

Yearly Status Report - 2019-2020

Part A				
Data of the Institution				
1. Name of the Institution	JD COLLEGE OF ENGINEERING & MANAGEMENT, NAGPUR			
Name of the head of the Institution	Dr.Shrikant Sonekar			
Designation	Principal(in-charge)			
Does the Institution function from own campus	Yes			
Phone no/Alternate Phone no.	07720039691			
Mobile no.	9823583089			
Registered Email	principal@jdcoem.ac.in			
Alternate Email	usdange@jdcoem.ac.in			
Address	Near Hanuman Temple,Borgaon Fata, Kalmeshwar Road,Nagpur-441501			
City/Town	Nagpur			
State/UT	Maharashtra			
Pincode	441501			

2. Institutional Stat	tus						
Autonomous Status (Autonomous Status)	Autonomous Status (Provide date of Conformant of Autonomous Status)			31-Jul-2019			
Type of Institution			Co-education				
Location			Rural				
Financial Status			Self finance	d			
Name of the IQAC c	o-ordinator/Directo	r	Dr.Ujwala Da	nge			
Phone no/Alternate	Phone no.		09011010038				
Mobile no.			9421632159				
Registered Email			usdange@jdcoem.ac.in				
Alternate Email			ujwalasdangejdcoem@gmail.com				
3. Website Addres	s						
Web-link of the AQA	R: (Previous Acad	emic Year)	<u>https://jdcoem.ac.in/about-</u> us/mandatory-disclosure/				
4. Whether Acader the year	nic Calendar pre	pared during	Yes				
if yes,whether it is uploaded in the institutional website: Weblink :			https://65h.11a.myftpupload.com/pdf/ACA DEMIC-CALENDAR-2019-20-(Even).pdf				
5. Accrediation Details							
Cycle	Grade	CGPA	Year of	Vali	dity		
			Accrediation	Period From	Period To		
1	A	3.16	2017	12-Sep-2017	11-Sep-2022		

6. Date of Establishment of IQAC

16-Aug-2016

7. Internal Quality Assurance System

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		

FDP on Outcome Based Pedagogic Approach for Effective Teaching -Learning and AccreditationApproach				c-2019 5			60
Session on Grant opportunities fo Engineering Teac	r			y-2019 1			36
Session for stud Online Satisfact Survey				b-2020 1			362
Autonomy & its Significance				b-2019 1			67
Awareness Sessio Activity Based L				n-2019 1			74
			Vie	<u>w File</u>			
B. Provide the list of S JGC/CSIR/DST/DBT/IC Institution/Departmen t/Faculty	•	orld B	ank/CPE o			ard with	Amount
Dr.Prashant Maheshwary	FDP			ffiliati versity)	2019)	220000
		No	Files	Uploaded	111		
9. Whether composition NAAC guidelines:	on of IQAC as	per la	test	Yes			
Upload latest notification	n of formation o	f IQAC		<u>View</u>	<u>File</u>		
10. Number of IQAC meetings held during the rear :				3			
The minutes of IQAC meeting and compliances to the lecisions have been uploaded on the institutional vebsite			Yes				
Upload the minutes of m	neeting and act	ion take	n report	<u>View</u>	File		
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?			No				

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

1.Conferment of Autonomy by UGC on 5th August, 2019. 2.Teachers training on Outcome Based Pedagogy. 3. Ph. D. Research Center. 4. Implementation of Activity based learning. 5. Re framing of Evaluation Pattern.

No Files Uploaded !!! 13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year Plan of Action Achivements/Outcomes Activity Based Learning Training of teachers of ABL PhD Research Centre Submitted the proposal to affiliating university Teacher's training on Outcome Based Implementation of OBE Pedagogy Conferred Autonomy by UGC Submission of grant of Autonomy to UGC No Files Uploaded !!! 14. Whether AQAR was placed before statutory Yes body? Name of Statutory Body Meeting Date Academic Council 27-Jan-2020 15. Whether NAAC/or any other accredited No body(s) visited IQAC or interacted with it to assess the functioning? 16. Whether institutional data submitted to Yes AISHE: Year of Submission 2019 Date of Submission 10-Dec-2019 17. Does the Institution have Management Yes **Information System ?** If yes, give a brief descripiton and a list of modules In order to enhance the effectiveness of various academic and administrative currently operational (maximum 500 words) systems, the college has MIS Synchronik. The administrative work of departments, student section, accounts , student and store section is undertaken through the MIS. Part B

CRITERION I – CURRICULAR ASPECTS

1.1 – Curriculum Design and Development

Name of Programm	ne Pro	gramme	Code Prog	gramm	e Speci	alization	D	ate of Revision
BTech		FY			FY			10/01/2020
BE		CSI	2		CSE			23/05/2020
BE		IT			IT			23/05/2020
			<u>View Fi</u>	<u>le</u>				
.2 – Programmes/ co r	ourses focusse	d on em	ployability/ entre	preneu	ırship/ s	kill develop	oment	during the Acade
Programme with Code	Programr Specializa		Date of Introdu	ction	Cours	se with Coc	le	Date of Introducti
N	o Data Ente	ered/N	ot Applicabl	le !!	!			
			No file upl	oaded	l.			
– Academic Flexik	oility							
.1 – New programme	es/courses intr	oduced	during the Acade	emic ye	ar			
Programme/C	ourse	P	rogramme Speci	alizatio	n	Da	tes of	Introduction
No Data	a Entered/N	lot Ap	plicable !!!					
			No file upl	oaded	l.			
.2 – Programmes in	which Choice	Based C	redit System (CF	3CS)/F	lective (Course Svs	stem ir	nplemented at th
ege level during the								
Name of programm CBCS	es adopting	Programme Specialization		Date of implementation of CBCS/Elective Course System				
BTecl	h		FY			01/08/2019		
– Curriculum Enri	chment	•						
.1 – Value-added co								
	urses imparting	g transfe	erable and life ski	ills offe	red duri	ng the yea	r	
Value Added C	• •	g transfe	erable and life ski		red duri			tudents Enrolled
Value Added C Webinar Ser Product De Engineering Engineering G	ourses ries on sign g and	g transfe		ction	red duri			tudents Enrolled 350
Webinar Ser Product De Engineering	ourses ries on sign g and graphics kshop on sign	g transfe	Date of Introdu	ction)20	red duri			
Webinar Ser Product De Engineering Engineering G One Day Worl Product De	ourses ries on sign g and raphics kshop on sign ing kshop on	g transfe	Date of Introdu 23/04/20	ction 020 020	red duri			350
Webinar Ser Product De Engineering G One Day Worl Product De Engineer: One Day Worl Foundry Tech An Introduc	ourses ries on ssign g and raphics kshop on sign ing kshop on nology tion To rough C -	y transfe	Date of Introdu 23/04/20 11/02/20	ction 020 020	red duri			350 52
Webinar Ser Product De Engineering G One Day Worl Product De Engineer: One Day Worl Foundry Tech An Introduc Programming Th	ourses ries on ssign g and araphics kshop on ssign ing kshop on nology tion To rough C -	y transfe	Date of Introdu 23/04/20 11/02/20 14/02/20	ction)20)20)20)20)20	red duri			350 52 50
Webinar Ser Product De Engineering G One Day Worl Product De Engineer: One Day Worl Foundry Tech An Introduc Programming Thr Online Data Base Ma System	ourses ries on ssign g and araphics kshop on ssign ing kshop on nology tion To rough C - nagement	y transfe	Date of Introdu 23/04/20 11/02/20 14/02/20 28/09/20	ction 020 020 020 019 019	red duri			350 52 50 11
Webinar Ser Product De Engineering G One Day Worl Product De Engineer: One Day Worl Foundry Tech An Introduc Programming Thr Online Data Base Ma System	ourses ries on ssign g and araphics kshop on sign ing kshop on nology tion To rough C - magement oft Skills r - Online	y transfe	Date of Introdu 23/04/20 11/02/20 14/02/20 28/09/20 17/10/20	ction 020 020 020 019 019 019	red duri			350 52 50 11 55

.3.2 - Field Projects / Internships und	er taken during the	year		
Project/Programme Title	Programme S	Specialization	No. of students enrolled for Field Projects / Internships	
BE	1	ME	22	
BE	CS	E IT	114	
BE	:	EE	32	
BE	E	TC	80	
BE		CE	60	
MBA	Þ	ÍBA	34	
	View	<u>v File</u>		
4 – Feedback System				
.4.1 – Whether structured feedback re	eceived from all the	stakeholders.		
Students		Yes		
Teachers		Yes		
Employers		Yes		
Alumni		Yes		

