Submission of Annual Quality Assurance Report (AQAR) by Accredited Institutions

(For Autonomous Colleges)

(Revised as per Revised Accreditation Framework in November, 2017)

राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद

विश्वविद्यालय अनुदान आयोग का स्वायन मण्डल

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

The Annual Quality Assurance Report (AQAR) of the IQAC
(For Autonomous 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 HQA)
1. Name of the Institution

• Name of the Head of the institution :	Dr. Madhuri Bhushan Khambete
• Designation:	Principal
• Does the institution function from own campus:	Yes
• Phone no./Alternate phone no.	(020) 25311100
• Mobile No.	9225517613
• Registered Email	principal@cumminscollege.in
• Alternate Email	vikram.athalye@cumminscollege.in
• Address :	Karvenagar
• City/Town :	Pune
• State/UT :	Maharashtra
• Pin Code :	411 052

2. Institutional status:

- Autonomous Status: **2016-17 onwards**

- Type of Institution: **Unaided**

- Location : **Urban**

- Financial Status: **Self-financing**

- Name of the IQAC Coordinator/Director: **Dr. Vikram Athalye**

- Phone no. /Alternate phone no. : **(020) 25311172**

- Mobile: **(020) 9604339640**

- IQAC e-mail address: **vikram.athalye@cumminscollege.in**

- Alternate Email address: **administrator@cumminscollege.in**

3. Website address: **www.cumminscollege.org**
Web-link of the AQAR: **www.cumminscollege.org/AQAR2017-18.pdf**
(Previous Academic Year):

4. Whether Academic Calendar prepared during the year? **Yes.**

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

....

5. Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity Period	
1st	B	70-75	2002	from: 15/05/2002	to: 14/02/2007
2nd	A	3.33	2012	from: 15/09/2012	to: 14/09/2017
3rd	A	3.16	2017	from: 30/10/2017	to: 29/10/2022
4th	-	-	-	from: -	to: -
5th	-	-	-	from: -	to: -

6. Date of Establishment of IQAC: DD/MM/YYYY: **26/09/2011**

7. Internal Quality Assurance System

7.1 Quality initiatives by IQAC during the year (2017-18) for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & duration	Number of participants/beneficiaries
Meeting of IQAC members	01/09/2017	20
Academic Audit of Departments	September 2017	ALL Departments

NAAC Peer Team Visit	October 13-14, 2017	Entire College
NBA Peer Team Visit	February 9-11, 2018	1. Dept. of Electronics and Telecommunication 2. Dept. of Information Technology

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, analyzed 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 Special Status conferred 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
Institution	'Prayasshala' under Nidhiprayas scheme	DST	2017-18	Direct provision of Equipment (> 1 Cr.)

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

10. No. of IQAC meetings held during the year: **1**

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

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

      If yes, mention the amount: NA   Year: NA

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

    1. Provided guidelines to the faculty members and non-teaching staff on the preparation for the upcoming visit of NAAC peer team, which was held on October 13-14, 2017.

    2. Framed questionnaire for obtaining student feedback on the newly implemented autonomous curriculum of the Institute.

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
Inclusion of higher cognitive levels (defined as per the Revised Bloom's Taxonomy (RBT) model) in framing questions for the In-semester and End-semester examinations:	Faculty members implemented the RBT model for the question-paper framing for all the autonomous courses of F. Y. B. Tech. and S. Y. B. Tech., in which questions based on higher cognitive levels were included with appropriate weightage.
Primary-level review of the status of Perspective Plan implementation:	IQAC members reviewed faculty-team-wise status of the Perspective Plan implementation and provided suggestions & guidance to the faculty members on the same.

14. Whether the AQAR was placed before statutory body? **Yes**

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

     Yes :   Date: **13-14 October, 2017**

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

17. Does the Institution have Management Information System?

     Yes

If yes, give a brief description and a list of modules currently operational.
The following activity heads are maintained through MIS:
1. Accounts & financial works
2. Store & material requisition
3. Staff attendance biometric & leave approval
4. Library & information science (through slim)
5. ERP portal for Student information, results, attendance and faculty profile

Part-B

CRITERION I – CURRICULAR ASPECTS

1.1 Curriculum Design and Development

1.1.1 Programmes for which syllabus revision was carried out during the Academic year

Name of programme	Programme Code	Dates of revision
Electronics & Telecommunication	Semester-I Audit Course 5 Green Energy Semester-II Audit Course 6 Team Building, Leadership and Fitness	2017-18
Computer Engineering	Semester I 410249: Audit Course 5 AC5 – I: Entrepreneurship Development Semester II 410257: Audit Course 6 AC6 – II: Gamification	2017-18
Information Technology	Semester-I 414461B Green Computing Semester-I 414469B Entrepreneurship	2017-18

From the A. Y. 2016-17, the institute became autonomous and in the A.Y. 2017-18, autonomous curriculum for the second year of all the programs has been implemented.

1.1.2 Programmes/ courses focused on employability/ entrepreneurship/ skill development during the Academic year

Programme with Code	Date of Introduction	Course with Code	Date of Introduction
All Programs	2017-18	Self-Expression (Communication Skill) AC2101	2017-18

1.2 Academic Flexibility

1.2.1 New programmes/courses introduced during the Academic year

Programme/Course	Date of introduction
Principles of Economics and Finance (for all programmes)	2017-18

1.2.2 Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year.

Name of Programmes adopting CBCS/Electives	UG	PG	Date of implementation of CBCS / Elective Course System	UG	PG
In the A. Y. 2017-18 provision of elective courses has been made in the curriculum structure of Third Year B. Tech.					

1.3 Curriculum Enrichment

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
Self-Expression (a variety of art-related and life-skills related courses)	2017-18	The second year B. Tech. students of all programs

1.3.2 Field Projects / Internships under taken during the year

Project/Internship Areas	No. of students enrolled
Instrumentation & Control Engg.	
Process Control	16
Biomedical Instrumentation	6
Embedded Systems	43
Information Technology	
Machine Learning	27
Network and Security	4
Mobile Computing	3
Web & Information Retrieval	12
Cloud Computing	8
Electronics and Telecommunication Engg.	
Networking	12
Embedded/VLSI	40
Image Processing	41
DSP	6
Telecommunication	30
Combination of the above domains	86
Computer Engineering	
Cloud Computing	12
Machine Learning	37
Data Mining	36
Big Data	12
Artificial Intelligence	12
Security	20
Image Processing	16
Compiler	3
Natural Language Processing	12
Android	36
Database	16
Mechanical Engineering	
Design Engineering	58
Manufacturing Engineering	20
Thermal Engineering	8
Combination of the above domains	4

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	--	--

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

The institute has a formal mechanism to elicit feedback from students and employers. The obtained feedback is analyzed on regular basis. It is utilized mainly for improving the quality of the teaching-learning process and also of the curriculum of the institute.

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

The students do not directly apply to the college but apply for admission through the centralized admission process (CAP) conducted by DTE, Govt. of Maharashtra. The number of 'candidates applied' and therefore the demand ratio cannot be computed. However, comparing scores of the last admitted candidates (cut-offs), demand ratio for various programs can be predicted.
It is observed that, cut-off for Mechanical Engineering branch has increased in the last few years. For Computer Engineering and Information Technology the cut-offs are the highest.

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
BSH	528	Nil	24	Nil	3
Computer Engineering	648	Nil	35	Nil	Nil
Electronics & Telecommunication	707	17	39	1	2
Information Technology	218	Nil	15	Nil	Nil
Instrumentation & control	218	5	4	2	8
Mechanical Engineering	237	23	14	2	1

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 (LMS, e-Resources)	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
128	100%	100%	100%	0	6
					1) IEEE (ASPP) + POP. 2) Springer Electrical, Electronics and Computer Science Engineering Collection. 3) Springer Mechanical Engineering Collection. 4) McGraw Hill Access Engineering eBooks. 5) Science Direct. 6) NPTEL Video Lectures

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

Mentor-mentee scheme: The institute has a mentorship scheme. For a group of 25-30 students.
1. One faculty member is assigned as Mentor. This aims at helping students in curricular and other activities. The mentor guides for the overall development of the mentees, which includes academic performance, career development and personal development.
2. The schedule for the mentor - mentees meeting is mentioned in the academic calendar. The mentees can meet the mentors additionally any time during the semester.
3. The issues/ difficulties raised in such meetings are further escalated if required.

Dean of student affairs – Dean of Student Affairs addresses the problems faced by the students. Students can approach Dean of student affairs for their problems and assistance.

Elected students' representatives – every year students' elections are conducted. Elected students share various responsibilities such as organizing events, publishing magazine, etc. They communicate problems, expectations of students to the Institute's administration and act as a
support system among themselves.

The medical support – Medical facility and residential doctor are available on the campus.

Counsellor - Qualified counsellor is appointed by the institute to help students in case of any personal level issue.

Financial support – Students from economically weaker section, socially underprivileged section get scholarships from the Government. However, still some students face challenges in meeting educational cost and living expenses. Institute with the help of parent trust supports such students from its own fund or try to get financial aid from other donors.

Meetings with the Director and the Heads of Departments – students' meetings are conducted regularly with the Heads and the Director to understand the problems faced by the students.

