

**The Annual Quality Assurance Report (AQAR) of the IQAC**  
***(For Affiliated/Constituent Colleges)***

Institutions Accredited by NAAC need to submit an Annual self-reviewed progress report i.e. Annual Quality Assurance Report (AQAR) to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the IQAC at the beginning of the Academic year. *The AQAR period would be the Academic Year. (For example, July 1, 2017 to June 30, 2018)*

**Part – A**

**Data of the Institution**

*(data may be captured from IQA)*

**1. Name of the Institution: JSPM's Jayawantrao Sawant College of Engineering**

- Name of the Head of the institution : **Dr. M. G. Jadhav**
- Designation: **Professor and Principal**
- Does the institution function from own campus: Yes
- Phone no./Alternate phone no.: **020 26970886 / 020 26970880**
- Mobile no.: **+91 94226 47123**
- Registered e-mail: [jscoe@jspm.edu.in](mailto:jscoe@jspm.edu.in)
- Alternate e-mail : [drmgjadhav@gmail.com](mailto:drmgjadhav@gmail.com)
- Address : **S. No. 58, Handewadi Road, Hadapsar**
- City/Town : **Pune**
- State/UT : **Maharashtra**
- Pin Code : **411 028**

**2. Institutional status:**

- Affiliated / Constituent: **Affiliated**
- Type of Institution: **Co-Education**
- Location : **Urban**
- Financial Status: **Self Financing**

- Name of the Affiliating University: **Savitribai Phule Pune University**
- Name of the IQAC Co-ordinator : **Dr. Sachin Todkari**
- Phone no: **020 26970886 / 020 26970880**
- Mobile: **+919922135900**
- IQAC e-mail address: [jscoe@jspm.edu.in](mailto:jscoe@jspm.edu.in)
- Alternate Email address: [sachintodkari@gmail.com](mailto:sachintodkari@gmail.com)

3. Website address: [www.jspmjscoe.edu.in](http://www.jspmjscoe.edu.in)

Web-link of the AQAR: (Previous Academic Year): NA

For ex. <http://www.ladykeanecollege.edu.in/AQAR2012-13.doc>

4. Whether Academic Calendar prepared during the year?

Yes....., if yes, whether it is uploaded in the Institutional website: Yes

Weblink: [www.jspmjscoe.edu.in/academiccalender17-18](http://www.jspmjscoe.edu.in/academiccalender17-18)

5. Accreditation Details:

Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1 <sup>st</sup>	<b>B+</b>	<b>2.62</b>	<b>2017-18</b>	from:30 Oct 2017 to: 29 Oct 2022
2 <sup>nd</sup>				from: to:
3 <sup>rd</sup>				from: to:
4 <sup>th</sup>				from: to:
5 <sup>th</sup>				from: to:

6. Date of Establishment of IQAC: DD/MM/YYYY: 01/02/2016

7. Internal Quality Assurance System

7.1 Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & duration	Number of participants/beneficiaries
1. Meeting with internal & external stakeholders for Planning & Implementation of Quality Policy	06/10/2017	24
2. Curriculum Development Process (CEP)	11 to 15 June 2017 (06 days)	183
3. Online Certificate Courses through NPTL	20 Dec to 30 Sept 2018	780

4. Skill Development Program by ICT Academy for Faculty Members & Students		68
5. Online Attendance Monitoring System through Moodle (LMS)	20 Dec to 30 Sept 2018 ( During execution of curriculum)	183
6. Skill development program by FACE for Placements	25 Dec 2017 to 10 Jan 2018	356
7. Formation of Student Clubs for development of Innovative Projects	22 Jan 2018	42
8. Virtual Lectures by External Experts through Virtual Class Room	During execution of curriculum	780
9. Improvement in monitoring system by Dept AMC (Academic Monitoring Coordinator) for Semester wise Academic Audit	After Completion of every semester	8
10. Monitoring the conduct of classes	During execution of Curriculum	8

***Note: Some Quality Assurance initiatives of the institution are:***

***(Indicative list)***

- *Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback from all stakeholders collected, analysed and used for improvements*
- *Academic Administrative Audit (AAA) conducted and its follow up action*
- *Participation in NIRF*
- *ISO Certification*
- *NBA etc.*
- *Any other Quality Audit*

**8. Provide the list of funds by Central/ State Government-**

UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount
ISHRAE-EMERSON	PG Project	ISHRAE	2017-18	Rs. 94,000

	Scheme	Chapter		
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**9. Whether composition of IQAC as per latest NAAC guidelines: Yes**

\*upload latest notification of formation of IQAC

**10. No. of IQAC meetings held during the year: 02**

The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website.....

Yes

(Please upload, minutes of meetings and action taken report)

**11. Whether IQAC received funding from any of the funding agency to support its activities during the year? No**

If yes, mention the amount: Nil Year: NA

**12. Significant contributions made by IQAC during the current year (maximum five bullets)**

- \* Skill Development Program for improvement in Placements
- \* Formation of Students clubs for innovative projects
- \* Implementing OBE base Teaching-Learning Process
- \* Enhancing LMS (MOODLE) & Online Certification courses through NPTEL
- \* Enhanced Internship activity during winter and summer vacation.

**13. Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year**

Plan of Action	Achievements/Outcomes
1.Enhancement in skill development activity for placement	75% Campus Placement is achieved
2.Improvement in the quality of course material and made available online on LMS (MOODLE)	Helps students for learning 24*7

**14. Whether the AQAR was placed before statutory body? No**

Name of the Statutory body: Nil      Date of meeting(s): Nil

**15.** Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning?

**No**

Date: NA

**16.** Whether institutional data submitted to AISHE: YES

Year: 2017-18

Date of Submission: 03/03/2018

**17.** Does the Institution have Management Information System?

**Yes (Partially)**

If yes, give a brief description and a list of modules currently operational.  
(Maximum 500 words)

## Part-B

### **CRITERION I – CURRICULAR ASPECTS**

#### **1.1 Curriculum Planning and Implementation**

1.1.1 Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

IQAC gives guidelines for curriculum design, which is in line with Institute's Vision, Mission, Quality Policy and Objectives. Before beginning of every semester the curriculum is designed and developed during **Curriculum Enrichment Program**, where all faculties plan the sessions and activities for the attainment of all GA. Faculty finalizes curriculum by taking inputs from internal and external stakeholders and departments prepares an exact plan of curriculum deployment .The course outcomes are formulated for each individual course to bridge the gap.

For curriculum implementation, IQAC finalizes academic schedule considering the guidelines given by SPPU about the dates like Commencement of the semester, End of the semester, In Semester, End Semester Examinations, Online Examinations, Oral, Practical Examinations, and Holidays.

The **Institute academic schedule** also includes Curricular, co-curricular, extracurricular activities like VC Lectures, industrial visits, workshop, seminars, training programs, Tech-Manthan, NSS, IEEE, ISHARE events.

HoD along with Faculty coordinators of each department prepares **Department Academic schedule** in consultation with subject teachers. It incorporates finer details like subject wise and unit wise detailing which includes each minute activity of department such as Parents Meet, Unit Test Schedule(online and written), GFM Meeting, Workshops, Seminars, Expert lectures, Industrial visits

Student feedback, Course End Survey and Exit Survey, extra learning aids like assignments quizzes, GD etc.

Once the academic calendar, teaching plan, student activity scheduling and course material are developed; they are uploaded on the MOODLE and used for effective course delivery and student activity conduction.

Students are evaluated internally and externally as per the predefined evaluation process which is already disclosed to the students at the beginning of the semester.

Attainment analysis is carried out by the course coordinator and PAC members. Attainments are further analyzed by DAB and IQAC, which in turn suggest an improvement and help redefine the curriculum development and deployment process.

