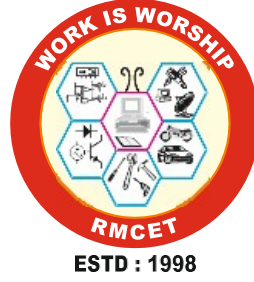




NAAC for Quality and Excellence in Higher Education

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**Rajendra Mane College of Engineering & Technology  
Ambav (Devrukh)**

Tal - Sangmeshwar, Dist- Ratnagiri (Maharashtra) - 415804

# **AQAR**

## **For the Academic Year 2017-18**

**Submitted to**



**राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्**

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**  
*An Autonomous Institution of the University Grants Commission*  
P. O. Box. No. 1075, Opp: NLSIU, Nagarbhavi, Bangalore - 560 072 India



## The Annual Quality Assurance Report (AQAR) of the IQAC

### Part – A

#### 1. Details of the Institution

1.1 Name of the Institution

Rajendra Mane College of Engineering and  
Technology, Ambav (Devrukh)

1.2 Address Line 1

At & Po. Ambav (Devrukh)

Address Line 2

Tal. Sangmeshwar

City/Town

Dist. Ratnagiri

State

Maharashtra

Pin Code

415804

Institution e-mail address

info@rmcet.com

Contact Nos.

(02354) 269400

Name of the Head of the Institution:

Dr. Bhagwat M. M.  
Principal

Tel. No. with STD Code:

(02354) 269609



NAAC for Quality and Excellence in Higher Education

Mobile:

Name of the IQAC Co-ordinator:

Mobile:

IQAC e-mail address:

1.3 NAAC Track ID (For ex. MHCOGN 18879)

1.4 NAAC Executive Committee No. & Date:  
(For Example EC/32/A&A/143 dated 3-5-2004.  
This EC no. is available in the right corner- bottom  
of your institution's Accreditation Certificate)

1.5 Website address:

Web-link of the AQAR:

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 <sup>st</sup> Cycle	B+	2.60	2017	05 Years

1.7 Date of Establishment of IQAC:

1.8 AQAR for the year :



**1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((for example AQAR 2010-11 submitted to NAAC on 12-10-2011))**

Nil

**1.10 Institutional Status**

Affiliated College                      Yes       No

Constituent College                      Yes       No

Autonomous college of UGC      Yes       No

Regulatory Agency approved Institution      Yes       No

AICTE

Type of Institution      Co-education

Rural     

Grant-in-aid                      UGC 2(f)                            UGC 12B       NA

Financial Status                      Totally Self-financing     

**1.11 Type of Faculty/Programme**

Engineering                            Management     

**1.12 Name of the Affiliating University (for the Colleges)**

University of Mumbai, Mumbai

**1.13 Special status conferred by Central/ State Government-- UGC / CSIR/DST/DBT/ICMR etc**



## NAAC for Quality and Excellence in Higher Education

Autonomy by State/Central Govt. / University	<input type="text" value="NO"/>		
University with Potential for Excellence	<input type="text" value="NO"/>	UGC-CPE	<input type="text" value="NO"/>
DST Star Scheme	<input type="text" value="NO"/>	UGC-CE	<input type="text" value="NO"/>
UGC-Special Assistance Programme	<input type="text" value="NO"/>	DST-FIST	<input type="text" value="NO"/>
UGC-Innovative PG programmes	<input type="text" value="NO"/>	Any other	<input type="text" value="NO"/>
UGC-COP Programmes	<input type="text" value="NO"/>		

### **IQAC Composition and Activities**

2.1 No. of Teachers	<input type="text" value="05"/>
2.2 No. of Administrative/Technical staff	<input type="text" value="02"/>
2.3 No. of students	<input type="text" value="01"/>
2.4 No. of Management representatives	<input type="text" value="01"/>
2.5 No. of Alumni	<input type="text" value="01"/>
2.6 No. of any other stakeholder and Community representatives	<input type="text" value="02"/>
2.7 No. of Employers/ Industrialists	<input type="text" value="01"/>
2.8 No. of other External Experts	<input type="text" value="01"/>
2.9 Total No. of members	<input type="text" value="14"/>
2.10 No. of IQAC meetings held	<input type="text" value="02"/>



2.11 No. of meetings with various stakeholders No.  Faculty

Non-Teaching Staff  Alumni  Others

2.12 Has IQAC received any funding from UGC during the year? Yes  NO

If yes, mention the amount

2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC  
Total No.

International  National  State  Institution Level

(ii) Themes

#### 2.14 Significant Activities and contributions made by IQAC

- 1) Preparation of NAAC visit
- 2) Preparation of Perspective Plan of the college
- 3) Internal Academic Audit of the college
- 4) Use of ICT in teaching learning
- 5) Organization of workshops at college level for quality enhancement

#### 2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year



Plan of Action	Achievements
NAAC Peer Team Visit	Accredited by NAAC with B+ grade
Participation in AICTE-CII survey	Ranked in Gold Category
Eco friendly campus	ISTE Best Campus Award
Soft Skill courses for students	Successfully completed by students
Academic Calendar of events	Executed to the most extent
Participation in Indiatimes survey	Got 144 <sup>th</sup> Rank among 163 Engg. colleges all over India

\* Attach the Academic Calendar of the year as Annexure.

2.16 Whether the AQAR was placed in statutory body Yes  No

Management  Syndicate  Any other body

Provide the details of the action taken

The AQAR was placed in the Directors Board meeting. It was discussed and approved by the management.



Part – B

Criterion – I

1. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PG	01	---	01	
UG	04	---	04	
<b>Total</b>	05		05	

1.2 (i) Flexibility of the Curriculum: CBCS

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	05

1.3 Feedback from stakeholders\*

Alumni

Parents

Employers

Students

Mode of feedback : Online

Manual

*\*Please provide an analysis of the feedback in the Annexure*

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

Yes, syllabus has been revised from the academic year 2016-17 by affiliating University

**Salient Feature:**

1. Choice Based Credit System is introduced.





2. Syllabus is based on outcome-based education system
3. More industry oriented elective courses are introduced.
4. Emphasis is given on developing expertise in specific domain of particular program.
5. Focus is given on developing Analytical, research & presentation skills, business etiquettes among students.

