are as follows:

A. Internal assessment for evaluating term work marks:

1. Attendance in class: If student has more than 80% attendance in class then 10 marks are granted. If the attendance is between 60-79% then 8 marks are given. If the attendance is between 40-59% then 6 marks are given. If the attendance is below 40% then 4 marks are given.

2. Performance in chapter test: Chapter test is of 10 marks in form of MCQ. Faculty conducts three chapter test for the required subject of total 30 marks which is converted into 'out of 10' marks.

3. Assignments: Two assignments are given for the required subjects who are evaluated out of 5 marks.

Sr. No.	Assessment tool	Weightage (Marks)
01	Attendance in class	10
02	Performance in chapter test	10
03	Assignments	05
	Total	25

B. Internal assessment for evaluation of practical:

1. Attendance in practical sessions: If student has more than 80% attendance in class then 10 marks are granted. If the attendance is between 60-79% then 8 marks are given. If the attendance is between 40-59% then 6 marks are given. If the attendance is below 40% then 4 marks are given.

2. Performance in practical sessions: It is evaluated on the basis of discipline, active participation, attentiveness and understanding of experiment.

3. Timely submission of journal & assignments: Punctuality and neatness of the journal are considered for this evaluation.

4. Mock Oral examination: Few questions on the basis of the experiment are asked to verify the understanding of the students about that experiment.

Sr. No.	Assessment tool	Weightage (marks)

01	Attendance in practical sessions.	10
02	Performance in practical sessions	05
03	Timely submission of journal & assignments.	05
04	Mock Oral examination	05
	Total	25

File Description	Document
Any additional information	View Document

2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and efficient

Response:

The mechanism to redress examination related grievances of the students at the university and institute level is transparent, time bound and efficient in following ways:

University Level:

Paper setting, conduction of examination, assessment and disclosure of results is done by SPPU.

- Students can apply for photocopy of their assessed answer sheets after the declaration of result by the university by paying required fees.
- After receiving photocopy of answer sheet in case of any grievance understudy can apply for revaluation in prescribed form within 10 days from the date of receipt of photocopy of answer book by paying revaluation charges.
- The revised marks obtained by the candidate after the revaluation result is taken into account for the purpose of modification of his/her result in accordance with the relevant rules of the university.

Institute level:

Examination related grievances are addressed at the institute in the following ways:

- The results of internal assessment are declared and displayed on notice boards within one week after the conduction of internal examination.
- The unit/chapter test answer books are shown to the students. Answers and marking scheme is discussed by the faculty with the students.
- Grievances related to the internal evaluation are discussed with concerned subject in charge and

subject in charge takes appropriate action

- In case, student is still not satisfied then he/ she can submit the same in the written format to the concerned Head of Department. Corrective measures are taken by the Departmental Examination Grievance Committee with due enquiry and satisfaction from concerned subject coordinator. The same answer sheet is moderated by another faculty member.
- Observed changes if any are re-communicated to said student within one week and are taken for further assessment work.
- In order to minimize the discrepancy in descriptive tests, we have opted objective based MCQ tests.
- If the grievance is not addressable at the departmental level then the matter is forwarded to the college level 'Examination Grievance Committee' for further action. The corrective measures are taken by the committee within 15 days.
- In case students feel any sort of hesitation to contact subject teacher/ HOD for any such exam related issue he/she may also put that query in suggestion box which is placed near the Principal's office.
- Normally, this box is open on every Saturday and the appropriate actions are initiated by the Principal.

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

2.5.4 The institution adheres to the academic calendar for the conduct of CIE

Response:

The institute follows SPPU and MSBTE defined academic calendars strictly.

- Prior to the initiation of every academic year, the institute prepares academic calendar in accordance with the curriculum prescribed by the University for sound teaching approach.
- To achieve the graduate traits in students the institute prepares its own academic calendar for each department in accordance with the curriculum prescribed by the University.
- For this, Head of each department take suggestions from respective faculty members to incorporate tentative academic, curricular, extracurricular activities and provisional dates for it.
- Principal discusses the same with all HOD and finalize academic calendar for institute while considering the University academic calendar.
- In fulfillment of the institute calendar, departmental academic and activity calendar is prepared by respective time table coordinator.
- By alluding these calendars subject faculty formulate teaching plan and include it in course file. Teaching plan is also uploaded on LMS and its execution status is filled after every lecture.
- Monthly review is taken by the HOD of each department and Principal to analyze the adherence and proper conduction of activities as per academic calendar with tolerance of two percent.
- All the academic activities such as chapter test, its result declaration are executed according to the

syllabus completion of respective subject while considering academic calendar of department.

- In similar way the industrial visits, seminars, guest lectures, workshops, project reviews etc., are arranged with respect to academic calendar for effective and efficient CIE as follows:

1. Each department arranges industrial visit according to curriculum which includes visits to companies, government/semi-government organizations and research centers.

2. Institute arranges guest/expert lectures of academicians as well as industry experts as per requirement.

3. For Project reviews, institute invites industry expert to guide final year students for their project related issues.

- Similarly the extra-curricular activities like annual social gathering 'Antragani', project competition 'Paroksha', sports week, Engineers Day etc., are arranged and accomplished in compliance with activity calendar.
- The institution adheres to the academic calendar for smooth conduction of CIE.

File Description	Document
Link for Additional Information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

Yes, Institute has adopted Program Outcomes (POs) specified by National Board of Accreditation (NBA). Similarly, Program Specific Outcomes (PSOs) are formulated by the institute for all the programs. Course Outcomes (COs) are specified by SPPU/MSBTE in syllabus itself. All PSOs and POs are displayed at prominent places. All POs, PSOs and COs are displayed on college website.

The POs, PSOs and COs are displayed in institute at the following locations:

- POs are displayed at Principal's cabin, college entrance corridor, and library.
- PSOs are displayed at HOD cabin and department corridor.
- COs are displayed in each laboratory of department and also included in respective course file.

Students and faculties are made aware about POs, PSOs and COs by following ways:

- POs, PSOs and COs are included in faculty course file.
- CO-PO and CO-PSO mapping methodology is explained to students by teachers/mentors in class.
- A common methodology for attainment of CO-PSO-PO is designed by IQAC, followed by institute and communicated to students for their understanding.

- Each subject teacher considers COs of respective course while designing assignments, test and its evaluation scheme etc.

File Description	Document
COs for all courses (exemplars from Glossary)	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Response:

Institute has designed and adopted a common format for course file of theory and lab practical for all courses of all programs. This format is approved by IQAC committee and implemented by the institute from even semester of Academic year 2015-16.

Attainment of COs, PSO, and POs with respect to theory and lab is carried out according to following mechanism:

- This common format includes planning of course delivery, teaching plan for each topic of syllabus, mode of teaching (traditional classes, visualization, seminar, expert lecture etc.), CO-PO mapping with its matrix, CO-PSO mapping with its matrix, assignments, chapter test question papers, university in-sem/end-sem current year and previous year question papers.
- Institute takes unit test for PG as per SPPU norms and for UG students, internal chapter tests are conducted for continuous internal evaluation (CIE).
- Chapter test are conducted by subject teacher after completion of two units. The pattern of these tests is in objective form and designed by considering COs of the respective subject.
- Assessment of Chapter test is done and result for the same is informed and notified to the students. The attainment of Cos, POs is evaluated for the all chapter tests. Cumulative attainment record for all subjects, departments is done at the end of respective semester.
- Assignments are designed according to CO and circulated to students for completion. Students solve and submit the same for evaluation purpose. Assessment of these assignments is done regularly and attainment of Cos, POs is calculated.
- Mapping for POs, PSOs and COs is done in each subject. Similarly matrix for linking between them is also carried out.
- The assessment tools for lab work are: attendance, performance, timely submission of journal/lab manual, mock oral exam.
- At the end of each semester the course exit survey is conducted by respective faculty member from students and analysis for the same helps further improvement in curricular delivery.

Attainment calculation at department and institute level:

- Each course addresses a sub-set of POs and PSOs to varying levels 1, 2 and 3.
- Attainment of a POs is calculated for the department and institution according to set specific thresholds.
- Strength of attainment of COs and POs is defined at three levels: Low (1), Medium (2) and Strong (3). for each attainment case two subsets are used:

1. Direct assessment

2. Indirect assessment.

- If targets are achieved then all the course outcomes are attained for that year. Program is expected to set higher targets for the following years as a part of continuous improvement
- To analyze the target attainment for institution all staff member play vital role in the execution of this practice. At the end of year new thresholds for upcoming academic year are set according to previous achievements.

File Description	Document
Link for Additional Information	View Document

2.6.3 Average pass percentage of Students

Response: 73.93

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

Response: 312

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

Response: 422

File Description	Document
Institutional data in prescribed format	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

File Description	Document
Database of all currently enrolled students	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years

Response: 134.89

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

2016-17	2015-16	2014-15	2013-14	2012-13
6.52	123.234	2.84	2.3	0

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

3.1.2 Percentage of teachers recognised as research guides at present

Response: 4.65

3.1.2.1 Number of teachers recognised as research guides

Response: 4

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

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

Response: 0.2

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

Response: 72

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document
Any additional information	View Document
Funding agency website URL	View Document

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

Response:

Startups are incubated in incubation center, which gives them a chance to bring their business in shape, before they reach out to the world. Raisoni Group of Institutions has well established Central Incubation center located at Nagpur with three different remote centers at Pune, Ahmednagar and Jalgaon campuses. G.H.Raisoni College of Engineering and Management, Ahmednagar is remote center for incubation work in co-ordination with central office to create innovations and entrepreneur development.

In Incubation center Computers, Internet connectivity (wired and Wireless), Video Conferencing devices, and printers, etc facilities are provided.

Initiatives by Incubation Center:

- **Projects:**

Incubation center has taken initiatives for design and development of Special Purpose Machines (SPM).

A. Completed projects:

1. Design and development of groundnut oil extracting machine by human pedal powered flywheel motor concept.
2. Design and development of garlic peeling machine by human powered flywheel motor concept.
3. Design and development of sugarcane sprout cutter machine by human pedal powered flywheel motor concept.
4. Design development and fabrication of multi-crop cutter.

B. Ongoing projects:

Design, development and manufacturing of mango pulp extractor machine. This project is mainly concentrating on smart means of separating pulp from seed, saving energy and providing an alternating source of food supplement and taste.

- **Other initiatives for creation and transfer of knowledge**

1. Industry Institute Interaction:

1. Domain Specific Expert Lectures of industry persons were arranged by institute.
2. Industrial visits were conducted to bridge the gap between theoretical and practical orientation.
3. Live projects are promoted by the institute. Students are guided to seek for sponsorship from various Industries and Government agencies for promoting research and development activities at Institute level.
4. Internship by the students in various industries is energized during summer and winter vacations.

2. Professional Membership IET, ISTE, IRED etc.:

Institute encourages faculty members for acquiring Professional society Membership.