1.1.2 Certificate/ Diploma Courses introduced during the Academic year

Name of the Certificate Course	Name of the Diploma Courses	Date of introduction and duration	focus on employability/ entrepreneurship	Skill development
NIESBUD	Nil	23rd March 2017 to 6th April 2017	Entrepreneurship	Small Business development

#### **1.2 Academic Flexibility**

1.2.1 New programmes/courses introduced during the Academic year

Programme with Code	Date of Introduction	Course with Code	Date of Introduction
Nil	Nil	Audit Course I (210250) Audit Course II	AC I and II – June 2016 ACIII and IV – June 2017

		(210258) Audit Course III Audit Course IV	
1.2.2 Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the Academic year.			
Name of Programmes adopting CBCS	UG	PG	Date of implementation of CBCS / Elective Course System
MBA		PG	Implementation of Elective choices for BE as per SPPU syllabus
Already adopted (mention the year)			
1.2.3 Students enrolled in Certificate/ Diploma Courses introduced during the year			
	Certificate	Diploma Courses	
No of Students	67 (ISHRAE)	Nil	
	562 (Soft skill)	Nil	
	478(English Proficiency)	Nil	
<b>1.3 Curriculum Enrichment</b>			
1.3.1 Value-added courses imparting transferable and life skills offered during the year			
Value added courses	Date of introduction	Number of students enrolled	
Zensar ESD Program	4 <sup>th</sup> June 2017	50	
Three Days workshop on “Developers Thrust”	18/08/2017 to 20/08/2017	65	
Data Science using R	9/02/2018-10/02/2018	80	
Two Days workshop on “ Data Science using Map Reduce”	20/02/2018 to 21/02/2018	60	
Workshop on Latex	27/03/2018	65	
PLC and Scada workshop	4/9/17 to 9/9/17	58	
PLC and Scada workshop	17/09/18 to 22/09/18	51	
1.3.2 Field Projects / Internships under taken during the year			
Project/Programme Title	No. of students enrolled for Field Projects / Internships		
Appointment Registration and cancellation of patient	1		
Student online Assessment	02		
Experimental Investigation of West Vegetable oil Based on Fatty Acid Methyl Ester On Single Cylinder Diesel Engine.	02		
Development and Testing of sustainable sound absorbing acoustic Material	02		

Design and Development of Experimental test setup for measurement of sound Absorption Coefficient	02
Characterization of hybrid biodiesel blends on compression ignition engine	01
Resonance Investigation of Opposed Piston Linear Compressor	02

#### 1.4 Feedback System

1.4.1 Whether structured feedback received from all the stakeholders.

1) Students	2) Teachers	3) Employers	4) Alumni	5) Parents
Yes	Yes	Yes	Yes	Yes

1.4.2 How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Institute has structured feedback mechanism comprising Internal and External stakeholders for enriching the curriculum. Once the curriculum is designed by University, institute collects a feedback from internal and external stakeholders about the curriculum. At Institute level Curriculum is updated as per the feedback.

During the execution of Curriculum student feedback on teaching-learning is carried out and corrective action is taken for improvement.

Suggestion box is kept student section where students drop their feedback on teaching-learning, facilities these suggestions are read by Principal on weekly basis and corrective action are taken for improvement. Ladies faculty visit girls hostel weekly to interact with students and collect the feedback on facilities, Mess discuss with Principal for action taken if any.

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

##### 2.1 Student Enrolment and Profile

##### 2.1. 1 Demand Ratio during the year

Name of the Programme	Number of seats available	Number of applications received	Students Enrolled
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#### Centralised Online Admission Process by DTE, Maharashtra

##### 2.2 Catering to Student Diversity

2.2.1. Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of full time teachers available in the institution teaching only UG courses	Number of full time teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2017-18	2032	265	144	39	183



## 2.3 Teaching - Learning Process

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

Number of teachers on roll	Number of teachers using ICT ( <i>LMS, e-Resources</i> )	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
183	183	Smart Class Room ,VC Hall, Moodle, MOOC, Digital Library, e-resources	28	07	Yes

2.3.2 Students mentoring system available in the institution? Give details. (maximum 500 words)

**Guardian Faculty Member (GFM)** is appointed for a batch of 15-20 students to take care of personal difficulties and academic development. In each department, **GFM** is appointed to provide personal and academic support for students, who take care of these students and helps the students to get over their difficulties. GFM conducts the meeting of the students allotted to him/her on regular basis and tries to understand their academic as well as personal problems. GFM try to sort-out the problems and if required forward it to the Head of Department. The students can approach the respective GFM for discussions any time and discuss their difficulties. Effective counseling is provided by GFM. The attendance is monitored by GFM on daily basis and the closely monitor the academic performance as well. GFM continuously motivate students to improve their performance. GFM takes the necessary action according to the need of students. The progress and observations are conveyed through telephonic conversion, SMS, email and personal meeting with parents of the students regularly in order to resolve issues if any. GFM maintains student records namely, personal information, previous and present academic performance, co-curricular and extra-curricular activities etc.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor: Mentee Ratio
<b>2297</b>	<b>183</b>	<b>1:13</b>

## 2.4 Teacher Profile and Quality

2.4.1 Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
183	183	05 (Ph.D.)	<b>05 (Ph.D.)</b>	05

2.4.2 Honours and recognitions received by teachers

*(received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )*

<i>Year of award</i>	<i>Name of full time teachers receiving awards from state level, national level,</i>	<i>Designation</i>	<i>Name of the award, fellowship, received from Government or recognized bodies</i>

	<i>international level</i>		
2017-18	Dr. P A Patil	Professor	BoS Member (Mechanical Department)

## 2.5 Evaluation Process and Reforms

2.5.1 Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year- end examination	Date of declaration of results of semester-end/ year- end examination
<b>First Year Engg</b>	<b>FE</b>	<b>Semester</b>	<b>06/04/18</b>	<b>20/07/18</b>
<b>Mechanical Engg</b>	<b>614561210/20</b>	<b>Semester</b>	<b>06/04/18</b>	<b>25 July 2018</b>
<b>Electronics &amp; Telecommunication Engg</b>	<b>641537210</b>	<b>Semester</b>	<b>06/04/18</b>	<b>25 July 2018</b>
<b>Computer Engg</b>	<b>614524510</b>	<b>Semester</b>	<b>06/04/18</b>	<b>25 July 2018</b>
<b>Information Technology</b>	<b>614524610</b>	<b>Semester</b>	<b>06/04/18</b>	<b>25 July 2018</b>
<b>Electrical Engg</b>	<b>614529310</b>	<b>Semester</b>	<b>06/04/18</b>	<b>25 July 2018</b>

2.5.2 Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

Institute designs the curriculum in such a way that for the practice of online exams, each department conducts mock online examination on the available e-platform provided by institute like MOODLE/ My-Examo /Intel Test. Based on result analysis, the remedy for weak students is planned.

For TE and BE, internal in-semester examination of 30 marks is conducted as per the format prescribed by University. Based on result analysis, remedial measures are taken for academically weak students.

Student's performance is assessed continuously in practical sessions for regular completion and understanding of practical assignments. At the end of the semester, submission is taken where the submission of assignments is assessed on the basis of mock practical/oral exams.

Students are also assessed through different competitions and events organized like "Tech-Manthan". BE students are guided to publish papers in national/international journals based on their project work. The seminar /mini-project activity as per university syllabus can be coupled with this activity.

Originative Facile Approach (OFA) model is started with some courses in the institute as a pilot project for improving evaluation process. This model is used to impart concepts among the students in an effective way. NPTEL lecture and videos are accessed through website online course.nptel.ac.in; video lectures by faculty, power point presentations are distributed for

learning among students. Each student is assessed daily for each subject so as to satisfy desired attainment level. To enhance placement activity institute provide portal facility to the students such as CoCubes [www.cocubes.com](http://www.cocubes.com), Parkisha [www.pariksha.co](http://www.pariksha.co) and TCS [campuscommune.tcs.com](http://campuscommune.tcs.com).

**2.5.3 Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)**

Institution adheres to the academic calendar prescribed by the University for conducting university exams and all external evaluation processes. For internal evaluations and assessments, institute and departmental academic calendars are strictly followed. Exam committee makes sure in-time completion of term work assessment, mock theory and practical exams, supervision duties and the participation of staff in CAP. Savitribai Phule Pune University (SPPU) prepares academic calendar, which includes commencement and end of teaching, and examination schedule namely, in-semester and end semester examinations. Based on SPPU academic calendar, Institute prepares its academic calendar. Institute academic calendar incorporates curricular, co-curricular and extracurricular activities along with examination schedule.

