NATIONAL BOARD OF ACCREDITATION

Compliance Report
(Tier – I/Tier – II)
PART- A: Institutional Information
(To be filled only once for all the programs under consideration)

A1. Name and Address of the College:- Jaipur Engineering College & Research Centre

City: - Jaipur | State: - Rajasthan

Pin Code: - 302022

Phone No (including STD Code):- 0141-2770232 | Fax – 0141-2770803

A2.Year of Establishment:- 2000

A3. First Approval Letter No.: F. No 765-66-01/NDEG/ET/2000 **Date: 13.07.2000**

A4. Head of the Institution:-

Name - Prof. Vinay Kumar Chandna | Designation- Principal

Nature of appointment:- Regular | Phone No. -0141-2770120

Email ID- principal@jecrcmail.com | Mobile No- 9891406784

Fax No. - 0141-2770803

A5. Name and address of the affiliating University:- Rajasthan Technical University

City: Kota | Pin code. -324010

State:- Rajasthan | Email - vcofficertu@yahoo.co.in

Website: www.rtu.ac.in | Mobile No- - 0744-2473015(Dean Academic)

Phone No. 07442473001

A6. Type of Institution:-

Institution of the National Importance University | Autonomous

University | **Any Other (Affiliated College) Yes**

Deemed University

A7. Ownership Status:-

Central Government | Trust

State Government

Government Aided

Section 25 Company

Any Other

Society

Self Financing Yes

A8. Students Admissions (institute level considering all UG Program)

Item	**CAY 2020-21**	**CAYm1 2019-20**	**CAYm2 2018-19**	**Total**
Sanctioned Intake	990	990	990	2970
Number of Students admitted (Corresponding to Sanctioned Intake)	980	901	842	2723
% of Students admitted over last three assessment years (Total admitted/Sanctioned Intake)	98.98	91.01	85.05	91.68

A9. Details of the students actually admitted through Lateral Entry/Separate Division

Item	**CAY 2020-21**	**CAYm1 2019-20**	**CAYm2 2018-19**	**Total**
Number of Students admitted through Lateral Entry	55	18	40	113
Number of Students admitted through separate Division	NIL	NIL	NIL	NIL
Total Number of Students admitted in the Second Year	55	18	40	113

A10. Provide separate Information for each of the program(s) for which compliance is to be submitted:-

Name of the Department	Name of the Program being offered	Name of the Program to be Considered	Year of Start	Increase in Intake, If any	No. of Seats increased	Total No. of Seats	Year of Increase	AICTE Approval	Accreditation Status
ECE	B.E.	B.E.	2000	-	-	60	-	13.07.2000	-
	B.E.	B.E.		Yes	30	90	2004	25.06.2004	No
	B.E.	B.E.		Yes	30	120	2008	22.07.2008	No

	B. Tech.	B. Tech.		No	-	120	2009 (NBA Accreditation)	22.07.2008	Yes
	B. Tech.	B. Tech.		Yes	60	180	2011	01.09.2011	Yes
	B. Tech.	B. Tech.		Yes	60	240	2012	10.05.2012	No
	B. Tech.	B. Tech.		No	-	240	2018 (NBA Accreditation)	04.04.2018	Yes
	B. Tech.	B. Tech.		Yes (-)	-60	180	2020	31.07.2020	Yes
ME	B.E.	B.E.	2003	-	-	60	-	12.05.2003	-
	B. Tech.	B. Tech.		Yes	30	90	2009	23.08.2009	No
	B. Tech.	B. Tech.		Yes	90	180	2012	10.05.2012	No
	B. Tech.	B. Tech.		No	-	180	2018 (NBA Accreditation)	04.04.2018	Yes
	B. Tech.	B. Tech.		Yes (-)	-60	120	2020	31.07.2020	Yes

- ***Grant of one year accreditation up to 30-6-2022.**

Write applicable One:

*****Granted Provisional accreditation for two/three years for the period (Specify period) - **Yes**
*Granted accreditation for 5 / 6 Years for the period (Specify period)
*Not accredited (Specify visit dates, year)
*Withdrawn (Specify visit dates, year)
*Not eligible for accreditation
*Eligible but not applied

Part B- Program Information

B1. Name of the Program: Mechanical Engineering

B2. Faculty Information and Contributions

Please provide the list of faculty in the department according to the below format as Appendix I **(Session: 20-21)**

S. No	Name	Pan No	Qualification	Area of Specialization	Designation	Date of Joining	Date on which Designated as Professor/Associate Professor	Currently Associated (Y/N)	Nature of Association (Regular/ Contract/ Adjunct)	If contractual mention Full time or Part time	Date of Leaving (in case Currently Associated is "No")
1	Dr. Mahendra Pratap Singh	AOPPS5028F	M.Tech/Ph.D	Mechanical Engineering	Professor	19-Aug-16		Y	Regular		NO
2	Dr. Fauzia Siddiqui	BHAPS1199C	M.Tech/Ph.D	Industrial Engineering	Professor	1-8-2018		Y	Regular		NO

3	Dr. Bhuvnesh Bhardwaj	AONPB5285K	Phd	Manufacturing Systems Engineering	Associate Professor	14-Jul-15	01-10-2016	Y	Regular		NO
4	Dr. Manish Shrivastava	ARUPS7035A	M.Tech/Phd (MBA)	Manufacturing Systems Engineering	Associate Professor	21-Jul-14	1-9-2018	Y	Regular		NO
5	Dr. Rishi Pareek	AYAPP6684K	M.Tech/Ph.D	Mechanical Engineering	Associate Professor	7-8-2018		Y	Regular		NO
6	Dr. Manmohan Siddh	BNPPS2864D	Ph.D	Production Engineering	Associate Professor	2-Jan-17	1-11-2019	Y	Regular		NO
7	Mr. Manish Jain	AANPJ7357E	M.Tech	Manufacturing Systems Engineering	Assistant Professor	7-Aug-01		Y	Regular		NO

8	Mr. Lalit Kumar Sharma	BQSPS3044K	M.Tech	Manufacturing Systems Engineering	Assistant Professor	13-Aug-07		Y	Regular		NO
9	Mr. Rajendra Kumar Gupta	AGVPG7205J	M.Tech	Manufacturing Systems Engineering	Assistant Professor	17/Sep/07		Y	Regular		NO
10	Mr. Kuldeep Sharma	BKOPS5002H	M.Tech	Manufacturing Systems Engineering	Assistant Professor	25-Aug-06		Y	Regular		NO
11	Mr. Aashish Nagpal	AUYPN8399M	M.Tech	Manufacturing Systems Engineering	Assistant Professor	16-Aug-10		N	Regular		31/3/21
12	Mr. Dayal Singh Rathore	ARZPR1164L	M. Tech	Production Engineering	Assistant Professor	23-Jul-12		Y	Regular		NO
13	Mr. Hukam Chand	AXAPC7807L	M.Tech	Thermal Engineering	Assistant Professor	23-Jul-12		Y	Regular		

	Nagar										NO
14	Mr. Akhil Vijay	AHJPV3272D	M.Tech	Production Engineering	Assistant Professor	24-Jul-12		Y	Regular		NO
15	Mr. Abhishek Kumar	BVBPK2936A	M.Tech	Manufacturing Systems Engineering	Assistant Professor	10-Aug-13		Y	Regular		NO
16	Mr. Satyendra Kumar	BSKPK2741R	M.Tech	Machine Design	Assistant Professor	16-Jul-14		Y	Regular		NO
17	Mr. Satyaprakash Saini	BJQPS8962K	M.Tech	Metallurgical and material Engineering	Assistant Professor	20-Jan-16		Y	Regular		NO
18	Mr. Shrikant Bansal	AZWPB3081B	M.Tech	Industrial Engineering	Assistant Professor	1-Aug-16		Y	Regular		

											NO
19	Mr. Tej bahadur Singh	CMQPS 7636J	M.Tech	Mechanical Engineering	Assistant Professor	2-Jan-17		Y	Regular		NO
20	Mrs. Preeti P.Bodkhe	ATVPB 1700A	M.Tech	Heat and Power Engineering	Assistant Professor	3-Jan-17		N	Regular		31/03/21
21	Mrs. Palak Jindal	AMHPN 6656J	M.Tech	Production & Industrial Engineering	Assistant Professor	4-Jan-17		Y	Regular		NO
22	Mr. Hemant Bansal	APGPB 2872J	M.Tech	Production Engineering	Assistant Professor	2-Jan-17		Y	Regular		NO
23	Mr. Akhilesh Paliwal	CPSPP3 593N	M.Tech	Industrial and Management Engineering	Assistant Professor	3-Jan-17		Y	Regular		NO

24	Mr. Yogesh Dubey	AVGPD 6643R	M.Tech	Manufacturing Systems Engineering	Assistant Professor	8-Feb-17		Y	Regular		NO
25	Mr. Utpal Chakarvarti	AAHPC 5325R	M.Tech	Industrial Engineering	Assistant Professor	16-Feb-17		Y	Regular		NO
26	Mr. Ravi Yadav	CFUPR 3176R	M.Tech	Prodution Engineering	Assistant Professor	27-7-2012		Y	Regular		NO
27	Mr.Nitin Chhabra	AUEPC 0203F	M.Tech	Production Engineering	Assistant Professor	31/01/2014		Y	Regular		NO
28	Mr.Dilip Prajapati	AZBPP5 053C	M.Tech	Production Engineering	Assistant Professor	06-10-13		Y	Regular		NO
29	Mr.Jitendra Gupta	BEDPG 1771G	M.Tech	Production Engineering	Assistant Professor	3/25/2014		Y	Regular		NO
30	Dr. Manoj Gupta	ARCPG 5114G	Ph. D.	Mechanical Engineering	Associate Professor	1 April 2021		Y	Regular		NO

B.2.1. Student Faculty Ratio (No of Faculty as per the sanctioned intakes):-

(To be calculated at Department Level)

No. of UG Programs in the Department (n): 1

No. of PG Programs in the Department (m): NA

No. of Students in UG 2nd Year = 86

No. of Students in UG 3rd Year = 114

No. of Students in UG 4th Year = 138

No. of Students in PG 1st Year = NA

No. of Students in PG 2nd Year = NA

Student Faculty Ratio (SFR) = S / F

Year	**CAY 2020-21**	**CAY 2019-20**	**CAY 2018-19**
u1.1	86	114	138
u1.2	114	138	131
u1.3	138	131	138
UG1	**338**	**379**	**407**
u2.1	0	0	50
u2.2	0	50	57
U2.3	50	57	56
UG2	50	107	**163**
Total No. of Students in the Department **(S)**	**388**	**486**	**570**
No. of Faculty in the Department **(F)**	**29**	**31**	**33**
Student Faculty Ratio (SFR)	**18.62**	**17.41**	**17.27**
Average SFR	**17.76**		

B 2.2. Faculty Details of the Department (UG+PG):

S.No.	Designation	CAYm1 2019-20			CAYM 2020-21		
		With PhD.		Without PhD.	With PhD.		Without PhD.
		Regular	Contractual		Regular	Contractual	
1	Professor	2	0	0	2	0	0
2	Associate Professor	4	0	0	4	0	0
3	Assistant Professor	0	0	25	0	0	23
4	Total number of Faculty in the Department (UG+PG)	6	0	25	6	0	23

B2.3. Faculty Cadre Proportion

The reference Faculty cadre proportion is 1 (F1):2(F2);6(F3)

F1: Number of Professors required =1/9 x Number of Faculty required to comply with 20:1

Student-Faculty ratio based on No. of students (N) as per B2.1

F2: Number of Associate Professors required =2/9 x Number of Faculty required to comply with 20:1 Student-Faculty ratio based on No. of students (N) as per B2.1F3: Number of Assistant Professors required = 6/9 x Number of Faculty required to comply with 20:1 Student-Faculty ratio based on No. of students (N) as per B2.1

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY *2020-21*	2.1	2	4.3	4	12.9	20
CAY *2019-20*	2.7	2	5.4	4	16.2	24
CAY *2018-19*	3.16	2	6.3	3	19	31
Average Numbers	2.65	2	5.33	3.66	16.03	25

B2.4. Faculty as participants in Faculty development/training activities/STTPs

Name of the faculty	Details of the participation(Faculty development /training activities/STTPs)			
	[2020-21]	[2019-20]	[2018-19]	[2017-18]
Dr. M.P. Singh	9	6	1	4
Dr. Bhuvnesh Bhardwaj	1	3	1	2
Mr. Manish Jain	-	-	1	1
Mr. Lalit Kumar Sharma	10	2	3	5
Mr. Rajendra Kumar Gupta	3	1	1	1
Mr. Kuldeep Sharma	1	2	2	1
Mr. Aashish Nagpal	1	2	1	1
Mr. Dayal Singh Rathore	4	1	1	1
Mr. Hukam Chand Nagar	-	2	1	1
Mr. Akhil Vijay	8	8	2	2
Mr. Ravi Yadav	4	4	2	2
Mr. Abhishek Kumar	10	1	1	2
Mr. Satyendra Kumar	1	2	1	1
Dr. Manish Shrivastava	1	1	1	2
Dr. Fauzia Siddiqui	1	5	1	-
Dr. Rishi Pareek	1	2	1	-
Mr. Tej Bahadur Singh	2	4	2	2
Mr. Yogesh Dubey	6	3	1	1
Mrs. Palak Jindal	4	2	1	1
Mr. Shrikant Bansal	4	1	2	2
Mr. Hemant Bansal	1	1	2	2
Dr. Manmohan Siddh	1	2	1	1
Mr. Akhilesh Paliwal	4	1	1	1
Mrs. Priti Bodkhe	-	1	1	1
Mr. Satya Prakash Saini	2	1	1	1