3. Motivation for publications:

Seed funding is provided by the Institute to faculty members for enhancing the research and development atmosphere.

Seminars related to Intellectual Property Rights are arranged for promotion of research and development activities.

4. Teacher in You:

Under the Corporate Social Responsibility (CSR), Institute had conducted training program for teachers from various Secondary and Higher Secondary Schools, Diploma Colleges in the periphery of Ahmednagar District.

5. PM YUVA Yojana:

'Pradhan Mantri Yuva Udyamita Vikas Abhiyan Yojana' has been sanctioned to our institute amongst 2200 institutes in 2017-18. This scheme is basically undertaken for the benefit of students coming from the various educational fields. The students enrolled under the scheme are given the entrepreneurial training. Under this scheme we have to nurture the budding technocrats for the entrepreneurship

development. The said scheme is guided and funded by Central Government of India. Committee of six members has been formulated.

Objectives:

- Educate and equip potential and early stage entrepreneurs.
- Connect entrepreneurs in enabling networks of peers, mentors, funds and business services.
- Support entrepreneurs through Entrepreneurship Hubs (E - Hubs).
- Catalyze a culture shift to encourage entrepreneurship.

3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

Response: 32

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

2016-17	2015-16	2014-15	2013-14	2012-13
9	16	4	0	3

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

3.3 Research Publications and Awards

3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes

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

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

Response: Yes

File Description	Document
e- copies of the letters of awards	View Document
List of Awardees and Award details	View Document

3.3.3 Number of Ph.D.s awarded per teacher during the last five years**Response:** 0

3.3.3.1 How many Ph.Ds awarded within last five years

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

3.3.4 Number of research papers per teacher in the Journals notified on UGC website during the last five years**Response:** 0.05

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

2016-17	2015-16	2014-15	2013-14	2012-13
11	8	4	4	0

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

3.3.5 Number of books and chapters in edited volumes/books published and papers in national/international conference proceedings per teacher during the last five years**Response:** 0.19

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

2016-17	2015-16	2014-15	2013-14	2012-13
15	43	25	19	5

File Description	Document
List books and chapters in edited volumes / books published	View Document

3.4 Extension Activities

3.4.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

Values of good citizenship are inculcated in our students by the teachers and student peer group. The aim of institute is to provide right environment for physical, intellectual, social and emotional quotients in students. Therefore, efforts have been taken to add values of good citizenship among the students. Students have shown active participation's in various extension activities initiated by the institute.

Promotion of extension activities in neighborhood community and involvement of students:

- **Blood Donation:**

The Institute organizes blood donation camps in collaboration with various blood banks namely 'Arpan', 'Ashtvinayak', 'Jankalyan' under CSR activity since last five year. Our students enthusiastically participated in blood donation camps. Accordingly, institute has been appreciated by the neighborhood community for the initiatives undertaken

- **Tree Plantation:**

The institute has been appreciated by Govt. of Maharashtra with the membership of 'Maharashtra Harit Sena' for conducting regular plantation drive. We are organizing tree plantation activity in and outside the campus during monsoon. This activity creates an awareness related to environmental issues among the students.

- **Donation to Orphanage:**

Students along with the staff members visit nearby 'Snehalay' orphanage. All students and staff members in contribution donate the medicines/ provisions/ fruits/ Diwali Special Gifts to the orphanage. Our students celebrate festivals like Rakhi, Holi with the children at the orphanages.

- **Street Lighting:**

Institute has provided lighting facility to village Chas, Tal. Nagar, Dist Ahmednagar to avoid road accidents as a part of Corporate Social Responsibility.

- **Traffic awareness program:**

The institution organizes Traffic awareness program for neighborhood community since last four years in corporation with RTO Ahmednagar.

- **'Swachh Bharat Abhiyan' i.e Cleaning Awareness Camp:**

The cleaning awareness camps have been organized in nearby schools, bus stands by students and staff members.

- **Teacher in You:**

To build the teacher as per the views of 'Dr. A. P. J. Abdul Kalam' we had initiated 'Teacher in U' program to train the nearby school and high-school teachers as a CSR activity. Under this activity 1053 teachers has been trained from neighborhood community.

- **Career guidance:**

Career guidance programs have been conducted in various schools and colleges.

- **Yoga Day:**

Yoga Day was organized on 21st June by institute for nearby residents with purpose of awareness among the people about physical fitness and mental peace.

- **Computer Awareness Program:**

Computer literacy program for nearby village women was organized by institute through computer van.

Steps taken for holistic development of students:

The institute conducts different programs for the holistic development of its students, such as

- Art of Living
- Yoga day

All these activities help in forming institution-neighborhood community network and has made G.H. Raisoni College recognizable in our neighborhood. Student's engagement in such extension activities makes them responsible citizens along with their service orientation and holistic development. These activities develop the leadership and management qualities along with creating an awareness of social responsibilities.

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

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

Response: 17

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

2016-17	2015-16	2014-15	2013-14	2012-13
6	7	2	1	1

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

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

Response: 8

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

2016-17	2015-16	2014-15	2013-14	2012-13
01	07	00	00	00

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

3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 52.63

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
499	907	1040	517	263

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

3.5 Collaboration

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

Response: 142

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

2016-17	2015-16	2014-15	2013-14	2012-13
63	37	20	12	10

File Description	Document
Any additional information	View Document
Number of Collaborative activities for research, faculty etc.	View Document
Copies of collaboration	View Document

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

Response: 28

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

2016-17	2015-16	2014-15	2013-14	2012-13
11	10	7	0	0

File Description	Document
Details of functional MoUs with institutions of national, international importance, other universities etc. during the last five years	View Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

As per the AICTE, State Government and Savitribai Phule Pune University norms, all the physical facilities are established to create conducive teaching and learning processes.

Physical Facilities (Qualitative):

- According to AICTE eighteen classrooms are required for UG and four PG class rooms are required. Institute is having twenty four classrooms with carpet area more than AICTE norms i.e. 66 sq.mts per classroom.
- According to AICTE, one tutorial room is to be provided against four classrooms. The institute has provided five classrooms with carpet area 33 sq.mts.
- Institute has provided adequate number of laboratories to get the practical expose to theoretical phenomenon. Institute is having fifty-seven laboratories with carpet area 66 sq.mts against forty-four laboratories as per AICTE norms.
- One drawing hall with carpet area 132 sq.mts is provided as per norms.
- Basic workshop with carpet area 200 sq.mts is provided.
- Library and reading room with carpet area 400 sq.mts is provided as per norms.
- Institute has provided one separate research lab for PG programs with carpet area 120 sq.mts.
- Six seminar halls with carpet area 132 sq.mts each are provided for expert lectures, departmental events, departmental meetings, etc. against three seminar halls required as per AICTE.
- Computer center with carpet area 160 sq.mts is provided for students to get free internet access.
- Digital library is provided along with library to get access to e-resources like e-journals, e-books, NPTEL Video lectures, etc.
- Language lab is provided as per norms.
- Institute's Zero deficiency report of every year signifies adequate availability of physical facilities.

Physical Facilities (Quantitative):

The institute has provided all required physical facilities for effective teaching learning. The details of available classrooms, tutorial rooms, laboratories, seminar halls, and workshop are as follows:

Details	Numbers		Area (Sq.mts.)	
	Required	Available	Required	Available
Class Rooms (UG)	18	22	1188	1690
Tutorial Rooms (UG)	05	05	165	165

Laboratories (UG)	44	57	3440	4298
Class Rooms (PG)	04	04	132	132
Research Lab	01	01	100	100
Drawing Hall	01	01	132	132
Seminar Hall	03	06	396	792
Computer Center	01	01	150	160
Language Center	01	01	66	66
Workshop	01	01	200	200
Library & Reading Hall	01	01	400	400
Total instructional area and library space				8136

Computing and other Facilities:

To fulfill the requirement teaching learning viz. of every department institute provided adequate number of computing facilities.

- Institute is having 425 computers and 50 Laptops, out of these 394 computers are exclusively provided for students.
- Institute has provided seventeen LCD projectors for classrooms and seminar halls.
- Institute has provided one smart class room to make students familiar with recent technologies

For effective teaching-learning process institute has following teaching wizards

Sr. No.	Teaching-learning Viz.	Quantity	
		Required	Available
1	Computer	214	394
2	LCD Projectors	07	17
3	Smart Board	01	01
4	OHP	-	01
5	Printers	11	44
6	Charts	-	180
7	White Boards	19	20
8	Green Boards	20	26

File Description	Document
additional information	View Document

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

Response:

For leadership development, team work, physical development of students institute provides sufficient facilities for sports and gymnasium to get the importance of work and relaxation balance in life and career.

Sports Facilities:

- Institute provides wide range of indoor ,outdoor sports as institute is situated in rural area and has sufficient land
- Institute has also provided three horses for horse riding for student as well as staff.

Sr. No	Sports	Size/Area (Sq.mts.)	Year of Establishment	User Rate
Outdoor Sports				
1	Badminton	13.40 m × 6.10 m	2013	4
2	Volleyball	18 m × 9 m	2012	70
3	Cricket (Pitch)	20.12 m × 3.05 m	2010	60
4	Kabaddi Court	13 m × 10 m	2010	30
5	Horse Riding	3 Nos	2010	15
Indoor Sports				
6	Chess	5 Nos	2008	40
7	Carom	1 Nos	2008	80
8	Table Tennis	1 Nos	2012	50

Gymnasium:

- Gymnasium facility is provided in Hostel.
- Gymnasium has adequate latest equipment which includes Lat pull down plates, 45 leg press, Olympic incline and declined bench, standing calf plates ,chest cum shoulder press, exerciser wrist curl, etc.
- Gymnasium is open for daily access to all the students as well as staff.

Cultural Facilities:

Institute is having enriched infrastructure for organizing various activities like cultural activities, public speaking, communication skills development, yoga etc. to inculcate the leadership qualities and team spirit in students and faculties.

Sr. No.	Cultural Facilities	Area (Sq.mts)
1	Cultural Ground (Open Air Theatre/Rangmanch)	1600
2	Seminar Hall for Indoor cultural events	160
3	Yoga Centre	160

File Description	Document
additional information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 32

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document

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

Response: 7.02

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

2016-17	2015-16	2014-15	2013-14	2012-13
41.48	67.62	50.36	47.55	99.4

File Description	Document
Audited utilization statements	View Document
Details of budget allocation, excluding salary during the last five years	View Document
Any additional information	View Document

4.2 Library as a Learning Resource

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

Response:

For Effective use of library the Library is equipped with **SyNchRoniK** software and all supporting latest technology required for automation of all operations in the library. The institute has automated library with ILMS in the year 2012. SyNchRoniK software is yearly maintained by paying annual maintenance charges. Digital library with access to national and international e-journals is facilitated.