**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 in website of the institution (to provide the weblink)

2.6.2 Pass percentage of students

Programme Code	Programme name	Number of students appeared in the final year examination	Number of students passed in final semester/year examination	Pass Percentage
641524510	Computer Engineering	122	114	95%
614537210	Electronics & Telecommunication Engineering	75	66	88%
614529310	Electrical Engineering	64	49	76.56%
614524610	Information Technology	51	46	90.19
614561210/20	Mechanical Engineering	162	152	93.83%

2.7.1 Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink) [www.jspmjscoe.edu.in/SSS.doc](http://www.jspmjscoe.edu.in/SSS.doc)

**CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION**

**3.1 Resource Mobilization for Research**

3.1.1 Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding Agency	Total grant sanctioned	Amount received during the Academic year
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Major projects	2016-2019	ISRO-UOP-SPPU	22.1 Lakhs	Nil
Minor Projects	2017-2018	ISHRAE	0.94 Lakhs	0.94 Lakhs
Interdisciplinary Projects	Nil	Nil	Nil	Nil
Industry sponsored Projects	2017-2018	IIT Bombay-ONGC	2 Lakhs	2 Lakhs
Projects sponsored by the University/ College	2 Years	SPPU BCUD	4.3 Lakhs	0.11
Students Research Projects ( <i>other than compulsory by the College</i> )	Nil	Nil	Nil	Nil
International Projects	Nil	Nil	Nil	Nil
Any other(Specify)	Nil	Nil	Nil	Nil
Total			<b>29.34 Lakhs</b>	<b>3.5 Lakhs</b>

### 3.2 Innovation Ecosystem

3.2.1 Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of Workshop/Seminar	Name of the Dept.	Date(s)
<b>Seminar – Introduction to IPR</b>	<b>Mechanical</b>	<b>20/10/2017</b>

3.2.2 Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of the Awardee	Awarding Agency	Date of Award	Category
Smart Gas Trolley	Prajakta Kumbhar, Akash Hadke, Prafullkumar Awaghade, Vrushali Kotkar	MHRDA Govt, of India, AICTE <b>Smart India Hackathon 2018</b>	22 June 2018	Security & Surveillance

3.2.3 No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Centre	Name	Sponsored by
Nil	Nil	Nil

Name of the Start-up	Nature of Start-up	Date of commencement				
Nil	Nil	Nil				
<b>3.3 Research Publications and Awards</b>						
3.3.1 Incentive to the teachers who receive recognition/awards						
State	National	International				
Nil	Nil	Nil				
3.3.2 Ph. Ds awarded during the year ( <i>applicable for PG College, Research Center</i> )						
Name of the Department			No. of Ph. Ds Awarded			
Nil			Nil			
3.3.3 Research Publications in the Journals notified on UGC website during the year						
	Department	No. of Publication	Average Impact Factor, if any			
National	Computer	16	3.3			
International	E&TC	02	4.2			
	Electrical	03	4			
	IT	07	3.2			
	Mechanical	16	2.5			
3.3.4 Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year						
Department			No. of publication			
Mechanical			3			
Electrical			1			
3.3.5 Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or Pub Med/ Indian Citation Index						
Title of the paper	Name of the author	Title of the journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citations
Survey on Intelligent Data Mining of Social Media for Better Decision	Dr.A.A.Dandavate	IJRSET	2017	23		

Making						
An Efficient Certificateless Encryption with SAn Efficient Certificateless Encryption with Signature for Secure Data Sharing and Verification in Public Cloudsignature for Secure Data Sharing and Verification in Public Clouds	Prof.M.D.Ingale	IJESC	2017	20		
Enhanced Cryptographic Mechanism with Data Recovery for Secure, Power Efficient and Reliable Routing in Mobile WSN	Prof.M.D.Ingale	IJRSET	2017	20		
Consistent and Effective Data Acquisition in Wireless Sensor Networks in the Existence of Transfaulty	Prof.M.D.Ingale	IJCA	2017	20		
PERSONALIZED AND EFFICIENT	Prof.D.R.Patil	OAIJSE	2017	2		

SEARCH OVER ENCRYPTED DATA ON CLOUD: A SURVEY						
Enabling Personalized Search over Encrypted Outsourced Data with Efficiency Improvement	Prof.D.R.Patil	IJASRE T	2018	2		
Water Level and Leakage Detection System with its Quality Analysis based on Sensor for Home Application	Prof.R.S.Dixit	IJRSET	2018	9		
An Online tool for Developing Group Projects with In-Build IDE and Communication Tools	Prof.V.V.Kondhalkar	IJARIE	2018	1		
Real Time Water Resource Quality Monitoring System Using Wireless	Prof.V.V.Kondhalkar	International Engineering Research Journal (IERJ),	2017	1		

Reducing Number of Parameters for Identifying Breast Cancer	Prof.R.P.Bachate	INTERNATIONAL JOURNAL OF ADVANCE SCIENTIFIC RESEARCH AND ENGINEERING TRENDS	2018	2		
“Data loss prevention scheme using ADCN with effective tour strategy in WSN”	Prof.S.V.Todkari	Journal-Advances in intelligent systems & computing “Springer”	2018	5		
Three Dimensional MRI Brain Image Analysis on Hadoop platform	Prof.J.S.Patil	Journal-Advances in intelligent systems & computing “Springer”	2018	5		
Brain Tumors Level	Prof.J.S.Patil	International	2018	2		



Detection in 3D MRI using Machine Learning & Map Reduce.		Journal of Pure and Applied Mathematics				
Investigation of cottonseed oil biodiesel with ethanol as an additive on fuel properties, engine performance, combustion and emission characteristics of a diesel engine	<i>Madiwale Shrikant, Alagu Karthikeyan, Bhojwani Virendra</i>	Thermal Science	September, 2018	1.5	Yes	
Experimental investigations of Flame patterns observed for LPG /Air premixture used in small Scale Swiss roll Combustor.	Sagar Manedeshmukh, A. Krishnamoorthy, V. K. Bhojwani	Heat Transfer Research	September, 2018	1.0	Yes	
An Experimental study to investigate the dynamic behavior of thermal conductivity for different concentrations of Al <sub>2</sub> O <sub>3</sub> nanofluid	Suhas M. Shinde, Pradeep A. Patil & Virendra K. Bhojwani	International Journal of Ambient energy	August, 2018	0.95	Yes	
Modelling and	Amit Jomde, V. K.	International	January 2018	3.5	Yes	

measurement of a moving coil oil-free linear compressor performance for refrigeration application using R134a	Bhojwani, A. Anderson, Shreyans Kedia, Nitish Jangale, Kshitij Kolas, Pravin Khedkar	Journal of Refrigeration				
Design and Manufacturing of Traveling Wave Thermo-acoustic Engine with Varying Regenerator Length”,	Mahesh Gaikwad, P. A. Patil, Dadasaheb Shendage, V. K. Bhojwani,	International Journal of Ambient energy	August, 2018	0.95	Yes	
Experimental Investigations of Effect of Depth of Swiss Roll Combustor on Its Thermal Performance as a Heat Generator	Sagar Manedeshmukh, V. K Bhojwani, A. Krishnamoorthy	International Journal of Ambient energy	August, 2018	0.95	Yes	
Resonance analysis of Opposed piston linear compressor for Refrigerator application	Suneeta Phadkule, Soheli Inamdar, Amit Jomde, V. K. Bhojwani	International Journal of Ambient energy	August, 2018	0.95	Yes	
Cottonseed oil biodiesel with ethanol as an additive-an alternative fuel	Shrikant Madiwale, V. K. Bhojwani, Snehal Choucule	Asian Research publication	September 2017	0.75	Yes	

for diesel engine		network (ARPN) Journal of Engineering and Applied Sciences				
Performance and analysis of vapour compression cycle chiller with magnetic flux at the condenser exit	Pralhad Tipole, A. Karthikeyan, Virendra Bhojwani	International Journal of Energy and Buildings	September 2017	5	Yes	
Investigation on diesel engines performance with integration of magnetic flux on the fuel line	Pralhad Tipole, A. Karthikeyan, Virendra Bhojwani	International Journal of Ambient energy	August, 2018	0.95	Yes	
Properties investigation and performance analysis of a diesel engine fuelled with Jatropha, Soybean, Palm and Cottonseed biodiesel using Ethanol as an additive	Shrikant Madiwale, V. K. Bhojwani, Snehal Choucule	Materials today Proceedings	Janr-2018	1.0		

3.3.6 h-index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the paper	Name of the author	Title of the journal	Year of publication	h-index	Number of citations excluding self	Institutional affiliation as mentioned in the

			n		citations	publication
Investigation of cottonseed oil biodiesel with ethanol as an additive on fuel properties, engine performance, combustion and emission characteristics of a diesel engine	<i>Madiwale Shrikant, Alagu Karthikeyan, Bhojwani Virendra</i>	Thermal Science	September, 2018	29	0	Yes
Experimental investigations of Flame patterns observed for LPG /Air premixture used in small Scale Swiss roll Combustor.	Sagar Manedeshmukh, A. Krishnamoorthy, V. K. Bhojwani	Heat Transfer Research	September, 2018	16	0	Yes
An Experimental study to investigate the dynamic behavior of thermal conductivity for different concentrations of Al <sub>2</sub> O <sub>3</sub> nanofluid	Suhas M. Shinde, Pradeep A. Patil & Virendra K. Bhojwani	International Journal of Ambient energy	August, 2018	18	0	Yes
Modelling and measurement of a moving coil oil-free linear compressor performance for refrigeration application using R134a	Amit Jomde, V. K. Bhojwani, A. Anderson, Shreyans Kedia, Nitish Jangale, Kshitij Kolas, Pravin Khedkar	International Journal of Refrigeration	January 2018	94	0	Yes