B2.5. Research and Development

Name of the faculty	Academic Research			
	Number of quality publication in refereed/SCI Journals ,citations ,Books/Book chapter etc.		Ph.D. guided/Ph.D. awarded during the assessment period while working in the institute	
	As provided in SAR	After evaluation (till the date of compliance report)	As provided in SAR	After evaluation (till the date of compliance report)
Dr. M. P. Singh	8	10		
Dr. Fauzia Siddiqui		7		
Dr. Bhuvnesh Bhardwaj	7	13	**Award**	
Dr. Devesh Kumar		2		**Award**
Dr. Manish Shrivastava				
Dr. Rishi Pareek		3		
Dr. Man Mohan Siddh	3	1		**Award**
Mr. Manish Jain	1			
Mr. Lalit Kumar Sharma		1		
Mr. Rajendra Kumar Gupta	1	1		
Mr. Kuldeep Sharma	1			
Mr. Aashish Nagpal				
Mr. Nikhil Jain		1		
Mr. Dayal Singh Rathore				
Mr. Hukum Chand Nagar				
Mr. Akhil Vijay		1		
Mr. Abhishek Kumar		1		
Mr. Satyendra Kumar	3	3		
Mr. Satya Prakash Saini				
Mr. Gaurav Jain		1		
Mr. Shrikant Bansal				

Mrs. Priti Bodkhe				
Mrs. Palak Jindal				
Mr. Hemant Bansal				
Mr. Akhilesh Paliwal				
Mr. Yogesh Dubey		2		
Mr. Utpal Chakravarty				
Mr. Tejendra Singh				
Mr. Shashank Shekhar Singh				
Mr. Tej Bahadur Singh		1		
Mr. Rohit Goyal				
Mr. Ravi Yadav				
Mr. Ravindra Kumar				
Mr. Neeraj Saini				
Mr. Nitin Chabbra	1			
Mr. Dilip kumar Prajapati				

B2.6. Sponsored Research/Consultancy

(B) Details as provided in the SAR previously

Name of the Faculty	Project Title	Project Type Research/ Consultancy	Funding Agency	Amount	Duration
Dr M.P.SINGH	**"Rural Technologies Business Incubations"**	**Research**	**Department of Science and Technology (DST), Rajasthan**	**2400000/-**	**3 YEAR**

(II) Details after evaluation (till the date of Compliance Report)

Name of the Faculty	*Project Title	Project Type Research/ Consultancy	Funding Agency	Amount	Duration
Co-Investigator: Mr. Manish Jain (Associate Professor Mechanical Department) Dr Mahendra Pratap Singh(Professor, Mechanical Department)	”Up-skilling Science and Logic learning for the youth of Jaipur rural area An Endeavour to Enhance learning through Scientific Convention(TPN / 63324)	**Research**	Science, Technology, Engineering, Mathematics, Medicine (STEMM) – India Initiative” *(Bhar at Vigyan Darshan)*"	RS/- 25,69,000/-	**1YEAR**

B.3. Students' Performance

Student Intake Table

Item (information to be provided cumulatively for all the shifts with explicit heading, wherever applicable)	**CAY 2020-21**	**CAYm1 2019-20**	**CAYm2 2018-19**	**CAYm3 2017-18**
Sanctioned intake of the program (N)	120	180	180	180
Total number of students admitted in first year minus number of students migrated to other programs/institutions, plus no. of students migrated to this program (N1)	60	76	122	125+50 = 175
Number of Students admitted in 2nd Year in the same batch via lateral entry (N2)		**10**	05	15
Separate division students, if applicable (N3)	NIL	NIL	NIL	NIL
Total number of students admitted in the program (N1 + N2 + N3)	60	86	127	190

Academic Performance Table

Year of entry	N1 + N2 + N3 (As defined above)	Number of students who have successfully graduated			
		I Year	II Year	III Year	IV Year
CAY(2020-21)	60				
CAYm1(2019-20)	86	62			
CAYm2(2018-19)	127	79	90		
CAYm3(2017-18)	190	58	108	129	
CAYm4 (LYG)(2016-17)	188	67	103	109	113
CAYm5 (LYGm1)(2015-16)	196	59	106	117	121
CAYm6 (LYGm2)(2014-15)	213	58	132	142	142

B3.1 Success rate without backlog in stipulated period

SI= (Number of students who graduated from the program without backlog in the stipulated period of course duration)/(Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry and separate division, if applicable)

Item	Latest Year of Graduation, LYG	Latest Year of Graduation minus 1, LYGm1	Latest Year of Graduation minus 2, LYGm2
Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry and separate division, if applicable	184+4*=188	186+10*=196	208+5*=213
Number of students who have graduated without backlog in the stipulated period	71	65	66
Success Index (SI)	0.39	0.34	0.32
Average Success Index	0.35		

***left/not registered in university exam**

https://jecrcfoundation.com/jf-data/NBA/ME/2014-15-to-19-20-Pass-Table-B3.pdf

B3.2. Success rate with backlog in stipulated period of study

SI= (Number of students who graduated from the program with backlog in the stipulated period of course duration)/(Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry and separate division, if applicable)

Item	LYG (CAYm4)	LYGm1 (CAYm5)	LYG (CAYm6)
Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry and separate division, if applicable	184+4*=188	186+10*=196	208+5*=213
Number of students who have graduated with backlog in the stipulated period	113	121	142
Success Index (SI)	0.60	0.62	0.67
Average Success Index	0.63		

***left/not registered in university exam**

https://jecrcfoundation.com/jf-data/NBA/ME/2014-15-to-19-20-Fail-Table-B3.2.pdf

B3.3 First Year Academic Performance

Academic Performance = (Mean of 1st Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks in First Year of all successful students/10) x (number of successful students/number of students appeared in the examination)

Successful students are those who are permitted to proceed to the second year.

Academic performance	**CAYm1 (2019-20)**	**CAYm2 (2018-19)**	**CAYm3 (2017-18)**
Mean of CGPA or Mean Percentage of all successful students (X)	5.78	5.87	6.72
Total no. of successful students (Y)	74	121	125
Total no. of students appeared in the examination (Z)	74	121	125
API = x* (Y/Z)	5.78	5.87	6.72
Average API = (AP1 + AP2 + AP3)/3	6.12		

B3.4. Academic Performance in Second Year

API = (Mean of 2nd Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Second Year /10) x (number of successful students/number of successful students/number of students appeared in the examination)

Successful students are those who are permitted to proceed to the Third year.

Academic Performance	**CAYm1** (2019-20)	**CAYm2** (2018-19)	**CAYm3** (2017-18)
Mean of CGPA of Mean Percentage of all successful students (X)	6.85	5.65	6.25
Total no. of successful students (Y)	110	180	186
Total no. of students appeared in the examination (Z)	110	180	186
API = x* (Y/Z)	6.85	5.65	6.25
Average API = (AP1 = AP2 + AP3)/3	6.25		

https://jecrcfoundation.com/jf-data/NBA/ME/NBA-4.4-Performance-2-yr-Table-B3.4.pdf

B3.5. Academic Performance in Third Year

API = (Mean of 3rd Year Grade Point Average of all successful Students on a 10 point scale) or(Mean of the percentage of marks of all successful students in Third Year /10) x (number of successful students/number of successful students/number of students appeared in the examination)

Successful students are those who are permitted to proceed to the final year.

Academic Performance	**CAYm1** (2019-20)	**CAYm2** (2018-19)	**CAYm3** (2017-18)
Mean of CGPA or Mean Percentage of all successful students (X)	6.63	6.33	6.38
Total no. of successful students (Y)	180	185	189
Total no. of students appeared in the examination (Z)	180	185	189
API = x* (Y/Z)	6.63	6.33	6.38

Average API = (AP1 = AP2 + AP3)/3	6.45

https://jecrcfoundation.com/jf-data/NBA/ME/NBA-4.3-Performance-3-yr-Table%20B3.5.pdf

B3.6. Placement, Higher Studies and Entrepreneurship

Item	**CAYm1** (2019-20)	**CAYm2** (2018-19)	**CAYm3** (2017-18)
Total No. of Final Year Students (N)	185	189	209
No. of students placed in companies or Government Sector (x)	125	91	93
No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT	0	2	2
No. of students turned entrepreneur in engineering/technology (z)	0	0	2
x+ y + z =	**125**	**93**	**97**
Placement Index : (x + y + z)/N	0.68	0.49	0.46
Average placement = (P1 + P2 + P3)/3	0.54		

PART C. Criterion wise Compliance Status

<table>
<tr><td colspan="4">Criterion-1 Vision, Mission and Programme Educational Objectives</td></tr>
<tr><td><u>S. NO</u></td><td>CRITERIA</td><td><u>OBSERVATION MADE BY NBA</u></td><td><u>COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)</u></td></tr>
<tr><td>1.5</td><td>Establish consistency of PEOs with Mission of the Department</td><td>Justification of mapping is not clear.</td><td>1. Department has prepared PEOs and Mission mapping format and circulated to the Faculty members, industry experts, alumni etc.
2. Analysis of the feedback submitted by the stake holders is carried out and based on below mentioned criteria mapping is finalized.
<table>
<tr><td>Average mapping point(m) given by stakeholders</td><td>Mapping finalization</td><td>Level of Relationship</td></tr>
<tr><td>m< 0.5</td><td>0</td><td>No</td></tr>
<tr><td>0.5≤ m≤1</td><td>1</td><td>Low</td></tr>
<tr><td>1< m ≤2</td><td>2</td><td>Medium</td></tr>
<tr><td>2< m ≤3</td><td>3</td><td>High</td></tr>
</table></td></tr>
</table>

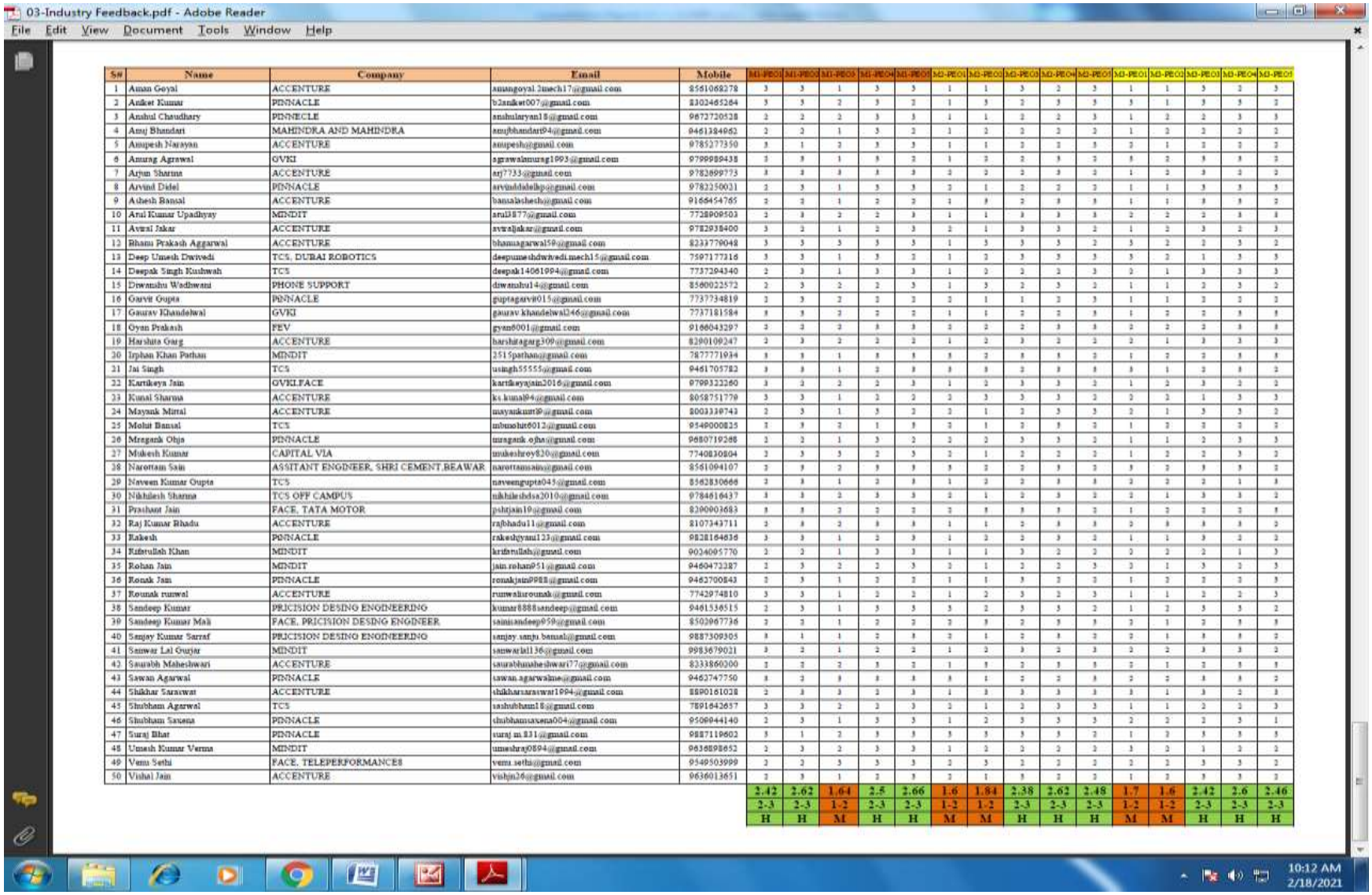
Mission ⇨ / **PEOs** ⇩	To impart quality technical knowledge to the learners to make them globally competitive mechanical engineers.	To provide the learners ethical guidelines along with excellent academic environment for a long productive career.	To promote industry-institute relationship.
1. To provide students with the fundamentals of Engineering Sciences with more emphasis in Mechanical Engineering by way of analyzing and exploiting engineering challenges.	**H**	**M**	**H**
2. To train students with good scientific and engineering knowledge so as to comprehend, analyze, design, and create novel products and solutions for the real life problems in Mechanical Engineering.	**H**	**H**	**H**