**1.5 Any new Department/Centre introduced during the year. If yes, give details**

No

**Criterion – II**

**2. Teaching, Learning and Evaluation**

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
55	54	01	00	00

2.2 No. of permanent faculty with Ph.D.

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
06	00	01	13	00	05	00	00	07	18

2.4 No. of Guest and Visiting faculty and Temporary faculty

30	07	13
----	----	----

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	--	01	--
Presented papers	02	14	02



2.6 Innovative processes adopted by the institution in Teaching and Learning:

ICT based education, online assignments, outcome based teaching, Language lab, Virtual lab, spoken tutorials, Video lectures, Use of Moodle.

2.7 Total No. of actual teaching days during this academic year

195 days

2.8 Examination/ Evaluation Reforms initiated by the Institution (for Example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, and online Multiple Choice Questions)

Online multiple choice Questions using Edmodo software

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

--	05	--
----	----	----

2.10 Average percentage of attendance of students

75.00

2.11 Course/Programme wise distribution of pass percentage:

Academic Year: 2017-18

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Total Pass %
Computer Engineering	59	14	24	14	02	91.53
Mechanical Engineering	82	16	28	19	02	79.27
Automobile Engineering	75	06	18	33	01	77.33



Electronics & Telecommunication	55	07	18	14	09	87.27
Information Technology	15	00	04	10	00	93.33
Master of Management Studies	25	00	11	00	00	44.00

**2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:**

- Promoting modern methodology of teaching & learning.
- Preparation of academic planning.
- Conduction of internal academic audit.
- Student feedback about teaching & learning.
- Review of student performance in internal and University examination.

**2.13 Initiatives undertaken towards faculty development**

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	10
HRD programmes	10
Orientation programmes	03
Staff training conducted by other institutions	19
Summer / Winter schools, Workshops, etc.	03
Others	08

**2.14 Details of Administrative and Technical staff**

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	59	00	00	00
Technical Staff	26	00	00	00



## Criterion – III

### 3. Research, Consultancy and Extension

#### 3.1 Initiatives of the IQAC (if any at department level) in Sensitizing/Promoting Research Climate in the institution

1. Grant for carrying out research activities is increased from Rs. 15,000 to Rs. 25,000 per department.
2. In order to improve quality of publications and to have publications in reputed journals, it is decided to give cash prize of Rs. 1500.
3. To motivate faculty members to submit minor and major research proposals to affiliating university and funding agencies.
4. Research paper reading exercise is initiated in order to inculcate habit of research paper reading among the students of T.E. and B.E.

#### 3.2 Details regarding major projects- Nil

#### 3.3 Details regarding minor projects

	Completed in 2017-18	On-going in 2017-18		Sanctioned in 2017-18	Submitted in 2017-18
		Sanctioned in 2017-18	Sanctioned in 2016-17		
Number	03 (Sanctioned in 2016-17)	03	03	03	14
Outlay in Rs. Lakhs	0.80	0.288	0.45	0.74	3.80

#### 3.4 Details on research publications

	International	National	Others
Peer Review Journals	28	--	--
e-Journals	20	01	--
Conference proceedings	02	20	02 (State Level)



**3.5 Details on Impact factor of publications:**

Range  Average  h-index

Nos. in COPUS

**3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations**

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned in Rs.	Received
Minor Projects	01	University of Mumbai	74,000 / -	Nil
Students research projects <i>(other than compulsory by the University)</i>	01	College	8,00,000/ -	8,00,000/ -
Total			8,74,000 / -	8,00,000

**3.7 No. of books published - Nil**

**3.8 No. of University Departments receiving funds from - NA**

**3.9 For colleges- Nil**

**3.10 Revenue generated through consultancy**

**3.11 No. of conferences organized by the Institution**

Level	National
Number	01
Sponsoring Agencies	Self-Sponsored

**3.12 No. of faculty served as experts, chairpersons or resource persons**

**3.13 No. of collaborations:** National  Any other

**3.14 No. of linkages created during this year**



**3.15 Total budget for research for current year in lakhs:**

From Funding Agency  from Management of   
University/College  
Total

**3.16 No. of patents received this year**

Type of Patent		Number
National	Applied	--
	Granted	01

**3.17 No. of research awards/ recognitions received by faculty and research fellows of the institute in the year**

Total	University
01	01

**3.18 No. of faculty from the Institution- Nil**

**3.19 No. of Ph.D. awarded by faculty from the Institution**

**3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)- Nil**

**3.21 No. of students Participated in NSS events:**

University level  State level   
National level  International level

**3.22 No. of students participated in NCC events: NA**

**3.23 No. of Awards won in NSS: Nil**

**3.24 No. of Awards won in NCC: NA**

**3.25 No. of Extension activities organized**

College forum  NSS  Any other



### 3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

- College had conducted programmes on engineering education awareness and career opportunities after engineering at science junior colleges and diploma colleges of Ratnagiri and Sindhudurga district.
- In January 2018, seven days residential camp was organized by NSS in adopted village Nive. Under this, activities like skill development programmes, social activities are carried out.
- College had conducted one day workshop on “Virtual Lab” for high school teachers from Ratnagiri District.
- **Department of Automobile Engineering** has donated the solar street light lamp system and conducted awareness programme regarding solar energy for the students of Tulasani High School.
- **Department of EXTC** conducted one day workshops on Virtual Lab, Arduino-Uno, and Project report writing using LATEX software for diploma students.
- **Department of Computer Engineering** has donated education set (study material) to needy students of schools in Devrukh Region

#### Activities Conducted by NSS during 2017-18

Sr. No.	Activity Details	Date	Participants	Venue
01	Celebration of Yoga Day	21/06/2017	Staff and Students	RM CET
02	Seminar on Road Safety	13/07/2017	Students	RM CET
03	Voter Awareness Programme	18/07/2017	Staff and Students	RM CET
04	Kargil Vijay Din Celebration	26/07/2017	Students	RM CET