Design and Manufacturing of Traveling Wave Thermo-acoustic Engine with Varying Regenerator Length”,	Mahesh Gaikwad, P. A. Patil, Dadasaheb Shendage, V. K. Bhojwani,	International Journal of Ambient energy	August, 2018	18	0	Yes
Experimental Investigations of Effect of Depth of Swiss Roll Combustor on Its Thermal Performance as a Heat Generator	Sagar Manedesh mukh, V. K Bhojwani, A. Krishnamoorthy	International Journal of Ambient energy	August, 2018	18	0	Yes
Resonance analysis of Opposed piston linear compressor for Refrigerator application	Suneeta Phadkule, Sohel Inamdar, Amit Jomde, V. K. Bhojwani	International Journal of Ambient energy	August, 2018	18	0	Yes
COTTONSEED OIL BIODIESEL WITH ETHANOL AS AN ADDITIVE-AN ALTERNATIVE FUEL FOR DIESEL ENGINE	Shrikant Madiwale, V. K. Bhojwani, Snehal Choucule	Asian Research publication network (ARPJ) Journal of Engineering and Applied Sciences	September 2017	17	0	Yes
Performance and analysis of vapour compression cycle chiller with magnetic flux at the condenser exit	Pralhad Tipole, A. Karthikeyan, Virendra Bhojwani	International Journal of Energy and Buildings	September 2017	132	0	Yes
Investigation on diesel engines performance with	Pralhad Tipole, A. Karthikeya	International Journal of Ambient energy	August, 2018	18	0	Yes

integration of magnetic flux on the fuel line	n, Virendra Bhojwani					
Properties investigation and performance analysis of a diesel engine fuelled with Jatropha, Soybean, Palm and Cottonseed biodiesel using Ethanol as an additive	Shrikant Madiwale, V. K. Bhojwani, Snehal Choucule	Materials today Proceedings	Janr-2018	11	1	Yes

### 3.3.7 Faculty participation in Seminars/Conferences and Symposia during the year :

No. of Faculty	International level	National level	State level	Local level
Attended Seminars/ Workshops		45	0	25
Presented papers	05	25	0	0
Resource Persons	0	0	0	12

### 3.4 Extension Activities

3.4.1 Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the Activities	Organising unit/ agency/ collaborating agency	Number of teachers <b>co-ordinated</b> such activities	Number of students participated in such activities
1	Tree plantation	<i>Vanamahotsav Program by Forest Department, Maharashtra State.</i>	<b>163</b>
2	Traffic Duty	<i>Wanowrie Police Station, Pune</i>	<b>27</b>
3	Waste Management Workshop	<i>By SPPU – NSS, Pune</i>	<b>29</b>
4	Blood Donation Camp	<i>PSI Blood Bank Pune</i>	<b>62</b>
5	Environmental Awareness Short Film Screening and Eco Quiz	<i>By Kirloskar Vasundhara Film Festival &amp; by SPPU – NSS, Pune</i>	<b>59</b>
6	Mahayojana Camp	<i>Legal Authority, Pune</i>	<b>24</b>
7	NSS Special Pune	<i>By SPPU – NSS, Pune</i>	<b>37</b>

3.4.2 Awards and recognition received for extension activities from Government and other recognized bodies during the year				
Name of the Activity	Award/recognition	Awarding bodies	No. of Students benefited	
Nil	Nil	Nil	Nil	
3.4.3 Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year				
Name of the scheme	Organising unit/ agency/ collaborating agency	Name of the activity	Number of teachers <b>coordinated</b> such activities	Number of students participated in such activities
Nil	Nil	Nil	Nil	Nil
<b>3.5 Collaborations</b>				
3.5.1 Number of Collaborative activities for research, faculty exchange, student exchange during the year				
Nature of Activity	Participant	Source of financial support	Duration	
Development of Special Purpose flexure bearing for Stirling Engine	JSCOE-IIT Bombay-ONGC	IIT Bombay-ONGC project funds	2017-18	
3.5.2 Linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the year				
Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration (From-To)	Participant
Industry	Internship	EAGLE BURGMANN INDIA PVT LTD.	11 Dec to 25 Dec	1
Industry	Internship	HITECH ENGINEERING SOLUTIONS, INDRAYANI NAGAR, HANDEWADI,	11 Dec to 25 Dec	1
Industry	Internship	L & T ELECTRICAL & AUTOMATION	11 Dec to 25 Dec	1

Industry	Internship	PRECIMACH ENGINEERING	11 Dec to 25 Dec	1
Industry	Internship	RATNA GEARS PVT. LTD.	11 Dec to 25 Dec	1
Industry	Internship	RATNA GEARS PVT. LTD.	11 Dec to 25 Dec	1
Industry	Internship	SHRI RENUKA ENGINEERING WORKS	11 Dec to 25 Dec	1
Industry	Internship	SHRI RENUKA ENGINEERING WORKS	11 Dec to 25 Dec	1
Industry	Internship	SESCOTEC INDIA PVT. LTD.	11 Dec to 25 Dec	1
Industry	Internship	SESCOTEC INDIA PVT. LTD.	11 Dec to 25 Dec	1
Industry	Internship	THE JAW MFG. CO.	11 Dec to 25 Dec	1
Industry	Internship	HITECH ENGINEERING SOLUTIONS	11 Dec to 25 Dec	1
Industry	Internship	HITECH ENGINEERING SOLUTIONS	11 Dec to 25 Dec	1
Industry	Internship	DELTA METROLOGICAL AND QUALITY SOLUTIONS	11 Dec to 25 Dec	1



Industry	Internship	DELTA METROLOGICAL AND QUALITY SOLUTIONS	11 Dec to 25 Dec	1
Industry	Internship	PARAMETRIK ENGINEERING PVT. LTD.	11 Dec to 25 Dec	1
Industry	Internship	KIRLOSKAR CHILLERS PRIVATE LTD.	11 Dec to 25 Dec	1
Industry	Internship	KIRLOSKAR CHILLERS PRIVATE LTD.	11 Dec to 25 Dec	1
Industry	Internship	VALEO INDIA PVT. LTD.	11 Dec to 25 Dec	1
Industry	Internship	VALEO INDIA PVT. LTD.	11 Dec to 25 Dec	1
Industry	Internship	BHAIRAVNATH SUGAR WORKS LTD.	11 Dec to 25 Dec	1
Industry	Internship	BHAIRAVNATH SUGAR WORKS LTD.	11 Dec to 25 Dec	1
Industry	Internship	DELTA METROLOGICAL AND QUALITY SOLUTIONS	11 Dec to 25 Dec	1

Industry	Internship	H. R. MANAGER, LARSEN & TOUBRO LTD., AHMEDNAGAR- 414111	11 Dec to 25 Dec	1
Industry	Internship	VJAY ENGINEERING WORKS	11 Dec to 25 Dec	1
Industry	Internship	VJAY ENGINEERING WORKS	11 Dec to 25 Dec	1
Industry	Internship	BRIGHT ENGINEERING WORKS	11 Dec to 25 Dec	1
Industry	Internship	NIRMITI DESIGN ENGINEERS PVT. LTD.	11 Dec to 25 Dec	1
Industry	Internship	NIRMITI DESIGN ENGINEERS PVT. LTD.	11 Dec to 25 Dec	1
Industry	Internship	NIRMITI DESIGN ENGINEERS PVT. LTD.	11 Dec to 25 Dec	1
Industry	Internship	WIRTGEN GROUP	11 Dec to 25 Dec	1
Industry	Internship	BHATRAT FORGE LIMITED	11 Dec to 25 Dec	1
Industry	Internship	BHATRAT FORGE LIMITED	11 Dec to 25 Dec	1