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

Yes

Feedback Obtained

Parents

Feedback plays a decisive role in improving the state of the existing process, systems in the institution. The inputs from all the stakeholders in the academic environment viz. students, teachers, employers, alumni and parents is extremely important in order to adhere to the quality standards. At JDCOEM at regular intervals the feedback from all the stakeholders is sought. The academic feedback from the students is sought twice in every semester. First feedback is floated amongst the students 30 days after the commencement of the semester to ascertain their understanding about the subject, frequency, wavelength of the teacher in connecting with the student, other academic support provided by the teacher to the students and other aspects of teaching learning process. The office of the Dean(Academics) processess this feedback and Head of the Department ensures the corrective actions if needed on consultation with the concerned teachers and students. The second academic feedback is floated a month before the end of the semester. This feedback helps the academic administration to analyze the state of syllabus progression and to undertake the measures if required to complete the syllabus ahead of the examination schedule. Apart from the formal feedback the HODs and teachers are connected with the students on whats app groups of the respective classess, Heads of the Department too is connected with the students through respective class teacher and class representative amongst the student. In regular meeting of Principal, Management the feedback on various administrative and academic issues are sought from the teachers. The Office of the Training and Placement Officers seeks feedback from the existing and potential employers. This feedback enables to train the students from industry perspective in terms of technical skills as well as soft skills.Notable employers are on the governing body of the college which significantly helps to reach the employers. Alumni is connected with the college through the Office of the Alumni Incharge and the respective departments. These touch points with alumni help us to bring out improvements

in the academic as well as administrative set up. During regular alumni meet too alumni offer feedback and other critical inputs. the feedback The parents are very well connected through Parents Meet as well as Home Visits by Teacher Guardians to the residences of the students alloted to them once in a year. These Home visits help the college to ascertain the exact socio economic background of the students as well as their demographics. The feedback from all the stakeholders is carefully analyzed, presented before the competent authority by the respective heads/incharges. Based on these inputs the necessary improvements, amendments are carried out in existing processess and the future systems are build based on the inputs. The constant improvements in all spheres of the institution can be attributed to this feedback mechanism to connect with all the stakeholders.

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled		
BTech	ME	120	44	44		
BTech	CSE	60	58	58		
BTech	EE	60	32	32		
BTech	CE	60	47	47		
BTech	IT	60	60	60		
BTech	ETC	120	22	22		
Mtech	EN	24	5	5		
Mtech	CSE	24	8	8		
MBA	MBA	60	60	60		
	<u>View File</u>					

2.2 – Catering to Student Diversity

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

Year	Number of	Number of	Number of	Number of	Number of
	students enrolled	students enrolled	fulltime teachers	fulltime teachers	teachers
	in the institution	in the institution	available in the	available in the	teaching both UG
	(UG)	(PG)	institution	institution	and PG courses
			teaching only UG	teaching only PG	
			courses	courses	
2019	1521	114	135	10	10

2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), Elearning 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	Numberof smart classrooms	E-resources and techniques used
145	145	11	20	15	10
View File of ICT Tools and resources View File of E-resources and techniques used					

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

Student Mentoring System: Based on the experience and requirement of the stakeholders viz: parents, students and recruiters, the institute have developed prominently two types of mentoring system. The first mentoring system is called as "Teacher Guardian Scheme" and the second one is known as Student Mentoring System. The functioning of the scheme is as follows: Teacher Guardian Scheme: This scheme is devised to ensure the constant contact with the students, teachers and parents. The allotment of teacher guardian is done on the basis of the branch in which the student has sought admission. This branch specific Teacher Guardians are allotted so as to maintain continuity of communication with each other. During induction program, Dean (Students) conducts the session on Aims, Objectives and Relevance of Teacher Guardian Scheme and also shares previous experiences with the students. The allotment is communicated to the students during their induction training sessions and the same is communicated to the parents as well. The specific teacher guardian collects the demographics, academic profile, socio-economic data from the students in the first formal interaction this leads to formal Ice Breaking session. Thereafter, the students in their respective time table are allotted class once in a week to interact with the respective Teacher Guardian. During these classes which are informally formal are a sort of Circle Time with the teacher guardian, wherein there is effective two way communication amongst the teacher guardians and students. The students share their achievements, progress of classes, the other issues related to understanding of subjects, performance in examinations etc. If the Teacher Guardian observes some changes in the disposition of the specific student, then he/she is referred to the Wellness Centre. The entire ecosystem works towards enhancing support system of the students. In order to create the awareness about the various initiatives of the institute, the teacher guardian once in a year visits the residence of the student irrespective of the student's geography. This helps to bridge the gap between the institute and the parents and thereby all the three entities are well connected. Owing to close contact with teachers, parents and students, there has been overall improvement in the performance of the students and has increased belongingness towards the institute. The students are allotted to the teacher in the ratio of 1:15. Another noteworthy mentoring system in the institute is Mentor-Mentee scheme, wherein the senior students who are active on multiple platforms ranging from scholastic, co-scholastic activities are allotted as mentors to the junior students. These senior students conduct experience sharing sessions in the junior classes. The experience sessions are based on preparation for placements, training programs, co-curricular and extracurricular activities etc. These interactions are aimed at confidence building and enhancing belongingness towards the institute. Based on the feedback and real time performance of the scheme, implementation of both the mentoring schemes are amended from time to time if needed.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
1521	145	1:10

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
145	145	Nill	21	15

2.4.2 – Honours and recognition 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
2019	Dr. P. B. Maheshwary	Professor	NPTEL STARS, NPTEL ENTHUSIAST and 2. NPTEL Believer
2020	Dr. P. B. Maheshwary	Professor	Associate Dean (Academics), Dr. Babasaheb Ambedkar Technological

			University, Maharashtra
2020	Dr. P. B. Maheshwary	Professor	Member, Board of Governance of G H Raisoni College of Engineering (Nominated by VC RTMNU)
2020	Dr. P. B. Maheshwary	Professor	Editor, Journal of Science, RTM Nagpur University
2020	Prof. N. N. Gyanchandani	Associate Professor	For NPTEL (Active SPOC) at IIT Bombay for Winter.
2020	Prof. N. N. Gyanchandani	Associate Professor	For NPTEL (Active SPOC) at IIT Bombay for Summer.
2020	Prof. G. V. Padole	Assistant Professor	1st topper in NPTEL for course Product Design Development with 99.
	<u>Vie</u> v	w File	
2.5 – Evaluation Process	and Reforms		
251 – Number of days from	n the date of semester-end/ ve	ear- end examination till the	e declaration of results during

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
BE	EE	VIII	20/05/2020	12/11/2020
BE	ME	VIII	20/05/2020	12/11/2020
BE	CSE	VIII	20/05/2020	12/11/2020
BE	IT	VIII	20/05/2020	12/11/2020
BTech	FY	I	23/11/2019	28/12/2019
BTech	FY	II	25/04/2020	27/07/2020
BE	CE	VIII	20/05/2020	12/11/2020
BE	ETC	VIII	20/05/2020	12/11/2020
MBA	MBA	IV	23/05/2020	26/11/2020
		<u>View File</u>		

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

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage		
Nill	276	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 weblink)

https://secureservercdn.net/198.71.233.44/65h.11a.myftpupload.com/wpcontent/uploads/2021/05/JDCOEM-PO-PSO-COS.pdf?time=1621437110

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
MBA	MBA	MBA	30	30	100
ETC	BE	ELE. TELECOMM.	63	63	100
IT	BE	INFORMATION TECH.	43	43	100
CSE	BE	COMP. SCI. ENGG	63	62	98.41
CE	BE	CIVIL	64	64	100
EE	BE	ELECTRICAL	54	54	100
		View	<u>/ File</u>		

2.7 – Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

https://secureservercdn.net/198.71.233.44/65h.11a.myftpupload.com/wp-content /uploads/2021/05/Student-Satisfaction-Survey-2019-20.pdf?time=1621437110

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 – Promotion of Research and Facilities

3.1.	3.1.1 – The institution provides seed money to its teachers for research								
	No								
			No file uploaded	•					
3.1.	2 – Teachers awarc	led National/Internation	al fellowship for advanc	ced studies/ research d	uring the year				
	Type Name of the teacher awarded the fellowship Name of the award Date of award Awarding agency								
No Data Entered/Not Applicable !!!									
			No file uploaded						
3.2 – Resource Mobilization for Research									
3.2.1 - Research funds sanctioned and received from various agencies, industry and other organisations									
Na	Nature of the Project Duration		Name of the funding agency						
	Industry sponsored Projects	360	Pollution And Ecology Control Services	25000	25000				

Any Other (Specify)	5	DBATU	220000	220000		
Major Projects	360	E Cart JDCOEM	45000	45000		
View File						

<u>View File</u>

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

No Data Entered/Not Applicable !!!