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05	Cancer Awareness Programme	02/08/2017	Staff and Students	RM CET
06	Swachhata Abhiyaan	11/08/2017	NSS Volunteers	Sangmeshwar & Devrukh S.T. stand
07	Blood Donation Camp	17/08/2017	Staff and Students	RM CET
08	NSS Day celebration	24/09/2017	Staff and Students	RM CET
09	Swachhata Abhiyaan	02/10/2017	Staff and Students	RM CET
10	Vigilance Awareness Week	31/10/2017 To 05/11/2017	Staff and Students	RM CET
11	NSS Residential Camp  Social activities such as AIDS Awareness, Road Safety, Chlorine Bottle Distribution, Skill development activities	06/01/2018 to 12/01/2018	NSS Volunteers	Nive





## Criterion – IV

### 4. Infrastructure and Learning Resources

#### 4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	126060 sq.m.	Nil	Management	126060 sq.m.
Class rooms	25	Nil	Management	1820.93 Sq.m
Laboratories	40	Nil	Management	3823.64 Sq.m
Seminar Halls	03	Nil	Management	417.24 Sq.m
No. of important equipments purchased ( $\geq$ 1-0 lakh) during the current year.	24	02	Management	26
Value of the equipment purchased during the year (Rs. in Lakhs)	299.28190	10.43921	Management	309.72111

#### 4.2 Computerization of administration and library

- The computerization of administration is done through ERP software.
- The library has Online Public Access Catalogue (OPAC) facility to search the library collection. In library, three OPAC machines are installed to help the users for searching the library resources. OPAC has basic and advance search facility to view all the details about the books.
- The library has Electronic Public Access Catalogue (EPAC) facility to search the library collection. With the help of EPAC, students can access the e-resources of the library from anywhere inside the campus.
- The Library has subscribed e-resource packages of e-journal J-Gate research and e-journal package where the federated search facility to search articles in multiple databases is available.



- These resources are accessible from anywhere in the college campus and link to all such e-resources, open access journals and e-Books are available at the library webpage on college website. ([www.rmct.com/library](http://www.rmct.com/library))
- A well-equipped Digital Library with 10 nodes having internet connectivity is available in the Central Library through OPAC for access to e-publications. Also, the access facility to e-journals is multiuser and IP address-based through EPAC.
- Library Management Software EASYLIB provides easy search modules to access catalogued books, new arrival list etc.  Issue and return of books is done with help of EASYLIB software
- To access the e-journals and internet, a digital library of 10 nodes is facilitated to the users in the Central Library. Scanned University question papers, syllabus, faculty publications, NPTEL video lectures and e-books are provided in the digital library.
- Internet bandwidth/speed :100 Mbps and total numbers of printers for public access: 02
- All departments have their own BlogSpot-Web Based Course Management System: A faculty maintains attendance records, can share resources like presentations, course material, books, files or links to internet resources.
- Students can access course material, daily attendance, departmental news, internal examination marks, etc.

### 4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
<b>Text Books</b>	25022	71,17,443	1068	3,25,604	26090	74,43,047
<b>Reference Books</b>	1693	7,57,989	--	--	1693	7,57,989
<b>e-Books</b>	300	--	70	--	370	--
<b>Journals</b>	44	1,55,300	26	52,700	70	2,08,000
<b>e-Journals</b>	02	1,37,400	01 Continued	69000	01	69000



<b>CD &amp; Video</b>	395	--	107	--	502	--
<b>Others (specify) Achieve Report</b>	1250	--	250	--	1500	--

#### 4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	379	16	80 MBPS	---	01	01	05	
Added	00	00	20 MBPS	---	---	---	---	
Total	379	16	100 MBPS	---	01	01	05	

#### 4.5 Computer, Internet access, training to teachers and students and any other programme for technology up gradation (Networking, e-Governance etc.)

Our campus is enabled with Wi-Fi facility The College is Nodal Center for Virtual Lab. Virtual Labs provide the students the result of an experiment by one of the following methods (or possibly a combination):

- Modeling the physical phenomenon by a set of equations and carrying out simulations to yield the result of the particular experiment. This can, at-the-best, provide an approximate version of the 'real-world' experiment.
- Remotely triggering an experiment in an actual lab and providing the student the result of the experiment through the computer interface. This would entail carrying out the actual lab experiment remotely.
- The college has developed curriculum for Soft skills Development in association with SEED InfoTech, Pune.
- College is also providing Students the access of "Spoken Tutorials". The Spoken Tutorial project is the initiative of the "Talk to a Teacher" project of the National Mission on Education through Information and Communication Technology, launched by MHRD, Govt of India. It contains a variety of Spoken Tutorials on various Free and Open Source



Software (FOSS) in various Indian regional languages. Learning is more effective when animation and narration are presented simultaneously. Audio-video demonstrations can illustrate features with maximum clarity.

- College is also promoting Teachers and Students to register for NPTEL Course. NPTEL courses provide E-learning through online Web and Video courses various streams.
- College also provides a facility of language lab. The language lab is a very useful tool that facilitates classroom engagement and interaction via computer-based exercises and activities to maximize language immersion.

#### 4.6 Amount spent on maintenance in lakhs:

i) ICT	Rs 2.48901
ii) Campus Infrastructure and facilities	Rs 19.97834
iii) Equipments	Rs 0.74417
iv) Others	Rs 14.20301
<b>Total:</b>	Rs 37.41453



## Criterion – V

### 5. Student Support and Progression

#### 5.1 Contribution of IQAC in enhancing awareness about Student Support

IQAC comes ahead in enhancing awareness about Student Support Services in following way:

1. Information about various services of institute spread among students through Induction Programme, Website, brochure and Notices. Examination Evaluation system is also informed during induction programme.
2. Web portals (Departmental blog) to promote internet technology and paperless organization.
3. Separate email id for online grievance redressal system.

#### 5.2 Efforts made by the institution for tracking the progression

1. Institute keeps record of students who are at the risk of drop out. They are identified through mentoring mechanism. Extra coaching classes of the concerned subjects are conducted and they are thoroughly guided by respective faculty members.
2. Also, institute keeps record of alumni, about their career and higher education by personally contacting them as well as through alumni meet and social media.