Institute has also provided Online Public Access Catalogue (OPAC) to the members of library for ease to access to library books.

The following library operations are automated.

- Accession of newly added books, journals and CDs
- Issue and return of books of library resources
- Renew of books
- Stock verification of the resources in the library

<i>Name of the ILMS software</i>	SyNchRoniK
<i>Nature of automation</i>	<i>Fully</i>
<i>Version</i>	<i>5.3</i>

File Description	Document
Any additional information	View Document

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

Response:

Library is enriched with various rare books, manuscripts, special reports, Handbooks, NPTEL Videos, etc.

- Library contains fifty three rare books, which includes engineering as well as general disciplines. Some of rare books are “Professional Papers on Indian Engineering”, Vol. IX written by Major A. M. Brandreth which is published in 1880, “The Irrigation Works of India” written by Robert Burton Buckley in 1905, etc.
- Library contains eleven manuscripts which includes Tithi-Koshtha, Vaidyakprkrit, Shivoditkalpalata , Nadipariksha, Kaiyyat-bhashya, Manorama, Siddhamanjiriadhyaya, Shadvidyagam, Yogasamgrahah, Grahlaghav, Mishrakadhyaya-Vivrutti.
- Library is also enriched with special reports about environment, recent technologies, some agreements related to environmental issues of various national and international organisations. Special reports include “The Montreal Protocol on Substances that Deplete the Ozone Layer”, “NITI Aayog Annual Report”, “Swaminathan Aayog Report”, “TRAI Annual Report”, etc.
- Library also preserves fifty five handbooks in different engineering discipline.
- Library contains wide database of NPTEL Video lectures so that students can get offline access to these lectures.
- Library is also enriched with other collections like various IS CODES, Steam tables, Mollier Charts, Refrigeration Charts, etc
- However library also provides Inter library loan (ILL) service the faculty members and as well as students to get access to book which are not available in our library from other libraries like Jayakar Library Pune.

Various resources for library enrichment

Resource	Quantity
Rare books	23
Manuscripts	11
Special reports	09
Handbooks	55
NPTEL Video Lectures	1220
Codes/Charts	107

File Description	Document
Any additional information	View Document

4.2.3 Does the institution have the following:

- 1.e-journals
- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A. Any 4 of the above

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

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

Response: 9.47

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

2016-17	2015-16	2014-15	2013-14	2012-13
2.84	8.5	20.35	9.96	5.72

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

4.2.5 Availability of remote access to e-resources of the library

Response: Yes

File Description	Document
Details of remote access to e-resources of the library	View Document

4.2.6 Percentage per day usage of library by teachers and students

Response: 74.85

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

Response: 634

File Description	Document
Details of library usage by teachers and students	View Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Institute has well established IT infrastructure to meet the requirements of the students as well as staff for enhanced teaching learning process. Following are the steps taken by institute,

- **Updation in LAN Facilities**

Total available internet bandwidth is 40 Mbps out of which 20 Mbps is provided by BSNL and 20 Mbps is provided by Vodafone. Updation of BSNL bandwidth up to 40 MBPS is under process to make total available bandwidth to 60 Mbps.

Institute has taken measures for improvement in internet facility continuously as shown below:

Date of Updation	Bandwidth	Remarks
Under process	60 Mbps	BSNL bandwidth updation upto 40 Mbps is under process
05/02/2017	40 Mbps	Vodafone Bandwidth increased to 20 Mbps
14/05/2013	30 Mbps	New 10 Mbps Vodafone line installed
01/05/2013	20 Mbps	BSNL Bandwidth increased to 20 Mbps
03/09/2012	4 Mbps	BSNL

- **Updation in Wifi Facilities**

Institute has provided 23 Wifi nodes across the campus to meet internet demand of students as well as staff. Six Rucus nodes were installed in 2013 and again seventeen nodes 3-CIT nodes installed in 2015. Wifi facility is open for all for 24 × 7.

Date of Updation	Nodes Available	Remarks
07/11/2015	23	New 17 3-CIT Nodes installed
24/03/2013	06	06 Rucus Nodes installed

- **Updation of Licensed software:**

Institute has purchased different academic software's to meet make students competent in current technologies.

Sr. No.	Name of Software	Date of Purchased
1	STAAD.Pro	27/04/2015
2	WTPSOFT 03	01/09/2015
3	ETPSOFT 03	01/09/2015
4	Matlab	26/05/2015
5	MS Windows SL 8.1	05/05/2014
6	Oracle Database Std. Edition	05/05/2014
7	MS Visual-Studio	05/05/2014
8	Matlab	30/04/2014
9	Ansys	10/01/2014

- **Updation in Computers/Laptop:**

Total 425 Computers are available in working condition in the college out of which 394 computers are available for students. Following are the computers available in college:

Sr. No.	Computers	Specifications	Quantity
1	Acer	Intel Core 2 Quad 2.33 GHz, 1 GB RAM, 160 GB HD	131
2	Dell (OptiPlex 330)	Intel Core 2 Duo 1 GB RAM 160 GB Hard Disk	97
3	Dell (OptiPlex 380)	Intel Core 2 Duo E7500 2.93 GHz 2 GB RAM DDR2 RAM	134
4	Dell (OptiPlex 3010)	Intel Pentium G2020 2.90 GHz 2 GB RAM	25
5	Acer	Intel Core 2 Quad 2.33 GHz, 2 GB RAM, 160 GB HD	35
6	Server	Intel Xeon 160 GB SCSI HDD 4 GB	1

		DDR2 RAM	
7	Server	Intel Xeon 1 TB HDD 8 GB RAM 3.30 GHz	1
8	Server	Intel Xeon 1 TB HDD 8 GB RAM CPU E5520 2.27 GHz	1

File Description	Document
Any additional information	View Document

4.3.2 Student - Computer ratio

Response: 1.93

File Description	Document
Student - Computer ratio	View Document

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

5-20 MBPS

20-35 MBPS

35-50 MBPS

Response: >=50 MBPS

File Description	Document
Details of available bandwidth of internet connection in the Institution	View Document
Additional information	View Document

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: Yes

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document
Any additional information	View Document
Link to photographs	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

Response: 69.59

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

2016-17	2015-16	2014-15	2013-14	2012-13
653.51	625.80	658.26	675.15	488.32

File Description	Document
Audited statements of accounts.	View Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Response:

Following are the procedures are adopted for utilizing physical and academic facilities.

Class rooms:

- Classrooms are allocated to each class at the start academic year by RAMS coordinator and same is utilized according to timetable.

Laboratory:

- All laboratories are well maintained by respective lab assistant.
- For each laboratory a dead stock register is maintained to keep record of lab equipment's, lab

consumables, etc.

- In each laboratory entry register is maintained to keep record of daily use of laboratory.

Sport room:

- All indoor and outdoor sports facilities are maintained by physical sports director.
- Record of sports equipment's/Consumables is maintained through dead stock register.
- Daily use of sports equipment's is maintained through entry register.

Library:

- Library is well maintained and utilized through integrated library management software.
- Daily issue-return, accession of books maintained through SyNchRoniK software.
- Library entry register is maintained to keep record of daily use of library.

Computers:

- All computer labs are maintained by respective lab assistant.
- Internet access to each computer regularly checked by IT technician.
- Record of use of computer is maintained through entry register.

Institute has established standard operating procedures for maintaining physical, academic and support facilities, same procedures are uploaded on institute website.

RESOURCE OPTIMASATION

- Utilization of Renewable energy resources like Solar panels, Replacing CFL with LED within one year
- Eco-friendly campus (Bio-gas, Gray Water, Rain Water harvesting), Placing placards for conservation of energy, water, fuel, stationary etc.
- Annual Physical Stock verification,
- Quarterly repairs and preventive maintenance In-house to the possible extent.

ACADEMIC EXCELLENCE

- Curriculum bench marking with premier institutes, gap analysis and delivery beyond syllabus curriculum
- Effective teaching learning in class rooms, labs, fields (Academic scheduling, Lesson plans, Session plans, Assessment and Evaluation)
- Staff development program
- Online Subject wise quality circles/forums Intra campus through mentors
- Effective Quality Assurance cell for Academic audit (Internal and External)/Feedback from stakeholders

INDUSTRY RESEARCH INTERFACE

- Campus tour to HR managers and 5 industry visits/Trade fares/Conferences or Summits per department per semester
- Industry Institute Interface
- Industry Funded labs
- Accreditation by industry such as (TCS, KPIT) and NABL
- Intellectual capital cell for Industry research

STUDENTS' VALUE ENHANCEMENT

- Moral and ethical Education
- Soft skills / life skills programs
- Imparting Employability Skills
- Students charter and Discipline
- Students clubs/Professional society chapters for Co-curricular activities
- Student's Cultural, Sports Club and Forum's

OPERATIONAL STANDARDS AND QUALITY

- Student and faculty Handbook
- Staff and Students portal
- Dedicated Team to monitor all systems in place and taking corrective actions
- Response time for all processes and Institute Calendar

NEW IDEAS & PRACTICES

- Incubation Center per institute and to create an ecosystem for entrepreneurship with minimum one start up every year
- Staff welfare schemes such as family medical insurance on mutual sharing

IMAGE BUILDING AND BRANDING

- Inter collegiate activity
- Our expert faculty should be allowed to deliver seminars as resource person
- To comply with National Advisory Committee, Governing Body, LMC, Preparing Annual Report, ARC etc..

- National and International accreditation of institutes.(ISO, NAAC, NBA, ABET)

File Description	Document
Link for Additional Information	View Document

NAAC

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

Response: 53.38

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

2016-17	2015-16	2014-15	2013-14	2012-13
553	783	666	639	477

File Description

Document

Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

[View Document](#)

upload self attested letter with the list of students sanctioned scholarships

[View Document](#)

5.1.2 Average percentage of students benefitted by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 17.99

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
315	441	201	87	37

File Description

Document

Number of students benefited by scholarships and freeships besides government schemes in last 5 years

[View Document](#)

Any additional information

[View Document](#)

5.1.3 Number of capability enhancement and development schemes –

1. For competitive examinations
2. Career counselling
3. Soft skill development
4. Remedial coaching
5. Language lab
6. Bridge courses
7. Yoga and meditation
8. Personal Counselling

A. 7 or more of the above

B. Any 6 of the above

C. Any 5 of the above

D. Any 4 of the above

Response: A. 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Link to Institutional website	View Document

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

Response: 86.95

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

2016-17	2015-16	2014-15	2013-14	2012-13
895	1166	1237	1026	762

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

5.1.5 Average percentage of students benefitted by Vocational Education and Training (VET) during the last five years**Response:** 64.43

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

2016-17	2015-16	2014-15	2013-14	2012-13
664	987	899	730	521

File Description**Document**

Details of the students benefitted by VET

[View Document](#)**5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases****Response:** Yes**File Description****Document**

Details of student grievances including sexual harassment and ragging cases

[View Document](#)

Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee

[View Document](#)**5.2 Student Progression****5.2.1 Average percentage of placement of outgoing students during the last five years****Response:** 13.24

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

2016-17	2015-16	2014-15	2013-14	2012-13
144	44	32	10	16

File Description	Document
Details of student placement during the last five years	View Document
Self attested list of students placed	View Document

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

Response: 8.6

5.2.2.1 Number of outgoing students progressing to higher education

Response: 37

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document
Any additional information	View Document

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

Response: 14.95

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

2016-17	2015-16	2014-15	2013-14	2012-13
4	1	3	2	0

5.2.3.2 Number of students who have appeared for the exams year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
15	10	14	12	11

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

5.3 Student Participation and Activities

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

Response: 6

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

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

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

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

Response:

- **Students Council :-**

We have active students council, Department wise Students forum such as EESA (Electrical Engineers Students Association), MESA (Mechanical Engineers Students Association), CESA (Computer Engineers Students Association) are present. With the help of such Associations different Competitions & events are organized so that students gets platform to show their Leadership, Talent in Academic & Extracurricular activities. Active student council cell is formed by selecting the students who are willing to

work as representative of various committees, student member etc. These students takes initiative to arrange various technical & non technical programs, also these students motivate other students to participate in competitions, seminars, workshops at institute level as well as in other college.