3. To inculcate professional and ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, entrepreneurial thinking and an ability to relate Mechanical Engineering issues with social issues.	**M**	**H**	**H**
4. To provide students with an academic environment aware of excellence, leadership, written ethical codes and guidelines, and the self-motivated life-long learning needed for a successful professional career in Mechanical Engineering.	**H**	**H**	**H**
5. To prepare students to excel in Industry and Higher education by Educating Students along with High moral values and knowledge in Mechanical Engineering.	**H**	**H**	**H**

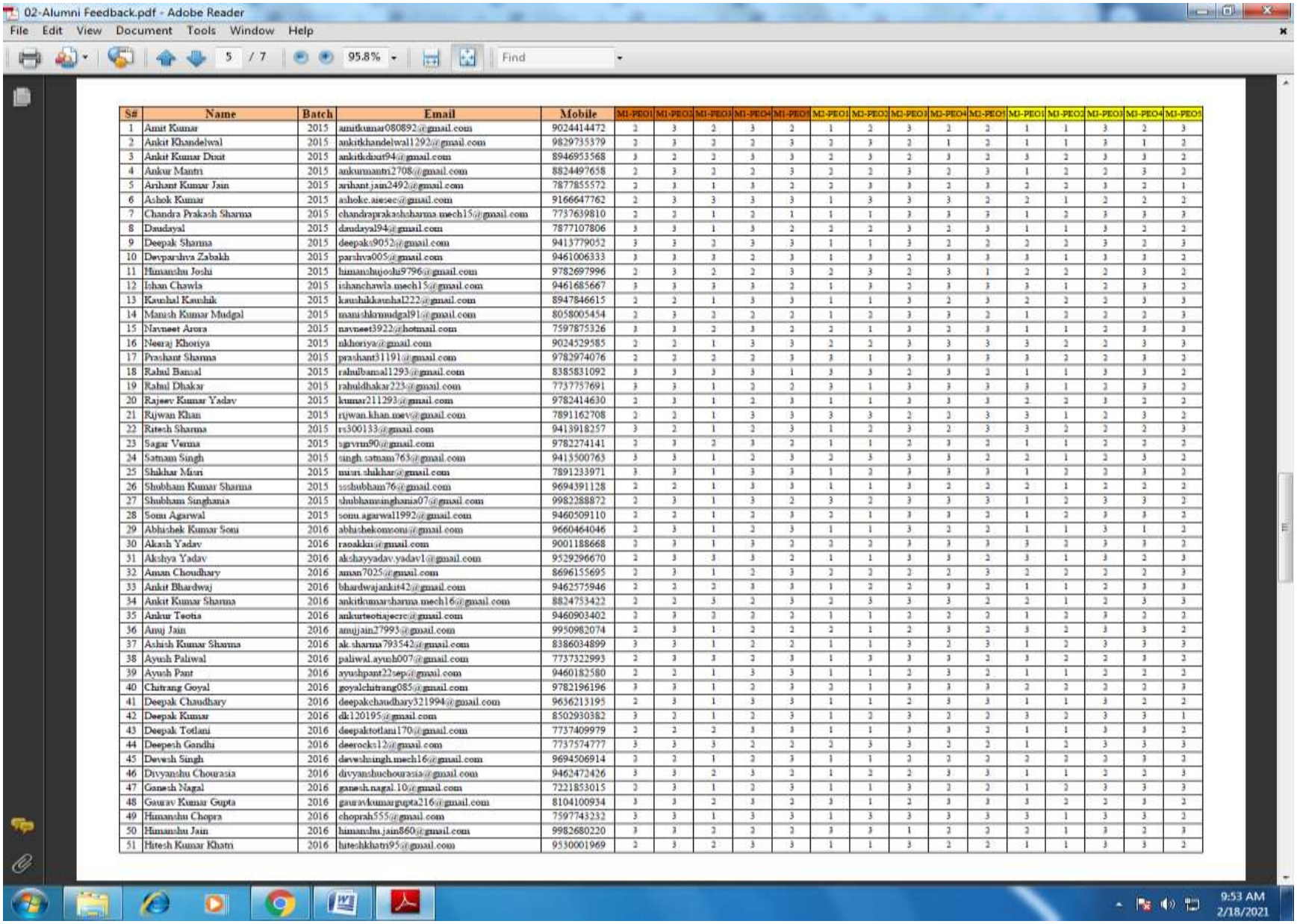
Justifications:

Mission PEOs	**<u>To</u> impart quality technical knowledge to the learners to make them globally competitive mechanical engineers.**	**To provide the learners ethical guidelines along with excellent academic environment for a long productive career.**	**To promote industry-institute relationship.**
1. To provide students with the fundamentals of Engineering Sciences with more emphasis in Mechanical Engineering by way of analyzing and exploiting engineering challenges.	Graduates thorough in fundamentals of engineering sciences, especially sciences related to mechanical engineering, perform well in a competitive world to a large extent and therefore a strong correlation is indicated.	Graduates acquainted with the fundamentals of engineering sciences with special emphasis in mechanical engineering, absorb socio-ethical development to a moderate extent, therefore a moderate correlation is indicated.	Graduates thorough in fundamentals of engineering sciences especially sciences related to mechanical engineering, possess R&D and innovative skills to a high extent, therefore a high correlation is indicated.

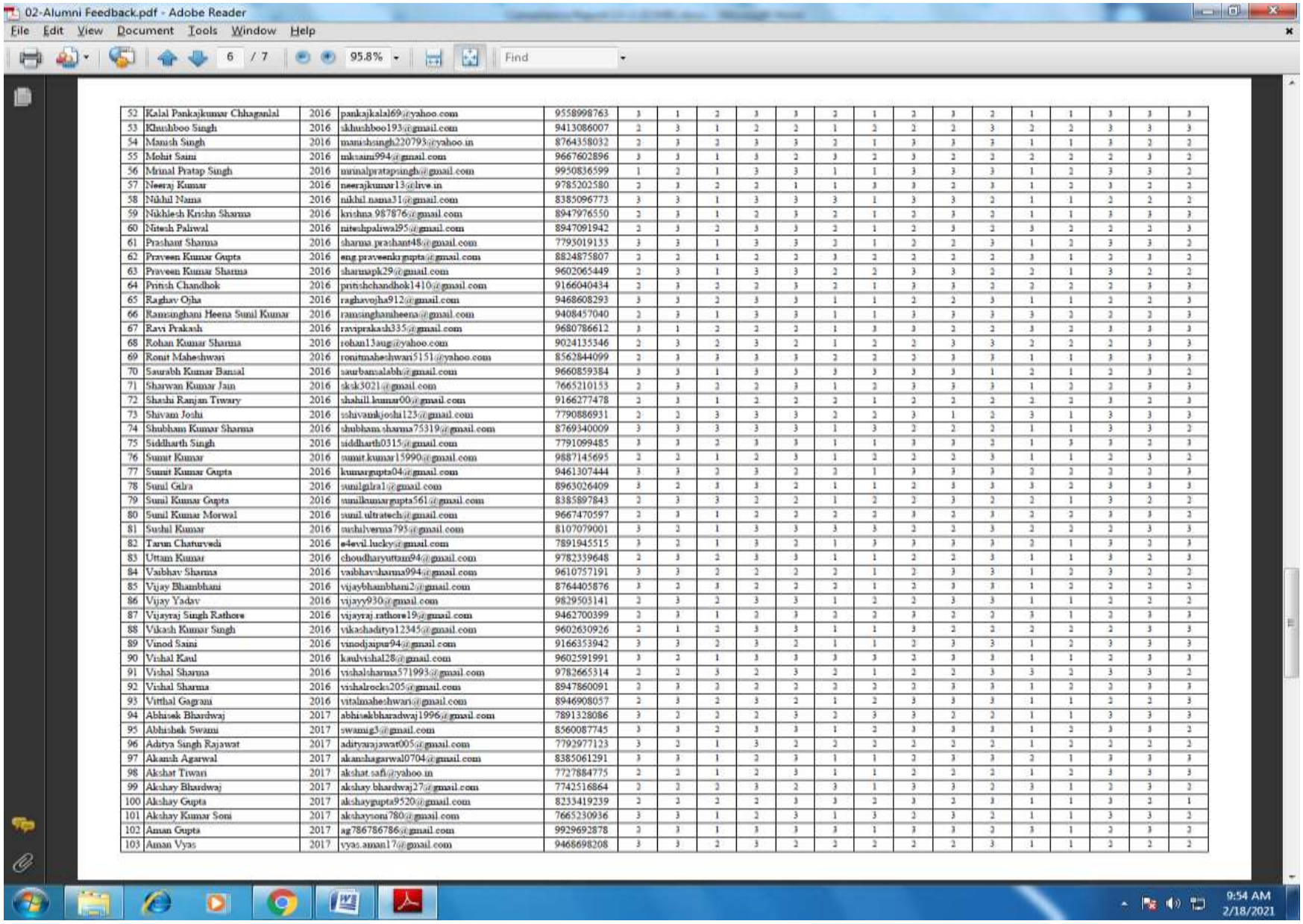
2. To train students with good scientific and engineering knowledge so as to comprehend, analyze, design, and create novel products and solutions for the real life problems.	Graduates thorough in scientific and engineering knowledge are able to analyse real world challenges, thus do well in a competitive world to large extent and therefore have a strong correlation.	Graduates thorough in scientific and engineering knowledge and able to apply it for creating novel products for real world challenges, are capable to appreciate ethical issues to a high extent, therefore a high correlation is indicated.	Graduates thorough in scientific and engineering knowledge and able to apply it to create novel products for real world challenges, possess R&D and innovative skills to a high extent, therefore have a high correlation.
3. To inculcate professional and ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, entrepreneurial thinking and an ability to relate engineering issues with social issues.	Graduates acquainted with professional and ethical attitude, communication skills, perform well in a competitive world to a moderate extent and therefore a moderate correlation is indicated.	Graduates acquainted with professional and ethical attitude, communication skills, absorb socio-ethical development readily to a large extent, therefore a strong correlation has been indicated.	Professional and ethical attitude, communication skills, teamwork skills and entrepreneurial skills enable Graduates to showcase their R&D and innovative skills effectively to industry at large, therefore a strong correlation is indicated.
4. To provide students with an academic environment aware of excellence, leadership, written ethical codes and guidelines, and the self-motivated life-long learning needed for a successful professional career.	Self-motivated Graduates well acquainted with ethical codes and guidelines and zeal to learn, do well in a competitive world to large extent and therefore have a strong correlation.	Self-motivated Graduates well acquainted with ethical codes and guidelines and dedicated to excellence, absorb socio-ethical development readily and strongly, therefore a strong correlation is indicated.	Self-motivated Graduates who are life- long learners and well acquainted with ethical codes and guidelines, are able to showcase R&D and innovative skills to a large extent, therefore have a strong correlation.
5. To prepare students to excel in Industry and Higher education by Educating Students along with High moral values and Knowledge.	Graduates willing to excel in industry and pursue higher education perform well in a competitive world to a large extent and therefore a strong correlation is indicated.	Graduates willing to excel in industry and pursue higher education with High moral values absorb socio-ethical development to a large extent, therefore have a strong correlation.	Graduates willing to excel in industry and to pursue higher education with High moral values possess R&D and innovative skills to large extent, therefore have a strong correlation