Placement Cell – The Institute has Training and Placement Cell. The Cell mentors and guides students in placement activities. The cell not only supports the current students but also helps passed out students for recruitment

Number of students enrolled in the institution	Number of fulltime teachers	Mentor: Mentee Ratio
2555	153	1:17

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
162	162	0	2	32

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)

Year of award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
26th September, 2017	Dr. Madhuri Purandare	Professor	Women in Education Leadership Award. Dewing Mehta National Education Awards.
10th December 2017	Prof. Namrata Karandikar	Assistant Professor	Vidnyan Sansshodhak Abhyasak Abhyasak Deshastha rugvei Brahmin samstha,Pune.
2017	Dr. S. N. Ohatkar	Professor	Venus International Women Awards: VIWA 2018: **Distinguished Women in Engineering** for initiatives and developments in the field of Electronics and Telecommunications. awarded on 3rd March 2018 – Chennai
2017	Dr. S. N. Ohatkar	Professor	Appreciation for instrumental role as SPOC (Single Point Of Contact) for the SWAYAM-NPTEL Local chapter. (**Active SPOC** for Jan-June 2018)
26 sept 2017	Dr.Sandhya Arora	Professor	State level -Dewang mehta award of "Best professor in computer engineering" awarded at Indira college of Engineering and Management, Pune

23rd Nov 2017	Dr.Sandhya Arora	Professor	National level -"Prof.Indira Parikh 50 women in Education Leaders Award 2017" given at World Education Congress, Mumbai
Dec 2017 done	Mrs. Vaishali Salgar	Assistant Professor	National level - "CSI Longest continuous SBC award"
2017-18	Chetana Gavankar	Assistant Professor	Best Industry Aligned research by CSI tech next India 2018
2017-18	Makarand Velankar	Assistant Professor	Best paper award in ICIC conference

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

Progra mme Name	Progra mme Code	Semester/ year		Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
All Programs		SY B Tech (Autonomy)	Sem I	17 November 2017	2 December 2017
			Sem II	15 May 2018	21 May 2018
All Programs		T.E (University)	Sem I	8 Dec 2017	Feb 2018
			Sem II	25 May 2018	20 July. 2018
All Programs		B.E (University)	Sem I	9 Dec. 2017	Feb. 2018
			Sem II	29 May 2018	4 July 2018
Instrumentation and Control. And Electronics and Telecommunication		M.Tech (Autonomy) First year	Sem I	2nd December 2017	22 December 2017
			Sem II	23 May 2018	29 May 2018
Instrumentation and Control. And Electronics and Telecommunication		M.Tech (Autonomy) Second Year	Sem I	14 November 2017	15 December2017
			Sem II	12 May 2018	16 May 2018

2.5.2 Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

Do not include re-evaluation/ re-totaling

Number of complaints or grievances about evaluation	Total Number of Students appear in the examinations	Percentage			
0	0				

2.5.2 Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

Do not include re-evaluation/ re-totalling

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
0		0

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 web-link)

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
CE	Computer Engineering	U.G.	226	222	98.67
EC	Electronics and Telecommunication Engg.	U.G.	214	200	93.45
		P.G.	15	15	100
IT	Information Technology	U.G	67	58	86.57
IN	Instrumentation and Control Engineering	U.G.	66	64	96.97
		P.G.	08	06	75.00
ME	Mechanical Engineering	U.G.	74	71	95.94

2.7 Student Satisfaction Survey

2.7.1 Student Satisfaction Survey (SSS) on overall institutional performance.
Following is the link for the SSS analysis:

CRITERION III – RESEARCH, INNOVATION AND EXTENSION

3.1 Promotion of Research and Facilities

3.1.1 The institution provides seed money to its teachers for research.

Institute financially supports teachers in various ways, such as by providing reimbursement of registration fees for Conferences. Workshops, Faculty Development Programs, Filing Patents and by giving incentive for SCI (Rs. 10.000/paper) and SCOPUS (Rs. 5.000/paper) indexed Journal Publications. Seed money in the form of equipment and other facilities are provided to the faculty members for research as per the requirement. In year 2017-2018, two faculty members have utilized fully paid sabbatical for the research. Center for Research and Intellectual Entrepreneurship (CeRIE) lab (worth Rs. 1.5 Crore) has been developed and started in year 2017, is supported by ANSYS and Cummins foundation.

Details of the financial support extended by the institute in various forms is as shown below:

Name of the teacher getting seed money	The amount of seed money	Year of receiving grant	Duration of the grant
Conference			
Ms. Ketaki Behele	Reimbursement of registration fees ICCUBEA conference organised by PCCOE. **Rs. 6000/-**	2017-18	$17^{th} – 18^{th}$ August
Dr. Sharada Ohatkar	Reimbursement of registration fees for ICTIS 2017 at Ahmedabad India. **Rs. 11,144/-**	2017-18	$25^{th} – 26^{th}$ March
Prof. Nivedita Daimiwal	Reimbursement of registration fees for ICCII conference. Hyderabad. **Rs.9000**	2017-18	$25^{th} - 27^{th}$ September
Prof. Revati Shriram	Reimbursement of registration fees for ICCII conference. Hyderabad.	2017-18	$25^{th} - 27^{th}$ September

	Rs.10,500		
Prof. Harshad Wadkar	Reimbursement of registration fees for Symposium on "Cyber Security (SCS-2017)" **Rs.1000**	2017-18	$23^{rd} - 24^{th}$ November
Prof. Nivedita Daimiwal	Reimbursement of registration fees for SCI, Vijaywada, **Rs.8260**	2017-18	$27^{th} - 28^{th}$ January
Prof. Revati Shriram	Reimbursement of registration fees for SCI, Vijaywada, **Rs.8260**	2017-18	$27^{th} - 28^{th}$ January
Prof. Suraj Chavan	Reimbursement of registration fees for Symposium on "Cyber Security (SCS-2017)", **Rs.1000**	2017-18	$23^{rd} - 24^{th}$ November
Prof. Makarand Velankar	Reimbursement of registration fees for ICICC 2017, **Rs.8000**	2017-18	$7^{th} - 8^{th}$ April
Prof. Sneha Thombre	Reimbursement of registration fees for IEEE I2CT 2018, **Rs.1500**	2017-18	$4^{th} - 6^{th}$ April
Prof. Y. S. Munde	Reimbursement of registration fees for AMPT, **Rs. 9000**	2017-18	$11^{th} - 14^{th}$ December
Prof. Harish Sinde	Reimbursement of registration fees for at NIT Suratka, **Rs. 6000**	2017-18	$29^{th} - 31^{st}$ January
Prof. Nilesh Kolhalkar	Reimbursement of registration fees for Conference at IIT Guwahati, **Rs. 5000**	2017-18	$8^{th} - 9^{th}$ September
Prof. S. A. Kedar	Reimbursement of registration fees for ICONSET, Bangalore, **Rs. 5000**	2017-18	$19^{th} - 20^{th}$ April
TOTAL	89,664		
Faculty Development Program			
TE staff - amount transferred directly to respective staff members account	Reimbursement of registration fees for FDP organized by SPPU on revised third year syllabus. **Rs. 4250/-**	2017-18	December
TE staff - amount transferred directly to respective staff members account	reimbursement of registration fees for FDP organized by SPPU on revised third year syllabus **Rs. 2000/-**	2017-18	December
Prof. Ganesh R Padalkar	Reimbursement of registration fees for FDP on Probability & statistics for Machine Learning at AIT . **Rs. 3000/-**	2017-18	$5^{th} - 9^{th}$ December
Prof. Ganesh R Padalkar	Reimbursement of registration fees for FDP deep learning & Image processing at MITCOE **Rs. 2000/-**	2017-18	$11^{th} - 16^{th}$ December
Prof. Prajakta Deshpande	Reimbursement of registration fees for FDP on BE IT Syllabus	2017-18	July

	Rs. 500		
Dr. Chetana Gavankar	FDP on TE IT Syllabus, **Rs. 500**	2017-18	July
Prof. Harsha Sonune	Reimbursement of registration fees for FDP on Research methodology and thesis writing for engineering scholars. **Rs. 2800**	2017-18	$12^{th} - 16^{th}$ June
Prof. Harsha Sonune	Reimbursement of registration fees for FDP on Discrete Mathematics and mathematical modelling, **Rs. 1500**	2017-18	$6^{th} - 10^{th}$ June
TOTAL	16,550		

Patent Filing			
Prof. Yashwant Adhav	Reimbursement of Patent Filing Fees for Patent on "System and Method for Hardness Detection of Water"	2017-2018	1,50,000
Prof. Revati Shriram	Reimbursement of Patent Filing Fees for Patent on "System and Method for Prognosis of Parkinson's Disease"	2017-2018	8,000
Prof. Revati Shriram and Prof. Nivedita Daimiwal	Reimbursement of Patent Filing Fees for Patent on "System for estimating brain aging and a Method thereof"	2017-2018	8,000
Prof. Harish Shinde & Dr. Anand Bewoor	Reimbursement of Patent Filing Fees for Patent on "System and Method for Diagnosis and Prediction of Automobile Engine Oil Quality"	2017-2018	8,000
Prof. Sunita Jahirabadkar	Reimbursement of Patent Filing Fees for Patent on "System and method for recognizing Handwritten Devanagari characters"	2017-2018	8,000
Prof. Atul Joshi	Reimbursement of Patent Filing Fees for Patent on "System for Automatic Recycling of Plastic Moulded Articles and Method Thereof"	2017-2018	8,000
Prof. Neeta Mhetre	Reimbursement of Patent Filing Fees for Patent on "Method for Predicting Gene Presence in a Query Sequence"	2017-2018	8,000
Dr. Prachi Mukherji	Reimbursement of Patent Filing Fees for Patent on "Vision based fall detection system using computer vision and single board computer for elderly person monitoring"	2017-2018	1600
		TOTAL	1,99,600
TOTAL	3,05,814		

3.1.2 Teachers awarded National/International fellowship for advanced studies/ research during the year				
	Name of the teacher awarded the fellowship	Name of the Award	Date of Award	Awarding Agency
National	--	--	--	--
International	--	--	--	--

3.2 Resource Mobilization for Research

3.2.1 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 year
Major projects	on-going	DST	29,96,000/-	12,93,597/-
Minor Projects	--	--	--	--
Interdisciplinary Projects	--	--	--	--
Industry sponsored Projects	--	--	--	--
Projects sponsored by the University/ College	2017-2018	BCUD AICTE	3.25.000 5.00.000	1.05.000
Students Research Projects *(other than compulsory by the College)*	--	--	--	--
International Projects	--	--	--	--
Any other(Specify)	--	--	--	--
TOTAL	2017-2018		38,21,000	13,98,597