Student's council is also formed in which different Posts are held by students such as Cultural Event In charge, Sports In charge, Ladies representative, Gathering Secretary. The selection process is done by the taking Interviews of Students by HOD & Principal. The active participation of the Students council is during Academic year in all the activities including academic & extra curricular activities.

- **Students Involvement in Different Committees :-**

Students are also Member of different committees such as Anti Ragging Committee, Students Grievance, and Women's Sexual harassment. The involvement of students in these committees gives valuable inputs to Management. Students provide the feedback on various student issues and contribute towards improvement in the institute's working. Implementation of suggestions of students is considered. Students Council is also formed for entire academic year who takes care of various seminars, Workshops Cultural activities organized in a academic year.

Students are also members of Internal Quality Assurance Cell (IQAC). The names of Committee members are displayed at various places in college including Flex & Notice boards.

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

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

Response: 39

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

2016-17	2015-16	2014-15	2013-14	2012-13
40	40	39	38	38

File Description	Document
Number of sports and cultural activities / competitions organised per year	View Document
Report of the event	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Response:

G.H. Raisoni Alumni Foundation (GHRAF) has been created and maintained to provide a Platform for its alumni to connect a lifelong connection between Institute and its alumni. Our Vision is to bring Alumni, Student, Faculties and other Key Constituents together for Continuous Interaction and Collaboration. The Dedicated common Web Portal has been created and updated regularly. The institute has a very strong Alumni Association around 1000 members at Institute level and 45000+ at group level. There are GHRAF chapter in places like Nagpur, Pune, Mumbai, Bangalore.

The General Activity of GHRAF includes:

- **R**- Reunions
- **A**-Alma Mater visits
- **I**-Invite Experts
- **S**- Shaping careers & Placements
- **O**- organize Trainings
- **N**-Networking
- **I**- Involvement in CSR

Alumni directly and indirectly Contributes for development of Institute. We have diverse body of Alumni like Professionals, industrialists, artists, software, academicians in different college and university.

- Alumni Contributed around **Rs 3.2 Lacks** for institute.
- Entrepreneurial Support to develop our E- Cell, Job discussions, Knowledge sharing discussions.
- In IQAC- Meeting They Put their Valuable Suggestions for Further Enrichment of Teaching Learning Process.
- Enhancing the Teaching Learning Process through Expert lecture, Project Co-Guides, Organizing Industrial Visit, Study tour, Mentoring Students.
- They always motivate by Sharing Lifelong Experience of their life to our students.
- To develop college and department Library by contribution of old valuable books.
- Alumni have spent time participating in academic and Research Program.

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

5.4.2 Alumni contribution during the last five years**<1 Lakh****1 Lakh - 3 Lakhs****3 Lakhs - 4 Lakhs****4 Lakhs - 5 Lakhs****Response: 3 Lakhs - 4 Lakhs**

File Description	Document
Any additional information	View Document
Alumni association audited statements	View Document

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years**Response: 5****5.4.3.1 Number of Alumni Association /Chapters meetings held year wise during the last five years**

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

File Description	Document
Any additional information	View Document
Number of Alumni Association / Chapters meetings conducted during the last five years.	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution

Response:

Vision

“To achieve excellent standards of quality education by keeping pace with rapidly changing technologies and to create technical manpower of global standards with capabilities of accepting new challenges”

We as an academician are applying our strengths for overall development of students to create competent and Quality Engineers with abilities like technical knowledge, ethical standards and social responsive behavior.

Nature of Governance

The institute has Governing Body to manage overall functions & take necessary decisions from time to time holding one/two meetings of governing body in a year, to decide the action plan for achieving the target set.

Perspective plan

Perspective plan for college is prepared in line with vision to meet local, social and technical requirement.

Participation of Teachers in Decision Making Bodies

Teachers play a very important role to achieve vision of institution. Teachers are contributing in decision making by attending meetings with Principal/HOD/different Committees etc. when required.

Mission

“Our efforts are dedicated to impart quality and value based education to raise satisfaction level of all stakeholders. Our strength is directed to create competent professionals. Our endeavor is to provide all possible support to promote research and development activities”

Nature of Governance

Governing Body working efficiently to achieve the vision & provide the technical/non-technical support to institution. A governing body of the institute defines the strategies, policies, goals, road-map, and quality policy for Institute.

Perspective plan

According to the feedback from all stakeholders, their expectations, management policies, goals and objectives of the college, the perspective plan was designed. The IQAC suggest Activity calendar plans and same are executed effectively to achieve the stated vision.

To enhance the quality of education and motivation we are adapting various mechanisms such as

1. Feedback System for various stakeholders.
2. Faculty Development Program (FDP), Short Term training Program (STTP), Vocational Education Training (VET).
3. Renewable energy Resources like Solar panels, Replacing CFL with LED.
4. Digital library, Digital Learning Material.
5. Student Value Added courses.
6. Modern and effective teaching learning techniques.
7. Publications in National and International Journals
8. Collaborations with Industries
9. Soft skills programs.
10. Co Curricular and Extra Curricular Activities.
11. Outcome based Educational System.

Participation of Teachers in Decision Making Bodies

For making effective and timely management, decision have been decentralized at various levels such as Principal, Dean Academics ,HODs, various committee members, mentors are delegated with certain powers to take decisions at their levels.

• Principal:-

1. All compliances related to statutory bodies .
2. Load distribution, Academic Calendar, Activity calendar is approved by Principal.
3. Availing Duty leaves to HOD's & staff members to attain STTP, FDP & Workshops.
4. Depending on the Students Feedback Principal issues Appreciation/ Warning letter.
5. Depending on the report given by Grievance committees, necessary action is taken by Principal.

• HOD:-

1. Academic strategy of the department in line with faculty.
2. Solves Academic & any other departmental queries.
3. Evaluation of faculties on regular & continuous basis in the area of Teaching.
4. Counseling of students

• Faculty:-

1. Effective implementation of Teaching Learning process.
2. Involvement in research through projects & publications.
3. Updating latest knowledge & providing inputs to the students through content beyond syllabus topics.

4. Faculty members as part of different grievance committees to resolve the complaints effectively.

6.1.2 The institution practices decentralization and participative management

Response:

To achieve Vision and mission of the institute, various decision making levels are structured & Participative management from each level is encouraged. Decision-making responsibilities are delegated by top management to middle and lower-level management within the organization, allowing top management to focus more on major decisions.

- Decentralized planning provides autonomy, flexibility and trust in planning to the departments for their domain area.
- Decentralization, Participation, Involvement and Accountability are the key aspects in the implementation of the quality policy of the Institution.

Case Study of Decentralization and Participative management: RAMS

Institute has RAMS (Raisoni Academic Monitoring System) an LMS tool for daily Academic Monitoring. It becomes necessary to evaluate the degree of performance of the Teaching-Learning process and so the RAMS have been introduced.

Objective of RAMS:

- To help teaching faculty to know their performance.
- To help HOD's and Principal to monitor academic activities.
- Providing constant backup of data and support to the faculty and students
- Communication through SMS and Mails
- Making the system more user friendly.

RAMS Decentralization:

1. Board of Governance:

- Monitors conduction of Theory / Practical's as per timetable.
- Teaching / Lesson plan
- Feedback of students.
- System automatically blocks the Attendance if the record is not filled within 48 hours of commencement of period.
- Assigning Institute level coordinator as well as Department wise coordinator.
- Uploading faculty details on RAMS by availing them unique RAMS ID & password.
- Uploading students Data on Module by providing unique RAMS ID & password to students.
- Observe various activities conducted in each Department.

2. Principal:

- Monitors syllabus coverage of faculty.
- Attendance monitoring.
- Approves the request when it is blocked by Board of Governance.
- Monitors conduction of Theory / Practical's as per Timetable.
- Analyze Feedback of Faculties taken from students.
- Monitors Activities conducted in each Department.

3. Institutional coordinator:

- Average Attendance report (Month wise & Students wise Report)
- KPI report
- Adherence Report
- Syllabus completion report
- Faculty feedback report.

4. Department HOD's:

- Monitors Attendance.
- Monitors University examination result.
- Average Attendance report (Month wise & Students wise Report).
- KPI report / Adherence Report.
- Monitors e-modules.
- Syllabus completion report.
- Mentor-Mentee fees Record.
- Faculty feedback report.

5. Departmental coordinator:

- Assign Theory & Practical slot in timetable faculty wise.
- Upload the Load of each faculty based on Load Distribution.
- Uploading timetable.
- New registration of First Year & Direct Second Year students.
- Upload Result analysis.
- KPI report generation.
- Monitors e-modules.
- Managing exchange of period.
- Detention of the students.
- Mentor-Mentee fees Record.

6. Teaching staff:

- Update daily conduction of Theory/ Practical in detail.
- Mentor-Mentee fees Record.
- Uploading assignments, Model question Papers / University question papers, chapter Notes, important Question Banks etc. on e-module.

7. Students:

- Download class timetable.
- Fill online Feedback of faculties.
- Download subject wise assignments, Model question Papers / University question papers, chapter Notes, important Question Banks etc. through e-module.

File Description	Document
Any additional information	View Document

6.2 Strategy Development and Deployment**6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution****Response:**

Yes, Institute has Perspective/Strategic plan of Five years and deployment documents.

To accomplish the vision and mission of the Institute the quality approach has been surrounded after talks with the best administration, Principal, HOD's and staff individuals. The Institute attempts different exercises to satisfy the quality arrangements. Every one of the exercises are checked and audited by the advisory groups.