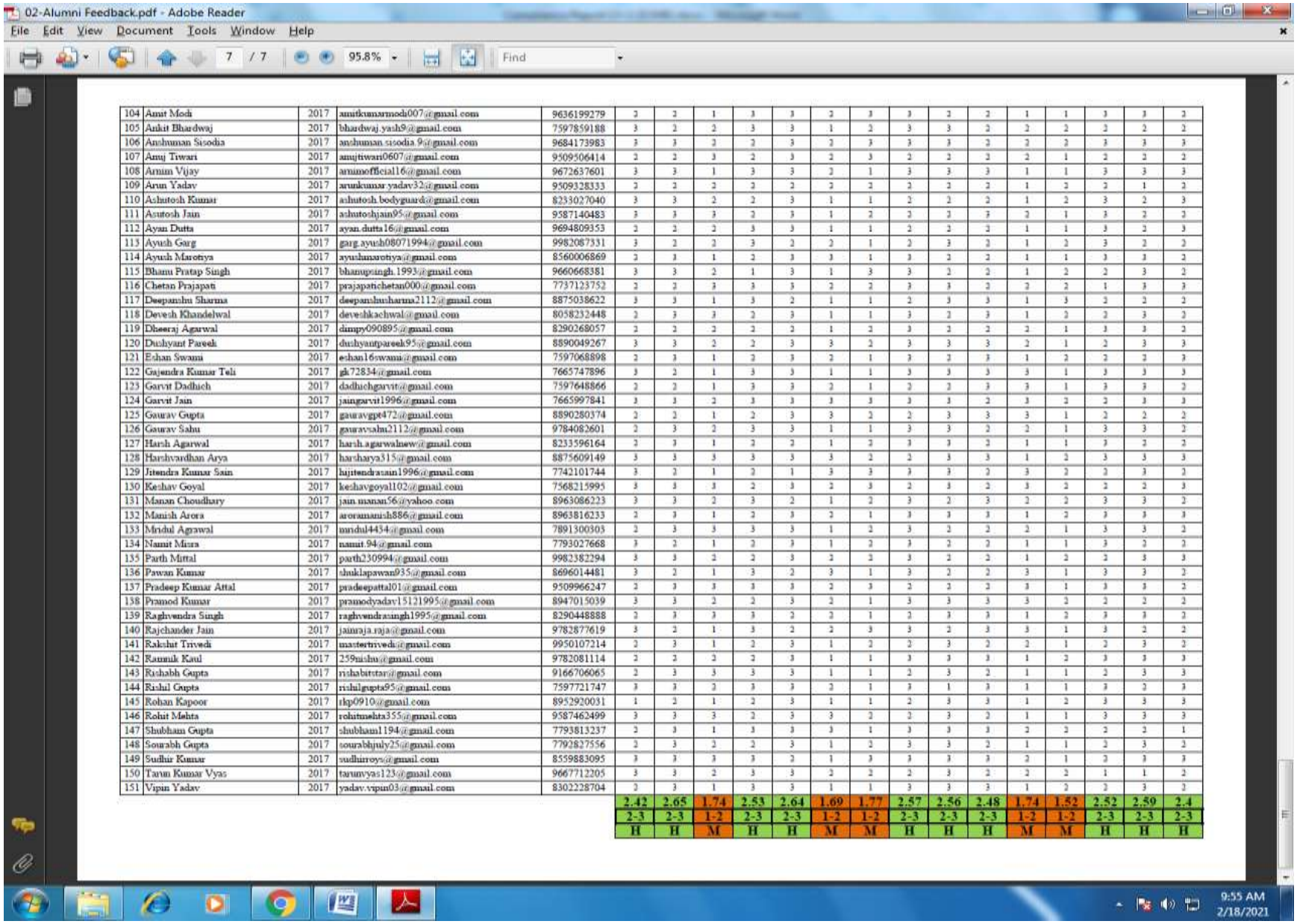
Sr#	Name	Company	Email	Mobile	M1-PEO1	M1-PEO2	M1-PEO3	M1-PEO4	M1-PEO5	M2-PEO1	M2-PEO2	M2-PEO3	M2-PEO4	M2-PEO5	M3-PEO1	M3-PEO2	M3-PEO3	M3-PEO4	M3-PEO5
1	Aman Goyal	ACCENTURE	amangoyal.2mech17@gmail.com	8561068278	3	3	1	3	3	1	1	3	2	3	1	1	3	3	3
2	Aniket Kumar	PINNACLE	b2aniket007@gmail.com	8302465284	3	3	2	3	2	1	3	2	3	3	3	1	3	3	2
3	Anshul Chaudhary	PINNECLE	anshularyan18@gmail.com	9872720528	2	2	2	3	3	1	1	2	2	3	1	2	2	3	3
4	Anuj Bhandari	MAHINDRA AND MAHINDRA	anujbhandari94@gmail.com	9461384962	2	2	1	3	2	1	2	2	2	2	1	2	2	2	2
5	Anupesh Narayan	ACCENTURE	anupesh@gmail.com	9785277350	3	1	2	3	3	1	1	2	2	3	2	1	2	2	2
6	Anurag Agrawal	GVKI	agrawalanurag1993@gmail.com	9799989438	3	3	1	3	2	1	2	2	3	2	3	2	3	3	2
7	Arjun Sharma	ACCENTURE	arj7733@gmail.com	9782899773	3	2	3	3	3	2	2	2	3	2	1	2	3	2	2
8	Arvind Didel	PINNACLE	arvinddidelkp@gmail.com	9782250031	2	3	1	3	3	2	1	2	2	2	1	1	3	3	3
9	Ashesh Bansal	ACCENTURE	bansalashesh@gmail.com	9166454765	2	2	1	2	2	1	3	2	3	3	1	1	3	3	2
10	Atul Kumar Upadhyay	MINDIT	atul3877@gmail.com	7728908503	2	3	2	2	3	1	1	3	3	3	2	2	2	3	3
11	Avtar Jakar	ACCENTURE	avtarjakar@gmail.com	9782938400	3	2	1	2	3	2	1	3	3	2	1	2	3	2	3
12	Bhanu Prakash Aggarwal	ACCENTURE	bhanuagarwal59@gmail.com	8233779048	3	3	3	3	3	1	3	3	3	2	3	2	2	3	2
13	Deep Umesh Dwivedi	TCS, DUBAI ROBOTICS	deepumeshdwivedi.mech15@gmail.com	7597177316	3	3	1	3	2	1	2	3	3	3	3	2	1	3	3
14	Deepak Singh Kushwah	TCS	deepak14061994@gmail.com	7737204340	2	3	1	3	3	1	2	2	2	3	2	1	3	3	3
15	Diwanshu Wadhwani	PHONE SUPPORT	diwanshul4@gmail.com	8560022572	2	3	2	2	3	1	3	2	3	2	1	1	2	3	2
16	Garvit Gupta	PINNACLE	guptagarvit015@gmail.com	7737734819	2	3	2	2	2	2	1	1	2	3	1	1	2	2	2
17	Gaurav Khandelwal	GVKI	gaurav.khandelwal246@gmail.com	7737181584	3	3	2	2	2	1	1	2	2	3	1	2	2	3	3
18	Gyan Prakash	FEV	gyan8001@gmail.com	9166043297	3	3	2	3	3	2	2	2	3	3	2	2	2	3	3
19	Harshita Garg	ACCENTURE	harshitagarg309@gmail.com	8290109247	2	3	2	2	2	1	2	3	2	2	2	1	3	3	3
20	Irphan Khan Pathan	MINDIT	2515pathan@gmail.com	7877771934	3	3	1	3	3	3	2	3	3	3	1	2	2	3	3
21	Jai Singh	TCS	usingh55555@gmail.com	9461705782	3	3	1	2	3	3	3	2	3	3	3	1	2	3	2
22	Kartikeya Jain	GVKI,FACE	kartikeyajain2016@gmail.com	9799322260	3	2	2	2	3	1	2	3	3	2	1	2	3	2	2
23	Kunal Sharma	ACCENTURE	ks.kunal94@gmail.com	8058751779	3	3	1	2	2	2	3	3	3	2	2	2	1	3	3
24	Mayank Mittal	ACCENTURE	mayankmit@gmail.com	8003339743	2	3	1	3	2	2	1	2	3	3	2	1	3	3	2
25	Mohit Bansal	TCS	mbmohit6012@gmail.com	9549000825	2	3	2	1	3	2	1	2	3	2	1	2	2	2	2
26	Mrigank Ojha	PINNACLE	mrigank.ojha@gmail.com	9680719288	2	2	1	3	2	2	2	3	3	2	1	1	2	3	3
27	Mukesh Kumar	CAPITAL VIA	mukeshroy820@gmail.com	7740830804	2	3	3	2	3	2	1	2	2	2	1	2	2	3	2
28	Narottam Sain	ASSITANT ENGINEER, SHRI CEMENT,BEAWAR	narottamsain@gmail.com	8561094107	2	3	2	3	3	3	2	2	3	2	3	2	3	3	2
29	Naveen Kumar Gupta	TCS	naveengupta045@gmail.com	8562830668	2	3	1	2	3	1	2	2	3	3	2	2	2	1	3
30	Nikhilesh Sharma	TCS OFF CAMPUS	nikhileshdsa2010@gmail.com	9784616437	3	3	2	3	3	2	1	2	3	2	2	1	3	3	2
31	Prashant Jain	FACE, TATA MOTOR	pshtjain19@gmail.com	8290003683	3	3	2	2	2	2	3	3	3	2	1	2	2	2	3
32	Raj Kumar Bhadu	ACCENTURE	rajbhadu11@gmail.com	8107343711	2	3	2	3	3	1	1	2	3	3	2	3	3	3	2
33	Rakesh	PINNACLE	rakeshgyan123@gmail.com	9828164836	3	3	1	2	3	1	2	2	3	2	1	1	3	2	2
34	Rifatullah Khan	MINDIT	krifatullah@gmail.com	9024095770	2	2	1	3	3	1	1	3	2	2	2	2	2	1	3
35	Rohan Jain	MINDIT	jain.rohan951@gmail.com	9460472387	2	3	2	2	3	2	1	2	2	3	2	1	3	2	3
36	Ronak Jain	PINNACLE	ronakjain9988@gmail.com	9462700843	2	3	1	2	2	1	1	3	2	2	1	2	2	2	3
37	Rounak runwal	ACCENTURE	runwalirounak@gmail.com	7742974810	3	3	1	2	2	1	2	3	2	3	1	1	2	2	3
38	Sandeep Kumar	PRICISION DESING ENGINEERING	kumar8888sandeep@gmail.com	9461536515	2	3	1	3	3	3	2	3	3	2	1	2	3	3	2
39	Sandeep Kumar Mali	FACE, PRICISION DESING ENGINEER	sainisandeep959@gmail.com	8503967736	2	2	1	2	2	2	3	2	3	3	2	1	2	3	3
40	Sanjay Kumar Sarraf	PRICISION DESING ENGINEERING	sanjay.sanju.bansal@gmail.com	9887309305	3	1	1	2	3	2	1	2	3	2	2	1	3	3	2
41	Sanwar Lal Gurjar	MINDIT	sanwarlal136@gmail.com	9983679021	3	2	1	2	2	1	2	3	2	3	2	2	3	3	2
42	Saurabh Maheshwari	ACCENTURE	saurabhmaheshwari77@gmail.com	8233860200	2	2	2	3	2	1	3	2	3	3	2	1	2	3	2
43	Sawan Agarwal	PINNACLE	sawan.agarwalme@gmail.com	9462747750	3	2	3	3	3	3	1	2	2	3	2	2	3	3	2
44	Shikhar Saraswat	ACCENTURE	shikharsaraswat1994@gmail.com	8890161028	2	3	3	2	3	1	3	3	3	3	3	1	3	2	3
45	Shubham Agarwal	TCS	ashubham18@gmail.com	7891842657	3	3	2	2	3	2	1	2	3	3	1	1	2	2	3
46	Shubham Saxena	PINNACLE	shubhamsaxena004@gmail.com	9509944140	2	3	1	3	3	1	2	3	3	3	2	2	2	3	1
47	Suraj Bhat	PINNACLE	suraj.m.831@gmail.com	9887119602	3	1	2	3	3	3	3	3	3	2	1	2	3	3	3
48	Umesh Kumar Verma	MINDIT	umeshraj0894@gmail.com	9636898652	2	3	2	3	3	1	2	2	2	2	3	2	1	2	2
49	Vemi Sethi	FACE, TELEPERFORMANCE8	vemi.sethi@gmail.com	9549503999	2	2	3	3	3	2	2	2	2	2	2	2	3	3	2
50	Vishal Jain	ACCENTURE	vishju26@gmail.com	9636013651	2	3	1	2	3	2	1	3	2	2	1	2	3	3	2
					2.42	2.62	1.64	2.5	2.66	1.6	1.84	2.38	2.62	2.48	1.7	1.6	2.42	2.6	2.46
					2-3	2-3	1-2	2-3	2-3	1-2	1-2	2-3	2-3	2-3	1-2	1-2	2-3	2-3	2-3
					H	H	M	H	H	M	M	H	H	H	M	M	H	H	H