3.2.2 Number of ongoing research projects per teacher funded by government and non-government agencies during the years

Prof. H. Shinde & Dr. A. Bewoor	BCUD	1,00,000
Prof. S. Kedar & Dr. A. Bewoor	BCUD	1,15,000
Prof. M. Tokekar & Prof. S.Pakale	AICTE	5.00.000
Prof. P. Meshram	BCUD	1,10,000
	TOTAL	8,25,000

3.3 Innovation Ecosystem

3.3.1 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)
Writing technical documents – handling ethical issues (Plagiarism, copyright) etc. By, Dr. Dineshsingh Thakur (Professor, DIAT)	For all Faculty	05/10/2016
Writing Technical Documents and Research Proposals Dr. Anuradha Ganesh (Cummins India Ltd)	For all Faculty	04/10/2016

IPR, Patenting and Plagiarism awareness By, Mr. Raghavendra Ponkshe and Dr. Sunita Jahirabadkar	TE Comp (A + B + C div)	21/07/2017
IPR, Patenting and Plagiarism awareness By, Mr. Raghavendra Ponkshe and Dr. Sunita Jahirabadkar	BE Comp (A + B + C div)	25/07/2017
IPR, Patenting and Plagiarism awareness By, Mr. Raghavendra Ponkshe and Dr. Sunita Jahirabadkar	BE E & TC (A + B + C div)	27/07/2017
IPR, Patenting and Plagiarism awareness By, Mr. Raghavendra Ponkshe and Dr. Sunita Jahirabadkar	TE Mech, BE Mech, BE IT	28/07/2017
IPR, Patenting and Plagiarism awareness By, Mr. Raghavendra Ponkshe and Dr. Sunita Jahirabadkar	TE E & TC (A + B + C div)	01/08/2017
IPR, Patenting and Plagiarism awareness By, Mr. Raghavendra Ponkshe and Dr. Sunita Jahirabadkar	TE IT, TE Instru BE Instru	04/08/2017

3.3.2 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
Mitsubishi	Ms. Vaidehi Pawar, Ms. Ameya Manure, Ms.Likhita Poola, Ms. Duvhuti Somavase	Mitsubishi Electric	16th Feb 2018	Student National Level Competition
Hackathon	Ms. Namrata Mahankal, Ms. Komal Amrutkar, Ms. Anamika Birhade, Ms. Shreya Bhat, Ms. Ayushi Naphad, Ms. Soha Parasnis	Government of India	March 2018	Student National Level Competition

3.3.3 No. of Incubation center created, start-ups incubated on campus during the year

Incubation Centre	Name	Sponsored by
Prayasshala Under Nidhiprayas scheme	--	Department of Science and Technology

Name of the Start-up	Nature of Start-up	Date of commencement
--	--	--

3.4 Research Publications and Awards

3.4.1 Ph. Ds awarded during the year: NIL

3.4.2 Research Publications in the Journals notified on UGC website during the year

	Department	No. of Publication	Average Impact Factor, if any
National	Basic Sciences & Humanities	--	--
	Computer Engineering	--	--
	Electronics & Telecommunication Engineering	--	--
	Instrumentation & Control	--	--
	Information Technology	--	--
	Mechanical Engineering		
International	Basic Sciences & Humanities	01	--
	Computer Engineering	04	--
	Electronics & Telecommunication Engineering	16	0.753 - 5.87
	Instrumentation & Control	03	--

	Information Technology	02	--
	Mechanical Engineering	06	--
	TOTAL	32	

3.4.3 Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Departments	No. of publications
Computer Engineering	
Chapters in the edited Volumes	--
Books Published	02
Papers in National/International Conference	03
Electronics & Telecommunication Engineering	
Chapters in the edited Volumes	01
Books Published	--
Papers in National/International Conference	17
Instrumentation & Control	
Chapters in the edited Volumes	01
Books Published	--
Papers in National/International Conference	18
Information Technology	
Chapters in the edited Volumes	01
Books Published	--
Papers in National/International Conference	07
Mechanical Engineering	
Chapters in the edited Volumes	--
Books Published	01
Papers in National/International Conference	07
TOTAL	58

3.4.4 Patents published/awarded during the year

Patent Details	Patent status	Patent Number	Date of Award
A Method and an apparatus for data compression including encryption for the file transfer	Granted	285348	18/07/2017
Real Time System and method for Monitoring and management of Asthma	Filed	201721017340	17/05/2017
Trespasser Inhibition Control System and method Thereof	Filed	201721017342	17/05/2017
System and Method for Hardness Detection of Water	Filed	201721020360	10/06/2017
System for Automatic Recycling of Plastic Moulded Articles and Method Thereof	Filed	201721033872	25/09/2017
System and Method for Prognosis of Parkinson's Disease	Filed	201721034084	26/09/2017
Vision based fall detection system using computer vision and single board computer for elderly person monitoring	Filed	201721045437	18/12/2017
System and Method for Diagnosis and Prediction of Automobile Engine Oil Quality	Filed	201721045907	20/12/2017
System for estimating brain aging and a Method thereof	Filed	201821014906	19/04/2018
TOTAL	10		

3.4.5 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
"Secure, Robust Video Watermarking to Prevent Camcorder Piracy"	Dr. Chhaya S. Gosavi	Indian Journal of Science and Technology(IJS T)	2017-18	--	Cummins College of Engg for Women, Pune	--
"A Systematic review of near duplicate video retrieval techniques"	Dr.Sunita Jahirabadkar	International conference on Emerging Trends in Science, Engieering and Technology (ICETSET2018)	2017-18	--	Cummins College of Engg for Women, Pune	--
"An insight into Theory-Guided Climate Data Science – A Literature Review"	Dr. Sunita Jahirabadkar	Springer's International Conference on Data and Information Sciences (ICDIS-2017),	3-4th Nov 2017	--	Cummins College of Engg for Women, Pune	--
A Database of Marathi Numerals for Speech Data Mining	Dr. Prachi Mukherji	International Journal of Advance Research in science and Engineering	Vol 16, Issue (10), Oct 2017.PP. 395-399	--	Cummins College of Engg for Women, Pune	--
" Real Time Implementation of Data Communication using IPV4 Telecom Network through SDHSTM-4 Digital Transmission WAN"	Dr.S.N. Ohatkar	International Journal of Research in Engineering Technology	Volume 3 Issue 4 May-June 2018 PP 16-22	--	Cummins College of Engg for Women, Pune	--
Performance evaluation of domino logic circuits for wide fan-in gates with FinFET	Dr. Anita Jain	Springer Microsystem Technologies	2017-18	--	Cummins College of Engg for Women, Pune	--

Maintaining spectrum sharing through software puzzles in WSN	Dr. Seema Rajput	International Journal of Advance Research and Innovative Idea in Education	2017-18	--	Cummins College of Engg for Women, Pune	--
Comparative Analysis of Agricultural Field Monitoring Techniques	Dr. Seema Rajput	International Journal of Recent Trends in Engineering & Research (IJRTER)	2017-18	--	Cummins College of Engg for Women, Pune	--
3 Dimensional Reconstruction of GM	Dr. M.S. Borse	International Journal of Biomedical Engineering & Technology (IJBET)	2017-18	--	Cummins College of Engg for Women, Pune	--
Food Ordering System For Railway Pantry Using Wireless Communication	Dr.S.R.Chaudhary	International Journal of Science, Engineering and Technology Research (IJSETR)	2017-18	--	Cummins College of Engg for Women, Pune	--
Mobile Based Digital Storage OScilloscope	Dr. M.A.Dixit	International Journal of Innovative Research in Technology (IJIRT).	2017-18	--	Cummins College of Engg for Women, Pune	--
Stable Cluster Based Data Gathering and Congestion Control Protocol for Mobile Wireless Sensor Networks	Prof. S.A. Paranjape	Journal of Computational and Theoretical Nanoscience	2017-18	--	Cummins College of Engg for Women, Pune	--
Vehicle Density Estimation using Segmentation Methods for Traffic Monitoring	Prof. M.V.Pathade	Journal of Emerging Technologies and Innovative Research	2017-18	--	Cummins College of Engg for Women, Pune	--
Object Detection And Tracking In Thermal Video Using Directed Acyclic Graph (DAG)	Prof.Mrs.S.A. Mangale	Ictact Journal On Image And Video Processing.	2017-18	--	Cummins College of Engg for Women, Pune	--

Approach for moving object detection using visible spectrum and thermal infrared imaging,	Prof.Mrs.S.A. Mangale	J. Electron. Imaging 27(3), 033004	2017-18	--	Cummins College of Engg for Women, Pune	--
Gray level co-occurrence matrix feature based object tracking in thermal infrared imagery,"	Prof.Mrs.S.A. Mangale	J. Electron. Imaging 27(3), 033004	2017-18	--	Cummins College of Engg for Women, Pune	--
Modelling Seamless Vertical Handovers in Hetrogeneous Wireless Networks	Dr. Prachi Mukherji	International Journal on Future Revolution in Computer Science and communication Engineering	2017-18	--	Cummins College of Engg for Women, Pune	--
Real-time implementation for digit recognition using Raspberry Pi	Dr. Ashwini Deshpande	International Journal of Latest Trends in Engineering and Technology	2017-18	--	Cummins College of Engg for Women, Pune	--
Wavelet Approach for Detection of Functional Brain activity in Prefrontal Lobe using Cranial PPG signal	Nivedita Daimiwal, Revati Shriram	International Journal of pure and applied Mathematics	2017-18	--	Cummins College of Engineering For Women, Pune	--
Statistical analysis of connectivity measures of electroencephalogram during congruent and incongruent stroop task	Revati Shriram, Nivedita Daimiwal	International Journal of pure and applied Mathematics	2017-18	--	Cummins College of Engineering For Women, Pune	--
Detection of Nitro-Aromatic Explosives with Parametric Regression modelling Approach	Dipali Ramdasi	International Journal of control and Automation	2017-18	--	MKSSS's Cummins College of Engineering For Women, Pune	--
Development of framework for moving object		International Journal of Latest Technology in	2017-18	--		--