Example of Activity successfully implemented based on strategic plan:-

- **Solar plant :**

As per the discussion with principal in IQAC meeting held in January 2016, Principal suggested to implement strategic plan given in five years Perspective plan. HODs of Electrical and Electronics & Telecommunication department took initiative. In IQAC meeting held in February 2016, it is decided to implement innovative activity "Solar panel" on the roof of college building.

Sun is an important source of renewable energy. Solar power helps to reduce global warming. It creates electricity without producing global warming pollution. Electricity generation from solar energy at present is no more a new concept to the world. Solar electricity is being clean (pollution free), silent, limitless and free will play a great role in the times to come in the present energy driven civilization. Putting Solar PV on the roof is likely to save lots of money. To provide seamless electricity supply often D.G. set is used from private / public buildings, industrial firm and commercial firm buildings.

From Grid connected rooftop Solar PV Power Plant work can be done on the basis of net metering. State policy of Rooftop Solar Power Plant for setting up rooftop solar power plant on Individual, institutional and government buildings has been promulgated in 2014-15. Installation of total 20 MW grids connected Solar Power Plant is targeted till the operation period of the policy March 2017. Installation of Grid connected Rooftop Solar Photovoltaic Power Plant will be promoted by the state government for

captive use / self consumption. This rooftop solar power plant will be based on Net Energy Metering / Net Energy Billing method. By Government / public institutions a certain percentage of their annual electricity consumption, installation of rooftop solar Photovoltaic Power Plant will be made and electricity produced by Solar Power Plant will be self consumed.

Solar energy is useful in many ways, some are as listed:

- Generate electricity using photovoltaic solar cells and utilized it throughout the premises.
- Heat water for domestic hot water using solar panels.

This activity had been used as a renewable source in the premises of the college. Students of Electrical Engineering get motivated by Real Life implementation of Solar panel.

Solar power provides energy reliability, energy security, energy independence. So, all HODs put this plan in next IQAC meeting with Principal on Feb 2016.

Principal also gave permission and the worked started in March 2016. The cost of 4 solar panels and other material body was 300000 /-. The solar plant installed on 30 March 2016 for which required 60000/-. The capacity of plant is 50Kw.

File Description	Document
Any additional information	View Document
Strategic Plan and deployment documents on the website	View Document
Link for Additional Information	View Document

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

Response:

Organizational structure:

An organizational chart which displays the structure of the organization, and also shows the relationships between organizational members and the role of all the positions in the organization.

Administrative setup:

Administrative setup is a part of organgram comprises with all higher authority members to perform administrative work.

Functions of various Bodies:-

Governing Body:

- 1.To ensure that the College is well run, meets the needs for which it has been set up and remains solvent.
- 2.Governing Body and to seek professional advice where appropriate.
- 3.To regularly attend meetings of the Governing Body and the Committees on which they serve, and to acquire appropriate knowledge to contribute effectively to decision making.

College Development Committee

- 1.Prepare the budget and financial statements;
- 2.Recommend to the management the creation of the teaching and other posts;
- 3.Determine the program of instruction and internal evaluation and to
- 4.discuss the progress of studies in the college;

IQAC Committee:

- 1.To ensure heightened level of clarity and focus in institutional functioning towards quality enhancement and facilitate internalization of the quality culture
- 2.To do the enhancement of integration among the various activities of the institution and institutionalize many good practices

Grievance Redressal Cell:

- 1.To provide with proper support to stakeholders to express their grievances freely and frankly without any fear of being victimized.
- 2.To ensure that there is no revenge of any kind against any applicant.

Women's Grievance Cell:

- 1.To create an effective organizational structure for improving the status of women in the institution.
- 2.The committee would be responsible for maintaining communication with and advising the institutions Administration and the governing body in planning and monitoring progress for women personnel and students.

Service rules, Procedures & Recruitment:

All faculties working in RGI are required to abide by the rules & regulations framed here under, unless otherwise stated.

- 1.All employees must maintain absolute integrity & show devotion to duty and refrain from such activities which will tarnish or spoil the reputation of the Group and bring a bad name to any Institution run by RGI.
- 2.The employees shall expend all courtesy and attention to all persons with whom he has to deal in connection with his official duties. No employee shall entertain any outsider for any work directly, but should advice him to contact the Principal or Registrar/Administrative officer of the Institute

depending upon the nature of the work.

- 3.No official document/ record should be shown or handed over to any outsider without the permission of HOD or Principal of Institute/ College.

Promotional policies & Governance Redressal mechanism:

Institute has different promotional policies & Governance Redressal mechanism. Concerned with the students feedback analysis, Principal issues Appreciation letter for good feedback of the teacher. Also they issue warning letter for poor feedback. Under the Grievance Redressal mechanism, Institute has Communication box which is opened once in a month to resolve the grievances effectively. Accessible and effective Grievance Redressal Mechanisms are a necessary component of accountability.

File Description	Document
Any additional information	View Document

6.2.3 Implementation of e-governance in areas of operation: 1.Planning and Development 2. Administration 3. Finance and Accounts 4. Student Admission and Support 5.Examination

A. All 5 of the above

B. Any 4 of the above

C. Any 3 of the above

D. Any 2 of the above

Response: A. All 5 of the above

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

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

Response:

The Institute has following committees which includes a faculty member from each department for smooth conduction of Administrative and Academic work.

- Women's sexual harassment Committee (Vishakha)
- IQAC Committee
- Anti-ragging Committee
- Women's Grievance Cell
- Student Grievance Redressal Cell
- Grievance Redressal Cell
- TRPCS committee
- Paroksha Committee
- Examination cell
- Cultural committee
- Library cell
- Hostel committee
- Mess committee

Women's sexual harassment Committee (Vishakha):

“Women's sexual harassment Committee (Vishakha)” has been formed to resolution, settlement or prosecution of acts of sexual harassment by taking all steps required. sexual harassment includes such unwelcome sexually determined behavior as:

- a) Physical contact and advances.
- b) A demand or request for sexual favors.
- c) Sexually colored remarks.

IQAC Committee:

The prime task of the **IQAC** is to develop a system for conscious, consistent and catalytic improvement in the overall performance of institutions. For this, during the post-accreditation period, it will channelize all efforts and measures of the institution towards promoting its holistic academic excellence.

Anti-ragging Committee:

College has taken various precautions as per AICTE Norms to prevent ragging and ensure 100% no-ragging.

- a) Formed Anti Ragging Committee consisting of senior faculty and headed by Principal.
- b) Persons not only from college but also from surrounding areas also will be participating in Anti-Ragging Activities.
- c) Committee has taken steps and allotted duties to all the staff members at almost all areas in the college and ensure that at least one faculty member will be present at any particular time at all the locations

to avoid ragging activities.

Women's Grievance Cell:

This cell has been formed to resolve the issues regarding girl students as well as ladies staff in the institution.

Student Grievance Redressal Cell:

This cell have to identify and solve the problem regarding to the students in the premises. This cell has the provision that all the students can place their problems in the suggestion box.

TRPCS committee

This committee is formed to conduct national level conferences and paper publication during the annual function held in the Institution. Committee member identify and categorize the type of papers to be publish through the TRPCS conference.

Paroksha Committee:

Institute has a committee to conduct all technical completion and project exhibition.

Examination cell:

The role of examination cell to manage all internal as well as external examination according to the academic curriculum provided by the university.

Cultural committee

The entire annual cultural event organizes and coordinates by the committee, events organizes in the Institution name as a Anataragini, republic-day, Independence-day, Ganesh-Festivals, Datta-Jayanti, Shiv-jayanti, etc.

Library cell:

This cell has a member form each department to coordinate and fulfill the requirements of the students regarding the Reference Books, TextBooks, journals and Magazines.

Hostel committee:

Institute has Hostel for Girls and Boys in the Institute Premises. To coordinate, resolve the problem of students and obey the rules and the regulations of hostel, committee has been formed, including Principal, hostel warden and students.

Mess committee:

This committee consists of hostel warden, anti ragging committee member and students who schedule the time, hygienic and quality food.

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

6.3 Faculty Empowerment Strategies

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

Response:

Yes, the institution has effective welfare measures for Teaching and non-teaching staff.

There are many welfare schemes available for the teaching and non-teaching staff mentioned below:

- 50 -75% Fees Concession for the ward of Non-Teaching Staff as well as for the close relative of teaching staff.
- Financial aids for the faculty welfare & their Qualification improvement.
- Provident Fund facility for Staff.
- 100% Group Insurance for Staff.
- Life insurance for Non-teaching staff.
- Staffs availing accommodation facility
- Health Checkup twice in a year for Staff.
- Staffs using Bus Transportation facility.
- Non-Teaching Staffs taking Uniform provision.

Welfare is the provision of a minimal level of well-being and social support for faculties. Welfare can take an assortment of structures, for example, money related installments, sponsorships and vouchers.

1.Group insurance covers a defined group of people, for example the members of a society or professional association, or the employees of the Institute. We avail Group insurance and life insurance in the Institute for teaching and non-teaching staff. Group insurance helps to reduce the problem of adverse selection by creating a pool of people eligible to purchase insurance that belong to the group for reasons. Group insurance may offer extra security, medical coverage, as well as some different kinds of individual protection.

2.For the wards of non-teaching staff, institute provides concession of 50% in the school fees. We have a policy for all the staff regarding the casual leaves, special leaves, study leaves, medical leaves, compensatory off and winter/summer vacations.

3.Non-teaching staff are availed with the uniform each year from the Institution. Institute provides accommodation and food facilities to staff. In the college premises a doctor visited to avail the Health Checkup to the staff.

4. Institute permitted teaching staff for higher studies as well as Sponsorship is provided to staff to motivate them for further education. There are various agencies and organizations that Sponsor higher education by empowering and supporting. The sponsoring agencies in this case look for potential donors who can sponsor education for a long or short term.

5. The Faculty Research Incentive Plan (FRIP) will be implemented in every year with the goals of

a) Providing an incentive for faculty members to secure additional competitively awarded grants and contracts.

b) Providing additional compensation to recognize faculty members who secure grants and contracts that fund academic year research activities.

c) Increasing educational and general funds that departments can use to support academic initiatives.

6. Teaching staffs are provided with financial support from institute for following reasons.

a) To attend various workshops, seminars, FDP, STTP, etc. conducted by universities in affiliated colleges.

b) For publishing the books, chapters in reputed volumes and papers in high impact journals.

c) For taking the life time membership of professional bodies.

7. Concession given to all teaching and non-teaching staff for availing the transportation facility.

8. Institute conducts various programs such as personality development program, faculty development program and soft skill development program for all teaching and non-teaching staff for their self development.