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
Copyright and IPR	Electrical Engineering	15/05/2020
Design Thinking and Innovation	Electronics and Telecomm. Engineering	19/09/2019
Urban Travel Commuters Behavior and its Impact on Environment	Civil Engineering	30/05/2020
BIM Utilization for Building Modeling	Civil Engineering	30/05/2020
Deterioration of RCC Structures	Civil Engineering	01/06/2020
AutoDesk Design Scope in Mechanical Sector	Mechanical	26/07/2019
Smart factory automation with digital twin	Mechanical	06/06/2020
Supply Chain Mangment and Modern Warehouse Design	Mechanical	07/06/2020
Education and work opportunity in USA	Mechanical	11/06/2020
Intellectual Property: Know Your Rights	Computer Science Engineering	12/05/2020
Intellectual Property: Copyrights and Patent	Computer Science Engineering	14/05/2020
Online Faculty Development Program On Python	Computer Science Engineering	06/05/2020
Online Webinar On IOT	Computer Science Engineering	27/05/2020
Intellectula Property Rights and patents	Electrical Engineering	18/04/2019
	<u>View File</u>	

Title of the innovation Name of Awardee Awarding Agency Date of award								Category
	ntered/N	ot Applia	cable	111				
			No file	uploaded	•			
3.3.3 – No. of Incubation	on centre create	d, start-	ups incubat	ted on camp	us durir	ng the year	ſ	
Incubation Center	Name	Spon	sered By	Name of Start-u		Nature of up		Date of Commencement
Nil	Nil		Nil	Shubha Castin	-	Cast Product factu		16/08/2019
Nil	Nil		Nil	Central engine chemical works		Serv and rebuil of eng	ding	15/01/2020
Nil	Nil		Nil	Construc Works		Constru Busin		25/08/2020
			View	v File				
3.4 – Research Public	cations and Av	wards						
3.4.1 - Ph. Ds awarded	d during the yea	r						
Name	Number of PhD's Awarded							
Compute			-	1				
Electrical Engineering						:	1	
First Year							1	
3.4.2 – Research Publi	UGC website	e during	g the year					
Туре	D	epartm	ent	Number of Publication Aver		Average	e Impact Factor (if any)	
Internationa	al M	lechan	ical	5			Nill	
Internationa	al Comp	. Sci	. Engg.	4			Nill	
Internationa	al Ele	. Tel	ecomm.	5		Nill		
Internationa	al F	'irst	Year	2		Nill		
Internationa	al E	lectr	ical	5			Nill	
Internationa	al	Civi	.1		17			Nill
			<u>Vie</u> v	<u>v File</u>				
3.4.3 – Books and Cha Proceedings per Teach	-		s / Books pu	ublished, and	d papers	s in Nation	al/Interna	ational Conference
	Department			Number of Publication				n
	Mechanical			4				
Computer	Science Eng	ineer	ing			2	4	
	Civil					1	.7	
			View	<u>v File</u>				
3.4.4 – Patents publish	ed/awarded dur	ing the	year					
Patent Details	Pa	atent sta	atus	Pater	nt Numb	ber	Da	ate of Award

Cyclocor for redu available freque	ncing supply	a		34/2020		21/	08/2020	
A cycloco for conver 50 cycles/ frequency t it's va	sion of /second :o 1/3rd	Publishe	đ		36/2020 09/		04/2020	
Desigr fabricati potable con wetland r	on of structed	Published		34/2020		21/	08/2020	
Cobalt-G ferromag contacts-bas field ef transis	netic sed spin- ffect	Publishe	d	34/		34/2020 21/		08/2020
			View	<u>r File</u>				
3.4.5 – Bibliomet Web of Science o			last aca	ademic y	ear based on av	erage citation ind	dex in Scopus/	
Title of the Paper	Name of Author	Title of journal	Year of publication		Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation	
Some Effective Techniques for Recogn izing a Person Across Aging	Dr. S.V. Sonekar	Lecture Notes on Data Engin eering and Communicat ions Techn ologies, Springer	2020		0	JDCOEM	Nill	
Recent A dvancement s in the field of Ballistic and Non- Ballistic Spin based Field Effect Tra nsistors	Dr. P.B. Maheshwary	AIP Conference Proceeding s	2019		1	JDCOEM	1	
Role of nanopartic le shape in enhancing the thermal co nductivity of nanofluids	Dr. P.B. Maheshwary	Materials Today: Pro ceedings	2020		2	JDCOEM	1	

Comprehe nsive study of spin field effect tra nsistors with co- graphene f erromagnet ic contacts	Dr. P.B. Maheshwary	Journal of Magnetism and Magnetic Materials	2020	0	JDCOEM	1
Preparat ion of Spi ntronicall y Active F erromagnet ic Contacts based on Fe, Co and Ni Graphene Nanosheets for Spin- Field Effect Transistor	Dr. P.B. Maheshwary	Journal of Materials Science En gineering B	2020	0	JDCOEM	Nill
Experime ntal Inves tigation of effect of nanopar ticle conc entration on thermo- physical properties of nanofluid	Dr. P.B. Maheshwary	Advances in Mechanical Engineerin g	2020	0	JDCOEM	Nill
Finite strip method for the analysis of diaphragm supported cylindrica l shell	Dr. P.B. Maheshwary	Materials Today : Pr oceedings	2020	0	JDCOEM	Nill
Experime ntal Inves tigation of Effect of Nano- Particle Size on	Dr. P.B. Maheshwary	ISHMT- ASTFE Heat and Mass Transfer	2019	0	JDCOEM	Nill

Heat Transfer P erformance in Heat Exchanger									
Preparat ion of Nan I orefrigera nts using Mono-, Bi- and Tri layer Graphene Nanosheets in R134a R efrigerant	Dr. P.H Maheshwai		e	019	0	JDC	DEM	Nill	
			View	<u>File</u>					
3.4.6 – h-Index of	the Institution	onal Publications of	during the	year. (bas	ed on Scopus/	Web of so	cience)		
Title of the Paper			l Yea public	-	h-index Numbe citatio excluding citatio		ons affiliation as ng self mentioned in		
No Data Entered/Not Applicable !!!									
		I	No file	uploade	d.				
3.4.7 – Faculty pa	rticipation in	Seminars/Confer	ences and	Symposia	a during the ye	ar			
Number of Faculty International National State Local						Local			
Attended/S				70	32			25	
nars/Worksho		8	, 0			2		25	
Presente papers	d	30	5		1			5	
Resource persons	e	Nill	Nill		Ni	Nill		1	
			View	<u>File</u>					
3.5 – Consultanc	;y								
3.5.1 – Revenue g	generated fro	om Consultancy d	uring the y	ear					
Name of the Consultan(s)Name of consdepartmentproject			Iltancy		ing/Sponsoring Agency			generated in rupees)	
Civil Engineering London S Project N					PECS		25000		
	I		View	<u>File</u>					
	generated fro	om Corporate Trai	inina bv th	e institutio	n durina the ve	ear			
3.3.2 - Revenue u	-	Fitle of the	Agency s	eeking /	Revenue ge (amount in	enerated	Numb	er of trainees	
Name of the Consultan(s) department		rogramme	train	iing	(amount m	. ,			
Name of the Consultan(s)		rogramme No Data En		-		. ,			
Name of the Consultan(s)		No Data En		ot Appl:	icable !!!	. ,			