detection and tracking in video sequences	Dr. Dipti Patil	Engineering, Management & Applied Science (IJLTEMAS)				
Feature Engineering and Generation for Music Audio Data	Makarand Velankar	The International Journal on Emerging Trends in Technology (IJETT)	2017-18	--	MKSSS's Cummins College of Engineering For Women, Pune	--
Effects of tangential and radial velocity on the heat transfer for flow through pipe with twisted tape insert-turbulent flow	Parag Chaware, C.M. Sewatkar	International Journal of Heat and Technology	2017-18	--	MKSSS's Cummins College of Engineering For Women, Pune	--
Vibration signature analysis of distributed defects in ball bearing using wavelet decomposition technique	S S Kulkarni, A K Bewoor, and Ravindra B. Ingle	Noise & Vibration Worldwide	2017-18	--	MKSSS's Cummins College of Engineering For Women, Pune	--
Investigation to appraise the vibration and damping characteristics of coir fibre reinforced polypropylene composites	Y S. Munde, Ravindra B. Ingle	Advances in Materials and Processing Technologies Publisher: Taylor & Francis	2017-18	--	MKSSS's Cummins College of Engineering For Women, Pune	--
Interoperability of International standards, condition monitoring methods and research models for bearing fault: An Integrated Approach	A. K. Bewoor and S. S. Kulkarni	Procedia Manufacturing	2017-18	--	MKSSS's Cummins College of Engineering For Women, Pune	--
Job Shop Scheduling with the Aid of Hybrid Social Spider Optimization and Gray Wolf Optimization with Industrial Scheduling Case Study	K. B. Gavali, Anand Bewoor and Debabrata Barik	International Journal of Mechanical Engineering and Technology	2017-18	--	MKSSS's Cummins College of Engineering For Women, Pune	--

Performance Enhancement in Job Shop Scheduling with the Aid of Hybrid Social Spider Optimization and Gray Wolf Optimization	K. B. Gavali, Anand Bewoor and Debabrata Barik	International Journal of Applied Engineering Research	2017-18	--	MKSSS's Cummins College of Engineering For Women, Pune	--
TOTAL	29					

3.4.6 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-citations	Institutional affiliation as mentioned in the publication
--	--	--	--	--	--	--

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

No. of Faculty	International level	National level	State level	Local level
Attended Seminars/ Workshops	--	73	1	32
Presented papers	44	--	2	--
Resource Persons	19	10	10	33
TOTAL	**63**	**83**	**23**	**65**

3.5 Consultancy

3.5.1 Revenue generated from Consultancy during the year

Name of the Consultant(s) department	Name of Consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)
Mechanical Engineering	Composite Material Testing	VIIT, Pune	3500

3.5.2 Revenue generated from Corporate Training by the institution during the year

Name of the Consultant(s) & Department	Title of the Programme	Agency seeking training	Revenue generated (amount in rupees)	Number of trainees
--	--	--	--	--

3.6 Extension Activities

3.6.1 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	Organizing unit/ agency/ collaborating agency	Number of teachers co-ordinated in such activities	Number of students participated in such activities
Blood Donation Camp	NSS + Janakalyan Raktapedhi Blood Bank	3	50

Eye Check-up Camp	NSS + Laurence Mayo	2	50
Thyroid & Sugar Check-up Camp	NSS - Thyrocare	1	20
Swatcha Swastha Bharat Pakhavda	NSS	4	50
Global Handwash Day	NSS	3	50
National Unity Day	NSS	1	20
Tree Plantation	NSS	10	100
Special Winter Camp	NSS + Villagers of Pisali	16	25
Cleanliness Drive	NSS	5	50
Traffic Rules & Regulations – Guest Lecture	NSS	5	150

3.6.2 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
--	--	--	--

3.6.3 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 co-ordinated such activities	Number of students participated in such activities
--	--	--	--	--

3.7 Collaborations

3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of Activity	Participant	Source of financial support	Duration
Sabbatical at Cummins Inc.	Dr. Deepak Watvisave	Cummins College of Engineering for Women	2/11/2017 to 31/10/18
Cummins Fellowship Program at Purdue University	Ms. Vaishnavi Radkar, Ms. Pooja Patil and Ms. Nidhi Sakhala	Cummins Inc.	2017-2019

3.7.2 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
Institute - Industry Linkages				
Internship and Training	Mercedes-Benz	Mercedes-Benz	28/02/2017	Faculty Members and Students
Training and Project	Ansys	Ansys	23/08/2017	More than 20 Faculty Members have completed the training
College curriculum to the Industry requirements	IGATE Global Solutions Ltd., Bangalore	IGATE Global Solutions Ltd., Bangalore	07/11/2014 to 06/11/2019	Faculty Members and Students
Improve employability amongst students	EATON Technologies Pvt. Ltd.	EATON Technologies Pvt. Ltd.	16/12/2011 to till date	Third Year Engineering Students

Industry - Institute Linkages				
Master's Program	Purdue University, USA	Purdue University, USA	From 2012 to 2018	More than 40 students are benefited till date
Master's and Doctoral Program	Deakin University, Australia	Deakin University, Australia	23/02/2012 to 22/02/2017	MoU & Exchange Program
Master's Program	La Trobe University, Australia	La Trobe University, Australia	20/12/2012 to 19/12/2017	Students
Institute - Charitable Trust Linkage				
Scholarship Program	Khushboo Charitable Trust, Pune	Khushboo Charitable Trust, Pune	28/04/2014 to March, 2018	Students

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

Organisation	Date of MoU signed	Purpose and Activities	Number of **students/teachers participated under MoUs**
ANSYS	23/08/2017	Training and Projects	About 20 Faculty Members
DST			

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
180.95 lakhs	212.03 lakhs

4.1.2 Details of augmentation in infrastructure facilities during the year

Facilities	Existing	Newly added
Campus area	26430 sq.mt.	
Class rooms	28	
Laboratories	57	01
Seminar Halls	05	
Classrooms with LCD facilities	29	
Classrooms with Wi-Fi/ LAN	22	
Seminar halls with ICT facilities	05	
Video Centre	01	
No. of important equipment purchased (≤ 1-0 lakh) during the current year.	193	07
Value of the equipment purchased during the year (Rs. in Lacs)	1992.65	187.06

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
SLIM21	FULLY	3.5.0.33040	2009

4.2.1 Library Services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	51085	1.19 crores	2580	12.75 lakhs	53665	1.32 crores
Reference Books	4970	1.44 crores	92	4.86 lakhs	5062	1.49 crores
e-Books	381	* 1.98 lakhs	725	2.27 lakhs	725	2.27 lakhs
Journals	127	** 8.32 lakhs	93	4.72 lakhs	93	4.72 lakhs
e-Journals	642	* 17.55 lakhs	680	15.40 lakhs	680	15.40 lakhs
Digital Database	4 (National Digital Library)	Free Subscription	4 (National Digital Library)	Free Subscription	4 (National Digital Library)	Free Subscription
CD & Video	139	0.23 lakhs	-	-	139	0.23 lakhs
Library automation	01	2.41 lakh	01	0.45 lakhs	01	2.86 lakh
Weeding (Hard & Soft)	1240	1.39 lakh	1798	4.51 lakh	3038	5.90 lakh
Others (specify)	NPTEL	1.0 lakhs	-	-	NPTEL	1.00 lakhs

4.2.2 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
--	--	--	--

4.3 IT Infrastructure

4.3.1 Technology Upgradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centers	Computer Centers	Office	Depart-ments	Available band width (Mbps)	Others
Existing	1376	30	106 Mbps	All labs	1	2	6		-
Added	42	-	-	-	-	-	-		-
Total	1418	30	106 Mbps	All labs	1	2	6		-

4.3.2 *Bandwidth available of internet connection in the Institution (Leased line):* 106 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

4.4 Maintenance of Campus Infrastructure

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
69.64 lakhs	72.55 lakhs	65.91 lakhs	42.73 lakhs

4.4.2 Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words)

A) Computers:
- **Propriety software / Open source software's**
  College makes use of large number of open source software's and OS such as Ubuntu14, Fedora 20. College also has licenses for list of OS such as Microsoft Campus Agreement License and Microsoft Base licenses, VM ware Vsphere Plus 4 for 3 Host, Red-hat Linux, Windows N.T. Workstation 4.0, and Windows N.T. Server 4.0
- **Maintenance of computers and their accessories**
  AMC is outsourced to external agencies on yearly basis. Engineers from the service provider company maintain all machines and printers of the college. AMC coordinators from departments along with lab in-charges coordinate the activity to ensure all computers and printers are in properly working condition.
- The annual budget for update, deployment and maintenance of the computers in the College is Rs. 30 lakhs for the year 2017-18.

B) Maintenance of the laboratory equipment:
  Other laboratory equipment is maintained by technical supporting staff. In case of any repair requirement, service is hired from the external agencies.

C) IT service management:
  College has IT policy addressing standards on IT Service Management, Information Security, Network Security, Risk Management and Software Asset Management. It outlines the responsible use of the Information Technology infrastructure at the college such as use of licensed software only, procurement of IP based licenses wherever possible, annual maintenance contract for application software, antivirus on every machine, restricted access through firewall, regular information backup, encouragement for usage of open source software.