Industry	Internship	BHATRAT FORGE LIMITED	11 Dec to 25 Dec	1
Industry	Internship	PMT MACHINES LIMITED	11 Dec to 25 Dec	1
Industry	Internship	COSMIC REFRIGERATION PVT. LTD	11 Dec to 25 Dec	1
Industry	Internship	COSMIC REFRIGERATION PVT. LTD	11 Dec to 25 Dec	1
Industry	Internship	JAWAS MFG. CO.	11 Dec to 25 Dec	1
Industry	Internship	RELIANCE INDUSTRIES LTD	01 June to 30 June	1
Industry	Internship	BHAIRAVNATH SUGAR WORKS LTD.	01 June to 30 June	1
Industry	Internship	HARJOT GEAR'S AND ENGINEERING WORKS	01 June to 30 June	1
Industry	Internship	TATA MOTORS UGANDA LTD.	01 June to 30 June	1
Industry	Internship	ENDURANCE TECHNOLOGIES PVT. LTD.	01 June to 30 June	1
Industry	Internship	MSRTC	01 June to 30 June	1

Industry	Internship	BAFNA MOTORS	01 June to 30 June	1
Industry	Internship	DELTA METROLOGICAL AND QUALITY SOLUTIONS	01 June to 30 June	1
Industry	Internship	DELTA METROLOGICAL AND QUALITY SOLUTIONS	01 June to 30 June	1
Industry	Internship	L & T	01 June to 30 June	1
Industry	Internship	JAIN IRRIGATION SYSTEM LTD.	01 June to 30 June	1
Industry	Internship	KIRLOSKAR BROTHER'S LTD.	01 June to 30 June	1
Industry	Internship	UTTEJAN CONSULTANTS	01 June to 30 June	1
Industry	Internship	KORADI THERMAL POWER PALNT	01 June to 30 June	1
Industry	Internship	RATNA GEARS PVT. LTD.	01 June to 30 June	1
Industry	Internship	PRECIMECH	01 June to 30 June	1
Industry	Internship	DHONE FORD	01 June to 30 June	1
Industry	Internship	DHONE FORD	01 June to 30 June	1

Industry	Internship	PRECIMECH	01 June to 30 June	1
Industry	Internship	RATNA GEARS PVT. LTD.	01 June to 30 June	1
Industry	Internship	RATNA GEARS PVT. LTD.	01 June to 30 June	1
Industry	Internship	RATNA GEARS PVT. LTD.	01 June to 30 June	1
Industry	Internship	KIRLOSKAR GROUP OF COMPANY	01 June to 30 June	1
Industry	Internship	VALVEWORKS INDIA	01 June to 30 June	1
Industry	Internship	NMDC LTD	01 June to 30 June	1
Industry	Internship	COSMIC REFRIGERATION PVT. LTD.	01 June to 30 June	1
Industry	Internship	COSMIC REFRIGERATION PVT. LTD.	01 June to 30 June	1
Industry	Internship	KALASHREE	01 June to 30 June	1
Industry	Internship	FORBES MARSHALL	01 June to 30 June	1
Industry	Internship	KALASHREE	01 June to 30 June	1

Industry	Internship	KALASHREE	01 June to 30 June	1
Industry	Internship	SANDVIK ASIA PVT. LTD	01 June to 30 June	1
Industry	Internship	BHARAT FORGE	01 June to 30 June	1
Industry	Internship	RASHTRIYA CHEMICALS AND FERTILIZERS LTD	01 June to 30 June	1
Industry	Internship	ORDANCE FACTORY BHUSAWAL	01 June to 30 June	1
Industry	Internship	UTTEJAN CONSULTANTS	01 June to 30 June	1
Industry	Internship	RAJARAMBAPU PATIL SAHAKARI	01 June to 30 June	1
Industry	Internship	MATSYODARI STEEL & ALLOY PVT. LTD.	01 June to 30 June	1
Industry	Internship	Maharashtra state electricity board ,Mahad	04/06/2018 to 14/06/2018	3
Industry	Internship	MSCDCL. , Shethphal, Mohol.	12/12/2017 to 20/12/2017	1
Industry	Internship	M.S.E.D.C.L C.C . O&M Division Khamgaon Dist.-Buldhana	27/05/2018 to 15/06/2018	1

Industry	Internship	Tata Hydro Power, Mulshi Dam.	27/05/2018 to 03/06/2018	4
Industry	Internship	Aai Mauli Electrical & Installation Malvan	01/06/2018 to 14/06/2018	1
Industry	Internship	N Datta electrical	09/12/2017 to 17/12/2017	4

3.5.3 MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose and Activities
ICT Academy	JAN 2018	Skill Development
<b>Jaws Mfg.Co. Pune</b>	5 Aug 2017	PRECIMECH
<b>Kalashree Engineering Pvt.Ltd.</b>	15 Feb 2018	RATNA GEARS PVT. LTD.
<b>Ratna Gears Pvt. Ltd.</b>	11 Jan 2018	,Industrial Trainnig For Students
<b>Bhairavnath Sugar Works Ltd.</b>	20 Dec 2017	,Industrial Trainnig For Students
<b>Cosmic Refrigeration Pvt Ltd</b>	29 Nov 2017	,Industrial Trainnig For Students
<b>Eagle Burgman India Pvt Ltd</b>	06 Oct 2017	BE Mechanical Projects Industrial Trainnig For Students
<b>Kirloskar Chiller's Pvt Ltd</b>	05 Oct 2017	,Industrial Trainnig For Students

#### **CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES**

##### **4.1 Physical Facilities**

4.1.1 Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
4,94,2778	4,14,41,656

4.1.2 Details of augmentation in infrastructure facilities during the year

Facilities	Existing	Newly added
Campus area	2.5 Acres	Nil
Class rooms	28	Nil
Laboratories	51	Nil
Seminar Halls	07	Nil
Classrooms with LCD facilities	28	Nil

Classrooms with Wi-Fi/ LAN	28	Nil
Seminar halls with ICT facilities	07	Nil
Video Centre	01	Nil
No. of important equipments purchased ( $\geq$ 1- 0 lakh) during the current year.	08	Nil
Value of the equipment purchased during the year (Rs. in Lakhs)	<b>1,330,770</b>	Nil
Others	Nil	Nil

#### 4.2 Library as a Learning Resource

##### 4.2.1 Library is automated {Integrated Library Management System -ILMS}

Name of the ILMS software	Nature of automation (fully or partially)	Version	Year of automation
<b>AUTOL IB</b>	<b>Full Automation</b>	<b>1.0.0</b>	<b>2011</b>

##### 4.2.1 Library Services:

	Existing		Newly added		Total
	No.	Value	No.	Value	No.
Text Books	26336	81.04	2128	5.34	28464
Reference Books	2141	14.78	45	0.79	2186
e-Books	27030	1.5	Renew same Pk.	0.28	27030
Journals	91	2.42	20	0.82	111
e-Journals	6852 (7 E- Jrs.Pkgs)	10.66	Renew the same	0.48	6852 (7 E-Jrs. Pkgs)
Digital Database	Nil	Nil	Nil	Nil	Nil
CD & Video	1774 (With Books /Jrs.)	-	13	-	1787 (With Books /Jrs.)
Library automation	Yes (Autolib)	-	-	-	-
Weeding (Hard & Soft)	-	-	-	-	-
Others (specify)	-	-	-	-	-



<b>4.3 IT Infrastructure</b>									
4.3.1 Technology Upgradation (overall)									
	Total Computer s	Comp uter Labs	Internet	Browsin g Centres	Comp uter Centre s	Offic e	Departme nts	Available band width (MGBPS)	Others
Exist ing	891	26	48	0	1	Nil	Nil	48	Nil
Adde d	0	0	16	0	0	Nil	Nil	16	Nil
Total	891	26	64	0	1	Nil	Nil	64	Nil
4.3.2 Bandwidth available of internet connection in the Institution (Leased line)									
64 MBPS									
4.3.3 Facility for e-content									
Name of the e-content development facility					Provide the link of the videos and media centre and recording facility				
Nil					Nil				
4.3.4 E-content developed by teachers such as: e-PG-Pathshala, CEC (under e-PG-Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc									
Name of the teacher		Name of the module			Platform on which module is developed		Date of launching e - content		
Nil		Nil			Nil		Nil		

<b>4.4 Maintenance of Campus Infrastructure</b>			
4.4.1 Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year			
Assigned budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
1,24,4772	29,98,723	1,65,8538	1,65,5382
4.4.2 Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. ( <i>maximum 500 words</i> ) (information to be available in institutional Website, provide link)			
<p>The institution has <b>well established procedures</b> for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports, computers, classrooms etc..</p> <p>Maintenance departments are available in campus for maintaining and repairing electrical lines and equipment, buildings &amp; civil works, housekeeping and garden services. Furniture maintenance is carried out by workshop department.</p> <p>Head of the department put their requirement to the head of institute and all facilities are provided as when required by departments</p> <p>Air conditioners, generator, water coolers are repaired through central store department. External agency is appointed for maintenance on case to case basis. Cleaning of coolers is done by respective location peon.</p>			

Laboratory equipment maintenance and servicing is done by the concerned manufacturers and service personnel/ laboratory technicians of departments.  
 The computers which are in the warranty and their accessories are maintain by college system administrator and respective computer laboratory assistants. Computer peripherals related problems are solved by System admin.  
 All kind of maintenance staff is on the payroll of the institute, duly supervised by supervisors and guided and monitored by HOD/Campus Director.  
 Some maintenance work is done from external agencies on case to case basis by calling quotations for the works.