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 Organising unit/a collaborating ag			particip	r of teachers ated in such ctivities		umber of students articipated in such activities
Sashakt	Nagpu	r Police		2		346
Sashakt		var Blood ink		2		1100
Run for Womer	n JCI	Nagpur		2		283
Outreach activito Khindsi, Ramt		COEM		3		45
Visit to Gau Vighyan Anusadha Kendra, Devlapan Ramtek	an Anusadha	Vighyan In Kendra		3		45
Visit to Udyoji Exhibition	ika VIA	Nagpur		2		42
	Visit to 11th Rotary siness Leadership Summit			2	40	
CSR activity: Visit to Matru Se Sangh Bal Sadar	eva	eva Sangh	4		45	
		View	<u>v File</u>			
3.6.2 – Awards and reco luring the year	gnition received fo	r extension act	ivities from	Government and	other	recognized bodies
Name of the activity	Award/R	ecognition	e e e e e e e e e e e e e e e e e e e		umber of students Benefited	
	No Data	Entered/N	ot Appli	cable !!!		
		No file	uploaded	1.		
3.6.3 – Students particip Drganisations and progra	•			•		
Name of the scheme	Drganising unit/Ag cy/collaborating agency	en Name of t	he activity	Number of teachers participated in such activites		Number of students participated in such activites
	Rotract Clu		Donation ive	2		35
Social Events				2		
Social Events Social Events	Rotract Clu		iothon- r heart	2		25
	Rotract Clu Rotract Clu	run for		2		25

3.7 – Collaborations

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

Nature of acti	of activity Participant Source of financial support Duration					Duration	
		No D	ata Entered/N	ot Applicable	!!!		
	No file uploaded.						
-	3.7.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research acilities etc. during the year						
Nature of linkage	Title of the linkage		Name of the partnering institution/ industry /research lab with contact details	Duration From	Duratio	on To	Participant
Training, Project Work	I	JTR	IGTR Nagpur	01/06/2019	20/0	5/2020	150
Research Facility	Gc Indus	yal tries	Goyal Industries Nagpur	15/06/2019	15/04	4/2020	15
Training, Project Work	F6 Solutions		F6 Solutions Nagpur	15/06/2019	30/0	5/2020	30
Internship	C Programming		Pegasus Inst	01/06/2020	30/06/2020		1
Internship	PRAG	RAMMER	COJAG	20/05/2019	22/06/2019		7
Internship	W Develc	eb pment	Codeninja Infotech Nagpur	20/05/2019	20/06/2019		4
Internship	Paytl ac	non,Or Le	Naresh Technology,	01/05/2019	29/06/2019		5
Internship	J	ava	Axiom tech Guru Pvt. Ltd	01/06/2019	01/0'	7/2019	3
Internship	W Develc	eb pment	Integraff Tech Solution,	03/06/2019	18/00	6/2019	3
			View	<u>/ File</u>			
3.7.3 – MoUs signe houses etc. during tł		itutions o	f national, internatio	onal importance, oth	er institut	tions, indu	ustries, corporate
Organisatio	n	Date	of MoU signed	Purpose/Activi	ties	Number of students/teachers participated under MoUs	
IGTR Nag	pur	0	1/06/2019	Training, P Work	roject		150
Goyal Indus	stries	1	5/06/2019	Research Fac	cility		15
F6 Soluti	lons	1	5/06/2019	Training, P Work	roject		30
	TECHNOLOGY PRIVATE		7/11/2020	Training, Pr Work, Resea Facility, Ca	rch		20

				1	Placement			
ICT ACAD HUAWE	-	14/09/202	20	T	Training, Norkshops		30	
Cloud Cou	nselage	30/06/202	20	T	Training, Norkshops		20	
UiPath Ac Allian		28/08/202	28/08/2020		ining, Projec k, Research lity, Campus Placement	t	20	
Data Poin Soluti		01/08/203	19		Internship		67	
Microc	hip	05/03/202	19		Training		10	
Pollutic ecology co Servic	ontrol	24/01/202	24/01/2020		Training		10	
			<u>View</u>	<u>/ File</u>				
	– INFRAS	TRUCTURE AND) LEAR	NING F	RESOURCES			
4.1 – Physical Fa	acilities							
4.1.1 – Budget all	ocation, exc	luding salary for infr	astructu	re augm	entation during the	year		
Budget alloca	ated for infra	astructure augmenta	tion	Bu	dget utilized for int	rastructure de	velopment	
	6	12		42.24				
4.1.2 – Details of	augmentatio	on in infrastructure fa	acilities c	luring th	e year			
	Facil	ities			Existing or	Newly Added		
		No Data Ente	ered/N	ot App	licable !!!			
		No	file	upload	led.			
4.2 – Library as	a Learning	Resource						
4.2.1 – Library is a	automated {	Integrated Library M	lanagem	ent Syst	em (ILMS)}			
Name of the softwar	-	Nature of automatic or patially)	on (fully	Version		Year of	Year of automation	
Sacki	nfo	Fully		2.5			2008	
4.2.2 – Library Se	ervices							
Library Service Type	l	Existing		Newly	Added	To	tal	
Text Books	14194	5323597	N	ill	Nill	14194	5323597	
Journals	36	42000		48	78650	84	120650	
Reference Books	2800	1040710	N	ill	Nill	2800	1040710	
CD & Video	744	Nill	N	i11	Nill	744	Nill	
Weeding (hard & soft)	1140	200000	N	ill	Nill	1140	200000	

	e-Boo	ks	3590	Nill	N	ill	Nill	35	90		Nill
	<u>View File</u>										
G	4.2.3 – 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						-				
				No Data E	ntered/N	ot Appl	icable !!	!			
	No file uploaded.										
4	4.3 – IT Infrastructure										
2	4.3.1 – Tech	nology Upg	gradation (overall)		.	•		•		
	Туре	Total Co mputers	Computer Lab	r Internet	Browsing centers	Compute Centers	r Office	Departme nts	Availat Bandw h (MBF GBPS	vidt PS/	Others
	Existin g	788	9	54	9	1	1	2	54		0
	Added	0	0	0	0	0	0	0	0		0
	Total	788	9	54	9	1	1	2	54		0
4	1.3.2 – Band	dwidth avail	able of int	ernet connec	tion in the li	nstitution ((Leased line)				
					54 MBF	PS/ GBPS	3				
4	4.3.3 – Facil	lity for e-cor	ntent								
	Nam	e of the e-c	content dev	velopment fa	cility	Provide	e the link of th rea	ne videos ar cording facil		a cei	ntre and
				No Data E	ntered/N	ot Appl	icable !!	!			
4	.4 – Mainte	enance of	Campus	Infrastructu	ire						
	4.4.1 – Expe component, o			aintenance	of physical f	acilities ar	nd academic	support fac	ilities, ex	xcluc	ding salary
	Ŭ	ed Budget o mic facilities		penditure ind intenance of facilitie	academic	Assigned budget on physical facilities facilities facilities			physical		
	(602.73		661.	48		113.5		7	4.0	8
lil		s complex, o	•		-	• • •	al, academic a words) (inforr				•
	phys computer polics bottom the d receip The up Mainten under t	sical, a rs and cl ies are approach departmen t transac b keep an hance Dep che purvi	cademic lassroom well la th. Phys nts agai action i nd maint partment iew of t	and supp ns are wel id out an ical reso inst their s maintai cenance of t. Academi the respec	ort faci ll concei d are di ources: The r require .ned at the f the sam ic infras ctive dep	lities, ived and ssemina he phys ement. T he cent ne is do structur partment	les for ma laborato d are fran ted at va ical reso The releva ral level one at the re: Class and are al Stock	ry, spor med accor rious le urces ar ant data by stor coms, la the cus	ts com dingl vels w e allo of is es dep leve borat	nple y. vith ocat sue part l b ori ns	ex, All the h top ced to and cment. y the es are of all

out every year to ensure the physical availability, ascertain the wear and tear of the equipments etc. Repair and maintenance is carried as per requirement of the department by maintenance department or by the outside vendor. Support facilities: Support facilities looked after by Wellness Centre and Sports facilities. Dean (Capacity Building) and Dean (Students) ensure the usage and maintenance of these facilities respectively. Common rooms are under the purview of Dean (Students). Library Resources: The usage of Library for the students, teachers is governed by specific rules and regulations. The library staff headed by Librarian ensures the daily maintenance and upkeep of the library resources. The annual stock verification of Library is undertaken by the Library Stock Verification team every year. The Departmental Library In charges are the core members of this team. Computer Centre: The Computer Science Department is entrusted with the responsibility of maintenance and upkeep of Central Computer Centre along with Server Room and other related locations. Sports Complex: All the sports infrastructure is looked after by the Sports Department headed by Dean(Students). The allocation of facilities, preparation, maintenance, and repair is ensured by this department. Computers: The dedicated in house team under the Systems Networking Department takes care of the routine repair and maintenance of all the computers and computing facilities. Classrooms: Based on the intake, the classrooms are allotted to the various departments who ensure the upkeep and maintenance of academic facilities with the help of the central maintenance team of housekeeping staff.