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	Endowment Scholarship	68	1,66,054
	Financial Assistance	76	12,05,000
	Tata Samarth Scholarship	12	3,00,000
	10% Fee Concession to Miss. Ankita Mandke, daughter of employee	1	12,228
	Fee concession to Mis. Ayushi Bansal	1	25,000

Financial support from other sources

a) National			787	778,25,476
	1.	Government Scholarship and freeship	787	778,25,476
	2.	DTE Scholarship for EBC	243	14689411
	3.	DTE – Dr. Punjabrao Deshmukh Scheme for Hostel charges	23	690000
	4.	Central Sector Scholarship	26	300000
	5.	Central and State Minority Scholarship	3	45000
	6.	Samstha Scholarship	68	1,66,054
	7.	Financial Aid and Barclay Fund	76	1205000
b) International		--	--	--

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
EEP	19th June 2018	650	MoebiuSutra Consulting Pvt. Ltd.
Soft skills and English communication training (Garnishing Talent)	Jan to April '18	130	Eaton (I) Ltd.
Quantitative aptitude	26th July 2017	300	Prof. Kirti Agrawal, A.P., BSH, CCOEW
Professional Society Activities like guest lectures, workshops, visits, competitions, etc.	Academic year 2017-18	1698	Experts from Professional Society Chapters

5.1.3 Students benefited by guidance for competitive examinations and career counseling 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 Counseling activities	Number of students who have passed in the competitive exam	Number of students placed
	Session on Awareness about MS admission		215	--	--
	Session on Awareness about GATE Exam	12			

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
0	--	--

The institute has mechanism to address student grievances by various ways:
- The institute has students' grievance redressal cell. The students can approach for any grievances related to facilities, support systems and academic activities.
- The institute conducts students' elections every year. The elected panel members communicate their problems, difficulties and grievances to the Director and the Dean – student affairs.
- The meetings of students with the Director also act as a platform to convey their grievances.
- As per the directives given by Supreme Court, institute level "Women's Grievance Cell against Sexual Harrasment" is formed. The Head of the institute, the representation of non-government organization and a faculty member constitute this committee. Till date, there are no cases of sexual harassment reported.
- The institute also has anti-ragging committee, constituted as per the norm F.No.37-3/Legal/AICTE2009 dated July 2009. Director of the institute, Dean – student affairs, hostel warden, faculty member representative, students' representatives, non-teaching staff members representative, parent representative, local police station nominee and non-government organization nominee are the members of the committee.

5.2 Student Progression

5.2.1 Details of campus placement during the year

On campus		Off Campus	
Name of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
98	493	408	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
2017-18	3	Engineering	Computer Engineering	University of Texas, Dallas PACE university New York RWTH Aachen University	MS
2017-18	3	Engineering	Electronics and Telecommunication Engineering	San Jose State University Illinois Institute of Technology	MS
2017-18	3	Engineering	Information Technology	University of Texas, Dallas University of Melbourne SASTRA, Deemed University, India	MS MS M. Tech.
2017-18	5	Engineering	Instrumentation and Control Engineering	Purdue University Ecole Nationale de I' Aviation Civile, France University of strathclyde Glasgow	MS
2017-18	3	Engineering	Mechanical Engineering	Purdue University Cummins College	MS 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
GRE	54	--
TOFEL	54	--

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

Activity	Level	Participants
Pentacle (Intercollegiate Sports Competition)	Regional	Undergraduate Students
Gandhar (Intercollegiate Cultural Competition)	Regional	Undergraduate Students

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
2017-18	Participation	National	Chess			Shreya Anekar
	Participation	West Zone University	Basketball			Shriya Joshi
	Participation	West Zone University	Badminton			Riya Jail
	Participation	West Zone University	Football			Ashwini Pampatwar
	Participation	West Zone University	Football			Devika Kale

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

The college has an independent student council and its election schedule is declared well in advance in academic calendar. In the academic year 2017-18, the elections were conducted in August 2017. More than 200 candidates contested for more than 30 posts.

The technical secretary along with student volunteers organized annual tech-fest 'Innovation', in which various workshops and seminars were organized.

The placement cell representatives helped TPO in various placement activities. The issues or problems faced by students were addressed by the TPO and student cell representatives. Due to well balanced and in synch work, the college was able to achieve more than 80% placement.

The magazine team under the leadership of magazine secretary published college magazine 'Kshitij'. The processes like collecting the material, editing, designing and publishing were done by students. The magazine committee was also involved in various department newsletters.

The sports secretary organized and conducted intercollegiate sports tournament Pentacle. This was well supported by enthusiastic student volunteers.

The students enthusiastically organized and participated in various cultural events. The university representative, general secretary and cultural secretary played major role in the organization of the annual cultural festival 'Gandhar'.

The treasurer along with assistant treasurers took care of the budget planning and expenses required for all the events.

5.3 Alumni Engagement

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

5.3.2 No. of registered Alumni: Nil

5.3.3 Alumni contribution during the year (in Rupees) : **Nil**

5.3.4 Meetings/activities organized by Alumni Association : **Nil**

CRITERION VI –GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

Vision of College:
- To be globally renowned institute for imparting quality education and to develop women leaders in engineering and technology.

Mission of College:
- To develop women professionals who are academically & technically competent with strong professional ethics.

6.1.1 Mention two practices of decentralization and participative management during the last year (maximum 500 words)

In 2017-18, research and development committee is formed, which is headed by the Dean – R & D. Research related support and incentives are recommended by this committee upon scrutinizing the quality of the research work as benchmarked by IQAC.

6.1.2 Does the institution have a Management Information System (MIS)?

Yes/No/Partial:

Yes. The following activity heads are maintained through MIS:
1. Accounts & financial works
2. Store & material requisition
3. Staff attendance biometric & leave approval
4. Library & information science (through slim)
5. ERP portal for Student information, results, attendance and faculty profile

6.2 Strategy Development and Deployment

6.2.1 Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

❖ Curriculum Development
New curriculum structure has been applied in the academic year 2017-18 by -
- Considering global trends in technology
- Incorporating the knowledge dimensions of the Revised Bloom's Taxonomy, wherever possible
- Increasing the proportion of laboratory courses relative to theory courses
- Including tutorials in some of the courses

❖ Teaching and Learning
- Pedagogy cell consisting of faculty members from each of the departments is formed to explore experiment and disseminate modern trends & methodologies pertaining to teaching-learning.
- Faculty members are encouraged to register for NPTEL online courses

❖ Examination and Evaluation
Quality guidelines on the setting of question papers for theory courses are developed and conveyed to the course instructors.

❖ Research and Development
Incentives are introduced for attracting funds from external agencies for research projects, for filing patents and also for publishing articles in quality journals.

6.3 Faculty Empowerment Strategies:

6.3.1 Teachers are provided with financial support to attend conferences / workshops and towards membership fee of professional bodies. During the year 2017-18, **61** teachers are provided with financial support of (total) Rs. 63,857 toward conferences / workshops and toward membership fee of professional bodies.

Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2017-18	Harsha Sonune	A workshop. "Research Methodology and Thesis Writing for Scholars", at SKNCOE, Pune from 12.06.2017 to 16.06.2017	N.A.	2800/-
2017-18	Suchitra Pakale	A workshop. "Research Methodology and Thesis Writing for Scholars", at SKNCOE, Pune from 12.06.2017 to 16.06.2017	N.A.	2800/-
2017-18	Harsha Sonune	STTP. "Discrete Mathematics and Mathematical Modeling at Zeal COE. Pune from 06.06.2017 to 10.06.2017	N.A.	1500/-
2017-18	Meenal Kamlakar	FDP arranged by SPPU at SITS Narhe from 12th June 2017 to 16th June 2017 for the revised syllabus.	N.A.	2500/-
2017-18	Vaishali Salagar	FDP arranged by SPPU at SITS Narhe from 12th June 2017 to 16th June 2017 for the revised syllabus	N.A.	2500/-
2017-18	Rita Shelke	FDP arranged by SPPU at SITS Narhe from 12th June 2017 to 16th June 2017 for the revised syllabus	N.A.	2500/-
2017-18	Pranjali Deshpande	FDP arranged by SPPU at SITS Narhe from 12th June 2017 to 16th June 2017 for the revised syllabus	N.A.	2500/-
2017-18	Dr. P.S. Chaware	Motilal Nehru National Institute of Technology Allahabad 6th International and 43rd National conference on Fluid Mechanics and Fluid Power held during December 15-17, 2016.	N.A.	4000/-
2017-18	Vaishali Upadhye	registration fess for Internation conference (Paper presentation) on Advanced Materials Technologies Sponsored by Elsevier and organised by DAIET. Vishakapatnam Andhara Pradesh held during December 27 and 28, 2016	N.A.	4000/-
2017-18	Jyoti Chitale	D.D. from SBI for The Director, UGC Human Resource Development Centre (HRDC), M.D.S. University, Ajmer.	N.A.	1000/-
2017-18	Kedar Deshpande & Anuradha Kolekar	Orientation Programme of MahaDBT Portal RO DTE Pune on 29.08.17	N.A.	240/-
2017-18	Mugdha Dewasthale	reimbursement of registration fess Rs. 4000/- for Internation conference (Paper presentation) on Comparative Performance Analysis and hardware implementation of adaptive filler alorithms for acoustic noise cancellation organised by VIT. held during December 16th to 19th 2015. and Rs. 4500/- for paper titled Performance comparison of LMS	N.A.	8500/-

		algorithms for acoustic noise cancellation at conference in Casp 2016 on 9th and 10th June 2016		
2017-18	Vrishali Belekar	reimbursement of registration fess for Internation conference (Paper presentation) on Wireless communication , signal processing and networking (WiSPNET-17) held during 22nd to 24th March 2017 in SSN college of Engg. Chennai , paper titled Improved Microstrip patch Antenna with Enhanced Bandwidth Efficiency and reduced return loss using DGS.	N.A.	13,000/-
2017-18	Sharada N. Ohatkar	reimbursement of registration fess for International conference (Paper presentation) on Cyber Security and IT Governance held on 19 March 2016, Ahmedabad	N.A.	9926/-
2017-18	Yogita Gunjkar	reimbursement of registration fess for Internation conference (Paper presentation) on Smart Trends for Information Technology and Computer Communication (SMART COM 2016) Held at Jaipur on 6th and 7th August 2016 , paper titled ABC and TLBO Technique for Evaluating data rate in Wireless Network published in Springer .	N.A.	15250/-
2017-18	Kedar Deshpande, Anuradha Kolekar & Revati gore towards	expenses for attending orientation programme of MahaDBT - 2 portal RO DTE Pune on 02.11.17.	N.A.	360/-
2017-18	Mangale S. A	reimbursement of registration fess for ISTA 16 conference at Jaipur on 21 - 24 September 2016 .	N.A.	12,000/-
2017-18	Rohini Mulay	reimbursement of registration fee for attending Industry Academia Conclave 2017 on 31.10.2017 at hotel wealth Pune	N.A.	1770/-
2017-18	Velankar Makarand	reimbursement of registration fees paper presentation in ICICC 17-International conference on Intelligent Computing & Comm. held on 2-4 Aug. 17 .	N.A.	9000/-
2017-18	Ketaki Behele	reimbursement of registration fees ICCUBEA conference organised by PCCOE on 17 & 18 Aug.17	N.A.	6000/-
2017-18	N.R. Kolhalkar	reimbursement of registration fees & traveling exp. for presenting a paper in Internation conference ICAHD-17 at IIT Guwahati on 8-9 Sept.17	N.A.	9673/-
2017-18	Nutan Deshmukh	reimbursement of registration fees for the FDP attended for new subject of TE comp. -Embedded system and internet of things by PCCOE for one week	N.A.	2500/-
2017-18	Jyoti Bangare	reimbursement of registration fees for the one day FDP - on System Programming and Operating System Laboratory on 12.12.17 by Kashibair Navale college	N.A.	400/-