#### 5.3 (a) Total Number of students

UG	PG
820	78

(b) No. of students outside the state

07

(c) No. of international students

00

Men

No	%
696	78

Women

No	%
202	22



Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
445	94	1	381	0	921	469	71	0	358	0	898

The college conducts one UG program i.e. B.E. in four trades and one PG program i.e. Masters in Management Studies. In both program 80% seats at entry point are filled by state government and hence demand ratio is not possible to calculate for 80%. 20% seats in both programs are filled by the management and demand ratio of the same is as follows:

Demand ratio

1:0.64

Dropout %

UG

4.14

PG

0.00

#### 5.4 Details of student support mechanism for coaching for competitive examinations (If any)

1. GATE Forum for providing coaching to final year students for GATE exams
2. IBPS Cell Coaching for preparation of Banking Exam
3. Coaching for NCFM – NSE's Certification of financial market examination.
4. Expert lectures for preparation of AMVI exam (Assistant Motor Vehicle Inspector)

No. of students beneficiaries

214

#### 5.5 No. of students qualified in these examinations -Nil



### 5.6 Details of student counselling and career guidance

1. Seminar on CDAC competitive exam awareness, dated 5/8/2017.
2. One to one interaction with the B.E. students through career guidance cell.
3. Guest Lecture on Career Planning by Mrs. Neeta Khamkar
4. Career Opportunities in Insurance Sector for MMS students by Mr. Devendra Mane
5. Guest lecture on “Entrepreneurship Management” by Mr. Milind Datar
6. Expert lecture on “Career opportunities in Merchant Navy” by Mr. Akshaykumar Pal.
7. Mentoring of all students.

No. of students benefitted

898

### 5.7 Details of campus placement:

A.Y.:2017-18

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
18	202	42	04

### 5.8 Details of gender sensitization programmes

Orientation program of Sexual Harassment Prevention Cell for first year Engg. & first year MMS girl students held on 22 Aug 2017, where 25 girls were benefitted.

Poster presentation on “women empowerment” held on 29 sept 2017, where 20 students were participated.



## 5.9 Students Activities

### 5.9.1 No. of students participated in Sports, Games and other events

State/ University level  National level

### No. of students participated in cultural events

State/ University level  National level

### 5.9.2 No. of medals /awards won by students in Sports, Games and other events

**Sports:** Nil

**Cultural:**

State/ University level  National level

## 5.10 Scholarships and Financial Support

	Number of Students	Amount
Financial support from institution	29	8,83,163.00
Financial support from government	543	2,22,19,101.00

### 5.11 Student organised / initiatives Nil

5.12 No. of social initiatives undertaken by the students

### 5.13 Major grievances of students (if any) redressed:

No major grievances received from students.





## Criterion – VI

### **6. Governance, Leadership and Management**

#### **6.1 State the Vision and Mission of the institution**

##### **Vision**

To empower the rural youth for better employment by providing engineering and management education

##### **Mission**

- To prepare all students for successful career based on Strong Moral and Ethical Foundation.
- To produce quality engineers by providing state of the art engineering education
- To impart personality development skills to students that will help them to succeed.
- To encourage and facilitate faculty and students to work together across discipline boundaries.
- To bring up mutually beneficial partnerships with Alumni, Industry and Institutes.

#### **6.2 Does the Institution has a management Information System**

Yes

There are separate modules of MIS at Administrative Office, Accounts Department, Library and Examination Section.

Office Admin – My SQL with dot net frame work

Accounts – Tally and Office excel

Library – Easylib Software

Examination dept – SQL server with dot net Frame work

#### **6.3 Quality improvement strategies adopted by the institution for each of the following:**

##### **6.3.1 Curriculum Development**

**Curriculum is designed by affiliating University.**

However College has conducted bridge course in following subjects to fill the gap and also to revise the prerequisites.

First Year SEM I - Engineering Mechanics, Basic Electrical and Electronics, Applied Mathematics, Applied Physics

First Year SEM II – Structured Programming Approach and Engineering Drawing, Applied Mathematics, Applied Physics



Final Year Automobile - Industrial Fluid Mechanics

**6.3.2 Teaching and Learning**

- For every semester academic calendar is prepared at Institute level for planning of lectures and practicals.
- Teaching plan is prepared for every subject for 100% completion of the syllabus.
- Modern teaching-learning aids and ICT resources such as edmodo, google drive, blog, spoken tutorial, NPTEL etc. are used for effective delivery of curriculum.
- Lecture notes are made available to the students.
- Crash course is conducted for the subject of Mathematics.
- Virtual Lab is used for conduction of Practicals wherever possible.

**6.3.3 Examination and Evaluation**

- Following are the various heads of Examinations and its evaluation

**1. Unit Tests**

- a) Two Tests conducted in a Semester, 1<sup>st</sup> at mid of the term on 40% syllabus and 2<sup>nd</sup> at the end of the term on 40 % of the remaining syllabus)
- b) Question papers of Unit test is set by concerned subject teacher based on blooms taxonomy to achieve course outcomes and ther by program outcomes.
- c) Average of two tests is given as Internal Marks (20% of the Theory Head)
- d) Marks obtained in Unit tests are communicated to parents.

**2. Term Work**

- a) This includes evaluation of Practical Performance / Tutorials / Assignments conducted throughout the semester.
- b) Evaluation of each sub head is done based on the rubrics designed for the same.
- c) Term work being a part of continuous evaluation, passing in the same is compulsory.

**3. Oral / Practical**

- a) Oral Examination or Practical Examination or both for a particular subject is conducted at the end of the semester by Internal & External Examiner. Evaluation of performance in practical examination is done based on the rubrics designed for the same.

**4. Mini Project / Project**

- a) Evaluation of Mini project / project is done at the end of the semester by Internal and External Examiner based on rubrics designed.



### **5. Theory Examination or End Semester Examination**

It is conducted by University at the end of the Semester. Question paper of every subject is of 80 % of the theory head and is set by University.