https://secureservercdn.net/198.71.233.44/65h.11a.myftpupload.com/wp-content/uploads/2021/05/Proceduresand-policies.pdf?time=1621437110

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	JDCOEM Reaching The Unreached	988	23074693
Financial Support from Other Sources			
a) National	Ministry of Social Welfare and Justice Maharashtra	1534	117339807
b)International	Nill	Nill	Nill
	View	<u>/ File</u>	

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 implemetation	Number of students enrolled	Agencies involved
Aptitude Training	15/07/2019	1308	TP, Department JDCOEM
Personality Development / Soft skills Training	15/07/2019	1368	TP, Department JDCOEM
Aptitude Soft Skills Training	22/02/2020	45	SPIRIT Academy
Aptitude Soft Skills Training	22/02/2019	98	Career Campus

Aptitude Soft Skills Training	22/02/2019	247	TP, Department JDCOEM			
Barclays Job Readiness Workshop- Connect with work (F2F)	28/01/2020	679	Barclays			
Barclays Emloyability Skill Training for Placed and Unplaced students	04/05/2020	274	Barclays			
	<u>View File</u>					

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 for	Number of benefited students by	Number of students who have passedin	Number of studentsp placed
		competitive examination	career counseling activities	the comp. exam	
2020	Skill and Personality Development Programme for SC/ST Students	85	85	Nill	Nill
2020	Barclays Job Readiness Wo rkshop- Connect with work (F2F)	679	679	Nill	Nill
2020	Barclays Emloyability Skill Training for Placed and Unplaced students	274	274	Nill	Nill
2020	Margdarshan: Campus to corporate	200	200	Nill	Nill
2020	Aptitude & Soft skills Training	274	274	Nill	Nill
2020	GRE/TOEFEL /GMAT entrance and Preparation	146	146	Nill	Nill
2020	IETS Guest Seminar	218	2018	Nill	Nill

Total grievan	ces received	Number of grieva	ances redressed	Avg. number of days for grievance redressal		
	5		5		6	
2 – Student Prog	gression					
2.1 – Details of ca	ampus placement d	uring the year				
	On campus			Off campus		
Nameof organizations visited	Number of students participated	Number of stduents placed	Nameof organizations visited	Number of students participated	Number of stduents placed	
Antsglobe, Balaji Automobiles, Blucursor, Byjus, Cadd Center, Capgemini, Chegg India, Congnizant, Collabera, Cybershines, Dmart, Extramarks, Gurubaxani Builders, Gems Essence, Genesis,TCS, Wipro, Hero Fin Corp, Infostrench, Infosys	2062	329	Infosys BPS, Mastersoft, Pinclick, SEETECH, Systematix, Talentio, Tudip, Toppers.com, White Hat Jr, Vinayak Castings, Advaik Ltd.	150	57	
2.2. Otudant nu	aveccion to higher a		<u>v File</u>			
· ·	gression to higher e	•				
Year	Number of students enrolling into higher education	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme admitted to	
2020	7	JDCOEM	ETC	MTech	MTech	
2020	2	JDCOEM	IT	MTech	MTech	
2020	3	JDCOEM	IT	MBA	MBA	
2020	6	JDCOEM	ME	MTech	MTech	
2020	4	JDCOEM	ME	MBA	MBA	

Items		Number of students selected/ qualifying			
GATE		3			
Civil Service	S		1		
Any Other			1		
	View	<u>/ File</u>			
5.2.4 – Sports and cultural activities / c	.2.4 – Sports and cultural activities / competitions organised at the institution level during the year				
Activity	Level		Number of Participants		
Intramoral	Col	lege	558		
Kabbdi	Col	lege	80		
Khokho	Col	lege	56		
Cricket	Col	lege	90		
Volleyball	Col	lege	72		
Athletic	Col	lege	60		
Chess	Col	lege	80		
carrom	Col	lege	72		
Table Tenis	Col	lege	48		
	View	<u>/File</u>			

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/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2019	Gold Medal DBATU	National	1	Nill	JBE17668	Rahul Dilip Raut
2019	Gold Medal DBATU	National	1	Nill	JBTECH19 158	Vaibhav Ramesh Adhave
2019	Gold Medal DBATU	National	1	Nill	JBE16096	Karuna Kamble
2019	Gold Medal DBATU	National	1	Nill	JBTECH18 034	Prajwal Duryadahan
2019	Gold Medal DBATU	National	1	Nill	JBE17619	Mithun Gajanan Chide
2019	Fifth Rank Motor Sports	National	1	Nill	Team Iron Kart	Team Iron Kart
	View File					

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

To instill the leadership, human values morals and ethics the college provides various opportunities to nurture student leadership. Student Council aims at nurturing the good citizenry amongst the students at various levels. The host of initiatives are undertaken through Students Council and Students Club. . The office bearers are selected through screening tests and personal interview and also the academic performance of the students. The students are encouraged to contest for the various posts in the council and students club. Over the years, these two platforms have garnered popularity from the students. The beginning of the academic session marks the nomination, selections on student's council. To ensure gender equity, the girls and boys are given due representation. The Offices of the Dean (Students) and Dean (Capacity Building) look after the functioning of Students Council and Students Clubs in the college. These two offices are responsible for student's participation in co-curricular and extracurricular activities within and outside the campus for various competitions. The training and mentoring of the students for various competitions is done by these two offices with the help of dedicated trainers in the college. The Students Council of the college helps to conduct cocurricular, extracurricular activities within and outside the campus. The members of council and students club ensure to do screening of the students before the event wherein entries are to be restricted. The Student Council and Students Club help the students to develop the following abilities: • Teamwork • Communication • Decision making • Empathy • Leadership The members of the student council and students club volunteer for the social responsibility activities. They also act as the mentors for the junior students which help their adjustment in the new environment. Through these platforms, the students participate in university cultural and sports festivals, sports meet national competitions Hackathon, Chatra Vishwakarma, Go-Cart, Science Conclave ,Unnat Bharat Abhiyan, MHRD IIIC Cell etc.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

No

5.4.2 - No. of registered Alumni:

620

5.4.3 – Alumni contribution during the year (in Rupees) :

75300

5.4.4 – Meetings/activities organized by Alumni Association :

Alumni meet conducted online mode on dated 17th and 30th May 2020. Being lockdown period, the significant number of alumni attended the meetings and shared their leanings with the respective departments.

CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 – Institutional Vision and Leadership

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

To promote ownership of decision and involvement of faculties , the college since inception has uphold the practice of decentralization and participative management. The apex body is the core members of the management. At the college there are existing bodies such as Governing Board, College Development Committee. To ensure the smooth functioning of the autonomy, the Governing Body

has been constituted which composes of senior academicians, industrialist, college principal, senior college faculties, representatives from UGC, State Govt, affiliating university. The major decisions regarding the various developmental aspects wherein the involvement, inputs that are critical for the growth of the institute are required. The Academic Council has been composed of all the heads of the department, senior teachers, senior faculties nominated by the affiliating university and is headed by the principal. This council is responsible for admission of the students for various programs as per prevailing norms, introduction of new courses, syllabus revision, student centric policy decisions, placement etc. To empower the faculty at the department level, the respective departments have Board of Studies, wherein every subject teacher is entrusted with designing and development of the syllabus. The posts of co-ordiantors for academics, placement, IQAC, PhD etc have have been created to maximize the involvement of the faculties in the mainstream. The vital issues related to the college administration are handled by the Office of Directors who are senior faculty members of the college, assisted by the Principal, Deans and Heads of the Department. The day to day working of the college sans the involvement of the management which enables the principal and his team to take charge of the various decisions in the larger interest of the college. The major purchase decisions are routed through the Office of the Principal and are finalized by the Office of the Director. Regular meetings of HoDs with faculty, HoDs with Principal and Deans are the platforms where there is exchange of thoughts and ideas. Board meeting with entire management and teaching staff is one of the most unique feature of participative management. The management encourages exchange of thoughts and ideas on such a mammoth platform where the entire teaching faculty interacts with the management in open house. The same type of meeting is conducted for Non teaching staff as well. Bottom up approach in decision making has helped us to create the good number of academic leaders for various portfolios.