## CRITERION V - STUDENT SUPPORT AND PROGRESSION

### 5.1 Student Support

#### 5.1.1 Scholarships and Financial Support

	Name /Title of the scheme	Number of students	Amount in Rupees
Financial support from institution	JSPM Scheme	01	1,10,190/-
Financial support from other sources			
a) National	Leela Poonawala Foundation Scholarship	04	1,80,000/-

5.1.2 Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Career Guidance program	19/07/2017 and 20 <sup>th</sup> , 23 <sup>rd</sup> and 27 <sup>th</sup> march 2018.	25	Barclay
Soft skill development	10 JAN 2018	480	Internal
Remedial coaching	From 2004	Needy students of all department	Internal
Personal Counselling and Mentoring	From 2004	Needy students of all department	Internal
Bridge courses	18 JAN 2018	180	ICT Academy

5.1.3 Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students by Guidance for Competitive examination	Number of benefited students by Career Counselling activities	Number of students who have passed in the competitive exam	Number of students placed
2017-18	GATE Coaching	70	110	2	-

5.1.4 Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year					
Total grievances received		No. of grievances redressed		Average number of days for grievance redressal	
Nil		Nil		Nil	
<b>5.2 Student Progression</b>					
5.2.1 Details of campus placement during the year					
<b>On campus</b>			<b>Off Campus</b>		
Name of Organizations Visited	Number of Students Participated	Number of Students Placed	Name of Organizations Visited	Number of Students Participated	Number of Students Placed
Zensar	50	01	VDA infosolution Pvt. Ltd.	12	01
Cybage	85	03	Zooper	15	01
BIL	70	04	Efficiency pvt ltd	18	01
Flash Electronics	220	142	Reliable Engineers	12	01
Kirloskar Chillers Pvt Ltd	100	01	Capgemini	12	02
Mphasis	218	05	Future Supply Chain Pvt td	16	01
Amazon	191	22	Infosys	18	01
Qspider	232	22	Oriental Rubber India Ltd	12	01
KPIT	55	08	Tech Mahindra	14	01
FACE	99	05	<i>Techtronics Pvt Ltd</i>	13	01
Axiom Techguru	242	14	ICICI Bank	15	01
BSA Group	75	13	AVL	12	01
R K Education	55	06	Hexaware	10	01

Neatwind Pvt Ltd	32	02	<b>On campus</b>		<b>284</b>
SQR Infotech	140	02	<b>Off campus</b>	After May 2018	<b>14</b>
Xento	65	05	<b>TOTAL</b>	<b>On campus + Off campus</b>	<b>298</b>
Analyzer CAE	12	01			
Syntel	50	15			
Seventh Sense Talent Solution	136	01			
JSM Infotech PVT LTD	20	01			
Bright Infotech	25	01			
Western heat & forge ltd	35	01			
Edumech Solutions	45	01			
Intelux Electronics Pvt. Ltd.	35	03			
Piaggio Pvt Ltd	15	01			
Marauti-SLS	40	02			
Delta Metrological Lab	25	01			
Capital First	15	01			

5.2.2 Student progression to higher education in percentage during the year :

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of Programme admitted to
17-18	02	IT	IT	AISSMs	ME-Comp
		Mechanical	Mechanical	VIIT, Pune	M.Tech

17-18	10	Mechanical	Mechanical	D.Y.Patil, Pune	M.Tech Digital Manufacturing
		Mechanical	Mechanical		Diploma CAD-CAM
		Mechanical	Mechanical	Cummins college of Engg for Women.	Mechanical
		Mechanical	Mechanical	IIT Bombay	Ph.D. Mechanical
		Mechanical	Mechanical	IIT Bombay	Ph.D. Mechanical
		Mechanical	Mechanical	JSPM JSCOE	M. E. Design
		Mechanical	Mechanical	COEP	M.Tech Mechatronics
		Mechanical	Mechanical	Crez Technical University	M.S. in Automobile Engg.
		Mechanical	Mechanical	VIIT, Pune	M.Tech

5.2.3 Students qualifying in state/ national/ international level examinations during the year (eg: NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	No. of Students selected/qualifying	Registration number/roll number for the exam
NET	NA	
SET	NA	
SLET	NA	
GATE	02	
GMAT	-	
CAT	-	
GRE	-	
TOFEL	8	
Civil Services	-	
State Government Services	7	
Any Other	-	

5.2.4 Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Participants
Antarnad	College level	1800
Techmanthan	National	600

### 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)

Year	Name of the award/medal	National/International	Sports	Cultural	Student ID number	Name of the student
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2017-2018	Silver Medal	National	Table Tennis			Laxdev Bhagwat
2017-2018	Gold Medal	National	Kho-Kho			Mayur Kambale
2017-2018	Gold Medal	National	Handball			Rishabh Daundkar
2017-2018	Gold Medal	National	Cricket			Pradumna Visapure
2017-2018	Gold Medal	National	Cricket			Pradumna Visapure

5.3.2 Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

Academic Student Bodies:

Students are a part of Departmental Advisory Board and Focus Group. With the help of these academic bodies, student can place their feedback related to teaching-learning method, gap identification in the syllabus, feedback about academics and infrastructure etc.

Apart from this students are also a part of following bodies:

- Professional student bodies

ISTE students" chapter, CSI students" chapter, IEEE students" chapter, Department Associations these are the few bodies in which students are the representative. Under various activities, students organize different competitions like TDCS, seminars or guest lecture for other students.

Students social bodies

- Library committee, NSS (National Service Scheme), Cultural committee, Ladies grievance cell, Anti-ragging committee are the examples of social committees in Institute. Student representative takes care of availability of books in the central library and departmental library, organizes different social activities like tree plantation, takes care of different problems of full-time resident students like food quality in mess or problems faced by girls in hostel etc. Cultural student representative actively participate in cultural events like

**5.3 Alumni Engagement**

5.3.1 Whether the institution has registered Alumni Association? Yes/No, if yes give details (maximum 500 words):

- The Institute has Registered Alumni Association which is established in the year 2009.
- Alumni association conducts various activities like Felicitation of Toppers from every department, provide financial assistant to financially weak students.
- Alumni association has donated books to Central Library
- Conducts Alumni Meet every year.
- Guest Lectures, Seminars, Industrial visits are organised by the Alumni students for the Regular students for guiding them for placement and Competitive exam