S#	Name	Batch	Email	Mobile	M1-PEO1	M1-PEO2	M1-PEO3	M1-PEO4	M1-PEO5	M2-PEO1	M2-PEO2	M2-PEO3	M2-PEO4	M2-PEO5	M3-PEO1	M3-PEO2	M3-PEO3	M3-PEO4	M3-PEO5
1	Amit Kumar	2015	amitkumar080892@gmail.com	9024414472	2	3	2	3	2	1	2	3	2	2	1	1	3	2	3
2	Ankit Khandelwal	2015	ankitkhandelwal1292@gmail.com	9829735379	2	3	2	2	3	2	3	2	1	2	1	1	3	1	2
3	Ankit Kumar Dixit	2015	ankitkdixit94@gmail.com	8946953568	3	2	2	3	3	2	3	2	3	2	3	2	3	3	2
4	Ankur Mantri	2015	ankurmantri2708@gmail.com	8824497658	2	3	2	2	3	2	2	3	2	3	1	2	2	3	2
5	Arihant Kumar Jain	2015	arihant.jain2492@gmail.com	7877855572	2	3	1	3	2	2	3	3	2	3	2	2	3	2	1
6	Ashok Kumar	2015	ashokc.aiesec@gmail.com	9166647762	2	3	3	3	3	1	3	3	3	2	2	1	2	2	2
7	Chandra Prakash Sharma	2015	chandraprakashsharma.mech15@gmail.com	7737639810	2	2	1	2	1	1	1	3	3	3	1	2	3	3	3
8	Daudayal	2015	daudayal94@gmail.com	7877107806	3	3	1	3	2	2	2	3	2	3	1	1	3	2	2
9	Deepak Sharma	2015	deepaks9052@gmail.com	9413779052	3	3	2	3	3	1	1	3	2	2	2	2	3	2	3
10	Devparshva Zabakh	2015	parshva005@gmail.com	9461006333	3	3	3	2	3	1	3	2	3	3	3	1	3	3	2
11	Himanshu Joshi	2015	himanshujoshi9796@gmail.com	9782697996	2	3	2	2	3	2	3	2	3	1	2	2	2	3	2
12	Ishan Chawla	2015	ishanchawla.mech15@gmail.com	9461685667	3	3	3	3	2	1	3	2	3	3	3	1	2	3	2
13	Kaushal Kaushik	2015	kaushikkaushal222@gmail.com	8947846615	2	2	1	3	3	1	1	3	2	3	2	2	2	3	3
14	Manish Kumar Mudgal	2015	manishkrmudgal91@gmail.com	8058005454	2	3	2	2	2	1	2	3	3	2	1	2	2	2	3
15	Navneet Arora	2015	navneet3922@hotmail.com	7597875326	3	3	2	3	2	2	1	3	2	3	1	1	2	3	3
16	Neeraj Khoriya	2015	nkhoriya@gmail.com	9024529585	2	2	1	3	3	2	2	3	3	3	3	2	2	3	3
17	Prashant Sharma	2015	prashant31191@gmail.com	9782974076	2	2	2	2	3	3	1	3	3	3	3	2	2	3	2
18	Rahul Bansal	2015	rahulbansal1293@gmail.com	8385831092	3	3	3	3	1	3	3	2	3	2	1	1	3	3	2
19	Rahul Dhakar	2015	rahuldhakar223@gmail.com	7737757691	3	3	1	2	2	3	1	3	3	3	3	1	2	3	2
20	Rajeev Kumar Yadav	2015	kumar211293@gmail.com	9782414630	2	3	1	2	3	1	1	3	3	3	2	2	3	2	2
21	Rijwan Khan	2015	rijwan.khan.mev@gmail.com	7891162708	2	2	1	3	3	3	3	2	2	3	3	1	2	3	2
22	Ritesh Sharma	2015	rs300133@gmail.com	9413918257	3	2	1	2	3	1	2	3	2	3	3	2	2	2	3
23	Sagar Verma	2015	sgvrm90@gmail.com	9782274141	2	3	2	3	2	1	1	2	3	2	1	1	2	2	2
24	Satnam Singh	2015	singh.satnam763@gmail.com	9413500763	3	3	1	2	3	2	3	3	3	2	2	1	2	3	2
25	Shikhar Misri	2015	misri.shikhar@gmail.com	7891233971	3	3	1	3	3	1	2	3	3	3	1	2	2	3	2
26	Shubham Kumar Sharma	2015	ssshubham76@gmail.com	9694391128	2	2	1	3	3	1	1	3	2	2	2	1	2	2	2
27	Shubham Singhania	2015	shubhamsinghania07@gmail.com	9982288872	2	3	1	3	2	3	2	3	3	3	1	2	3	3	2
28	Somu Agarwal	2015	somu.agarwal1992@gmail.com	9460509110	2	2	1	2	3	2	1	3	3	3	1	2	3	3	2
29	Abhishek Kumar Soni	2016	abhishekomsoni@gmail.com	9660464046	2	3	1	2	3	1	1	3	2	2	1	1	3	1	2
30	Akash Yadav	2016	raoakku@gmail.com	9001188668	2	3	1	3	2	2	2	3	3	3	3	2	3	3	2
31	Akshya Yadav	2016	akshayyadav.yadav1@gmail.com	9529296670	2	3	3	3	2	1	1	3	3	2	3	1	3	2	3
32	Aman Choudhary	2016	aman7025@gmail.com	8696155695	2	3	1	2	3	2	2	2	2	3	2	2	2	2	3
33	Ankit Bhardwaj	2016	bhardwajankit42@gmail.com	9462575946	2	2	2	3	3	1	2	2	3	2	1	1	2	3	3
34	Ankit Kumar Sharma	2016	ankitkumarsharma.mech16@gmail.com	8824753422	2	2	3	2	3	2	3	3	3	2	2	1	2	3	3
35	Ankur Teotia	2016	ankurteotiaiecrc@gmail.com	9460903402	2	3	2	2	2	1	1	2	2	2	1	2	3	2	2
36	Anuj Jain	2016	anujjain27993@gmail.com	9950982074	2	3	1	2	2	2	1	2	3	2	3	2	3	3	2
37	Ashish Kumar Sharma	2016	ak.sharma793542@gmail.com	8386034899	3	3	1	2	2	1	1	3	2	3	1	2	3	3	3
38	Ayush Paliwal	2016	paliwal.ayush007@gmail.com	7737322993	2	3	3	2	3	1	3	3	3	2	3	2	2	3	2
39	Ayush Pant	2016	ayushpant22sep@gmail.com	9460182580	2	2	1	3	3	1	1	2	3	2	1	1	2	2	2
40	Chitrang Goyal	2016	goyalchitrang085@gmail.com	9782196196	3	3	1	2	3	2	1	3	3	3	2	2	2	2	3
41	Deepak Chaudhary	2016	deepakchaudhary321994@gmail.com	9636213195	2	3	1	3	3	1	1	2	3	3	1	1	3	2	2
42	Deepak Kumar	2016	dk120195@gmail.com	8502930382	3	2	1	2	3	1	2	3	2	2	3	2	3	3	1
43	Deepak Totlani	2016	deepaktotlani170@gmail.com	7737409979	2	2	2	3	3	1	1	3	3	2	1	1	3	3	2
44	Deepesh Gandhi	2016	deerocks12@gmail.com	7737574777	3	3	3	2	2	2	3	3	2	2	1	2	3	3	3
45	Devesh Singh	2016	deveshsingh.mech16@gmail.com	9694506914	2	2	1	2	3	1	1	2	2	2	2	2	2	3	2
46	Divyanshu Chourasia	2016	divyanshuchourasia@gmail.com	9462472426	3	3	2	3	2	1	2	2	3	3	1	1	2	2	3
47	Ganesh Nagal	2016	ganesh.nagal.10@gmail.com	7221853015	2	3	1	2	3	1	1	3	2	2	1	2	3	3	3
48	Gaurav Kumar Gupta	2016	gauravkumargupta216@gmail.com	8104100934	3	3	2	3	2	3	1	2	3	3	3	2	2	3	2
49	Himanshu Chopra	2016	choprah555@gmail.com	7597743232	3	3	1	3	3	1	3	3	3	3	3	1	3	3	2
50	Himanshu Jain	2016	himanshu.jain860@gmail.com	9982680220	3	3	2	2	2	3	3	1	2	2	2	1	3	2	3
51	Hitesh Kumar Khatri	2016	hiteshkhatri95@gmail.com	9530001969	2	3	2	3	3	1	1	3	2	2	1	1	3	3	2



52	Kalal Pankajkumar Chhaganlal	2016	pankajkalal69@yahoo.com	9558998763	3	1	2	3	3	2	1	2	3	2	1	1	3	3	3
53	Khushboo Singh	2016	skhushboo193@gmail.com	9413086007	2	3	1	2	2	1	2	2	2	3	2	2	3	3	3
54	Manish Singh	2016	manishsingh220793@yahoo.in	8764358032	2	3	2	3	3	2	1	3	3	3	1	1	3	2	2
55	Mohit Saini	2016	mksaini994@gmail.com	9667602896	3	3	1	3	2	3	2	3	2	2	2	2	2	3	2
56	Mrinal Pratap Singh	2016	mrinalpratapsingh@gmail.com	9950836599	1	2	1	3	3	1	1	3	3	3	1	2	3	3	2
57	Neeraj Kumar	2016	neerajkumar13@live.in	9785202580	2	3	2	2	1	1	3	3	2	3	1	2	3	2	2
58	Nikhil Nama	2016	nikhil.nama31@gmail.com	8385096773	3	3	1	3	3	3	1	3	3	2	1	1	2	2	2
59	Nikhlesh Krishn Sharma	2016	krishna.987876@gmail.com	8947976550	2	3	1	2	3	2	1	2	3	2	1	1	3	3	3
60	Nitesh Paliwal	2016	niteshpaliwal95@gmail.com	8947091942	2	3	2	3	3	2	1	2	3	2	3	2	2	2	3
61	Prashant Sharma	2016	sharma.prashant48@gmail.com	7793019133	3	3	1	3	3	2	1	2	2	3	1	2	3	3	2
62	Praveen Kumar Gupta	2016	eng.praveenkrgupta@gmail.com	8824875807	2	2	1	2	2	3	2	2	2	2	3	1	2	3	2
63	Praveen Kumar Sharma	2016	sharmapk29@gmail.com	9602065449	2	3	1	3	3	2	2	3	3	2	2	1	3	2	2
64	Pritish Chandhok	2016	pritishchandhok1410@gmail.com	9166040434	2	3	2	2	3	2	1	3	3	2	2	2	2	3	3
65	Raghav Ojha	2016	raghavojha912@gmail.com	9468608293	3	3	2	3	3	1	1	2	2	3	1	1	2	2	3
66	Ramsinghani Heena Sunil Kumar	2016	ramsinghaniheena@gmail.com	9408457040	2	3	1	3	3	1	1	3	3	3	3	2	2	2	3
67	Ravi Prakash	2016	raviprakash335@gmail.com	9680786612	3	1	2	2	2	1	3	3	2	2	3	2	3	3	3
68	Rohan Kumar Sharma	2016	rohan13aug@yahoo.com	9024135346	2	3	2	3	2	1	2	2	3	3	2	2	2	3	3
69	Ronit Maheshwari	2016	ronitmaheshwari5151@yahoo.com	8562844099	2	3	3	3	3	2	2	2	3	3	1	1	3	3	3
70	Saurabh Kumar Bansal	2016	saurbansalabh@gmail.com	9660859384	3	3	1	3	3	3	3	3	3	1	2	1	2	3	2
71	Sharwan Kumar Jain	2016	sksk3021@gmail.com	7665210153	2	3	2	2	3	1	2	3	3	3	1	2	2	3	3
72	Shashi Ranjan Tiwary	2016	shahill.kumar00@gmail.com	9166277478	2	3	1	2	2	2	1	2	2	2	2	2	3	2	3
73	Shivam Joshi	2016	shivamkjoshi123@gmail.com	7790886931	2	2	3	3	3	2	2	3	1	2	3	1	3	3	3
74	Shubham Kumar Sharma	2016	shubham.sharma75319@gmail.com	8769340009	3	3	3	3	3	1	3	2	2	2	1	1	3	3	2
75	Siddharth Singh	2016	siddharth0315@gmail.com	7791099485	3	3	2	3	3	1	1	3	3	2	1	3	3	2	3
76	Sumit Kumar	2016	sumit.kumar15990@gmail.com	9887145695	2	2	1	2	3	1	2	2	2	3	1	1	2	3	2
77	Sumit Kumar Gupta	2016	kumargupta04@gmail.com	9461307444	3	3	2	3	2	2	1	3	3	3	2	2	2	2	3
78	Sunil Gehra	2016	sunilgehra1@gmail.com	8963026409	3	2	3	3	2	1	1	2	3	3	3	2	3	3	3
79	Sunil Kumar Gupta	2016	sunilkumargupta561@gmail.com	8385897843	2	3	3	2	2	1	2	2	3	2	2	1	3	2	2
80	Sunil Kumar Morwal	2016	sunil.ultratech@gmail.com	9667470597	2	3	1	2	2	2	2	3	2	3	2	2	3	3	2
81	Sushil Kumar	2016	sushilverma795@gmail.com	8107079001	3	2	1	3	3	3	3	2	2	3	2	2	2	3	3
82	Tarun Chaturvedi	2016	e4evil.lucky@gmail.com	7891945515	3	2	1	3	2	1	3	3	3	3	2	1	3	2	3
83	Uttam Kumar	2016	choudharyuttam94@gmail.com	9782339648	2	3	2	3	3	1	1	2	2	3	1	1	3	2	3
84	Vaibhav Sharma	2016	vaibhavsharma994@gmail.com	9610757191	3	3	2	2	2	2	1	2	3	3	1	2	3	2	2
85	Vijay Bhambhani	2016	vijaybhambhani2@gmail.com	8764405876	3	2	3	2	2	2	1	2	3	3	1	2	2	2	2
86	Vijay Yadav	2016	vijayy930@gmail.com	9829503141	2	3	2	3	3	1	2	2	3	3	1	1	2	2	2
87	Vijayraj Singh Rathore	2016	vijayraj.rathore19@gmail.com	9462700399	2	3	1	2	3	2	2	3	2	2	3	1	2	3	3
88	Vikash Kumar Singh	2016	vikashaditya12345@gmail.com	9602630926	2	1	2	3	3	1	1	3	2	2	2	2	2	3	3
89	Vinod Saini	2016	vinodjaipur94@gmail.com	9166353942	3	3	2	3	2	1	1	2	3	3	1	2	3	3	3
90	Vishal Kaul	2016	kaulvishal28@gmail.com	9602591991	3	2	1	3	3	3	3	2	3	3	1	1	2	3	3
91	Vishal Sharma	2016	vishalsharma571993@gmail.com	9782665314	2	2	3	2	3	2	1	2	2	3	3	2	3	3	2
92	Vishal Sharma	2016	vishalrocks205@gmail.com	8947860091	2	3	3	2	2	2	2	2	3	3	1	2	2	3	3
93	Vitthal Gagrani	2016	vitalmaheshwari@gmail.com	8946908057	2	3	2	3	2	1	2	3	3	3	1	1	2	2	3
94	Abhisek Bhardwaj	2017	abhisekbharadwaj1996@gmail.com	7891328086	3	2	2	2	3	2	3	3	2	2	1	1	3	3	3
95	Abhishek Swami	2017	swamig3@gmail.com	8560087745	3	3	2	3	3	1	2	3	3	3	1	2	3	3	2
96	Aditya Singh Rajawat	2017	adityarajawat005@gmail.com	7792977123	3	2	1	3	2	2	2	2	2	2	1	2	2	2	2
97	Akansh Agarwal	2017	akanshagarwal0704@gmail.com	8385061291	3	3	1	2	3	1	1	2	3	3	2	1	3	3	3
98	Akshat Tiwari	2017	akshat.safi@yahoo.in	7727884775	2	2	1	2	3	1	1	2	2	2	1	2	3	3	3
99	Akshay Bhardwaj	2017	akshay.bhardwaj27@gmail.com	7742516864	2	2	2	3	2	3	1	3	3	2	3	1	2	3	2
100	Akshay Gupta	2017	akshaygupta9520@gmail.com	8233419239	2	2	2	2	3	3	2	3	2	3	1	1	3	2	1
101	Akshay Kumar Soni	2017	akshaysoni780@gmail.com	7665230936	3	3	1	2	3	1	3	2	3	2	1	1	3	3	2
102	Aman Gupta	2017	ag786786786@gmail.com	9929692878	2	3	1	3	3	3	1	3	3	2	3	1	2	3	2
103	Aman Vyas	2017	vyas.aman17@gmail.com	9468698208	3	3	2	3	2	2	2	2	2	3	1	1	2	2	2