Evaluation of answer books of First Year Semester I & II and Final Year Semester VII & VIII is done at University level.

Evaluation of answer books of Second Year Semester III & IV and Third Year Semester V & VI is done at College level.

For college level evaluation, verification of assessment done as well as recounting of the marks is done by other faculty members in order to eliminate errors / mistakes / omissions etc.

### **6.3.4 Research and Development**

1. Faculty members have been encouraged to carry out research work by taking grants from University in terms of Minor research Proposal Scheme.
2. 14 Minor Research Proposals have been submitted to University of Mumbai in year 2017-18 out of which 03 proposals have been sanctioned.
3. Seminars by experts on topics like “Advanced research and innovation”, “Research Report/paper writing” are organised for students and faculty members.
4. Every year Institute organises National Conference on “Changing Technology & Rural Development” (CTRD) for developing research culture.
5. Total Paper presented in Conference (CTRD2k17) by faculty of our college are 25.
6. Students are encouraged to participate every year in project exhibition and competitions like DIPEX (the most prestigious and popular state level exhibition-cum-competition of projects and working models of degree and diploma engineering students) and in research convention like Avishkar (University Level competition)
7. Project report writing is done using open source software like LATEX.
8. Final Year students are encouraged to publish at least one research paper based on their project work in UGC approved journal.
9. Students are encouraged to participate in the national level competitions as Formula Student India organized by DAE and Indian Karting Competition.



### 6.3.5 Library, ICT and physical infrastructure / instrumentation

**Library Facility** – In our library there are total 26090 books available for circulation. In addition there are 1693 reference books, 44 National & International Journals. Library provides book bank facility to the students under which 600 books have been issued.

- 928 volumes of Engineering degree course and 140 volumes of MMS have been purchased in year 2017-18
- 46 National / International Journals for Engineering and 24 for MMS have been procured in year 2017-18
- Feed back from students regarding library facility is taken every year.

**Library committee has been constituted for smooth functioning of library activities.**

**Committee has organized following events:**

1. Library Orientation program for newly admitted students
2. Books Exhibition
3. Vachan Prerana Din
4. Marathi Bhasha Din (14<sup>th</sup> February)

**ICT and physical infrastructure / instrumentation**

- Every department is having one digital/ multimedia class room. Effective use of the same is carried out while teaching.
- Virtual Lab is used to perform practical's
- Microwave engineering lab of Electronics & Telecommunication Department has been upgraded by purchasing a new Microwave test bench.
- Advance Wheel alignment machine is procured in Automobile Department for performing practical's based on the same. The services of the same are extended to public as a facility.

### 6.3.6 Human Resource Management

- College has recruited the teaching faculty to every department as per AICTE norms to fulfil Teacher Student ratio.
- Every faculty of the department has been given additional responsibility apart from academic load for smooth functioning of the department.



- Also various statutory committees have been formed at college level for smooth functioning of academic as well as non academic activities of the college.
- Every faculty member of various department has been given the responsibility as either the head of the committee or member.
- Every committee head conducts a meeting of the members for planning and execution of activities.

#### **6.3.7 Faculty and Staff recruitment**

1. Well defined HR policy.
2. Higher Salary paid to commensurate higher qualification and experience.
3. Career Advancement Scheme (CAS) implemented as per the norms and guidelines of AICTE and University.
4. University Staff Selection Committee (USSC) interviews conducted for regular appointments.
5. Staff welfare schemes implemented for all staff members.
6. Faculty are encouraged for research activities by providing financial assistance.
7. Faculty are sponsored for attending / participating in conference for paper presentation / publications.

#### **6.3.8 Industry Interaction / Collaboration**

IIC (Industry Institute Interaction Cell) is in place through which following activities have been initiated.

- All the Students of Third Year are encouraged to undergo in plant training during summer vacation.
- Industrial Visits are organized for students.
- Experts from industry are invited for interaction with staff and students.
- A seminar was organized on “Entrepreneurship Development and Applications of Robotics in Automotive Industries” for all students.
- One Day Workshop was organized on “Industrial Fluid Mechanics” for Mechanical Students.
- Four MOUs have been signed this year for providing advanced technical training to the students.



### 6.3.9 Admission of Students

1. Admission notification is published in leading newspapers of this region.
2. Staff members visit 10+2 level science colleges of nearby district for counselling, campaigning.
3. Under the Prabodhan academy Coaching in the subjects of PCM is given to the local students to make them eligible for engineering admission.
4. College achievements are displayed at prime locations through hoardings and news published on regular basis.
5. Concession in fees to meritorious but economically weaker section of students by the Management.
6. Various events are organised throughout the year for school & Junior College students by all the departments.
7. College honours the winners of taluka level science exhibition of primary and secondary school of Ratnagiri district.

### 6.4 Welfare schemes for

Teaching	<ol style="list-style-type: none"><li>1. Advance payment against salary.</li><li>2. Guarantor against Loan liability.</li><li>3. Concession in fee and relaxation in time for payment of fee for their wards.</li><li>4. Financial assistant in case of medical treatments.</li></ol>
Non teaching	Same as above
Students	<ol style="list-style-type: none"><li>1. Tuition Fee concession is given to the meritorious and economically weaker students.</li><li>2. Concession in hostel fees is given to the meritorious students.</li><li>3. The college has a student welfare fund through which financial assistance is given to students' activities.</li><li>4. Details about the scholarships, various free ship are displayed on the notice board of the college. Office staff provides guidance to the students regarding various scholarship/ free ship schemes.</li><li>5. Scholarships from central, state governments and other agencies are made available to the students.</li><li>6. Educational loan facility from the bank is also provided to the students</li></ol>



	<p>7. Free Medical facility and 24 x 7 Ambulance facility is available in the campus.</p> <p>8. Financial assistance to students for participating in University and national level competitions.</p>
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6.5 Total corpus fund generated Rs. 1,00,000.00

6.6 Whether annual financial audit has been done  Yes  No

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	No	--	Yes	IQAC
Administrative	No	--	Yes	IQAC

6.8 Does the University/ Autonomous College declares results within 30 days?

NA

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

- From Academic Year 2016-17 University has implemented Choice Based Credit and grading system for Engineering Degree Course.
- Question papers of End semester Examinations are sent online on University web link one hour before the commencement of examination. Separate DEPDS (Digital Examination Paper Down loading System) Room has been developed with CCTV, High Speed Digital copier machine, Separate PC with Internet Connection.
- Theory papers of End semester Examinations of First Year and Final Year, which is conducted by University are assessed online, where faculty members can assess / moderate the papers on screen in the CAP center arranged for the purpose in the college.
- Internal marks are submitted online on University web portal.
- Examination forms are submitted online as well as hall tickets are made available online.