5.3.2 No. of registered enrolled Alumni: **550 for A.Y 2017-18**

**Total Alumni enrolled : 5789**

5.3.3 Alumni contribution during the year (in Rupees) : **Rs.2,50,000 /-**

5.3.4 Meetings/activities organized by Alumni Association :
<p>1) Annually two meetings of Alumni members are conducted. 12/7/2017, 23/4/2018</p> <p>2) Alumni involvement in training &amp; placement activities.</p> <p>2) Agenda includes Planning of co-curricular activities of alumni for SE to BE student.</p> <p>3) Alumni involvement in teaching learning as well as Co-curricular Activities.</p> <p>4) Planning of Alumni Meet for the current academic year.</p>
<b>CRITERION VI –GOVERNANCE, LEADERSHIP AND MANAGEMENT</b>
<b>6.1 Institutional Vision and Leadership</b>
<p>6.1.1 Mention two practices of decentralization and participative management during the last year</p> <p>The authority is provided to the head of department &amp; Faculty members for managing and contributing in all academic process. Through the various committees appointed by academic leader works responsibly for the development and provide them leadership skills. Absolute freedom is given to faculty for research activity. The administration has faith in giving academic and authoritative independence to Principal who, thus, offers opportunity to HOD to plan and execute academic process in the perspective of vision and mission.</p> <p>The operational flow of work from top management to IQAC – DAB – FG – PAC. The decentralization reaches to the module coordinator and faculty providing them teaching learning autonomy. This type of structure help faculty to adopt their own teaching learning methodology for overall development of students. This enhances the productivity of the students as well as faculty with respect to achieve goals and objective of the institute</p>
6.1.2 Does the institution have a Management Information System (MIS)?
<b>Partially</b>
<b>6.2 Strategy Development and Deployment</b>
6.2.1 Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):
<ul style="list-style-type: none"> <li>❖ Curriculum Development: Institute conduct <b>Curriculum Enrichment Program (CEP)</b> before commencement of every semester where every faculty plan and develop the course material which will uploaded on MOODLE (Learning Management System), these content available online 24x7 for reference purpose.</li> </ul>
<ul style="list-style-type: none"> <li>❖ Teaching and Learning : Institute adopted following strategies in T-L <ul style="list-style-type: none"> <li>- MOODLE (LMS) as e-learning platform</li> <li>- Use of ICT during execution of curriculum</li> <li>- Outcomes Based Education Model (OBE)</li> <li>- Online Assessments, LMS, Smart Class rooms</li> <li>- Remedial lectures for needy students after regular academics</li> <li>- Daily one question methods</li> <li>- E-books, e-Journals ,courseware, notes, video lectures is made available online for each course</li> <li>- CO-PO mapping and Blooms level for each course</li> <li>- Virtual lectures through virtual classroom</li> </ul> </li> </ul>

<ul style="list-style-type: none"> <li>- Mini Project based learning during lab sessions</li> <li>- Industrial visits to get the realtime experience of industry model.</li> </ul>
<p>❖ Examination and Evaluation</p> <p>The <b>formative</b> and <b>summative assessment</b> approaches adopted by the Institute to measure <b>student achievement</b> are as follows:</p> <p>Formative Assessment:</p> <ul style="list-style-type: none"> <li>- <b>Continuous assessment</b> of each student is done by faculty during practical sessions.</li> <li>- <b>Unit wise assignments</b> are given to students and key points for answers are discussed by faculty in the classroom.</li> <li>- <b>Mini project, Major project, Seminar work</b> are used for formative evaluation of various subjects.</li> <li>- <b>Seminars</b> are conducted for TE students and demonstration/presentation of Projects by BE students for formative assessment.</li> <li>- <b>Attendance</b> of <b>theory</b> and <b>practical sessions</b> is continuously monitored by faculty members and if improvement is needed, defaulter students are warned and parents are also informed of the same.</li> <li>- As Institute has adopted <b>OBE system, attainment of TLOs</b> is analyzed by asking questions to students after completion of the topic.</li> </ul> <p>Summative Assessment:</p> <ul style="list-style-type: none"> <li>- At the end of the semester, <b>term work</b> marks are assessed based on evaluation sheets exercised throughout the semester</li> <li>- <b>Attendance monitoring</b> is done throughout the semester for theory and practical sessions.</li> <li>- <b>Mock theory</b> and practical's examinations are conducted periodically.</li> <li>- <b>Online Examinations</b> and <b>In-Semester examinations</b> are conducted</li> </ul>
<p>❖ Research and Development :</p> <ul style="list-style-type: none"> <li>- Regular programs are conducted for enhance the research culture</li> <li>- Students research clubs are form to develop innovative projects</li> <li>- Research lab made available to the students for extended hours &amp; on holidays as per need</li> <li>- Plagiarism checking cell is formed for review of papers before submission for publications in Conferences and journals</li> <li>- Regular IPR sessions are conducted by research committee for staff &amp; students.</li> <li>- Research projects from ISRO,DST,BCUD.</li> </ul>
<p>❖ Library, ICT and Physical Infrastructure / Instrumentation</p> <ul style="list-style-type: none"> <li>- Barcode / RF Enabled Circulation and Surveillance</li> <li>- Book bank facility</li> <li>- OPAC facility is made available</li> <li>- AutoLib software</li> <li>- Internet &amp; Wi-Fi facility group members can easily access the e-resources as well as library information all over the campus</li> <li>- e-books, e-journals are available online through MOODLE (LMS)</li> </ul>
<p>❖ Human Resource Management: Workshop for Teaching &amp; Non-Teaching staff by counsellor</p>
<p>❖ Industry Interaction / Collaboration :</p> <ul style="list-style-type: none"> <li>- Formation of I-I-I cell at department level</li> </ul>



<ul style="list-style-type: none"> <li>- Conducted HR Meet</li> <li>- Collaboration with ICT Academy, CoCubes, AMACT, FACE.</li> <li>- Industrial visits</li> <li>- 10 % Projects are industry sponsor</li> <li>- Research centre in collaboration with industry</li> </ul>				
<ul style="list-style-type: none"> <li>❖ Admission of Students : <ul style="list-style-type: none"> <li>- Seminar conducted in rural area for awareness of technical education</li> <li>- Free counselling centre for students</li> <li>- Education loan provided through leading banks</li> <li>- Govt ARC centre during admission process</li> </ul> </li> </ul>				
6.2.2 : Implementation of e-governance in areas of operations:				
<ul style="list-style-type: none"> <li>❖ Planning and Development <ul style="list-style-type: none"> <li>- The Institute has established an Internal Quality Assurance Cell (IQAC) to develop system for consistent, catalytic action to improve upon the academic and administrative performance of the institution. IQAC ensure the quality in teaching learning and administrative processes, with critical analysis and feedback response. The institute has developed student centric environment for quality education as per institute's quality policy.</li> <li>- Enhance the research quality with motivational support institute always invite the researchers</li> <li>- Institute is in plan to start few Centre of Excellence in skill development</li> <li>- This in turn again assures the quality improvement for the betterment of institute as well as the society.</li> </ul> </li> </ul>				
<ul style="list-style-type: none"> <li>❖ Administration: <ul style="list-style-type: none"> <li>- For better administration decentralised work pattern is implemented where office superintended has rights to take decision under the control of head of institute</li> </ul> </li> </ul>				
❖ Finance and Accounts:				
<ul style="list-style-type: none"> <li>❖ Student Admission and Support: <ul style="list-style-type: none"> <li>- Career Guidance Program conducted in rural area to attract the students in technical education</li> <li>- Free facilitation centre is run during admission process</li> <li>- Support provided to Parents &amp; Students through digital media during admission process</li> <li>- Financial support provided to needy students by Management</li> </ul> </li> </ul>				
<ul style="list-style-type: none"> <li>❖ Examination: <ul style="list-style-type: none"> <li>- 24*7 Library facility during internal &amp; external examination</li> <li>- Start Online assessment process for internal exam</li> <li>- CO based question paper during internal examination</li> <li>- Course in-charge are available in library till midnight to clear the students doubt during exam period</li> </ul> </li> </ul>				
<b>6.3 Faculty Empowerment Strategies</b>				
6.3.1 Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year				
Year	Name of teacher	Name of conference/ workshop attended for which financial	Name of the professional body for which membership fee is provided	Amount of support

		support provided		
2017-18	Prof.U.A.Malwade	ICKDST	---	4000/-
2017-18	Prof.Gaikwad Mahesh	IPR Filing	---	12000/-
2017-18	Prof.Nikhil Kumar	IPR Filing	---	10,650/-

6.3.2 Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	Dates (from-to)	No. of participants (Teaching staff)	No. of participants (Non-teaching staff)
<b>2017-18</b>		<b>Effective communication &amp; Technical skill</b>	<b>25/09/17 to 30/09/17</b>	<b>06</b>	<b>30</b>

6.3.3 No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	Date and Duration (from – to)
FDP on Big data science	03	29 Jan to 02 Feb 2018
FDP on Oracle Database	02	9 to 13 April 2018
FDP on Autodesk Inventor	02	28 May to 1 June 2018
FDP on IoT	03	27 to 28 March 2018
FDP on Teaching Technique	03	22 to 23 Feb 2018
Orientation program for newly join faculties	15	15 to 17 June 2017
Orientation program for HoD's and Senior faculties	15	15 to 17 June 2017

6.3.4 Faculty and Staff recruitment (no. for permanent/fulltime recruitment):

Teaching		Non-teaching	
Permanent: 183	Fulltime	Permanent: 99	Fulltime

6.3.5 Welfare schemes for

Teaching	Sponsorship for PhD & Higher education, Group Insurance
Non teaching	Loan through JMCC bank, support for loans from financial institutions
Students	Group Insurance

#### 6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

(with in 100 words each)

Internal auditing is done by central corporate office after each six months & each financial year by certified CA.