104	Amit Modi	2017	amitkumarmodi007@gmail.com	9636199279	2	2	1	3	3	2	3	3	2	2	1	1	3	3	2
105	Ankit Bhardwaj	2017	bhardwaj.yash9@gmail.com	7597859188	3	2	2	3	3	1	2	3	3	3	2	2	2	2	2
106	Anshuman Sisodia	2017	anshuman.sisodia.9@gmail.com	9684173983	3	3	2	2	3	2	3	3	3	2	2	2	3	3	3
107	Anuj Tiwari	2017	anujtiwari0607@gmail.com	9509506414	2	2	3	2	3	2	3	2	2	3	2	1	2	2	2
108	Armim Vijay	2017	arnimofficial16@gmail.com	9672637601	3	3	1	3	3	2	1	3	3	3	1	1	3	3	3
109	Arun Yadav	2017	arunkumar.yadav32@gmail.com	9509328333	2	2	2	2	2	2	2	2	2	2	1	2	2	1	2
110	Ashutosh Kumar	2017	ashutosh.bodyguard@gmail.com	8233027040	3	3	2	2	3	1	1	2	2	2	1	2	3	2	3
111	Asutosh Jain	2017	ashutoshjain95@gmail.com	9587140483	3	3	3	2	3	1	2	2	2	3	2	1	3	2	2
112	Ayan Dutta	2017	ayan.dutta16@gmail.com	9694809353	2	2	2	3	3	1	1	2	2	2	1	1	3	2	3
113	Ayush Garg	2017	garg.ayush08071994@gmail.com	9982087331	3	2	2	3	2	2	1	2	3	3	1	2	3	2	2
114	Ayush Marotiya	2017	ayushmarotiya@gmail.com	8560006869	2	3	1	2	3	3	1	3	2	2	1	1	3	3	2
115	Bhanu Pratap Singh	2017	bhanupsingh.1993@gmail.com	9660668381	3	3	2	1	3	1	3	3	2	2	1	2	2	3	2
116	Chetan Prajapati	2017	prajapatichetan000@gmail.com	7737123752	2	2	3	3	3	2	2	3	3	2	2	2	1	3	3
117	Deepanshu Sharma	2017	deepanshusharma2112@gmail.com	8875038622	3	3	1	3	2	1	1	2	3	3	1	3	2	2	2
118	Devesh Khandelwal	2017	deveshkachwal@gmail.com	8058232448	2	3	3	2	3	1	1	3	2	3	1	2	3	3	2
119	Dheeraj Agarwal	2017	dimpy090895@gmail.com	8290268057	2	2	2	2	2	1	2	3	2	2	2	1	3	3	2
120	Dushyant Pareek	2017	dushyantpareek95@gmail.com	8890049267	3	3	2	2	3	3	2	3	3	3	2	1	2	3	3
121	Eshan Swami	2017	eshan16swami@gmail.com	7597068898	2	3	1	2	3	2	1	3	2	3	1	2	2	2	3
122	Gajendra Kumar Teli	2017	gk72834@gmail.com	7665747896	3	2	1	3	3	1	1	3	3	3	3	1	3	3	3
123	Garvit Dadhich	2017	dadhichgarvit@gmail.com	7597648866	2	2	1	3	3	2	1	2	2	3	3	1	3	3	2
124	Garvit Jain	2017	jaingarvit1996@gmail.com	7665997841	3	3	2	3	3	3	3	3	3	2	3	2	2	3	3
125	Gaurav Gupta	2017	gauravgpt472@gmail.com	8890280374	2	2	1	2	3	3	2	2	3	3	3	1	2	2	2
126	Gaurav Sahu	2017	gauravsahu2112@gmail.com	9784082601	2	3	2	3	3	1	1	3	3	2	2	1	3	3	2
127	Harsh Agarwal	2017	harsh.agarwalnew@gmail.com	8233596164	2	3	1	2	2	1	2	3	3	2	1	1	3	2	2
128	Harshvardhan Arya	2017	harsharya315@gmail.com	8875609149	3	3	3	3	3	3	2	2	3	3	1	2	3	3	3
129	Jitendra Kumar Sain	2017	lujitendrasain1996@gmail.com	7742101744	3	2	1	2	1	3	3	3	3	2	3	2	2	3	2
130	Keshav Goyal	2017	keshavgoyal102@gmail.com	7568215995	3	3	3	2	3	2	3	2	3	2	3	2	2	2	3
131	Manan Choudhary	2017	jain.manan56@yahoo.com	8963086223	3	3	2	3	2	1	2	3	2	3	2	2	3	3	2
132	Manish Arora	2017	aroramanish886@gmail.com	8963816233	2	3	1	2	3	2	1	3	3	3	1	2	3	3	3
133	Mridul Agrawal	2017	mridul4434@gmail.com	7891300303	2	3	3	3	3	1	2	3	2	2	2	1	3	3	2
134	Namit Misra	2017	namit.94@gmail.com	7793027668	3	2	1	2	3	1	2	3	2	2	1	1	3	2	2
135	Parth Mittal	2017	parth230994@gmail.com	9982382294	3	3	2	2	3	2	2	3	2	2	1	2	2	3	3
136	Pawan Kumar	2017	shuklapawan935@gmail.com	8696014481	3	2	1	3	2	3	1	3	2	2	3	1	3	3	2
137	Pradeep Kumar Attal	2017	pradeepattal01@gmail.com	9509966247	2	3	3	3	3	2	3	2	2	2	3	1	3	3	2
138	Pramod Kumar	2017	pramodyadav15121995@gmail.com	8947015039	3	3	2	2	3	2	1	3	3	3	3	2	2	2	2
139	Raghvendra Singh	2017	raghvendrasingh1995@gmail.com	8290448888	2	3	3	3	2	2	1	2	3	3	1	2	3	3	2
140	Rajchander Jain	2017	jainraja.raja@gmail.com	9782877619	3	2	1	3	2	2	3	3	2	3	3	1	3	2	2
141	Rakshat Trivedi	2017	mastertrivedi@gmail.com	9950107214	2	3	1	2	3	1	2	2	3	2	2	1	2	3	2
142	Ramnik Kaul	2017	259rishu@gmail.com	9782081114	2	2	2	2	3	1	1	3	3	3	1	2	3	3	3
143	Rishabh Gupta	2017	rishabhtstar@gmail.com	9166706065	2	3	3	3	3	1	1	2	3	2	1	1	2	3	3
144	Rishul Gupta	2017	rishulgupta95@gmail.com	7597721747	3	3	2	3	3	2	1	3	1	3	1	1	3	2	3
145	Rohan Kapoor	2017	rkp0910@gmail.com	8952920031	1	2	1	2	3	1	1	2	3	3	1	2	3	3	3
146	Rohit Mehta	2017	rohitmehta355@gmail.com	9587462499	3	3	3	2	3	3	2	2	3	2	1	1	3	3	3
147	Shubham Gupta	2017	shubham1194@gmail.com	7793813237	2	3	1	3	3	1	3	3	3	3	2	2	2	2	1
148	Sourabh Gupta	2017	sourabhjuly25@gmail.com	7792827556	2	3	2	2	3	1	2	3	3	2	1	1	2	3	2
149	Sudhir Kumar	2017	sudhirroys@gmail.com	8559883095	3	3	3	3	2	1	3	3	3	3	2	1	2	3	3
150	Tarun Kumar Vyas	2017	tarunvyas123@gmail.com	9667712205	3	3	2	3	3	2	2	2	3	2	2	2	1	1	2
151	Vipin Yadav	2017	yadav.vipin03@gmail.com	8302228704	2	3	1	3	3	1	1	3	3	3	1	2	2	3	2
					2.42	2.65	1.74	2.53	2.64	1.69	1.77	2.57	2.56	2.48	1.74	1.52	2.52	2.59	2.4
					2-3	2-3	1-2	2-3	2-3	1-2	1-2	2-3	2-3	2-3	1-2	1-2	2-3	2-3	2-3
					H	H	M	H	H	M	M	H	H	H	M	M	H	H	H

Criterion-2 Program Curriculum and Teaching- Learning Process			
S. NO	**CRITERIA**	**OBSERVATION MADE BY NBA**	**COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)**
2.1.1	**2.1.1 State the process to identify extent of compliance of the University Curriculum for attaining the Program Outcomes & Program Specific Outcomes (PSOs), mention the identified curricular gaps, if any**	Gaps are not identified systematically and relevant& contemporary industry topics are not covered.	Gaps are identified systematically. Department regularly collects the feedback from industry experts, employers, placement cell, alumni etc. Collected feedbacks have been analyzed and discussed. In discussion, department has identified contemporary industry topics that may be included in syllabus and communicated to affiliated University(RTU) for necessary action. Based on gaps identified the department has included various topics to deliver to the students through various means and modes. Feedback from the students is also taken for relevant topics and its relevance is also analyzed.

S. No.	Gaps in Curriculum	Mapping with subjects
1	Advanced designing software in Mechanical Engineering (Such as creo, solids works etc.)	Computer Integrated Manufacturing / CAD/CAM/Design of machine element/ FEM/ Mechatronics/ Machining & Machine Tools
2	Electric and hybrid vehicles technologies	Automobile Engg./IC Engine/ Manufacturing technology/ Refrigeration and Air Conditioning
3	Modern industrial production technologies	Manufacturing technology/ Computer Integrated Manufacturing /Computer Aided Design/Product design and development/ Micro and Nano Manufacturing
4	Design consideration and safety of machine elements	Computer Integrated Manufacturing / CAD/CAM/Design of machine element/ FEM/ Mechatronics/ Machining & Machine Tools
5	Use of IoT technology for computer-integrated manufacturing systems in industry	Manufacturing technology/ Computer Integrated Manufacturing /Computer Aided Design/Product design and development/ Micro and Nano Manufacturing Micro and Nano Manufacturing, Product Development and Launching/Quality management

JECRC

Jaipur Engineering college and research centre,
Shri Ram ki Nangal, via Sitapura RIICO Jaipur- 302 022

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE (JECRC)

Company name: FEV India Pvt. Ltd.	Designation: Head Human Resources
Name of HR: Anu Sethi	Mobile Number/ Email address: sethi@fev.com

Your feedback will help in academic / innovative activities at our institute(s)

Vision of Jaipur Engineering College and Research Centre	**Mission of Jaipur Engineering College and Research Centre**
To become a renowned centre of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.	**M1**: Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning. **M2**: Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions. **M3**: Offer opportunities for interaction between academia and industry. **M4**: Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

To what extent you think the students achieve

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems in Mechanical Engineering.
PO2: Problem analysis: Identify, formulate, research literature, and analyze complex Mechanical Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3: Design/development of solutions: Design solutions for complex Mechanical Engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions in Mechanical Engineering.
PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex Mechanical Engineering activities with an understanding of the limitations.
PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional Mechanical Engineering practice.
PO7: Environment and sustainability: Understand the impact of the professional Mechanical Engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the Mechanical Engineering practice.
PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings in Mechanical Engineering.
PO10: Communication: Communicate effectively on complex Mechanical Engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11: Project management and finance: Demonstrate knowledge and understanding of the Mechanical Engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long

JECRC

Jaipur Engineering college and research centre.
Shri Ram ki Nangal, via Sitapura RIICO Jaipur- 302 022.

Parameters	5 (Very High)	4 (High)	3 (Moderate)	2 (Low)	1 (Very Low)
Does our syllabus match with your industrial requirements			✓		
Technical abilities of our students		✓			
Analytical capabilities of our students		✓			
Would you like to visit JECRC again	✓				
Will you recommend JECRC to other companies?	✓				
How would you rate our students already working in your company?		✓			
Hospitality	✓				
Overall experience at our institute	✓				

Any suggestions:

Student need to understand advance automotive technologies like. hybride technology and Electrical vehicles and Battery Management System.