2017-18	Namita Tandale	registration fees for the one day FDP - on System Programming and Operating System Laboratory on 12.12.17 by Kashibair Navale college	N.A.	400/-
2017-18	TE staff - amount transfered directly to respective staff members account	reimbursement of registration fees for FDP organized by SPPU on revised third year syllabus	N.A.	4250/-
2017-18	TE staff - amount transfered directly to respective staff members account	reimbursement of registration fees for FDP organized by SPPU on revised third year syllabus	N.A.	2000/-
2017-18	Vaishali salgar	reimbursement of travelling expenses (Pune to Madurai to Pune) for short term course on Deep Learning with applications in language, vision and control organised by Thiagrajar college	N.A.	3215/-
2017-18	Hitendra Khairnar	reimbursement of travelling expenses (Pune to Madurai to Pune) for short term course on Deep Learning with applications in language, vision and control organised by Thiagrajar college	N.A.	3215/-
2017-18	Wadkar Harshad	reimbursement of registration fees for 2 days symposium on Cyber security (SCS 2017) at COEP Pune	N.A.	1000/-
2017-18	Suraj Chavan	reimbursement of registration fees for 2 days symposium on Cyber security (SCS 2017) at COEP Pune from 23.11 to 24.11.17	N.A.	1000/-
2017-18	Dr. Sandhya Arora	reimbursement of registration fees for Web Technology FDP of TE Syllabus at D.Y. Patil Instt. from 13th Dec.to15th Dec.17	N.A.	1000/-
2017-18	Mrs. Jyoti Bangare	reimbursement of registration fees for Web Technology FDP of TE Syllabus at D.Y. Patil Instt. from 13th Dec.to15th Dec. 17	N.A.	1000/-
2017-18	Mrs. Smita Lokare	reimbursement of registration fees for Web Technology FDP of TE Syllabus at D.Y. Patil Instt. from 13th Dec.to15th Dec. 17	N.A.	1000/-
2017-18	Mrs. Deepali Nagrale	reimbursement of registration fees for Web Technology FDP of TE Syllabus at D.Y. Patil Instt. from 13th Dec.to15th Dec. 17	N.A.	1000/-
2017-18	Sharada Ohatkar	reimbursement of registration fees for ICTIS 2017 held on 25-26 March.17 at Ahmedabad India as per letter attached.	N.A.	11,144/-
2017-18	Anagha Panditrao	reimbursement of registration fees for one week winter school on Optimization and Optimal Control during Dec.4-12-17 organised by COEP as per letter attached.	N.A.	3000/-
2017-18	Pratima Kulkarni	reimbursement of registration fees for one week winter school on Optimization and Optimal Control during Dec.4-12-17	N.A.	3000/-

		organised by COEP as per letter attached.		
2017-18	Anjali Naik	reimbursement of registration fees for FDP on design and Analysis of Algorithms from 18-23 dec. 17 organized by MITCOE & CSI	N.A.	3000/-
2017-18	Ganesh R Padalkar	reimbursement of registration fees for FDP on Probability & statistics for Machine Learning at AIT (5-9 Dec.17- Rs.3000/-) & deep learning & Image processing at MITCOE (11-16 Dec.17 Rs.2000)	N.A.	5000/-
2017-18	Dr. Dipti D. Patil	reimbursement of registration fees for FDP on Designing for Internet of Things during 20 Nov.to 1 Dec. 17 organized by E&TC Academy PDPM IIIT Jabalpur	N.A.	2200/-
2017-18	Swati Shirsath	reimbursement of registration fees for Software Modeling and Design FDP at D.Y. Patil College of Engg. held on 27.12.17 & 28.12.17 as per letter attached	N.A.	1500/-
2017-18	Dr. Ajit A. Bhosale	Dr. Ajit A. Bhosale	N.A.	1298/-
2017-18	Harish M. Shinde	reimbursement of registration fees (Rs.1198 + IGST Rs. 198/-) for SAE membership fees as per letter attached	N.A.	1298/-
2017-18	Avinash S.Shinde	ration fees for 2 days International workshop on Research Issues in Reinforced Materials during 29-30 Dec. 2017- letter attached	N.A.	1000/-
2017-18	Malini Bapat	reimbursement of registration fees for 254th American Chemical Society National meeting Washington , DC USA , August 20-24 2017.HRD	N.A.	11,200/-
2017-18	Ravikiran Holkar	registration fees for one day FDP on System Programming and Operating System Laboratory at Sinhagad Instt. on 12.12.17	N.A.	400/-
2017-18	Sangita Gambhir	registration fees for internation conference on Algebra and Alalysis organized by Centre for advanced study from 19th to 22nd Dec. 17	N.A.	2000/-
2017-18	Dr. Chetana Gavankar	reimbursement of registration fees FDP on TE IT 2015 Sem II Syllabus Orientation on 6th Dec. 2018 at Zeal college of Engg. Pune	N.A.	500/-
2017-18	Mr. Milind Kolambe	registration fees of "One week FDP on Data Science and R Programming." from 18/12/17 to 22/12/17.	N.A.	2000/-
2017-18	Vaishali Salgar	CSI convention 2017 at Kolkata from 19th January to 22nd January 2018 as per letter attached.	N.A.	13,360/-
2017-18	Pranjali Deshpande	CSI convention 2017 at Kolkata from 19th January to 22nd January 2018 as per letter attached.	N.A.	13,360/-
2017-18	Mr. Atul Tawale	one day state level workshop on open source software organied by Vishwakarma University on 30/05/18.	N.A.	400/-

TOTAL AMOUNT				2,09,459/-
2017-18	Shubhangi Tikhe	N.A.	Reimbursement of IEEE membership and subscription for intelligent systems society for the year 2017-2018	16,833/-
2017-18	12 students	N.A.	Amount paid to international Society Automation USA A/C towards students ISA membership fees	8870/-
2017-18	CCOEW	N.A.	Membership fees of CII booked as expenses for the year 2017-18	13,800/-
2017-18	CCOEW	N.A.	Confedration of Indian Industry Annual membership subscription	4425/-
2017-18	CCOEW	N.A.	Renewal of Institutional membership to ARAI Library	590/-
2017-18	Sagar Vanarase	N.A.	Reimbersement of IEEE student membership fees for the year 2017	7251/-
2017-18	Dr. Mrudul Dixit	N.A.	Reimbersemnt of registration fees for IEEE professional membership for the year 2018	5388/-
2017-18	A.S. Khade	N.A.	Reimbersement of IET membership fees for the year 2018-2019	6700/-
TOTAL AMOUNT				63,857/-

6.3.2 Number of professional development / administrative training programmes organized by the Colleges 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)
2017-18	Training / demo session of Turn it in, a world class plagiarism detection software	N.A.	27 Feb. 2018	60	0
2017-18	N.A.	GST Workshop	11/08/2017	--	4
2017-18	N.A.	Seminar on Professional Tax Return Filing	11/09/2017	--	2
2017-18	N.A.	Seminar on TDS	23/02/2018	--	3
2017-18	N.A.	GST Workshop	11/08/2017	--	4

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	Duration
NPTEL certification Course "Outcome based pedagogic principles for effective teaching"	1	July 24, 2017 - August 18, 2017	4 weeks
NPTEL certification course on "Wireless and Cellular communication", IIT Chennai	1	July-Oct 2017	12 Weeks
NPTEL certification course on "Analog	1	July-Oct 2017	12 Weeks

Circuits and Systems through SPICE Simulation", IIT Kharagpur			
NPTEL certification Course on "Outcome based pedagogic principles for effective teaching", IIT Kharagpur	1	July 24, 2017 - August 18, 2017	4 weeks
NPTEL course on " Biology for Engineers"	1	24th July-18th Aug	4 weeks
NPTEL course on " Great Experiments in Psycolog	1	5Feb- 2 March 2018	4 weeks
NPTEL certification course on "Principles of signals and systems"	1	22nd Jan 2018 to 28th April 2018	12 Weeks
NPTEL certification Course "Introduction to Programming in C ", IIT Kanpur	1	Jul-sept 2017	8 week
NPTEL certification course on "Analog Circuits and Systems through SPICE Simulation", IIT Kharagpur	1	July-Oct 2017	12 Weeks
NPTEL Certification Course on' Principles of signals and systems'	1	July-Oct 2017	12 Weeks
NPTEL Certification Course on "Fiber Optics"	1	2-6th April 2018,	8 weeks
3. NPTEL certification Course on"Electromagnetic Theory"	1	July to Oct 2018	12 weeks
NPTEL Certification Course on' Effective Engineering Teaching in Practice'	1	Jan-Apr 2018	4 week
NPTEL certification course on "An Introduction to coding Theory'	1	Feb -April 2018	8 week
NPTEL certification course on "Biomedical Signal Processing'"	1	Jan-April 2018	12 week
FDP201x:Pedagogy for Online and Blended Teaching-Learning Process	2	14/09/2017 to 12/10/2017	4 weeks
FDP101x: Foundation Program in ICT for Education	2	03/08/2017 to 13/09/2017.	5 weeks
FDP201x:Pedagogy for Online and Blended Teaching-Learning Process. IIT Bombay	1	14/09/2017 to 12/10/2017	4 weeks
Basics of software- defined radios and practical applications	1	5Feb- 2 March 2018	4 weeks
AICTE Sponsored Image Processing and Pattern Recognition Applications with Hand-on	2	27-Nov to 1 st dec. 2017	1 week
AICTE Sponsored Embedded System Design – A Microcontroller Approach	2	20-Nov to 1 st dec. 2017	2 weeks
AICTE-ISTE approved refresher program on 'Recent Advancement in AI & IoT'	1	4-9 June 2018	1 week
AICTE sponsored FDP one week FDP on" Image Processing and PR Applications"	1	27-Nov to 1 st dec. 2017	1 week
Machine Learning using Tensor flow	1	16/02/2018 to 18/02/2018	3 days
Digital Signal Processor	1	7th December 2017	1 Day
Innovative research in Pedagogy for mini-MOOCs blended with instruction strategies to enhance quality of higher education	1	21- 22 July 2017	2 Days
State level FDP on Probability and Statistics for Machine Learning And Deep Learning	1	5 Dec to 9 Dec 2017	1 week
Deep Learning and Image Processing	1	11 Dec to 16 Dec 2017	1 week