### 6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

Not Applicable

### 6.11 Activities and support from the Alumni Association

Alumni Association has been formed and same is registered at Charity Commission, Ratnagiri. (Alumni Reg.No. Maharashtra/5832/Ratnagiri dated 23<sup>rd</sup> Feb 2017)

Alumni Association conducts an Alumni Meet every year to make them aware about the developments taking place in the college. This year meet is conducted on 09<sup>th</sup> September 2017 at Mumbai and 91 Alumni attended the same.

Following is the details about the Lectures / Seminars conducted by the Alumni to the existing students in year 2017-18

1. Expert Lecture is conducted by alumni Mr. Jitendra Singh and Mr. Amol kavitkar for EXTC & Computer students through video conferencing on 07/04/2018
2. Lecture to the students of Mechanical engg. on CAD/CAE by Mr. Hrishikesh Sawant on 16/03/2018
3. Seminar on 3D Printing by Utkarsh Ankalkhopte on 27/02/2018
4. Expert Lecture for GATE appearing students by Mr. Desale Deep on 08/08/2018
5. Seminar on Hydroelectric Power Plant By, Mr. Rahul Bodhe on 29/09/2017
6. Lecture on Project Development by Mr. Pushkaraj Naringrekar IBM
7. Lecture on Employability Skills by Mr. Gaurav Kadam.
8. Seminar on “PCB designing using Dip Trace and Altium software”, by Mr. Prakash Bhanushali, Technical Head, Design for Excellence, Venture of VJTI to Extc Students
9. Guest Lecture delivered by Mrs. Khamkar Neeta S. on Introduction of HRM & Career Planning on 03/04/2018 for MMS I & II Year students.
10. Guest Lecture delivered by Mr. Nitin Shedge on Financial Planning & Environment Protection on 19/09/2017 for MMS I & II Year students. One of our Alumni Mr. Ankush Agrawal donated an Anroid App. – “Sqloop” for communicating with parents





### **6.12 Activities and support from the Parent – Teacher Association**

A meeting of Parent teacher Association is conducted every year at departmental level to convey the information about the activities that are carried out in college for the benefit of the students. Suggestions and feedback from parents are also taken

### **6.13 Development programmes for support staff**

Supporting staff is encouraged to attend the workshops / Training programs for skill development and up gradation of knowledge.

### **6.14 Initiatives taken by the institution to make the campus eco-friendly**

**College has taken following initiatives to make the campus ecofriendly.**

- College has carried out green audit of the campus by external agency and got A Grade.
- The institute organizes various Tree Plantation program through Nature Club and NSS unit within the Institute. The plantation program includes plantation of various types of ornamental and medicinal wild plant species. This activity is done during the month of July. This program helps in maintaining eco-friendly environment as well as provides pure oxygen within the campus.

The institute has started in house composting culture during 2016-17. The main purpose of this is to reduce disposable waste in the college campus and after complete process of vermin composting it is used as manure.

- Our college has installed Waste Water Treatment Plant of 50 KLD for treating the sewage water coming from the hostels. The quality of treated water is comparable to irrigation standards and is used for irrigation purpose.
- There is a rain water harvesting plant with Volume 6 Lakhs Litres (Approx.)
- 11 Solar street lights have been installed in the campus each of 12 Watt with 40 watt panel for saving conventional electricity.



## Criterion – VII

### 7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

#### 1. Establishment of ‘e-Club’

Department of Electronics & Telecommunication has taken an initiative to encourage the students to work on the projects related to electronics that will be useful for the society in day to day life. Students who are interested to learn modern tools of engineering enroll their names in ‘e-Club’. Hands on training of hardware & software are provided to the students by expertise of the College. Students share the ideas regarding the requirements of the society. Student groups are formed to work on a particular project as per the requirement. College provides funding to carry out the projects. Project Exhibitions are also arranged by ‘e-Club’ to exhibit the hidden talent in the students.

#### 2. RTO authorized Motor Driving School

RMCET is the first educational college in the University of Mumbai to start the RTO Authorized Motor Driving School for the students and citizens staying nearer to the College. Department of Automobile Engineering has taken an initiative to start this activity in the College to train their students. Later, this facility was extended to the society. After registration, on successful completion of training, permanent license is issued by the RTO authorities.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

Sr. No	Plan of Action	Achievement
01	All staff members Should take initiative in preparing R&D proposals	We have submitted Minor Research proposals to Mumbai University for Minor Research Grant



		<ul style="list-style-type: none"> <li>• One of the proposals is sanctioned from Computer department.</li> <li>• One of the proposal is sanctioned and two proposals are ongoing from EXTC department</li> <li>• From Mechanical department one proposal is sanctioned and two proposals are completed &amp; submitted.</li> <li>• One proposal is completed &amp; submitted by Applied Science department.</li> <li>• One FDP by Mechanical department has been sanctioned by ISTE, New Delhi.</li> <li>• Students participation in Avishkar Research Festival</li> <li>• Paper presentation in international and national conferences and Journals by Staff as well as students</li> </ul>
02	Library Activities	<p>Under Library following Activities has done.</p> <ol style="list-style-type: none"> <li>1. Book Exhibition.</li> <li>2. Vachan Prerana Din</li> <li>3. Marathi Bhasha Din</li> </ol>
03	Use of Renewable Energy like Solar Street Light may be introduced	Solar Street Lights are implemented in campus.