6.4.2 Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies/ individuals	Funds/ Grants received in Rs.	Purpose
<b>Nil</b>	<b>Nil</b>	<b>Nil</b>

6.4.2 Total corpus fund generated : **Rs.67,50,000/-**

<b>6.5 Internal Quality Assurance System</b>				
6.5.1 Whether Academic and Administrative Audit (AAA) has been done?				
Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	ARQAC	Yes	AMC
Administrative	Yes	QAC	Yes	Corporate office
6.5.2 Activities and support from the Parent – Teacher Association (at least three)				
1. Semester wise Parent-Teacher meet know the overall progress of students 2. Involvement of parent in curriculum development 3. Parent support for industry connect				
6.5.3 Development programmes for support staff (at least three)				
1. Workshop on Effective communication skill 2. Computer Networking workshop 3. Workshop on Lab Maintenance				
6.5.4 Post Accreditation initiative(s) (mention at least three)				
1. Skill Development Programs to enhance the placement activities 2. Collaboration with Industry 3. Strengthen Curriculum by appointing departmental AMC				
<b>6.5.5</b>				
a. Submission of Data for AISHE portal : (Yes)				
b. Participation in NIRF : (No)				
c. ISO Certification : (No)				
d. NBA or any other quality audit : (No)				
6.5.6 Number of Quality Initiatives undertaken during the year				
Year	Name of quality initiative by IQAC	Date of conducting activity	Duration (from-- ---to-----)	Number of participants
2017-18	1. Meeting with internal & external stakeholders for Planning & Implementation of Quality Policy	06/10/2017	06/10/2017	24
2017-18	2. Curriculum Development Process (CEP)	11 June 2017	11 to 15 June 2017	All Faculties
2017-18	3. Online Certificate Courses through NPTL	During Semester	20 Dec to 30 Sept 2018	All SE & TE Students
2017-18	4. Skill Development Program by ICT Academy for Faculty Members & Students	During Semester	20 Dec to 30 Sept 2018	Computer, IT & Mechanical Staff & Students (80)
2017-18	5. Online Attendance Monitoring System through Moodle (LMS)	20 Dec 2018	20 Dec to 30 Sept 2018 ( During	All Faculties

			execution of curriculum)	
2017-18	6. Skill development program by FACE for Placements	25 Dec 2018	25 Dec 2017 to 10 Jan 2018	350
2017-18	7. Formation of Student Clubs for development of Innovative Projects	22 Jan 2018		80
2017-18	8. Virtual Lectures by External Experts through Virtual Class Room	During execution of curriculum	All SE,TE & BE Students	450
2017-18	9. Formation of Dept AMC (Academic Monitoring Coordinator) for Semester wise Academic Audit	After Completion of every semester	All Faculties	
2017-18	10. Monitoring the conduct of classes	During execution of Curriculum	All Faculties	

## CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

### 7.1 - Institutional Values and Social Responsibilities

#### 7.1.1 Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period (from-to)	Participants	
		Female	Male
Tech-Manthan 2018	22-23 Jan 2018	223	312
Antarnad 2018	12 Feb 2018	287	263

#### 7.1.2 Environmental Consciousness and Sustainability/Alternate Energy initiatives such as: Percentage of power requirement of the College met by the renewable energy sources

Yes

#### 7.1.3 Differently abled (Divyangjan) friendliness ( Divyangjan student not present for A.Y 2017-18)

Items Facilities	Yes/No	No. of Beneficiaries
Physical facilities	Yes	All Faculties & Students
Provision for lift	Yes	All Faculties & Students
Ramp/ Rails	Yes	As per need
Braille Software/facilities	NA	NA
Rest Rooms	Yes	As per need
Scribes for examination	No	No
Special skill development for differently abled students	No	No
Any other similar facility	No	No

#### 7.1.4 Inclusion and Situatedness

##### Enlist most important initiatives taken to address locational advantages and disadvantages during the year

Year	Number of initiatives to	Number of initiatives	Date and duration of	Name of the initiative	Issues addressed	Number of participating
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	address locational advantages and disadvantages	taken to engage with and contribute to local community	the initiative			students and staff
2017-18	05 (Industrial Visit)	02	5 Sept 2017	Ganesh Visarjan Festival	Help to local Traffic Police to solve the traffic Problem	14
	Industry Internship		20 June 2017	Dnyashewar Maharaj/Tukaram Maharaj Palkhi	Supply Medicine & Food to the Person involve in Palkhi	26

#### 7.1.5 Human Values and Professional Ethics

Code of conduct (handbooks) for various stakeholders

Title	Date of Publication	Follow up (maximum 100 words each)
<b>JSCOE Handbook</b>	<b>15 Dec 2017</b>	This handbook is given to every stakeholder which include code of conduct and facilities available in the institute

#### 7.1.6 Activities conducted for promotion of universal Values and Ethics

Activity	Duration (from-----to-----)	Number of participants
<b>Nil</b>	<b>Nil</b>	<b>Nil</b>

#### 7.1.7 Initiatives taken by the institution to make the campus eco-friendly (at least five)

1. Energy Conservation

2. Water harvesting

3. Efforts taken for carbon neutrality

4.E-waste Management

5.Tree plantation activity

#### 7.2 Best Practices

Describe at least two institutional best practices

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

##### 1. Title: I-I-I Cell to a in Placement & Projects

**Goal:**The main goal of I-I-I cell is to build a trustworthy channel between industry and educational institute and to fill the gap between requirements of industries and institute.

This cell guides the students to adapt ever-changing industrial needs by arranging various training programs, workshops and research activity and helps the institute to achieve the stated objectives.

**Context:** Industry-institute interaction (I-I-I) is the most preferred activity for mutual benefit and growth of

industries as well as institutions. I-I-I provides the platform for showcasing the best practices, latest technological advancements, their implementation and its impact.

- Improve the T&P activity by arranging HR Meet every year.
- Knowledge enrichment of student by arranging workshop, seminar. Arrange the industrial visit to get real-time experience on recent technology and trends of industries.
- Create the research culture by arranging seminar by researchers from renowned organization.
- Improve the T&P activity by arranging HR Meet every year.

## **2. Title : CEP (Curriculum Enrichment Program)**

**2 Goal:** Enrichment of curriculum to achieve stated learning outcome which are in-line with graduate attribute.

**Context:** Institute defines its vision, mission, quality policy and objectives. To achieve these institute prepare well defined academic plan. Institute design learning outcomes which are in line with 12 Graduate Attribute, Institute adheres to achieve these during the course of time. SPPU provides syllabus along with course objectives and course outcomes. According SPPU syllabus all learning outcomes are not achieved, so to achieve them department arrange CEP before commencement of every semester for curriculum enrichment.

### **7.3 Institutional Distinctiveness**

Institute always gives the priority to placement of the students, for that we organize different skill development program, HR Meet through I-I-I cell. Training & Placement is the area where performance of JSCOE is remarkable for A.Y 2017-18, in this A.Y institute achieve the 75% placements which is in line with institute vision.

[www.jspmjscoe.edu.in/A.Y 2017-18 placements](http://www.jspmjscoe.edu.in/A.Y 2017-18 placements)

**8. Future Plans of action for next academic year (500 words)**

- Preparing for NBA
- Enhancement in Teaching Learning by more utilization of e-learning platform LMS (MOODLE)
- Arrange more Faculty Development Program
- Sign International MoU's for Centre of Excellence in recent Technology
- Enhancement in Research & Development by collaborations & research funded projects
- Include more Skill Development program in curriculum
- Organize Career Development Program
- More focus on Students Innovative projects
- Achieve 90% Placements
- More Alumni interaction for development in Training & Placement

*Name: Dr.S.V.Todkari*

*Name: Dr.M.G.Jadhav*

*Signature of the Coordinator, IQAC*

*Signature of the Chairperson, IQAC*

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**Abbreviations:**

CAS	-	Career Advancement Scheme
CAT	-	Common Admission Test
CBCS	-	Choice Based Credit System
CE	-	Centre for Excellence
COP	-	Career Oriented Programme
CPE	-	College with Potential for Excellence
DPE	-	Department with Potential for Excellence
GATE	-	Graduate Aptitude Test
NET	-	National Eligibility Test
PEI	-	Physical Education Institution
SAP	-	Special Assistance Programme
SF	-	Self Financing
SLET	-	State Level Eligibility Test
TEI	-	Teacher Education Institution

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