File Description	Document
Any additional information	View Document

6.3.2 Average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 22.99

6.3.2.1 Number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
05	95	15	09	08

File Description	Document
Details of teachers provided with financial support to attend conferences,workshops etc. during the last five years	View Document

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Response: 10.4

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

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

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

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

Response: 65.42

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
89	91	84	16	82

File Description	Document
Details of teachers attending professional development programs during the last five years	View Document
IQAC report summary	View Document

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

Response:

Yes, Institution has Performance Appraisal System for teaching and non-teaching staff. A well defined Performance Appraisal Scheme of Institute to review performance of teaching faculty by following points in consideration

- **Engaging Theory Lectures:** From the syllabus of each subject, target lectures are mentioned. Out of that, how many lectures engaged by faculty are verified. It is calculated in terms of percentage.
- **Attendance in Theory Lectures:** It is observed that how many students present for each lecture engaged by faculty.
- **Result Analysis of Theory subjects:** Subject wise result analysis is done.
- **Marks scored by students in Theory subjects:** Calculating the number of students scoring 60%, subject wise taught by each faculty.
- **Students' Feedback:** Students feedback taken twice per semester. According to that, Principal issues Appreciation/ Warning letter to the respective subject's faculty.
- **Valid Memberships of Professional bodies:** Faculty performance evaluated on the basis of membership of professional bodies. It creates great impact on appraisal of faculty.
- **Use of Teaching – Learning Material:** Performance of faculties are evaluated by timely submission of teaching plan to HOD's, also conduction according to that plan with the use of NPTEL, ICT tools etc. for advanced teaching learning process.
- **Research papers published in National / International Journals/ Conference:** Institute evaluate the performance of faculty by the number of Research papers published in National/International Journal/conference.
- **Active Participation in Activities:** Performance evaluation done according to the participation of faculties in the Co-Curricular activities such as Seminars, STTP, Career fair, Entrepreneurship , TRPCS, Paroksha , Industry Institute Interaction Cell ,Library Committee , Research Committee, IQAC member, Expert Lectures delivered in institutes other than own, Consultancy ,Examination In-charge , LIC member, AICTE –DTE portfolio In-charge etc.

Also performance is calculated on the basis of Extra Curricular Activities such as Gathering, Cultural Events, Sports-Meet, Blood Donation, Plantation, Corporate Social Activities, Community Projects or similar activities.

- **Industrial Visits organized:** Faculty organizes Industrial visits to bridge the gap between academic curriculum and industry. To enhance the knowledge of students regarding subject as well as topics apart from the syllabus, and also aware them regarding emerging technologies used in industry by Industry Experts.
- **Achievements:** Achievements like Awards, Rewards, and Books published, Citations, Patents registered, Innovative Projects, and Models are the key indicators to evaluate the performance of

faculties.

- **Functional Performance:** Evaluation should be done only by HOD or Principal after verifying record cursorily and not by teacher himself or herself. Mark in appropriate column.

1. Maintains up to date Course file.
2. Carries out operations of RAMS assignments regularly.
3. Checks term work and Does Continuous assessment regularly.
4. Updates question banks of his subjects regularly.
5. Updates question banks of his subjects regularly.
6. Displays notices of less attendance fortnightly.

File Description	Document
Any additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Internal and external audit has been done regularly through various responsible agencies. Internal audit has been done half yearly while external audit is conducted once in a year by registered Chartered Accountant firm. List of auditing agency for last five year is given below.

Sr. no	Auditing Agency	Year
1	V. K. Surana & CO Nagpur.	2016-17
2	V. K. Surana & CO Nagpur.	2015-16
3	Kirtane & Pandit, Pune.	2014-15
4	Kirtane & Pandit, Pune.	2013-14
5	Kirtane & Pandit, Pune.	2012-13

Significant Account Audit objectives are as follows:

1. Basis of Presentation
2. Fixed Assets
3. Revenue Recognition
4. Borrowing cost
5. Inventories
6. Retirement benefits

1. Basics of Presentation

The financial statements are prepared under historical cost convention in accordance with the generally accepted accounting principal and the accounting standard and statement issued by the Institute of Chartered Accountants of India.

2. Fixed Assets

Fixed assets are stated at historical costless depreciation. On revaluation of fixed assets, surplus on revaluation is credited to revaluation reserve. Depreciation on fixed assets is provided on the written down value method at the rates as approved by the board of trustees of the trust. Depreciation on the revalued items of fixed assets is calculated on their respective revalued amounts and an amount equivalent to the aforesaid additional depreciation charge is adjusted from the revaluation reserve.

ASSETS	RATE
Building	10%
Library books	15%
Furniture and Fixtures	10%
Lab Equipment's	15%
Sports equipment's	15%
Canteen equipment's	15%
Computer and Accessories	60%
Software	100%
Vehicle	15%
Solar system	60%
Electrical equipment's	15%
DG Generator set	10%

3. Revenue Recognition

Tuition fees, bus fees & other fees are recognized on accrual basis. A portion of development fees for the year as deemed fit by the management is transferred to Research and Development fund. Income of fixed deposits on bank is accounted for on accrual basis. Donations are accounted on receipt basis.

4. Borrowing Cost

Borrowing costs that are attributable to the acquisition or construction of qualifying assets are capitalized as part of the cost of such assets. A qualifying asset is one that takes substantial period of time to get ready for intended use. All other borrowing costs are charged to revenue.

5. Inventories

Inventories are mainly in the nature of consumables (computer consumable and miscellaneous material), which have been charged to income and expenditure account only to the extent of actual consumption and the balance stock is valued at cost.

6. Retirement Benefits

Contribution to Provident Fund is recognized on accrual basis. Provision of gratuity has been made on accrual basis

File Description	Document
Link for Additional Information	View Document

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

Response: 23.69

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

2016-17	2015-16	2014-15	2013-14	2012-13
23.405	0.189	0.067	0.009	0.015

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

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

Response:

Yes, Institute has strategies for mobilization of funds and the optimal utilization of resources, they are as follows

1. Institute has the policy of following norms of regulating authorities regarding fund mobilization, because it is under self-financed institution category.
2. The major resources of finance are in the form of fees collected from students i.e. tuition fees, development fees and other fees which is as per the fixation of fee regulation authority. Institute does not receive any type of grant.
3. Institute also generates revenue from hostel fees, canteen, college bus and interest from fixed deposits from bank. Institute also provides some consultancy services for revenue generation.
4. A development fee which is collected from students is then spent on Research and Development activities.
5. Major expense of Institute is on salary of teaching & Non-teaching staff, staff welfare scheme, maintenance and repair of equipment etc.
6. Institute also spent money on library, cleanliness of campus, garden maintenance, social cultural activities, sport activities, staff uniform, student development activities etc.
7. With respect to optimal utilization of funds, institute prepares budget based on the expenditure on various heads. The expenditures are planned and executed in an optimal way so that expenditures are met with the available fund resources.
8. Budgetary provisions are made for salary, infrastructural cost and other expenses such as electricity, consumables, semi-consumables, water, telephone, photocopies, postage, welfare schemes etc.
9. All the Departments prepare the budget for development of laboratories, student's activities, minor purchases for their departments.
10. The institution maintains bills and records regarding the tuition fees collected from students and account is maintained which is audited by CA.
11. The money allocated for purchasing library books, equipment's, systems and laptops are documented and the review of the same is done periodically.
12. Institute has Appointed responsible person for monitoring each resource at Campus To ensure cost control and better efficiency of existing resources such as
 - a. Energy.
 - b. Infrastructure.
 - c. Stationary.
 - d. IT Consumables.

File Description	Document
Any additional information	View Document

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the

quality assurance strategies and processes

Response:

Yes, Internal Quality Assurance Cell (IQAC) has contributed significantly for Institutionalizing the quality assurance strategies and processes.

Objective of IQAC:

- Ensure heightened level of clarity and focus in institutional functioning towards quality enhancement.
- Ensure internalization of the quality culture.
- Ensure enhancement and coordination among various activities of the institution and institutionalize all good practices.
- Provide a sound basis for decision-making to improve institutional functioning.
- Act as a dynamic system for quality changes in HEIs.
- Build an organized methodology of documentation and internal communication.

Strategies:

- Ensuring timely, efficient and progressive performance of academic, administrative and financial tasks;
- The relevance and quality of academic and research programmes;
- Equitable access to and affordability of academic programmes for various sections of society;
- Optimization and integration of modern methods of teaching and learning;
- The credibility of evaluation procedures;
- Ensuring the adequacy, maintenance and proper allocation of support structure and services;
- Sharing of research findings and networking with other institutions in India and abroad.

Process of IQAC:

IQAC Committee is formed at the beginning of the each academic year to plan the different activities for students as well as staff members of institute to improve their knowledge. Also IQAC take initiative to implement activities schedule in perspective plan .The Process to execute particular plan is as follows

Call Meeting

- Review of previous meeting
- Discussion on problem definition or any suggestions

(For Example How to improve count of all clear students/ count of sponsored project)

- Finding Solution
- Implementation & Assessment
- Prepare minutes of meeting and maintain in file.

The cell implements and monitors QA as per the policy given by principal and the institution has following policy objectives:

- Improve quality of teaching learning process by close monitoring by IQAC and Departmental Head.
- Improve the quality of students' projects by taking projects having latest tools used in the industry.
- Improvement in quality of teachers by advising them to attend FDP, STTP, Workshops, seminars on specialized areas.

Objectives	2013-14	2014-15	2015-16	2016-17	2017-18	
Improve quality of teaching learning process by close monitoring by IQAC and Departmental Head.	YES	YES	YES	YES	process	Unde
Improve the quality of students' projects by taking projects having latest tools used in the industry.	YES	YES	YES	YES		
Improvement in quality of teachers by advising them to attend FDP, STTP, Workshops, seminars on specialized areas.	YES	YES	YES	YES		

File Description	Document
Any additional information	View Document

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Response:

Yes, The institution Reviews the teaching learning process through IQAC committee

- In which HODs of individual department take review of their faculties and the concern members of IQAC collect the reviews.
- The IQAC, the planning body, collects inferences from the learners and various committees through participatory interactions, based on which it proposes comprehensive perspective plan to the governing council for approval and implementation.
- The chain of committees is in charge of implementation of developmental and academic activities assigned by the governing council.
- The supervision by the governing council ensures the proper implementation. The fair representation of the learners ensures the transparency in the process.

Norm's of IQAC:

- The prime assignment of the IQAC is to build up a framework for cognizant, reliable and reactant change in the general execution of foundations. National Assessment and Accreditation Council (NAAC), Bangalore suggests that each certify organization ought to set up an Internal Quality Assurance Cell (IQAC) as a post-accreditation quality sustenance measure.
- Its achievement relies on the feeling of belongingness and support it can instill in every one of the constituents of the organization. It will not be yet another hierarchical structure or a record-keeping exercise in the institution.
- It will be a facilitative and participative voluntary system/unit/organ of the institution.
- It has the potential to become a vehicle for ushering in quality enhancement by working out planned interventionist strategies to remove deficiencies and enhance quality like the “Quality Circles” in industries.