Ye	es					
5.2 – Strategy Development and Deployment						
6.2.1 - Quality improvement strategies adopted by the institution for each of the following (with in 100 words each						
Strategy Type	Details					
Admission of Students	The college being situated in rural area, the deliberate efforts are made to improve the quality of incoming students. To attract serious students the college conducts robotics workshops in various schools and junior colleges across vidarbha region. The college also conducts awareness workshops about engineering career in association with print media. The emphasis is on reaching the potential aspirants thorough digital media. To enhance the quality of the input, the JDCOEM has full fledged training and placement department with aptitude and soft skill trainers. To ensure the holistic development of the students, the thrust is on hand on learning, industry exposure, compulsory internships. In order to enable students to know about the latest trends in various domains,					

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

	the students are compulsorily enrolled for NPTEL /SWAYAM online modules. The necessary mentoring support is provided to them so that they are able to crack the evaluation at the end of the course.The college has MOUs with leading companies to facilitate industry based training of the students. The all out efforts are made to attract the quality students to the college.
Industry Interaction / Collaboration	To increase the current practices of the industry, CEO series has been initiated, wherein the corporate heads conduct interactive sessions with the students and teachers. The college has vibrant industry interaction cell wherein teachers visit the industries in and around vidarbha region to understand the problems faced by industries. The efforts are made to provide solutions to the prevailing problems if possible. The students are taken regularly for industrial visits. They are encourage to undertake the visit from the point of view of providing solution to the prevailing problems. The compulsory interneships are provided to students after every semester break.
Human Resource Management	human resources are given utmost importance. The various policies regarding human resources are documented in the form of HR Manual. The newly inducted teachers are provided with induction training to help them assimilate in the new work environment. To help teachers and non teachers to relieve and release stress they are also trained in performing arts such as dance, drama, music. They are provide stage to display talent during specially conducted family gathering in the presence of their beloved ones. Annual excursion of teachers is under taken.Eid iftar party during ramjaan and diwali milan are celebrated with great fervor. All such initiatives help to increases camaraderie among the teachers and non teachers. Financial aid is also provided to staff during family emergency as and when required by them.
Library, ICT and Physical Infrastructure / Instrumentation	Use of digital learning devices is encouraged at all levels. The constant efforts are made to upgrade the physical infrastructure. To increase

	the use of library resources the students are registered on national digital library (NDL). The students are provided with library class in their time table in the presence of teachers. This helps to developed reading skills of the students.
Research and Development	The teachers and students are constantly encourage to conduct research and development in frontier areas of science and technology. To ensure quality research the students are encourage to publish paper UGC approved journals at the time of their final year project. The strict check is in place to prevent plagiarism. Research and development policy has the provision for funding research publications and presentations. The teachers are provided an opportunity to interact with centers of higher learning such as IITs and IISC.
Examination and Evaluation	The examination of the students of RTMNU DBATU students are conducted and held as per the respective universitys time lines. For Autonomous batch, the Controller of Examination is incharge of Examination and Evaluation. The theory queston papers are invited from the listed paper setters which are duly moderated by the moderation committee. The theory and practical evaluation is based on development of higher order thinking and meta cognitive skills, the emphasis on experiential and activity based learning.Within the framework of university guidelines the deliberate efforts are made to evaluate the students on the basis of various graduate attributes recommended by NBA. The academic clearance of the students is taken to ensure the timely completion and submission of all the academic activities which are mandated for students i.e completion of journals as per prescribed norms, completion of online courses if required, internships wherever applicable.
Teaching and Learning	To prepare students as per the attributes of Engineering and Management Graduates as stated by NBA, systematic efforts are undertaken to train teachers on how to deliver outcome based pedagogy for effective teaching. The three faculty development programs have been conducted in association with NITTR Kolkatta. To

	enhance the higher order thinking skills, the activity based teaching has been implemented in core subjects of engineering. • To imbibe the importance of self learning and lifelong learning, the students and teachers are taking up NPTEL MOOCS certifications regularly. In every cycle, both the counts are increasing. To cater to the need of autonomous sylllabus, Activity Based Learning has been introduced for all the subjects.The thrust is on developing higher order thinking skills and meta cognitive skills of the students.
	The college runs three types of affiliations i.e RTM Nagpur University for the students admitted before 2017-18 and DBATU affiliation in the same year and the grant of autonomy from the year 2019-20. The curriculum of RTMNU and DBATU is imparted for the respective batches as prescribed by the respective universities. For Autonomous batch the brainstorming and deliberations are carried out by respective Board of Studies keeping in view the trends at the leading institutes of national repute as well as requirement of the local ecosystem.The syllabus is put before the Governing Body for necessary approvals. During curriculum development for the autonomous courses, the indepth analysis of industry needs in terms of hard and soft skills is taken into account. Based on the same modules such as Design thinking, Innovation Entrepreneurship Development etc are included in the curriculum.

E-governace area	Details			
Administration	The functioning of stores and maintenance departments is implemented through ERP namely Synchronik.			
Finance and Accounts	The finance and accounts functions are conducted thorugh through ERP namely Synchronik.			
Student Admission and Support	The student admission and support functions are conducted through ERP namely Synchronik. The students are assigned individual ids for all the official work related to college.			

6.2.2 – Implementation of e-governance in areas of operations:

Examination

Being autonomous affiliated to DBATU that is the technical university of Maharashtra examination work is governed by examination portal of college and university. The controller of examination is incharge of the examination related work of Autonomous Batch.

6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

2020Dr. S.J. PhilipFinancial Derivatives and Risk ManagementNPT2020Dr. M.V. TakarkhedeDeveloping Soft Skills and PersonalityNPT2020Dr. P.B. MaheshwaryInternational Conference IPR ActivityInt. 0 IPR Activity2020Prof. Sonali ZunkeWorksh IIT Khar Summit 2020Worksh IPT NPT2020Dr. S.V. SonekarData Base ManagementNPT	body for pership <i>v</i> ided
TakarkhedeSoft Skills and Personality2020Dr. P.B. MaheshwaryInternational Conference IPR ActivityInt. 02020Prof. Sonali ZunkeWorksh Enterpreneuship 	EL 825
MaheshwaryConference IPR ActivityIPR Activity2020Prof. Sonali ZunkeWorksh Enterpreneuship Summit 2020Worksh IIT Khar2020Dr. S.V.Data BaseNPT	EL 825
ZunkeEnterpreneuship Summit 2020IIT Khar2020Dr. S.V.Data BaseNPT	Conf. 89355
System	EL 1500
2019 Dr. U.S. IQAC - AQAR Binz Dange Workshop College Clust	IQAC
2019 Prof. A.A. IQAC - AQAR Binz Junankar Workshop College Clust	IQAC
2020 Prof. Atika Design of NPT Ingole Reinforced Concrete Structures	EL 500
2020 Prof. Madhuri Data Base NPT Pal Management System	EL 500
<u>View File</u>	
3.2 – Number of professional development / administrative training programmes	organized by the Colleges for
ching and non teaching staff during the year Year Title of the Title of the From date To Date	

Year	Title of the professional development	Title of the administrative training	From date	To Date	Number of participants (Teaching	Number of participants (non-teaching
	programme organised for	programme organised for			staff)	staff)

	teachi	ing staff	non-teaching staff				
2019	Devel t Pr on OU BA PEDA APPI F EFFE TEAC LEARI CCREI	aculty lopmen ogram UTCOME SED GOGGIC ROACH OR CTIVE CHING- NING A DITATI ON	Effective Office Com munication	10/12/2019	14/12/2019	15	38
2020	on ma n: Mea Hea dur Turbu in as tion	rkshop aintai ing ntal alth ring ulence ssoica with MATU	Soft Skill training for Non Teaching Staff	06/05/2020	10/05/2020	711	32
				<u>View File</u>			
6.3.3 – No. of tea Course, Short Te	rm Cou	irse, Facu	Ity Development	Programmes du	Iring the year		
Title of the professiona developmer programme	al nt		of teachers attended	From Date	To da	te	Duration
Online Learning Workshor	J		3	01/04/2020	03/04,	/2020	3
Workshop Scilab			10	04/05/2020	09/05,	/2020	6
Produc Design En Autodesk Fu 360	gg		11	07/05/2020	23/05/	/2020	3
Intellect Property: F Your Righ	Know		6	12/05/2020	12/05,	/2020	6
FDP on 1 4.0	[ot		6	27/05/2020	27/05/	/2020	6
FDP or Introductio Forensic Science a Digital Cy Forensic	n to c nd ber		6	15/05/2020	19/05,	/2020	4