04	Online Certification Courses	<p>Online certification courses by NPTEL are completed by three faculty members from E&amp;TC and One from Mechanical.</p> <p>One Student from E&amp;TC had registered for such online course in the 7th Semester as a part of MOOCs based self-learning course &amp; achieved Elite Certificate.</p>
05	To arrange Tech Fest 'Scientilla2K18'	Scientilla 2K18 organised by Mechanical Department on 16 <sup>th</sup> & 17 <sup>th</sup> February 2018.
06	To take feedback from the students	Feedback was taken from the students and actions were taken based on it.
07	Preparation for NBA	All the departments have started the process.

**7.3 Give two Best Practices of the institution** (please see the format in the NAAC Self-study Manuals)

1. Promoting the students to undergo Industrial Training.
2. Encouragement to students for participation in National Level Competitions conducted by Society of Automotive Engineers (SAE) & Formula Student India (FSI).

*\*Provide the details in annexure (annexure need to be numbered as i, ii,iii)*

**7.4 Contribution to environmental awareness / protection**

1. The institute formed many social groups such as Nature Club, NSS, WDC which take part in environment related activities like tree plantation, women empowerment etc.
2. Energy conserving lights like CFL and LED are used in the College campus Solar Energy is used for providing hot water in hostels. The solar water heating system has a capacity of 11,000 liter which saves the electricity consumption by 1,65,000 Units i.e. approximately Rs. 17,32,500/- per year.
3. Rain water harvesting is done in the college by collecting the roof top water.



4. Government built dam is available just behind the college campus. The rain water has been routed to the dam through the stream channels inside the campus.
5. E-waste management: College has scrap management committee to look after e-waste & other waste material management.
6. Vehicle parking locating at College Gate
7. Felicitation of Guest by offering tree (Plants) instead of offering bouquet.
8. Electronic Document Management (EDM) is the management of different kinds of documents in a department in soft copy format using Google drive, blog and FTP server.

**7.5 Whether environmental audit was conducted?**      Yes       No

**7.6 Any other relevant information the institution wishes to add (SWOC Analysis)**

**Strengths:**

1. Dynamic and dedicated faculty with diversified specializations.
2. Supportive Management.
3. Well-developed infrastructure.
4. Eco friendly campus and positive academic ambience.
5. Effective teaching learning process with personal attention to students and monthly feedback to parents.
6. Active Training & Placement Cell and Entrepreneurship Development Cell.
7. Dispensary with Consulting Doctor and 24x7 Ambulance facility.
8. RTO authorized motor driving school.
9. Fee concession to budding and needy students.

**Weaknesses:**

1. Geographical location of college and intake quality.
2. Disproportionate cadre ratio.
3. R & D and Consultancy activities.
4. Interaction with premier institutes.
5. Representation of faculty in university governance.

**Opportunities:**

1. Permanent affiliation and accreditation of all the departments.



2. To start PG courses in engineering disciplines.
3. Starting of foreign language training program.
4. To become solution provider to the society.

**Challenges:**

1. Motivating students towards engineering education.
2. Employability of students.
3. Developing research aptitude among faculty.
4. Attracting senior faculty.



**Rajendra Mane College of Engineering and Technology, Ambav**  
**Academic Calendar Odd Semester (2017-18)**

Week No.	Month	Week Days							Event	Holidays
		Mon	Tue	Wed	Thu	Fri	Sat	Sun		
0	July (19)						1	2		
0		3	4	5	6	7	8	9		
1		10	11	12	13	14	15	16	10 - Reporting of students & Commencement of classes	
2		17	18	19	20	21	22	23		
3		24	25	26	27	28	29	30		
4		31								
4	August (20)		1	2	3	4	5	6	07 to 12- Ist student's online feedback 15 - Independence Day celebration	15 Independence Day
5		7	8	9	10	11	12	13	16 - 1st Letter to parents (Attendance up to 10/08/2017)	25-29 Mid term Break
6		14	15	16	17	18	19	20	17-College Anniversary (working day)	30 - Holiday Against Pateti (17/08)
7		21	22	23	24	25	26	27		31 - Holiday Against Gandhi Jayanti (02/10)
8		28	29	30	31					
8	September (22)					1	2	3	03, 04 & 05 - Internal Examination - I 09 - Mid term AMC Meet	01- Holiday against 04 <sup>th</sup> Monday



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9		4	5	6	7	8	9	10	15- Display of UT I marks 15 Engineers Day Celebration	(25/09) 02 Bakari Id 30 Dasara
10		11	12	13	14	15	16	17	18 - 02nd Letter to parents (Attend. up to 16/09 & IE - I Result)	
11		18	19	20	21	22	23	24	18 to 23 Internal Examination for Repeaters	
12		25	26	27	28	29	30		18 to 23 - 02nd online Feed Back 29 Khande Navami Pooja after 04.00 pm	
12	October (21)							1		01 Mohoram 19 Laxmi Pujan 20 Diwali Padawa 21 Bhaubeej
13		2	3	4	5	6	7	8	02 - Working Day	
14		9	10	11	12	13	14	15	6-7 NAAC Peer Team Visit for Inspection	
15		16	17	18	19	20	21	22	28 - Term End 28 AMC Meeting with Parents	
16		23	24	25	26	27	28	29		
17		30	31						30, 31 & 01 Internal Examination - II	
17	November(09)			1	2	3	4	5	02 & 03 Term Work Submission	04 Gurunanak Jayanti
18		6	7	8	9	10	11	12	06 - 03rd Letter to Parent (Attendance up to 28/10/17 & IE - II Result)	
19		13	14	15	16	17	18	19	06 - 11 Oral/Pract. Exam. (Tentative)	
20		20	21	22	23	24	25	26	12 to 21 Preparatory Leave (10 days)	





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21		27	28	29	30				22-Commencement of theory Examinations (Tentative)	
Activities							Internal Examinations			Holiday

Rajendra Mane College of Engineering and Technology, Ambav

Academic Calendar Even Semester (2017-18)