Teaching learning process:

Following steps are used for teaching learning

- 1.Preparation of Teaching Plan
- 2.Implementation
- 3.Monitoring
- 4.Assessment
- 5.Analysis
- 6.Remedial Action

Methodologies of Operations:

- Smart Class room
- NPTEL video library is in every department.
- Introducing bridge courses and orientation lectures
- Attendance monitoring on RAMS
- ICT method of teaching is followed

File Description	Document
Any additional information	View Document

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

Response: 7.4

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

2016-17	2015-16	2014-15	2013-14	2012-13
10	19	4	1	3

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document

6.5.4 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements
2. Academic Administrative Audit (AAA) and initiation of follow up action
3. Participation in NIRF
4. ISO Certification
5. NBA or any other quality audit

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: B. Any 3 of the above

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

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

Response:

NAAC team had visited our institute in April 2015 and we received 'B' grade. According to the

suggestions given in the result of NAAC, Institute made the incremental improvements as below.

Sr. No.	Suggestions given by peer team in first cycle of NAAC	Action Taken
1	Academic flexibility has been limited as per University norms.	Academic flexibility has been increased that selective subject as per SPPU.
2	Action should be taken for poor record faculty members.	Institute issues warning letter to faculty members and help them for their improvement.
3	Feedback from other stake holders needs to be made more formal.	Feedback from other stakeholders has been taken and action has been taken.
4	Need to attract more meritorious students.	RGI merit-scholarship has been given to meritorious students.
5	Use of tools such as multimedia and ICT can be strengthened.	Faculty members are using ICT-tools, multimedia in learning process.
6	There is a need to improve the quality of teachers by appointing more PhDs as per AICTE-norms.	Institute improves the quality of teachers by appointing more PhDs as per AICTE-norms.
7	Need to enhance financial support.	Financial support has been provided for faculty members, STTP, workshops, orientation programs, Professional bodies.
8	Continuous internal assessment is done by conducting tests periodically.	For evaluation of CIA, institute adopts CO-PO to meet outcome-based education.
9	Internal Assessment questions paper need improvement.	For internal assessment, question papers are prepared of MCQ's.
10	Only few Faculty members are publishing papers in conferences but more papers to be in quality Research Journals.	The count of publishing papers by faculty members increased and they publish papers in Journals highly factor.
11	College could organize more training programs as social responsibility.	Institute organizes more training programs to improve skills of the teachers through "Teacher in U" as social responsibility.
12	Need to arrange more guest lectures by industry-experts through by experts from industry through departmental association.	Institute has organized guest lectures by industry experts through departmental association.
13	Classroom need to be modernized with multimedia and ICT facilities.	Students are publishing papers in good conferences.
14	More E-books could be added for digital library.	E-database library is implemented for faculty and student.
15	14MBPS internet bandwidth needs to be increased.	Institute has 60MBPS internet bandwidth.
16	More focused training for GATE & Competitive exams can be provided to promote more students getting into higher studies and Engineering Services.	Institute conducts training for GATE & Competitive exams to promote more students getting into higher studies and Engineering Services.
17	Newly recruited faculty needs to be trained additionally for effective teaching.	200 hours faculty development program arranged for teaching of newly recruited faculty.
18	Internal academic audit system is to be make more effective.	Internal academic audit system is improved under the guidance of CO-PO mapping.
19	Need to take steps for use of more solar-power, energy-audit and energy management.	Institute has implemented solar panel for energy management.

File Description	Document
Any additional information	View Document

NAAC

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 27

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

2016-17	2015-16	2014-15	2013-14	2012-13
6	6	5	5	5

File Description

Document

Report of the event

[View Document](#)

List of gender equity promotion programs organized by the institution

[View Document](#)

7.1.2

1. Institution shows gender sensitivity in providing facilities such as:

1. Safety and Security
2. Counselling
3. Common Room

Response:

a) Safety and Security

Security Cameras:

Now a day's security of girls and boys is a very crucial issue inside and outside the campus. There are around 70 CCTV cameras with a resolution 1250x1024 and 06 DVRs, that keeps watch on the various activities inside the college premises including administrative buildings, boy's and girl's hostel, entry-exit gate and key areas as per the norms. Recording is being stored in the hard disc. Head office, Principal and server incharge can view this recording at any time.

Entry-Exit Point Security:

All staff member's and student's identity cards are checked at single Entry-Exit point by security guard. Registers are kept at the entrance for all staff members, residential students and visitors. Security

guards are available at the main entrance as well as at hostels.

Medical Facility:

The institute organizes medical checkup every year for students.

1. Emergency- In case of any accident or emergency, 24 hours ambulance facility is available in the college campus. For emergency situation the students are sent to authorized & recognized hospital situated in Ahmednagar for specialized treatment.

2. Free Treatment- All the students are given free treatment for day to day medical problems. The college has tied up for the services of a leading Doctor visiting the students regularly in the college premises during college timing. First aid box with all the essential medicines are readily available in the campus and transport buses.

b) Counseling-

Counselor:

Expert Counseling facility is provided as per requirement. Ladies staff members and hostel wardens counsel the female students wherever and whenever required. Any Individual (student/ staff) in the campus has any issues related to academic performance, emotional disturbances, family issues, behavioral/habitual disorders; social isolation etc is helped by professional counseling services.

Mentor-Mentee program:

Through the mentor-mentee interactions various academic and personal issues are addressed. Mentors take care of the gender issues and if any case is observed it is communicated and resolved in coordination with women's grievance cell/ girl's hostel warden/ senior lady staff members.

Grievance Cells:

In the institute, various grievance cells have been formed and functioning. Women's grievance readdressal cell conducts meeting at regular intervals, cases if any are discussed and resolved. The list of committee members with contact details are displayed at prominent places, so that students can contact them. Ragging inside and outside the campus is prohibited.

Parent Meets:

Parent's meetings are conducted every semester and the issues related to students are discussed. After the meeting the feedback from parents is taken and suggestions are implemented. According to these suggestions certain remedial measures have been taken.

c) Common room:

In campus specious separate common room for girls and boys with adequate area, attached washroom, mirrors and cots, indoor sport facilities like Carom, chess, etc are provided. This space has been designed to give a place to relax, study, have informal discussions in free time available. Daily newspapers, magazines and journals are available for free time reading.

File Description	Document
Any additional information	View Document

7.1.3 Alternate Energy initiatives such as:

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

Response: 6.35

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

Response: 2983

7.1.3.2 Total annual power requirement (in KWH)

Response: 46996

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document
Link for Additional Information	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 6.87

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

Response: 1139

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 16580

File Description	Document
Details of lighting power requirements met through LED bulbs	View Document
Any additional information	View Document

7.1.5 Waste Management steps including:

- **Solid waste management**
- **Liquid waste management**
- **E-waste management**

Response:

1. Solid waste management:

- **Solid Waste Treatment:** All the solid waste generated inside the campus is collected and segregated. The organic food waste is collected separately and the other waste is collected and disposed-off by various ways. Solid waste excluding food waste is collected into waste pit. Solid waste is regularly collected from the canteen and it is supplied to nearby farmers and it also acts as a fertilizer for plants. Rubbish waste like used plastic bags, some unwanted papers and other waste material is disposed off after shredding process. We have also installed solid waste treatment plant behind the campus.

2. Liquid waste management:

- **Sewage Water Treatment:** Sewage water Treatment Plant has been installed in order to purify the water which has been used for watering the plants. This Sewage water treatment plant has been installed to treat the raw waste water generated from domestic usage containing pollutants like suspended solids and biodegradable organics. This practice helps us to overcome problem of shortage of water during summer.

3. E-waste management:

E-waste has been regularly supplied to Salvation Army. Mostly it contains unwanted and faulty materials from labs. This waste material is used to create best out of waste.

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

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

We have implemented rain water harvesting in our premises. This technology is used for collecting and storing rain water from roof tops to prevent soil erosion and meet water requirement partially by raising ground water table.

Rainwater is charged into the groundwater aquifers through recharge pits which are dug near to the workshop. There are **4 recharge pits which is 15 ft to 5 ft wide and 6 ft deep.**

The following elements are provided to ensure the quality of water

- Filter mesh at the entrance point of rooftop drains
- Settlement chamber
- Filter bed

Settlement tanks are used to remove slit and other floating impurities from rainwater. Settlement tank is like ordinary storage container having provisions for inflow, outflow and overflow of rainwater. The pits are surrounded by brick masonry wall. The pit contains different layers starting from bottom layer of pit boulders, small gravel, charcoal sand and top most layer contain soil. Top Surface of pit is covered with vegetation as prevention from mosquitoes.

Total cost of these pits = Rs. 28000/-

Total Area = 10 acre

Built-up area = 20837.02 sq.mts.

Total water harvested = 1111658 gallons (293314 Ltr).

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

7.1.7 Green Practices

- **Students, staff using**
 - a) **Bicycles**
 - b) **Public Transport**
 - c) **Pedestrian friendly roads**
- **Plastic-free campus**
- **Paperless office**
- **Green landscaping with trees and plants**

Response:

We regularly conduct different activities for green initiatives like tree plantation, waste management.

- **Students and Staff using**

1. **Bicycles:** Hostel students and staff members use bicycles to mobilize in and around the campus.
2. **Public transport:** Students and staff members avail the college bus facility. Commuting by four and two wheeler is done by staff members and students.
3. **Pedestrian Friendly roads:** available and used.

- **Plastic Free Campus:**

‘No plastic’ campaign was conducted to sensitize students and staff members. The institute makes use of paper bags to replace plastic bags.

- **Paperless Office:**

1. **Group Domain:** Internal communication is done through internet and electronic media. A domain name i.e. @raisoni.net has been generated for staff members and students in order to send mails and circulars.
2. **RAMS:** It is a software tool available for teaching-learning management.
3. **AIMS:** It is used for automation of all administrative processes. Students submit their enrollment forms through AMIS software. It also helps the faculty members to maintain the record of students.

- **Green landscaping with trees and plants:**

The institute has been appreciated by Govt. of Maharashtra with membership of ‘Maharashtra Harit Sena’ for conducting regular tree plantation drives.