I		1	1				
FDP on Python	8 11/05		5/2020	15	5/05/202	20 5	
Outcome Based Pedagogic Approach for Effective Teach ing-Learning Accreditation	15	10/1	2/2019	14	1/12/20:	19 5	
		<u>View</u>	<u>/ File</u>				
6.3.4 – Faculty and Staff recr	uitment (no. for	permanent re	ecruitment):				
Teac	ching				Non-tea	aching	
Permanent	Full Ti	me	Per	rmanen	t	Full Time	
145	14	5		157		157	
6.3.5 – Welfare schemes for							
Teaching		Non-te	aching			Students	
The teachers are financial support attend FDPs,Confere Workshops at th institutes of nati repute.The salary ac is given in case emergency, marriage other family commitments.The conveyance is provid subsidized rates communing to th college.The wards teachers who are stu at JDCOEM are offe fees concessions ove above Social Welf Scholarships.	to p ences, me othe onal dvance su of fac es and to bas e the ded at m for str ded at m for str ded at m e off s of in udying we ered er and are	Non-teaching Salary advance is provided in case of medical emergency and other family commitments. Free as well as subsidized conveyance facilities are provided to non teaching staff based on the tenure in the college. The wards of non teaching staff studying at JDCOEM are offered fees concession in addition to social welfare scholarship.		stud cc scho initi the un of pro insura	needy and deserv ents are provide oncessio ns ans larship under th lative of Reachin reached The proc oviding accident nce to the stude s in pipeline.	ed ng ess al	
6.4 – Financial Managemer							
6.4.1 – Institution conducts in	iternal and exter	nal financial	audits regula	arly (wit	h in 100 v	vords each)	
The accounts depar and the qualified the routine timeline per time lines du tentative revenue of into account.The c departments and s under various head allocation of 6.4.2 - Funds / Grants receiv	team to ass es. External ring the fin generated fr omprehensive ections to p s.The Finand resources de	ist him. Audit is nancial y com fees, e budgeta plan for ce Commit epending	The inter s conduct ear. y Fo scholars ry requin the alloo tee heade upon need	rnal a ed by or res hips, rement cation ed by d and	udit is the ou source r consul is inv of fir the Dir urgency	s conducted as p tside Audit firm mobilization, the tancy etc is tak vited from all t nancial resource rector ensures t y of the same.	er a as e cen he s he

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/ Grnats received in Rs.	Purpose
No D	ata Entered/Not Applicable	111

6.4.3 - Total corpus fund generated

No Data Entered/Not Applicable !!!

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	Dr.Samir Telang, Dr.R.H.Parikh	Yes	Dean Academics
Administrative	No	Nill	Yes	Dean Administration

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

The teachers of the various departments conduct home visit at the residences of the students under teacher-guardian scheme. This has helped the institute to bond with the parents as the major stakeholder of the institution. The insights from the parents have been helpful in executing various policies. Every department conducts Parents Teachers Meeting during every semester. Under the Parent-Teacher Association during the lockdown of month of May2020, 2619 parents were reached online. The parents have given the input to provide training for the competitive examinations like GRE,GMAT, TOFEL,IELTS etc. The modalities for the same are in process.

6.5.3 – Development programmes for support staff (at least three)

To improve the various skill set of non teaching staff of the college, the training program on Effective office communication, and softskills for non teaching staff were organized wherein 38 and 32 faculties were benefited. To help them relieve the work place stress, the dedicated slots are assigned to them to learn dance, drama and music. During the the family gathering around 45 non teaching staff performed on the stage. The training sessions of experts from other reputed colleges for non teaching staff will be conducted.

6.5.4 – Post Accreditation initiative(s) (mention at least three)

Post accreditation, the college was awarded Autonomy on 5th August2019. PhD Research Center for Engineering and Basic Sciences have been started on approval from the affiliating university .i.e.Dr.Babasaheb Ambedkar Technological University (DBATU), Lonere. The Research Center for MBA has been approved by Rashtrasnt Tukdoji Maharaj Nagpur University, Nagpur. The process of NBA Accreditation has been initiated.

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b)Participation in NIRF	Yes
c)ISO certification	No
d)NBA or any other quality audit	No

6.5.6 - Number of Quality Initiatives undertaken during the year

	IEEES summit 2019	09/09/2019	09/09/2019	09/09/2019	130
2019	Guest Lecture on Design Analysis of Algorithm	17/09/2019	17/09/2019	17/09/2019	80
2020	COVID 19 Lockdown: The Survey of Students' Perception on Teaching Learning Processes	05/05/2020	05/05/2020	15/05/2020	233
2019	Internatio nal Yoga Day Celebration	21/06/2019	21/06/2019	21/06/2019	150
2019	Guest Lecture on Recent Trends in Engineering Technology	25/06/2019	25/06/2019	25/06/2020	45
2019	Expert Talk on Big data Engineering	29/06/2019	29/06/2019	29/06/2019	48
2019	Guest Lecture on IT Infrastru cture and Latest Trends of Technical Solutions	23/08/2019	23/08/2019	23/08/2019	38
2019	Expert Talk on Oppo rtunities in Machine Learning	18/07/2019	18/07/2019	18/07/2019	49
2019	Guest Lecture by Torana Inc, Nagpur on the topic Industry Interaction	29/08/2019	29/08/2019	29/08/2020	42
		View	File		

year)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
Workplace safety	19/07/2019	19/07/2019	26	15
Women in Engineering	11/09/2019	11/09/2019	67	52
Sashakt: Awareness about safety & Security	04/03/2020	04/03/2020	118	134
Breaking the Glass Ceiling	28/05/2020	28/05/2020	38	32

7.1.2 - Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources

Environmental Consciousness and Sustainability are the underlying features in the institution. The buildings are constructed using a recycled material. The natural and sustainable material is used in construction of buildings resulting in temperature difference. The ventilation arrangements are made keeping in view the availability of natural light in abundance. The water from artificial water bodies is reused in maintenance of gardens. The pathways are constructed with the help of material which absorbs rain water in the soil. The efforts have been initiated to install solar energy system.

7.1.3 - Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	Nill
Ramp/Rails	Yes	Nill
Rest Rooms	Yes	Nill

7.1.4 - Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadva ntages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2019	1	1	14/08/2 019	1	Village Survey	Identif ication of disposal and susta inable practices in Waste Water Man agement	27
2019	1	1	29/11/2	1		Waste M	34

			019		Household Survey	anagement	
2020	1	1	24/01/2 020	1	Farming Survey	Automat ion of Farming O perations	29
2020	1	1	28/05/2 020	1	Digital Literracy	Online payments	18
			No file	uploaded.			
7.1.5 – Human	Values and P	rofessional	Ethics				
	Title		Date of pu	ublication	Foll	ow up(max 100) words)
Student	Code of Co	onduct	19/00	5/2019	the a colle fac regui sch fac coll S Cond year. guide navig admini the they impor The pr is the good profes have	order to fa wareness a ge and the academic a administrat ilities,rul lations, in hedules, ce ilities et ege publis tudent Cod duct/Manual This manua to the stu gating the academic a strative a college, t are expose tant stake eface of t colleges citizenry ssional eth to abide b onsible cit	bout the various and tive les and aportant entral c, the hes the e of l every al is the idents in various and spects of o which d as the holders. he manual tenets of and the nics they y as the tizen of
Star	nding Order	rs	21/0	5/2019	and t variou to var units Sec Sto Inve Handli etc, t are p to docume among	ensure uni ransparenc s processe ious admin s such as S ction, Acco pres, Purch ntory Mana Material ng,Conveya the Standir ublished f time. Thes nted and c st the con ere to the	y in the s related istrative Students bunts, hases, gement, nce bills ng orders rom time se are irculated cerned to

I	IID News-1	21/07/2010	The UD Mercel is the
	HR Manual	31/07/2019	The HR Manual is the set of rules and regulations for the seamless functioning of the faculty in the college. This contains the comprehensive account of the various systems and processess laid down bythe administration ranging from joining till exit of the faculty from the college. Leave rules, R D policy, Consultancy policy , appraisal parameters, confidential reports etc are well documented in this manual. The provisions in the manual are subject to change if required. This is circulated among st the concerned so as to follow the ethical practices.
	Examination Manual	03/09/2019	To make students aware about the examination system in the autonomous set up, the Examination Manual has been released.This contains the rules and regulations about the evaluation, grades, Cumulative Grade Point Average (CGPA), Sessional Grade Point Average(SGPA) etc.
	First Ordnances Rules and Regulations of Autonomy	03/09/2019	To make the stakeholders aware about the functioning of the autonomous college, the Rules and Regulations have been released. This contains the comprehensive details of various nomenclatures, courses, programs offered, academic council, governing body, finance committee, board of studies with functions of theses statutory bodies,course credits, incentive credits,components for calculating marks, major, minor projects and

various related modalities.