Signature: Awasthi
Date: 19/2/19

JECRC Mail

Hod Me <hod.me@jecrc.ac.in>

Improvement in Syllabus

Shefali<Shefali.cad@gmail.com> Tue, June 15, 2019 at 10:15 AM
To: <hod.me@jecrc.ac.in>

Dear Sir,

Greetings from CADD Center

We would like to thank you for the courtesies extended by you and your team during our visit to your Institute last week, regarding training and placement of students in our company

We have inculcated the very best of modern technology and new developments in the field of automobile in our products, which has enabled us to become one of the leading automobile company in the world.

During our interaction with your students overall we found that they were well equipped in their respective fields and subjects, however, they were lacking in their knowledge about the latest updates which are happening in the world of automobile engineering.

Therefore before we complete the process of recruitment, we would suggest that you may initiate and complete the following two activities with your students so that they are better equipped to handle the latest updates in the industry.

The first first topic is Vehicle Mechanics.:

1. To apply the knowledge of Material science manufacturing and design to implement the various concepts of vehicle mechanics.

2. To apply the knowledge of 3D printing technology in design and development of prototypes.

Hope you would find our suggestions in the right spirit and try to inculcate these new aspects in the students curriculum.

We look forward to coming again to your Institute for completion of the recruitment process

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE	**Jaipur Engineering college and research centre,** Shri Ram ki Nangal, via Sitapura RIICO Jaipur- 302 022.

Alumni Feedback Form **Date:** 12-11-2018

Academic year: 2018-19

Feedback rating range:

Excellent:(5) Very Good:(4) Good:((3) Satisfactory:(2) Needs improvement: (1)

Dear Alumni,

JECRC is privileged to have you as one of its utmost assets and its global representative. Thus, your inputs would be most valuable. We would really appreciate if you can spare some of your valuable time to fill up the following questionnaire. Your answers would help your Alma Mater in making further improvements.

Name: Harsh babel
Year of Graduation: 2010
Branch: Mechanical engineering
Name of the Company/Organisation: Daimler India commercial vehicle
Designation: Senior manager (CRO)
Email: [illegible]@gmail.com
Mobile number: [illegible]

Vision of Jaipur Engineering College and Research Centre	Mission of Jaipur Engineering College and Research Centre
To become a renowned centre of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.	M1. Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning. M2. Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions. M3. Offer opportunities for interaction between academia and industry. M4. Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

Parameters	(5) Excellent	(4) Very Good	(3) Good	(2) Satisfactory	(1) Needs Improvement
1.To what extent you agree with the vision of JECRC	✓				
2.To what extent you agree with the Mission of JECRC		✓			
3.The extent to which the following abilities/skills were inculcated in you:					
a. Technical abilities		✓			
b. Communications Skills	✓				
c. Problem Solving Capacity			✓		
d. Ethical Values & Social Responsibility		✓			
e. Leadership Skills		✓			
f. Ability to develop practical solutions to work place problems using technology and workplace equipment			✓		
g. Working as part of a team		✓			

How could our programs be improved? What specific comments do you have regarding the curriculum enrichment?

There is no subject knowledge regarding concepts of electric vehicle so it should be considered.

Any Suggestion (s) you would like to make regarding Department/College:

Arrange some more training 1 hours on of [illegible]

Date: -

Harsh
Signature

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Ref. No. JECRC/98/2021/458

20/10/2021

To,

The Hon'ble Vice Chancellor,
Rajasthan Technical University,
Rawatbhata Road, Kota.

Subject: Regarding curriculum enrichment in the syllabus of various streams of Engineering

Dear Sir,

As per discussion with HODs, senior faculty members of Jaipur Engineering College and Research Centre, Jaipur and information received from various industry persons and alumni, our institute identified that the following are the curriculum advancements are required in the syllabus of various streams of engineering which will be beneficial for the students to achieve skills as required by the industry.

Request for your information please –

S. No.	Streams	Topic
1	Civil Engineering	Hyperloop technology
		Modular Construction
		Vastu shastra & Green building technology
2	Mechanical Engineering	3D metal printing
		Hybrid technology
3	Computer Science Engineering	Data Analytics
		R programming
		Augmented & virtual reality
4	Information technology	Digital Marketing
		Advance search engine optimization
		Deep learning
5	Electrical Engineering	Quantum Computing
		Robotics Process Automation
		Electrical Vehicles
		SMART GRID
6	Electronics and Communication Engineering	Machine Learning
		Internet of Things

With best regards,

Prof.(Dr.) Vinay Kumar Chandna
Principal

PRINCIPAL
Jaipur Engineering College &
Research Centre
Tonk Road, Jaipur-302022

JECRC Foundation
www.jecrcfoundation.com

Jaipur Engineering College and Research Centre
Approved by AICTE & Affiliated to RTU
JECRC Campus, Shri Ram Ki Nangal,
Via Sitapura RIICO, Opp. EPIP Gate, Tonk Road, Jaipur 302 022
t: 0141 2770120, 2770232 e: info@jecrcmail.com

<table>
<tr><th colspan="4">Criterion-2 Program Curriculum and Teaching- Learning Process</th></tr>
<tr><th>S. NO</th><th>CRITERIA</th><th>OBSERVATION MADE BY NBA</th><th>COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)</th></tr>
<tr><td>2.1.2</td><td>2.1.2 State the delivery details of the content beyond the syllabus for the attainment of POs & PSOs</td><td>Delivery of topics beyond syllabus is minimal and random.</td><td>The topics beyond syllabus are delivered through experiential learning, participative learning and problem solving learning to bridge the identified curricular gaps.Delivery methods are as follows:
Add-on Courses: Recent trends based add-on courses are organized through industries
Guest lecturers: Experts from industry and academia are invited to deliver lectures on the latest trends and thrust areas in Mechanical Engineering.
Technical talk: Students are kept updated about the advances in technologies through technical seminars.
Workshops: The department has introduced a novel initiative for students, wherein• they are encouraged to participate in hands-on workshops, thereby enhancing their application skills.
Industrial visits: Visits to industries of repute are organized every year to keep the• students abreast with applications of Information Science and Engineering.
Soft skill training: The department emphasises on personality development through soft skills training programs to improve the employability of students.
Internships: Students are encouraged to take-up short-term internships through intershalla, coursera and industries to understand industry practices.
Delivery of number of topics beyond syllabus is shown below for various academic years.
<table>
<tr><td>Academic Year</td><td>2018-19</td><td>2019-20</td><td>2020-21</td></tr>
<tr><td>No. of activities</td><td>27</td><td>28</td><td>34</td></tr>
</table>
Content beyond is identified through various feedbacks of stake holders.
Impact analysis: Sixty eight (68) students have been placed in Designing and hybrid vehicles industries in last two years.</td></tr>
</table>

Delivery methods	Link
Add-on courses / workshops	https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/AutoCAD.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Introduction-of-Electric-Vehicles.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Solidworks.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Working-and-Disassembling-of-Electric-Vehicle.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/ANSYS.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Comparison-of-Electric-Vehicle-with-Conventional-Automobile.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Creo.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Hybrid-and-Advanced-Electric-Vehicles.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/3D-Printing-Technology.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/3D-Printing-Technology-finalyear.pdf https://jecrcfoundation.com/jf-data/ADDON/Differentaspect2019-20.pdf https://jecrcfoundation.com/jf-data/ADDON/3DPrinting2019-20.pdf https://jecrcfoundation.com/jf-data/ADDON/differentaspect2018-19.pdf https://jecrcfoundation.com/jf-data/ADDON/L3D2019-20.pdf https://jecrcfoundation.com/jf-data/ADDON/3Dprinting2018-19.pdf https://jecrcfoundation.com/jf-data/ADDON/automobileworkshop.pdf https://jecrcfoundation.com/pdf/addon-certificates/2020-21.pdf https://jecrcfoundation.com/pdf/addon-certificates/2019-20.pdf https://jecrcfoundation.com/pdf/addon-certificates/2018-19.pdf
Guest lectures by the industry person	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/Guest-Lectures-2019-20.pdf https://jecrcfoundation.com/pdf/webinar/Webinar-ME.pdf
Industrial visits	https://jecrcfoundation.com/jf-data/NBA/ME/Industrial-Visit/Industrial-Visits-2019-20.pdf
Conferences	https://www.jecrcfoundation.com/pdf/confrence-reports/ME%202015-2020.pdf

Technical clubs/ activities	https://jecrcfoundation.com/jf-data/NBA/ME/MoonRider/Annual%20Report%202019-20.pdf https://jecrcfoundation.com/jf-data/NBA/ME/MoonRider/Annual-Report-2018-19.pdf

Jaipur Engineering College and Research Centre, Jaipur
Department of Mechanical Engineering
Action Taken (2020-21)

S #	Gap	Topics	Proposed plan	Action taken	Resource Person with designation	% of students	Relevance to PO/PSO
1	Advanced designing software in Mechanical Engineering	SOLIDWORKS	Work shop	Workshop	Sh. Raj Kumawat , Director Cademate Training and Technical Services Pvt Ltd	100 %	PO1,PO2,PO3,PO4,PO5
		CREO	Training/workshop	Workshop	Cademate Training and Technical Services Pvt Ltd	100 %	PO1,PO2,PO3,PO4,PO5,PO11
		3D Printing Technology	Training/workshop	Workshop	Sh. Ashish Varshney CEO, Latashri 3D Creations	100 %	PO1,PO2,PO3,PO4,PO5,PO11
		ANSYS	Training/workshop	Workshop	Sh. Ravi Kumar Swami Cademate Training and Technical Services Pvt Ltd	100 %	PO1,PO2,PO3,PO4,PO5,PO7,PO8,PO10,PO11
		AutoCAD	Training/workshop	Workshop	Sh. Ravi Kumar Swami Cademate Training and Technical Services Pvt Ltd	100 %	PO1,PO2,PO3,PO4,PO5,PO7,PO8,PO10,PO11
		Opportunities For Mechanical Engineer In IT Sector	Guest Lecture	Guest Lecture	Sh. Ganesh Subhash Tanpure. Senior Business Analyst	70%	PO1,PO2,PO3,PO4,PO5,PO11,PO12
		How Mechanical Student Make Their Career In Aerospace Industry	Guest Lecture	Guest Lecture	Sh. Jayadev Nambisan Masters in Aerospace	65%	PO1,PO2,PO3,PO4,PO5,PO11

2	Electric and hybrid vehicles technologies.	Introduction of Electric Vehicles	Training/workshop	Workshop	Sh. Nimesh Baba Founder and CEO, Baba Automobile Pvt Ltd	100 %	PO1,PO2,PO3,PO4,PO5,PO10
		Working and Disassembling of Electric Vehicle	Training/workshop	Workshop	Sh. Nimesh Baba Founder and CEO, Baba Automobile Pvt Ltd	100 %	PO1,PO2,PO3,PO4,PO5,PO10
		Comparison of Electric Vehicle with Conventional Automobile	Training/workshop	Workshop	Sh. Nimesh Baba Founder and CEO, Baba Automobile Pvt Ltd	100 %	PO1,PO2,PO3,PO4,PO5,PO10
		Hybrid and Advanced Electric Vehicles	Training/workshop	Workshop	Sh. Nimesh Baba Founder and CEO, Baba Automobile Pvt Ltd	100 %	PO1,PO2,PO3,PO4,PO5,PO7,PO8,PO10,PO11
		Recent Challenges and Opportunities in Automotive Sector	Guest Lecture	Guest Lecture	Sh. Amit Rajagopalan Digital Transformation-product owner, Agile Business Analyst	75%	PO1,PO2,PO3,PO4,PO5,PO10
		Trends in HVAC Industry	Guest Lecture	Guest Lecture	Sh. Paramjit Thakur Entrepreneurship Development Cell Head, SCOE, Mumbai	80%	PO1,PO2,PO3,PO4,PO5,PO10
3	Modern industrial production technologies	3D Printing Technology	Training/workshop	Workshop	Sh. Ashish Varshney CEO, Latashri 3D Creations	100 %	PO1,PO2,PO3,PO4,PO5
		3D Printing Technology	Training/workshop	Workshop	Sh. Ashish Varshney CEO, Latashri 3D Creations	100 %	PO1,PO2,PO3,PO4,PO5,PO10
		3D Printing Technology	Workshop	Workshop	Sh. Beeru Trainer, Skifi Education Labs Pvt Ltd	100 %	PO1,PO2,PO3,PO4,PO5,PO7,PO8,PO10,PO11,