File Description	Document
Link for Additional Information	View Document

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Response: 1.19

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

2016-17	2015-16	2014-15	2013-14	2012-13
11.05	10.39	14.36	17.25	1.56

File Description	Document
Details of expenditure on green initiatives and waste management during the last five years	View Document
Green audit report	View Document

7.1.9 Differently abled (Divyangjan) Friendlines Resources available in the institution:

1. Physical facilities
2. Provision for lift
3. Ramp / Rails
4. Braille Software/facilities
5. Rest Rooms
6. Scribes for examination
7. Special skill development for differently abled students
8. Any other similar facility (Specify)

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

Response: A. 7 and more of the above

File Description	Document
Resources available in the institution for Divyangjan	View Document
Any additional information	View Document
link to photos and videos of facilities for divyangjan	View Document

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years**Response:** 21

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

2016-17	2015-16	2014-15	2013-14	2012-13
4	7	3	4	3

File Description**Document**

Number of Specific initiatives to address locational advantages and disadvantages

[View Document](#)**7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)****Response:** 5

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

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

File Description**Document**

Details of initiatives taken to engage with local community during the last five years

[View Document](#)

Report of the event

[View Document](#)**7.1.12****Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal / Officials and support staff****Response:** Yes

File Description	Document
URL to Handbook on code of conduct for students and teachers , manuals and brochures on human values and professional ethics	View Document

7.1.13 Display of core values in the institution and on its website

Response: Yes

File Description	Document
Provide URL of website that displays core values	View Document

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	View Document
Any additional information	View Document

7.1.15 The institution offers a course on Human Values and professional ethics

Response: Yes

File Description	Document
Any additional information	View Document
Provide link to Courses on Human Values and professional ethics on Institutional website	View Document

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Response: Yes

File Description	Document
Provide URL of supporting documents to prove institution functions as per professional code	View Document

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

Response: 30

File Description	Document
List of activities conducted for promotion of universal values	View Document
Any additional information	View Document

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

Response:

The institute organizes national festivals like Independence Day, Republic day as well as Maharashtra-day where it is celebrated with great enthusiasm. Many patriotic songs are sung and the campus is full of great joy. All students and staff members participate in these programs.

Teacher Day (5th Sept.) is celebrated in honor of 'Dr. Saravpalli Radhakrishnan's' birthday. On this day the students honor their beloved teachers with greeting cards and roses as a token of love and respect toward them.

Engineer's Day (15th Sept., Birth anniversary) is celebrated for the remarkable tribute to the greatest Indian engineer 'Bharat-Ratna Dr. Mokshagundam Visvesvaraya'. On this day technical quiz and poster presentation competitions are organized.

Birth/death anniversaries celebrated every year in the institution are:

Birth anniversaries:

- 'Mahatma Gandhi Jayanti' Father of Nation, on 2nd Oct.
- 'Bharat-Ratna Dr. Babasaheb Ambedkar Jayanti' on 14th April.
- 'Savitribai Phule Jayanti' on 3rd Jan.
- 'Chatrapati Shivaji Maharaj Jayanti' on 19 Feb.
- 'Sardar Vallabhai Patel Jayanti' as 'Rashtriya Ekta Din' on 31st Oct.
- 'Swami Vivekanand Jayanti' as Youth day on 12th Jan.

Death anniversaries:

- 'Bharat-Ratna Dr. A. P. J. Abdul Kalam' on 27th July.
- 'Bharat-Ratna Dr. Babasaheb Ambedkar' on 6th Dec.

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

Institute effectively uses notice-boards and own website for circulation and publication of various notices, data reports, photographs and videos.

1. Financial, administrative and auxiliary functions:

- ERP software tool i.e. AIMS is used to maintain the financial and administrative data. Modules in AIMS software are: purchase module, admin module, finance module, admission module, library module, placement module human resource module.
- Purchase module is used by the store department for procurement and Human-resource module is used by the HR department, while admin module is used to maintain the record of students and administrative work.
- For the Library automation, software tool named 'SynchRonik' is used to maintain the record of available books, issue-return activities of books. All books are accessed through Bar-code system.
- Internal and External audit is carried-out regularly for financial, administrative works and Library. Audited statements are published on the institutional website, wherever necessary.

2. Academic Functions:

- For the activities like planning, executing, circulating academic information and students-feedback we are using online software tool 'RAMS'.
- All stake-holders can access RAMS with different set of rights as per level of authority.
- Attendance, examination outcomes, various activity notices are regularly displayed on notice board.

File Description	Document
Any additional information	View Document

7.2 Best Practices**7.2.1 Describe at least two institutional best practices (as per NAAC Format)****Response:****Title of practice-1: "Eco-system for academic development"****The-Objective:**

- Scrutinize academic activity through RAMS and transparency in administrative work through AIMS-software.
- Resolve troubles through mentor-mentee Scheme.
- Providing constant backup of data and support to faculty and students.

The-context:

- Performance of students in attendance and result is a critical issue due-to inadequate teaching learning process.
- This problem is analyzed through interaction.
- Attendance-monitoring of student at central level.

The-Practice:

We do teach students to learn but it becomes necessary to evaluate the degree of performance in the Teaching-Learning process RAMS is used.

Different levels

- **Head-Quarter**

1. Monitoring Attendance.
2. Syllabus track.
3. KPI Report.
4. E-learning and Feedback-Module.
5. Result Analysis.

- **College-Level**

1. Lesson Plans.
2. Updating timetables.
3. Attendance Marking.
4. Circulation of study-materials.
5. Attendance of students and faculty.

- **Student-Level**

1. Accelerated learning.
2. Efficient communication
3. Awareness of attendance

In Mentor-Mentee scheme mentor has a group of 10-20 mentees. They have got a good rapport between them. This interaction is communicated to HOD/Principal for remedial action.

Evidence of Success:

- Feedback analysis is done through RAMS.
- The improvement was shown in teaching through counseling by HOD/Principal and arranging expert-lecture.
- Installing RO system.
- Communication gap reduced.
- Performance appraisal of each faculty updated.

Problems Encountered and Resources Required:

- Proper training required for all coordinators.
- Problem in Internet connection.
- All mentees could not attend the collective meeting at same time.

- Well equipped Labs
- ICT facility.

Title of practice 2: “Performance Enhancement through Stakeholder’s Feedback”

The Objective:

- For students satisfaction level.
- To enhance the academic and administrative work through feedback from students, Alumni and parents.
- To bridge the gap between industry and institute and create technical know-how through feedback from industry person.

The context:

- Feedback is best way to measure student’s satisfaction level.
- Employment of today’s engineer is an essential issue.
- To increase utilization of library resources and make library more accessible for students.
- Students are good in theory, but they are lagging behind in practical knowledge.
- Improve the administrative working procedure we take feedback from parents.

The Practice:

For the development of institute we are taking the feedback from students, parents, alumni and industry person. We are taking students and alumni feedback through online and feedback from parents and industry person through offline.

- RAMS is used to collect feedback from student.
- We have prepared online Google form to take it.
- Parent feedback is taken on the eve of parent meet.
- We have identified some industry person and we arrange guest lecture, seminar based on the industry.

Evidence of Success:-

- Teaching learning process is improved.
- Institute has increased number of ICT tools, books in library.
- Wi-Fi bandwidth and number of devices has increased.
- Bus timing has been changed.
- We have increased number of Industrial-visits, Industry Expert-Lectures, Seminar, workshops and Internship through 40 MOUs.

Problems Encountered and Resources Required:

- Continuous Internet facility problem.
- Time consuming process.
- Continuous follow-up.
- No existence of large scale industries.
- Smart phones and PCs with internet connection are required.
- RAMS server.
- Special training.

File Description	Document
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7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

Implementation of Technical Know-how for Agricultural Industry

As major economy of India depends on agriculture sector, but still the agriculture sector is under-

developed. For the development of agricultural sector, we are encouraging our students to build their own project on agricultural industry. As our institute belongs to rural area and which is surrounded with agricultural area, Our major feeder zone is from rural area and students belongs to farmer family so they are familiar with agricultural sector.

Lack of agricultural Labors is a serious issue in the development of the agricultural sector so in order to reduce manpower it is essential to implement automation in agricultural work. For encouraging this practice we are organizing some industrial visits to agricultural industry like dairy industry, Rahuri Agricultural university etc. We also encourage students to visit near-by sugar factory for cogeneration of products like Electric energy, ethanol etc. We have completed some agricultural projects and they are as follows.

- All the students of TE E&TC have implemented their Mini Project on 'Dairy Automation System'. Student groups have implemented different modules of Dairy and if we combine all the modules it will form fully automated dairy farm. Students have used different sensor's and processor's to design this complete project. This dairy automation system contain cleaning module, feeding module, temperature and humidity control module and Milk testing module.
- Students from BE Mechanical have implemented 'Solar based Grapes Drying System', which is used for production of raisins from grapes. The whole project works on solar energy which is a green energy project. The project which was implemented like a prototype but if we implement it on a large scale then it will form a large Raisin manufacturing industry.
- Another agricultural project from students of BE Mechanical is “Multiple Fruit Grading Machine”. They have developed a machine which can be used to separate the spherical and circular fruit size wise. The machine can separate the fruit in three grades i.e. small, medium and large. A drive is provided to the machine by using electric motor.
- Our students from BE E&TC have implemented 'Microcontroller based plant watering Robot' which measures humidity of soil and depending on humidity level robot ON/OFF the water pump.
- With inspiration from incubation center project of design and development of 'Mango Pulp Extractor Machine' is undertaken by the BE Mechanical engineering students. This project is concentrating on the smart means of separating the pulp from the Seed, saving energy and providing an alternative source of food supplements and taste. The project is sponsored by Deepa Industry, MIDC, Ahmednagar.

This practice helps us to enhance the use of technology in agricultural industry and motivate students to become entrepreneur.

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NAAC

5. CONCLUSION

Additional Information :

We are organizing 'National Conference on Emerging Trends in Technology and Social Engineering' on 24th Feb. 2018.

Our institution has been selected for implementing PM-YUVA YOJANA under Central Govt. scheme.

Solar system has been installed in college/hostel premises for energy conservation. Also, green initiatives such as tree plantation, sewage water treatment plant, use of LED bulb, rain water harvesting, etc are effectively implemented in campus.

Concluding Remarks :

G.H. Raisoni College of Engineering and Management, is run by very well known and reputed group i.e. S.G.R Education Foundation. The vision is to achieve excellent standards of quality education with capabilities of accepting new challenges.

We have studied Peer Team Report of NAAC Committee given to us in 2015. Afterwards, we have implemented maximum suggestions given by Peer Team of NAAC and hence decided to go for re-assessment to improve our credential.

We have incorporated feedback from all the stake holders namely students, parents, Alumni and employers. This is analyzed periodically and accordingly action is taken to improve the system.

In teaching learning process apart from using black board, various modern tools such as RAMS/AIMS, ICT tools, e-journals, e-books, video lecture series, etc are used for effective understanding.

MCQ Test, Quiz, Paper presentation, Industrial visit, Industry Based Project, open electives etc. are incorporated to meet outcome based education. Feedback is taken from students and even employers to measure learning outcomes. Expert lectures, workshop, seminars, certificate courses, VET etc are conducted to make it more student centric learning.

Research and development culture has been developed in the college. Many industrial and live projects have been carried out successfully. Incubator is established to imbibe the culture of entrepreneurship amongst students, under which many agricultural related projects have been implemented.

Thus, our Institute is taking multi-dimensional efforts to impart quality and value based education to raise satisfaction level of all stake-holders.