Week No.	Month	Week Days							Event	Holidays
		Mon	Tue	Wed	Thu	Fri	Sat	Sun		
	January (19)	1	2	3	4	5	6	7	08 - Reporting of Students & Commencement of Classes	29 - Holiday against 08/01/2018
1		8	9	10	11	12	13	14		
2		15	16	17	18	19	20	21	19- Inauguration of Aarohan 2018 26 - Republic day Celebration	
3		22	23	24	25	26	27	28	28 - Aarohan 2018 Annual Day	
4		29	30	31						
4	February (21)				1	2	3	4	05to 10 First Students feedback 14 - First Letter to parent (Atten. Up to 10)	03 & 10 - Holiday against GATE Exam
5		5	6	7	8	9	10	11	16-17 Techfest (Scintilla 2018)	
6		12	13	14	15	16	17	18	19 Shivajayanti (Working Day)	
7		19	20	21	22	23	24	25	24 - Mid term meeting of AMC with parents and Parents Meet at 03.30 pm	
8		26	27	28					24, 27 & 28 UT I (02 papers per day)	



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8	March (21)				1	2	3	4		01 to 05 - Holi <u>Break</u> 01 - against 29/03 (Mahavir Jayanti) 02 Dhuli vandan 03 against 30/03 (Good Friday) 05 against 19/02 (Shivjayanti)
9		5	6	7	8	9	10	11	13 to 17 Second Student's Feedback	
10		12	13	14	15	16	17	18	14 Second Letter to Parent UT I Marks	
11		19	20	21	22	23	24	25	19 - 24 Internal Exam - Repeaters	
12		26	27	28	29	30	31			
12	April (16)							1		14- Aambedkar Jayanti 30 Buddha Pornima
13		2	3	4	5	6	7	8	16 - Defaulters list preparation 16 - 18 UT II	
14		9	10	11	12	13	14	15	19 AMC Meeting with Parents 19 to 21 T/w submission	
15		16	17	18	19	20	21	22	21 - Term End	
16		23	24	25	26	27	28	29	23 to 28 Oral Practical Examaminations 24 - 3rd letter to parent (UT II Marks)	
17		30								
17	May (00)		1	2	3	4	5	6	04 MMS Sem IV Uni. Exam	01 - Maharashtra Din
18		7	8	9	10	11	12	13	29 April to 07 May Preparation Leave	
19		14	15	16	17	18	19	20	08th Commencement of Theory Examination	
20		21	22	23	24	25	26	27		
21		28	29	30	31					
Activities								Tests & Marks Display		Holiday



SAMPLE FEEDBACK FORM

**Faculty Evaluation**

Welcome, 18COSE001! [Change Detail](#) | [Change Password](#) | [Logout](#)

Branch : Computer Engineering | Semester : III

Faculty Name:  Subject Taught:

Note: Enter Rating from 0 to 10.

M. K. Gosavi  
Kolekar Sir  
P. G. Magdum  
P. S. Joshi

ID	Questions	
1	Punctuality in taking class and Sincerity.	<input type="text"/>
2	Discipline, attitude and Behavior towards student	<input type="text"/>
3	Subject knowledge/Quality of course material	<input type="text"/>
4	Accessibility/Availability interaction with students inside and outside classroom	<input type="text"/>
5	Effective Presentation/Method of teaching/Audibility of Teacher	<input type="text"/>
6	Command over the class	<input type="text"/>
7	Conducting lectures practicals in interactive manner	<input type="text"/>
8	Developing inspiration and confidence in the subject among the students	<input type="text"/>
9	Proficiency in English/Maintaining the continuity of the topic	<input type="text"/>
10	Would you like this teacher to teach you again? Yes/No (Yes-10 points, No-5 points)	<input type="text"/>

Remark:

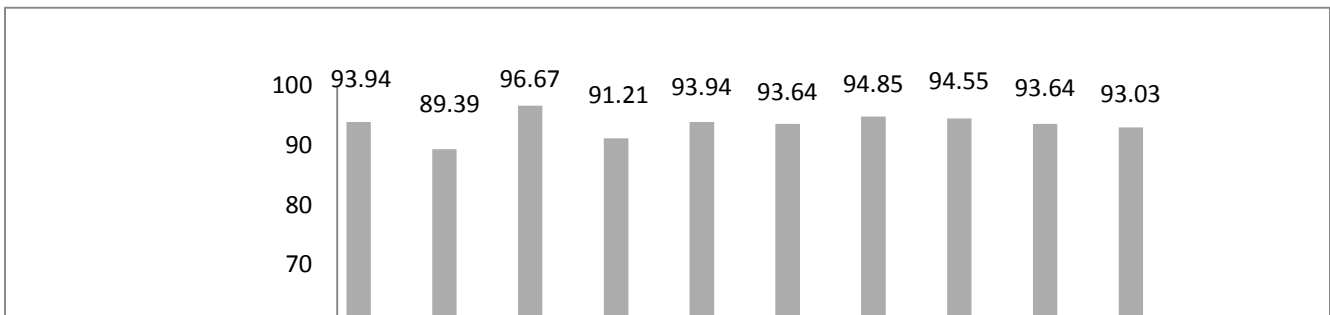
HOME Faculty Evaluation System  
Developed By: Computer Engineering Department, RMCET



### Faculty Feedback Analysis (Sample)

**Academic Year : 2018-19** **Month : August**  
**Name of Lecturer:- Mrs. Parulekar V. W.** **Class:-SE Computer** **SEM: III**  
**Subject:-AM-III**

1) Punctuality in taking class and Sincerity :	93.94
2) Discipline, attitude & Behavior towards Students:	89.39
3) Subject knowledge/ Quality of course material:	96.67
4)Accessibility /Availability /Interaction with the students inside and outside the class room:	91.21
5)Effective Presentation/ method of teaching /Audibility of Teacher	93.94
6) Command over the class:	93.64
7) Conducting lectures/ practical in interactive manner:	94.85
8) Developing inspiration and confidence in the subject among the students:	94.55
9)Proficiency in English / maintaining the continuity of topic:	93.64
10) Would you like this teacher to teach you again: Yes/No: (Yes:- 10 points, No - 5 Points)	93.03





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