Business Management	1	21- 22 July 2017	2 Days
Faculty Orientation Workshop on T.E. revised syllabus 2015 Course	1	14th Dec to 16th Dec 2017	3 Days
Information Theory, Coding and Communication Networks(2015 pattern),	2	14th Dec to 16th Dec, 2017	3 Days
SPOS	1	14-17 Dec	3 days
Mechatronics	2	23- 24 June 2017	2 days
Power Electronics	1	14th Dec to 16th Dec, 2017	3days
Electronic System Design	1	23-24 June 17	2 Days
Employability Skills and mini project	1	14,15 Dec. 2017	2 Days
Five Days FDP on " Data Science and Big Data Analytics	1	29th May 2017- 2nd June 2017	5 days
Two Weeks National Level STTP on " Data Mining : Research Avenues and Tools"	2	29th May- 9th June 2017	2 weeks
Five Days FDP on " Advanced Java Programming & Mobile Application Development"	4	12th June 2017- 16th June 2017	5-days
One Week Workshop on " Research Methodology & Thesis Writing for Engineering Scholars "	1	12th June 2017- 16th June 2017	1-week
One Day Faculty Development Program on Computer Networks Laboratory (2015 Course)	4	13th June 2017	1-day
One Day Faculty Development Program on " Database Management System Laboratory"	3	16th June 2017	1-day
Faculty Development Program on " FDP101x " on Foundation Program in ICT for Education	3	3rd Aug -7th Sept 2017	4-weeks
Faculty Development Program on " FDP101x " on Pedagogy for Online and Blended Teaching- Learning Process	3	4th Sept-12th Oct 2017	5-weeks
Two Week Short Term Course on " Deep Learning with Applications in Language, Vision & Control "	2	4th Dec 2017- 17th Dec 2017	2-weeks
One Day Faculty Development Program on " System Programming and Operating System Laboratory"	3	12th Dec 2017	1-day
Three Days Faculty Development Program on " Web Technology"	4	13th Dec 2017-15th Dec 2017	3-days
One Week Faculty Development program on " Embedded system and internet of things " (T.E. Computer Engg 2015 Course)	1	18th Dec 2017-23rd Dec 2017	1-week
One Week National Level Faculty Development program on " Design and Analysis of Algorithms"	1	18th Dec 2017-23rd Dec 2017	1-week
"Data Mining Algorithms for graph, Text and streaming data "	1	19th Dec- 27th Dec 2017	2-weeks
Two days Faculty Development program on " Software Modelling and Design"	1	27th Dec-28th Dec 2017	2-days
One Day Workshop on " Integrated degree course on Computer Science and Management"	1	4th Jan 2018	1-day

Two days workshop on " Deep Learning" and " DevOps"	1	21st Feb- 22nd Feb 2018	2-days
Four Week Course on Effective Engineering Teaching in Practice" NPTEL Online Certification	3	Feb-March 2018	4-weeks
Four Week Course on " Patent Drafting for Beginners" NPTEL Online Certification	1	Feb-March 2018	4-weeks
One Week FDP on " AI and Machine Learning"	1	4th June 2018- 8th June 2018	1-week
TEQIP STTP Cyber Forensic and Information Security	3	4-8 DEC 2017	1 week
TEQIP FDP on Data Science	1	18-22 DEC 2017	1 Week
FDP on Foundation Program in ICT for Education	5	3 Aug 2017 to 07 SEPT 2017	3 week
Pedagogy for Online and Blended Teaching-Learning Process	4	14 sept 2017 to 5 Oct 2017	3 week
One Week Winter School on "Optimization and Optimal Control"	3	4 -8 Aug 2017	1 week
Foundation Program in ICT for Education	2	3 Aug- 7 Sep 2017	4 week
Pedagogy for Online and Blended Teaching-Learning Process	2	14 Sep-12 Oct 2017	4 week
Wavelet Applications in Signal and Image Processing	1	18 -19 Jan 2018	2 days
How to draft patents and conduct searches	3	3-4 Feb 2018	2 days
Effective Engineering Teaching in Practice	2	Feb –Mar 2018 (4 week)	4 week
Introduction to Internet of Things	3	Jan- Apr 2018 (12 weeks)	12 weeks
Product Development Workshop	1	19-20 March 2018	2 days
Foundation Program in ICT for Education	8	3rd Aug to 7th Sept 2017	2 week
Pedagogy for online and blended teaching learning process	5	14 Sept to 30 Dec 2017	2 week
Competitive Manufacturing Technologies	1	Dec 11-22, 2018	2 Week
Life Long Researchers	2	5th to 9th March 18	1 Week
Spur and Helical Gear Cutting	1	July-Aug 2017	4 Week
Outcome based pedagogic principles for effective teaching	1	Feb-Mar 2018	4 Week
Effective Engineering Teaching In Practice	1	Feb-Mar 2018	4 Week
Research Writing	1	Feb-Mar 2018	4 Week
Numerical Methods	1	July-Aug 2017	8 Week
Traditional and Non-Traditional Optimization Tools	1	Feb-Mar 2018	8 Week
Research issues in Reinforced Materials	1	29-30 December	2 days
One day syllabus implementation W/S on Energy Audit & Management	1	17th July 2018	1 day
Foundation program in ICT for Education	2	August 3rd - september 7 th ,2017	5 day 2 week
Induction Program	2	26-28 June	3 days

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

Teaching		Non-teaching	
Permanent	Fulltime	Permanent	Fulltime
14	27	0	10

6.3.5 Welfare schemes for

Teaching	EPF, Gratuity, Group Insurance, Remuneration for paper, Mediclaim policy
Non-teaching	EPF, Gratuity, Group Insurance, Mediclaim policy
Students	College Financial aid to needy students, life insurance, Government scholarships, Samstha's Scholarships.

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly.

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

Department	Name of the non- government funding agencies / individuals	Funds / Grants received in Rs.	Purpose
	Cummins - CeRIE	Rs.1,30,00,000/-	
	Cummins - Signature Project	Rs.57,01,464/-	
	Ansys - CeRIE	Rs.80,00,000/-	

6.4.2 Total corpus fund generated = Rs.26,701,464/-

6.5 Internal Quality Assurance System

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	NBA (E&TC and IT depts.)	Yes	Dean, Academics and Dean, Quality assurance
	Yes	NAAC		
Administrative	--	--	--	--

6.5.2 Activities and support from the Parent – Teacher Association (at least three)

- Parents feedback is taken and suggestions are incorporated for further development
- College monitors students' progress and communicates with the parents.

6.5.3 Development programmes for support staff (at least three): --

6.5.4 Post Accreditation initiative(s) (mention at least three):
1. Development of the Perspective Plan of the college
2. Formation of faculty teams to assure and monitor all-round development of the college according to the perspective plan.
3. Periodic reviews on the progress of faculty research by the research committee of the college.
4. Formation of the Centre for Research, Innovation and Entrepreneurship.

6.5.5

a. Submission of Data for AISHE portal	:	(Yes /No) - **Yes**
b. Participation in NIRF	:	(Yes /No) - **Yes**
c. ISO Certification	:	(Yes /No) - **No**
d. NBA or any other quality audit	:	(Yes /No) - **Yes**

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

Cummins college is an all-girls college. Hence, specific gender equity promotion programs are not conducted. Amongst the faculty members, there are around 35% male faculty members and 65% female faculty members.

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

1) **Environmental Quality:**
   - There is a separate estate maintenance department to look after green environment in the campus. With proper landscaping and well maintained lawns campus looks green. Every year, tree plantation activity is carried out by NSS students in college campus as well as at Kalyan village which is adopted by college. Emphasis is given on plantation of native trees.
   - Savings in the paper usage is done by
     - Online voting (e- ballots) for college election.
     - Online Student's feedback for teaching-learning process.
     - Circulation of notices via e-mail.
     - Students' submissions in CD format.
     - Department newsletter in electronic form

2) **Water Conservation:**
   - Drip irrigation and sprinklers are used on campus.
   - Rain water harvesting system is used on campus.
   - Low flush toilets are used in college buildings.
   - Waste water utilization is done for garden trees.