7.1.6 - Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants		
One day session Spiritual values	08/06/2019	08/06/2019	249		
One week workshop of Sudarshan Kriya under Student Empowerment Learning Program	22/07/2019	27/07/2019	62		
Herritage Visit to Ramtek	08/08/2019	08/08/2019	261		
<u>View File</u>					

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

1. The campus is one of the greenest academic campuses across the region. The vast expanse of green zones, well maintained gardens, perfectly manicured lawns provide succor to the eyes of every visitor to the campus. The team of dedicated garden staff under the able supervisor relentlessly carry out the work with full dedication. 2. The garden waste is processed into compost which meets the requirement of the green members of the JD family. The Vermi compost plant too caters to the requirement of the manures in house. 3. The deliberate efforts are taken to reduce the carbon foot prints by producing notice boards, dust bins, door panels, door handles by utilizing the fabrication, carpentry, smithy facilities in the workshop. 4. The female wash rooms are installed with sanitary napkin vending machines and incinerators to effectively dispose off solid waste. 5. The canteen sans plastic usage while serving food and beverages.Junk food is prohibited in the campus. 6.The architecture of the buildings is planned so as to capture natural light at all work stations, laboratories. The students are sensitized to ensure the cleanliness of the campus, use the areas earmarked for waste disposal.

7.2 – Best Practices

7.2.1 - Describe at least two institutional best practices

Over the past decade, the college has evolved on various aspects viz. teaching learning process, curricular and co-curricular engagements of the students and other stakeholders.With the support of visionary leadership, foresight of the management the college has added many firsts to its credit over the past few years. This progressive run has been possible due to the establishment of various best practices and the establishment of the benchmarks and minutest detailing of every task. The wide range of best practices have been adopted by the college in all spectrums of academic environment. 1. Outcome Based pedagogy: To enhance the learning outcome of engineering and management graduate, the college has been implementing Outcome Based Pedagogy to ensure that the graduates from the system are able to various expectations of the employers in the actual world of work. The teachers have been given orientation/hands on practice at OBE by the senior faculties in the college and outside resources were also roped in to imbibe upon the philosophy. The teachers were formally trained by NITTR and NPTEL module of OBE was also introduced to them. This has witnessed in significant improvement in the teaching learning processes and satisfaction of the students. 2. Activity Based Learning: The students were introduced to Activity Based Learning for the respective semesters. The set of individual as well as group activities were

planned well in advance by the concerned subject teacher to retain the interest of the students in the subject. For practical as well as theory subjects the slew of activities was conducted. 3. Mentor Mentee System: To help the students assimilate in the culture of the institution, the senior students who have been

achievers in various domains ranging from academics, placement, sports, cultural activities etc act as mentors to the junior students. This helps the younger students to raise their aspirations in various scholastic as well as coscholastic activities. 4. Home Visit at student's residence: To connect with

the parents in effective manner, apart from Parents -Teachers Meet, every year, the Teacher Guardians visit the residences of the allotted students to ascertain the expectations of the parents from the institute, awareness about the institute's various initiatives, to have the first hand inputs regarding socio-economic background of the students . 5. Compulsory Internships: After every semester break, the students have to complete mandatory internships. This stint at the shop floor helps the students to understand the functioning of the plant/industry from the operations perspective. 6. Best teaching/non teaching faculty award: Based on the appraisal points, contribution of the concerned in the corporate life of the college every year the award is given to Best Teaching faculty, Debut Faculty- the faculty who has been new addition in the system, Non teaching faculty, Class IV employee. The awardees are offered citation, certificate and gift hamper. This award scheme has been helpful in enhancing the moral and motivation level of the teaching as well as non teaching faculty. It sets the tone for other faculty members to reach the higher goals. 7. Engineering Clinics: The branch specific workshops of industry

experts are organized throughout the year for the students to know the skill set required by the industry. The industry experts are roped in to share their insights with the students. Hands on sessions are conducted on various domain specific software tools. 8. Family Gathering :To increase the bonding of the faculty members with the institutes and an effort towards creating a better work place, every year the cultural evening is set for the faculty members and their families, wherein the stage and training is provided to the concerned to unleash their latent potential in dance, drama, music etc. This is much sought after event amongst the JD fraternity. 9. Annual Excursion: To help the faculty members to unwind themselves, the overnight excursion is planned in the nearby jungles. This jungle retreat offers nature trail, jungle safari, bonfire, team games etc.

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

https://jdcoem.ac.in/about-us/mandatory-disclosure/

7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

Adhering to the vision of the institute, the institute's distinctiveness lies in the following: 1. Academic Reforms: To cater to the need of industry in terms of course contents, syllabus, the college became the first college under the Technological University of Maharashtra i. e Dr. Babasaheb Ambedkar Technological University (DBATU) to get the Autonomous status. The implementation of outcome based pedagogy in right sense and spirit is certainly the differentiating feature of the college. All the academic deliberations are centered on what the learner should be able to perform after studying theory, practical or audit subject. To strengthen the OBE further, the Activity Based Learning has been implemented i.e learning by doing. The activities for all the subjects are drawn well in advance to ensure the retention of interest of the student in the subject and enhance his curiosity to learn further, venture the unknown. Field visits to identify the various engineering problems are integral

part of the syllabus. The higher order thinking is channelized through this practice. 2. Industry exposure: From 3rd Semester onwards, the students are given hands on exposure through compulsory internships. Quite a few students have been doing online paid internships via internshala with reputed organizations and institutes of national repute. The students have been doing internships with reputed companies like Piramal foundation, Codeninja, Profit Plug etc. As a part of industry exposure the students have worked at grass root level with Pani Foundation, Unnat Bharat Abhiyan etc. 3. Placement training: The placement training is imparted not only in terms of technical training but comprehensive training in soft skills, aptitude attitude etc is imparted through the full fledged training and placement in house team from the early stage of engineering education. The result of which is seen in the increase in number of placements in tier 1 companies with average package on the rise every year. 4. Capacity Building initiatives: The emotional well being of the students is addressed by the full time team of psychologists who are responsible for addressing the issues related to preventive psychology of the young adults through various interventions, for which regular classes are assigned in the time table slots. The understanding and empathizing with various societal issues are also addressed through these initiatives at regular intervals. This helps the students to empathize with the challenged, less privileged elements of the society. The field visits in nearby villages help students to identify the various. The departmental forums for the students by the students provide students an opportunity to learn the tenets of leadership by organizing various events. To enable students to appreciate the art and culture, the classess for dance, drama, music are conducted in every semester. 5. Interaction with the Technical bodies on national and international repute: The college has the active chapters of leading engineering associations such as IETE, IEEE, ISTE etc which provide the learning ground for the students to explore the industry requirement through various expert sessions, competitions,

hackathons etc.

Provide the weblink of the institution

https://jdcoem.ac.in/about-us/mandatory-disclosure/

8. Future Plans of Actions for Next Academic Year

the plans for the forthcoming academic year constitute: 1. The preparation for NBA accreditation of all the eligible branches. Sensitization of stakeholders towards their role and contribution in NBA Accreditation.2. To increase the quality and quantity of research publications of faculty members. Ecosystem to encourage quality research publications will be developed. 3.To increase in the number of patent filing, publication and award. Thrust to develop interdisciplinary research to foster research environment. To revise the incentive and assessment schemes to encourage quality research. 4. To increase the participation in funded projects of AICTE, DST, NAAC, ISRO, DRDO etc.5.To enhance the reach of Entrepreneurship Development, Start Ups,Industry Institute Interaction Cell.6. To enhance the efficacy of Admission Cell by procuring CRM software.7. Development of teaching learning aids to enhance the reach of students and teachers.