3) **Renewable Energy:**
   - Solar water heaters have been fitted in all hostels and guest houses. The capacity of solar water heater system is 18 KW with total number of 48 panels. Around 3000 lit. of hot water is made available daily through this system.
   - Biogas plant has been installed in campus which utilizes around 160 kg of food waste from hostels. The capacity of this plant is 20 m^3. Bio gas thus generated is used for cooking in hostels.
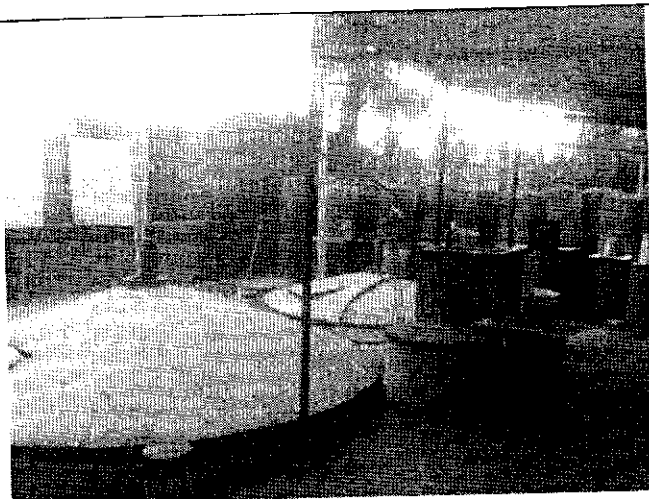
Biogas Plant

4) Waste Disposal:
- Bio degradable and non-bio degradable waste is segregated and bio degradable waste is used for compost.
- E-waste is collected and given to authorized agency (SWaCH) for dismantling and recycling as per NPCB norms.
- Bins are set up in college campus by SWaCH to collect small dimension e-waste and bins can be used as awareness tool.
- SWaCH had conducted E-waste collection drive on 1st September 2017.
- Hazardous waste from Chemistry lab is disposed with due precautions

5) All the classrooms, laboratories, staffrooms and offices are well illuminated with natural light. CFL and LED bulbs are used at most of the places instead of fluorescent bulbs.

7.1.3 Differently abled (Divyangjan) friendliness

Items Facilities	Yes/No	No. of Beneficiaries
Physical facilities	Yes	06
Provision for lift	Yes	06
Ramp/ Rails	Yes	06
Braille Software/facilities	NA	--
Rest Rooms	No	--
Scribes for examination	NA	--
Special skill development for differently abled students	NA	--
Any other similar facility	Yes	06

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 address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date and duration of the initiative	Name of the initiative	Issues addressed	Number of participating students and staff
	--	--	--	--	--	--

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)
--	--	--

7.1.6 Activities conducted for promotion of universal Values and Ethics

Activity	Duration (from--------to ------)	Number of participants
Visit to Parent Institution	1st to 7th August 2017	540

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

Energy Conservation:
- ➤ Notices regarding switching off fans, tubes and electrical appliances when not in use are placed throughout the campus to avoid wastage of energy.
- ➤ The architecture of the college buildings is such that maximum advantage of day light can be taken.

Use of renewable energy:
- Solar water heaters have been fitted in all hostels and guest houses. The capacity of solar water heater system is 18 KW with total number of panels 48. Around 3000 lit. of hot water is made available through system.
- Biogas plant has been installed in campus which utilizes around 160 kg of food waste from hostels. The capacity of this plant is 20 m³. Bio gas thus generated is used for cooking in hostels.

Water harvesting:
- On campus three plants of water harvesting are in operation. Each plant can recycle around 3000 lit of water daily. In Monsoon season plant can accommodate 1,40,000 lit of rain water.

Check Dam Construction:
- Our college is in city premises so the activity of check dam construction is carried out in kalyan village though NSS.

Efforts for Carbon neutrality:
- Use of Bio sanitizer technology for garbage composting in campus– Oxygen rich water, treated with bio sanitizer is sprayed on garbage heap to ensure eco-friendly bio-conversion in to compost. In this process, there is no heat generation and minimal emission of green house gases.
- The capacity of this plant is 6 ton per six month.
- Dry leaves and waste papers are not allowed to be put on fire in campus.
- Encouraging staff and students to use stairs instead of elevators.

Plantation:
- Tree plantation is carried out in campus every year as an activity of NSS.
- Old tree count is approximately 100.
- Native tree count is approximately 1900.

Hazardous waste management:
- Hazardous waste from Chemistry lab is disposed with due precautions

E-waste management:
- E-waste is collected and given to authorized agency (SWaCH) for dismantling and recycling as per NPCB norms.
  - SWaCH had conducted E-waste and Plastic waste collection drive on campus on 1ˢᵗ Sept 2017. E – waste of ~30 kg and plastic waste ~3 kg was collected.
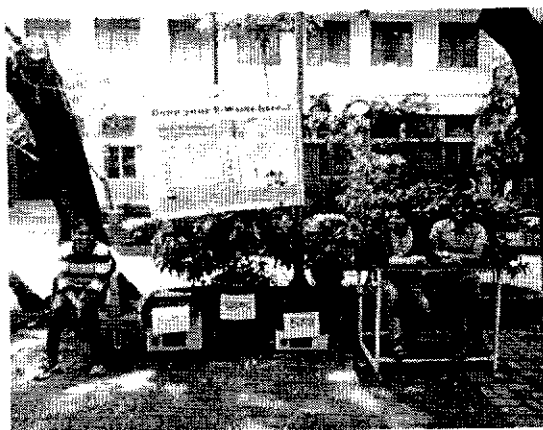
waste collection drive

7.2 Best Practices

Describe at least two institutional best practices:

Best Practice 1:

- **Title: "Innovation, Employability Skills Enhancement and Career Building Program"- an initiative under Cummins Signature Project**

- **Objective:**
  The objective of this practice is to provide training to third year students of all branches to enhance employability skills, innovation ability. The program also aims to help students in overall career development.

- **The Context:**
  After graduation, when students enter the engineering profession, in addition to domain knowledge, other skills and abilities such as communication skills, leadership, innovation, team building are very much required to become successful in the profession, which are not directly covered in the curriculum. To address this need a unique certificate course on Innovation, Employability Skills Enhancement and Career Building is designed which focuses on Self Awareness, Professional Skills, Innovation and Communications.

- **The Practice:**
  The 40-hour course was introduced from academic year 2013-14 for third year students for all the branches of engineering. Students are divided in five batches.In a week, each batch attends one session of two hours duration. Total 20 sessions are planned throughout the academic year for all batches. These sessions include as follows
  1. Icebreakers, Introductions, MOOCs, Opportunities Abroad
  2. Mind map- Theory, Individual Mind map, Group Mind map
  3. DBDA and psychometric Test Administered
  4. Creativity Workshop
  5. DBDA and Psychometric Result Discussion
  6. Video Analysis and English Language Tips
  7. Transactional Analysis (TA) and Presentation Skills
  8. Corporate Grooming +Business Ethics
  9. Project Selection and SWAF Analysis (JW Skipped since it was done in 2nd year)
  10. Team Building Games
  11. Effective Resume Writing Theory
  12. Profile building, Innovation(IP) and feedback (Resume Book Distributed)
  13. Review and Interview Theory
  14. 6 Thinking Hats workshop
  15. HR and Technical Round 1 (with External Evaluators)
  16. HR and Technical Round 2 (with Industry experts)
  17. HR and Technical Round 3 (with industry experts)
  18. Aptitude Test Prep Tips and Aptitude Test delivery
  19. GD theory and GD Round
  20. Conclusions, SOP Tips and Feedback

  At the end of the training Program, every student gets course completion certificate.

- **Evidence of Success:**

Assessment of the students is carried out at the end to understand the impact of the program which is conveyed to the students individually. Following generalised statements can be drawn on the basis of students' feedback.
  - The course is observed to help students improve their skills such as individual report writing, creative and strategic thinking etc.
  - There is a noticeable positive change in the overall personality of the students who have completed this course.
  - As a direct consequence of the innovation aspect of the program. 15 students have filed patents till date. This is a key differentiator, giving the students an upper edge as they embark on their search for careers in the industry or pursue higher education in India or overseas.
  - Mock interviews and group discussion sessions conducted under this program have resulted into positive feedback from the companies visiting the campus.

- **Problems encountered and resources required:**

This program is sponsored by CIL, under its Signature project initiative and hence offered to the students without charging fees.

This program needs to be planned beyond the students' regular academic engagements. Hence, it becomes challenging to identify free time-slots for large groups of students.

A separate faculty coordinator had to be assigned for the smooth conduction of the program.

The college has made an auditorium available for all the sessions and to all the batches.

Best Practice 2:
- **Title: Faculty Development Schemes**

- **Objective:**

The objective of the practice is to motivate the faculty members to do research, organize and attend conferences, workshops, seminars and symposia to get to know emerging technology trends and also to update their domain knowledge.

- **The Context:**

For effective teaching as well as research engagements, faculty members are expected to have holistic idea of their area of specialization. To accomplish this, they require exposure to various inter-faculty interactions taking place via conferences, workshops, seminars, symposia etc. This situation is addressed by introducing various faculty development schemes.

- **The Practice:**

Research and Development Committee of the institution promotes and facilitates research undertakings of the faculty members. The faculty members are sponsored by the institute to attend the national / international conferences. To encourage quality research work by faculty members, various monetary incentives are in place. If the paper gets published in Scopus indexed journals, faculty gets reward of Rs.5000/-. If the faculty member receives grant from funding agencies, then 5% of the grant amount is rewarded to the faculty member by the institute. Faculty members pursuing Ph. D. programs are provided with two years of fully paid study leave from the institute.
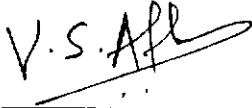
- **Evidence of Success:**
  - Enhancement in the number of faculty members registering for Ph.D. programs
  - Enhancement in the number of quality publications by faculty members
  - Increase in the number of workshops, seminars attended by the faculty members
  - Increase in the number of faculty members implementing best pedagogic practices

8. Future Plans of action for next academic year (500 words) – (i.e. for 2018-19)

1. Evaluation of all the autonomous courses (First Year B. Tech. to Third Year B. Tech.) based on the 'cognition' dimension of the Revised Bloom's Taxonomy

2. Introduction of courses on soft skills, innovation and entrepreneurship in the autonomous curriculum

3. Formation of 'Intellectual Property Rights' (IPR) Cell

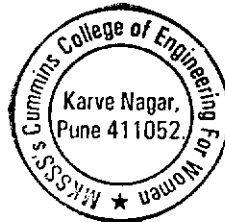4. Establishment of Design Centre

Name: Dr. Vikram Athalye

V.S.AfL

Signature of the Coordinator, IQAC

Name: Dr. Madhuri Khambete

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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
UPE	-	University with Potential Excellence

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For Communication with NAAC

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