		Mechanical CAD	Guest Lecture	Guest Lecture	Sh. Jai Prakash Singh CADD Center, Jaipur	70%	PO1,PO2,PO3,PO4,PO5,PO11,PO12
4	Design consideration and safety of machine elements	Rapid Prototyping by Additive Manufacturing	Training/workshop	Workshop	Sh. Ashish Varshney CEO, Latashri 3D Creations	70%	PO1,PO2,PO3,PO4,PO5
		Plastic and It's Impact on Environment	Guest Lecture	Guest Lecture	Dr. Pankaj Kumar Srivastava DGM (Marketing), Gail (India) Ltd.	90%	PO1,PO2,PO3,PO4,PO5,PO7,PO11,PO12
		Convection and Dimensionless Numbers	Guest Lecture	Guest Lecture	Dr. Sandeep Joshi Principal, Pillai College of Engineering	80%	PO1,PO2,PO3,PO4,PO5,PO8,PO10,PO11
5	Use of IoT technology for computer-integrated manufacturing systems in industry	IoT in Manufacturing	Workshop/ Guest lecture	Short term course	NITTTR, Chandigarh	90%	PO1,PO2,PO3,PO4,PO5,PO6,PO7,PO10,PO11
		Mentoring and Principles of System Thinking	Guest Lecture	Guest lecture	Sh. Adam Walls Lead & Business Architect, Program Director, London, U.K.	85%	PO1,PO2,PO3,PO4,PO7,PO8,PO10,PO11,
		Design of Mechanisms	Guest Lecture	Guest Lecture	Dr. Kailash Chaudhary Professor MBM Jodhpur	65%	PO1,PO2,PO3,PO4,PO5,PO7,PO8,PO10,PO11
		Innovation & Future of startups	Guest Lecture	Guest Lecture	Sh. Jainam Mehta Oizom Instruments Pvt. Ltd., Gujarat	65%	PO1,PO2,PO3,PO4,PO5,PO10,PO11
6	Introduction of coding	Coding	Training	Training	Face academy	100 %	PO1,PO2,PO3,PO4,PO5,PO8,PO10,PO11

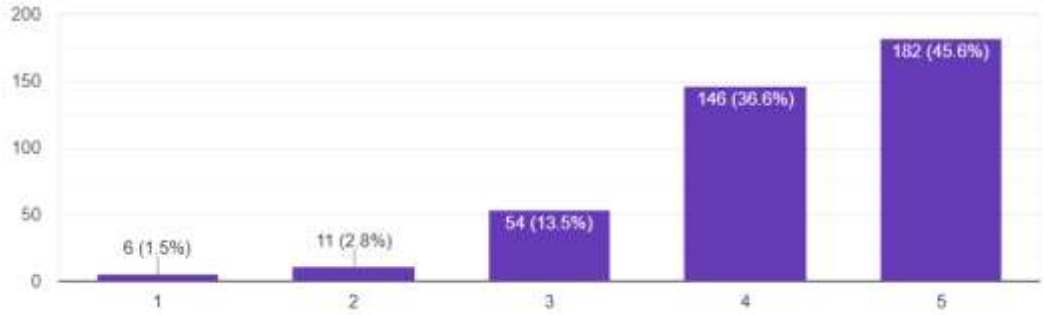
Impact analysis: Sixty eight (68) students have been placed in Designing and hybrid vehicles industries in last two years.

Criterion-2 Program Curriculum and Teaching- Learning Process			
S. NO	**CRITERIA**	**OBSERVATION MADE BY NBA**	**COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)**
2.2.1	**2.2.1Describe the Process followed to improve quality of Teaching Learning**	Feedback process exists but no follow up action taken after analysis.	Department regularly collect and analyse feedback on quality of Teaching Learning process. The student's feedbacks on the performance of faculty members are taken every semester based on different categories. The feedbacks from the students are taken anonymously through on-line mode. The feedback of all the faculty members are summarized individually and communicated to the respective faculty members through the Head of the Department. Appraisal of faculty member is also based on feedback of teaching learning process that is included in yearly increment. The suggestions of the students are taken into considerations and appropriate course of action is taken. After analysing the feedbacks corrective actions are taken. Feedback forms, Mechanism and action taken reports are also available on the institute websites. https://jecrcfoundation.com/iqac/feedback-forms https://jecrcfoundation.com/pdf/iqac-feedback/1.4.2-Feedback%20Mechanism.pdf https://jecrcfoundation.com/jf-data/AQAR/2020-21/Website/Student-satisfaction-survey.pdf https://jecrcfoundation.com/iqac/action-taken-report

Students feedback - Teaching learning Final

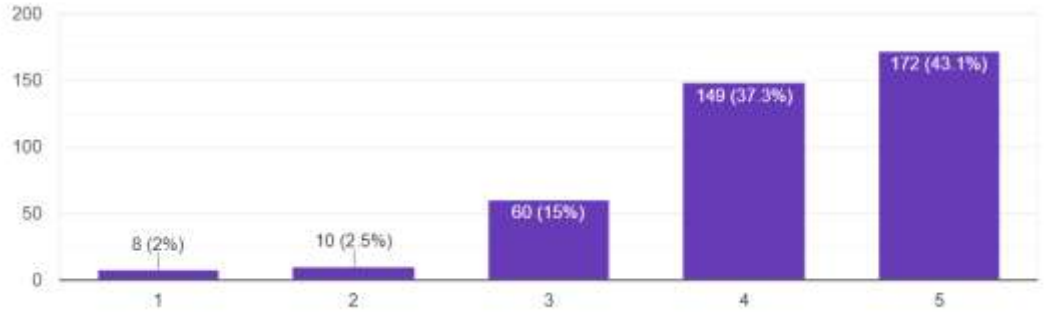
To what extent the teacher discusses course outcomes and program outcomes in the class.

399 responses



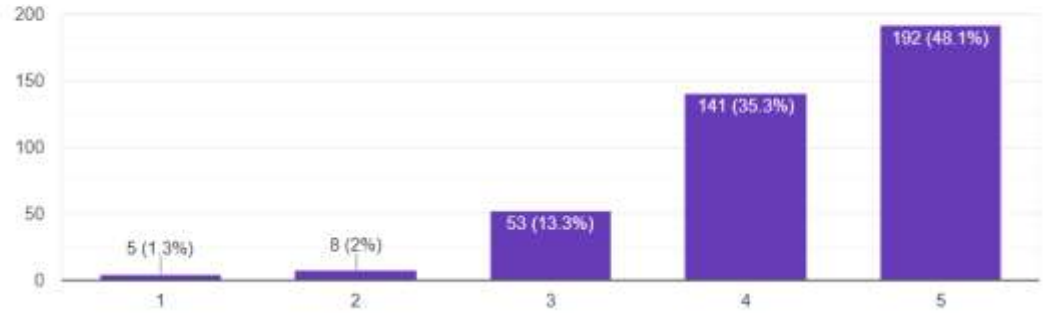
To what extent the teacher encourages participation and discussion in class.

399 responses



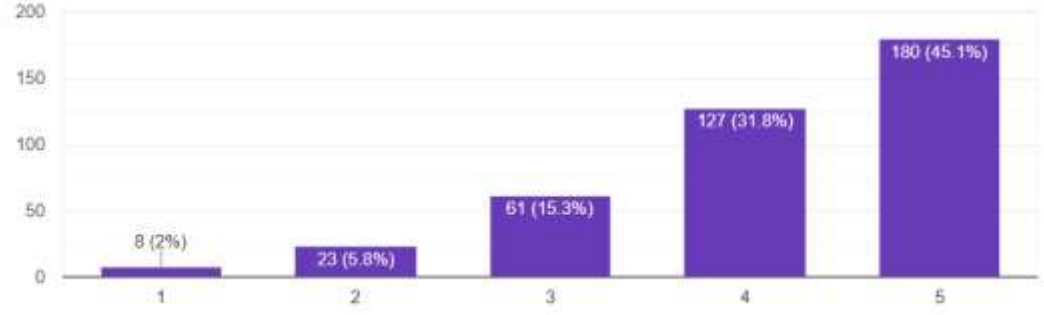
To what extent teacher maintains regularity and punctuality in class.

399 responses



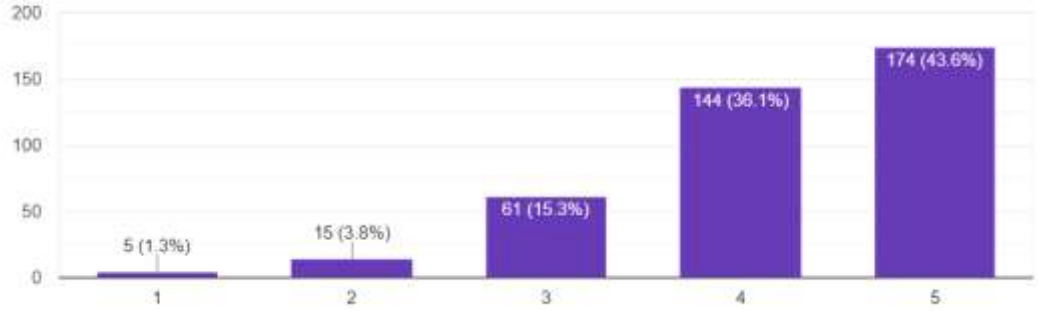
To what extent the teacher motivates students for participation in extracurricular activities

399 responses



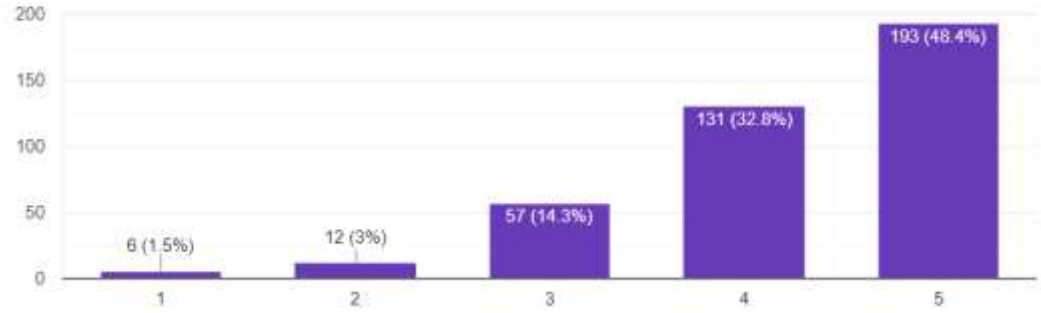
To what extent the teacher provides mentoring for academic and non-academic matters

399 responses



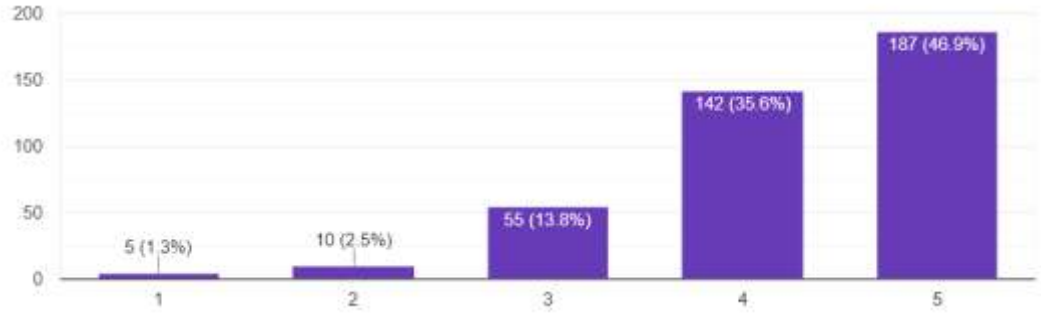
To what extent faculties deliver online lecture and e-notes through Google Classroom.

399 responses



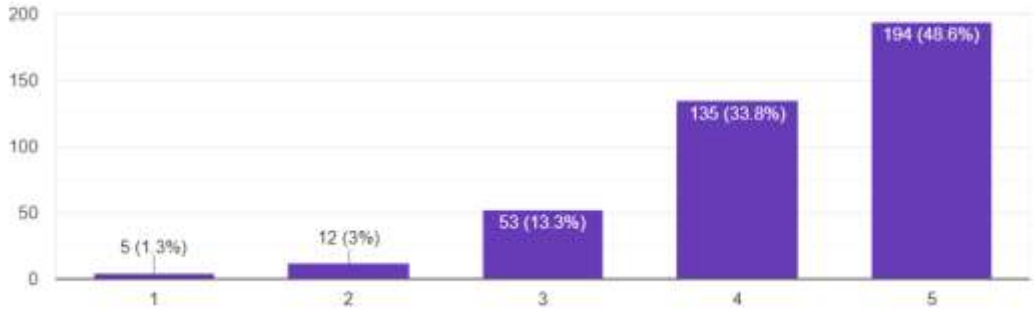
To what extent the faculties provide the assignments and discussion related to problem solving approach.

399 responses



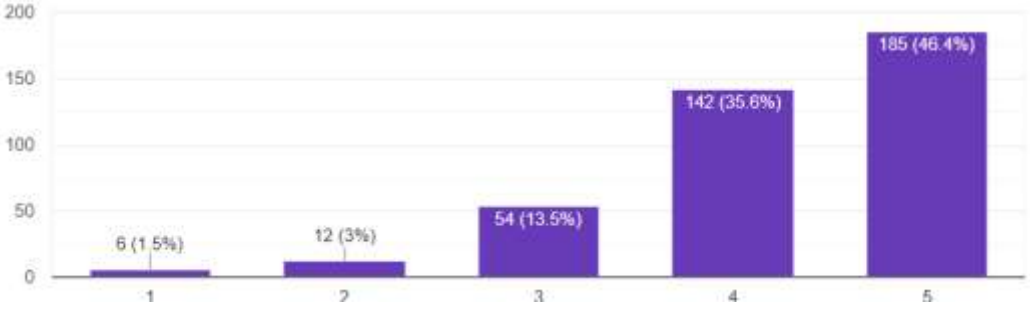
To what extent faculties provide notes/ppt /e-materials through online platform.

399 responses



To what extent grievances related issues are addressed.

399 responses

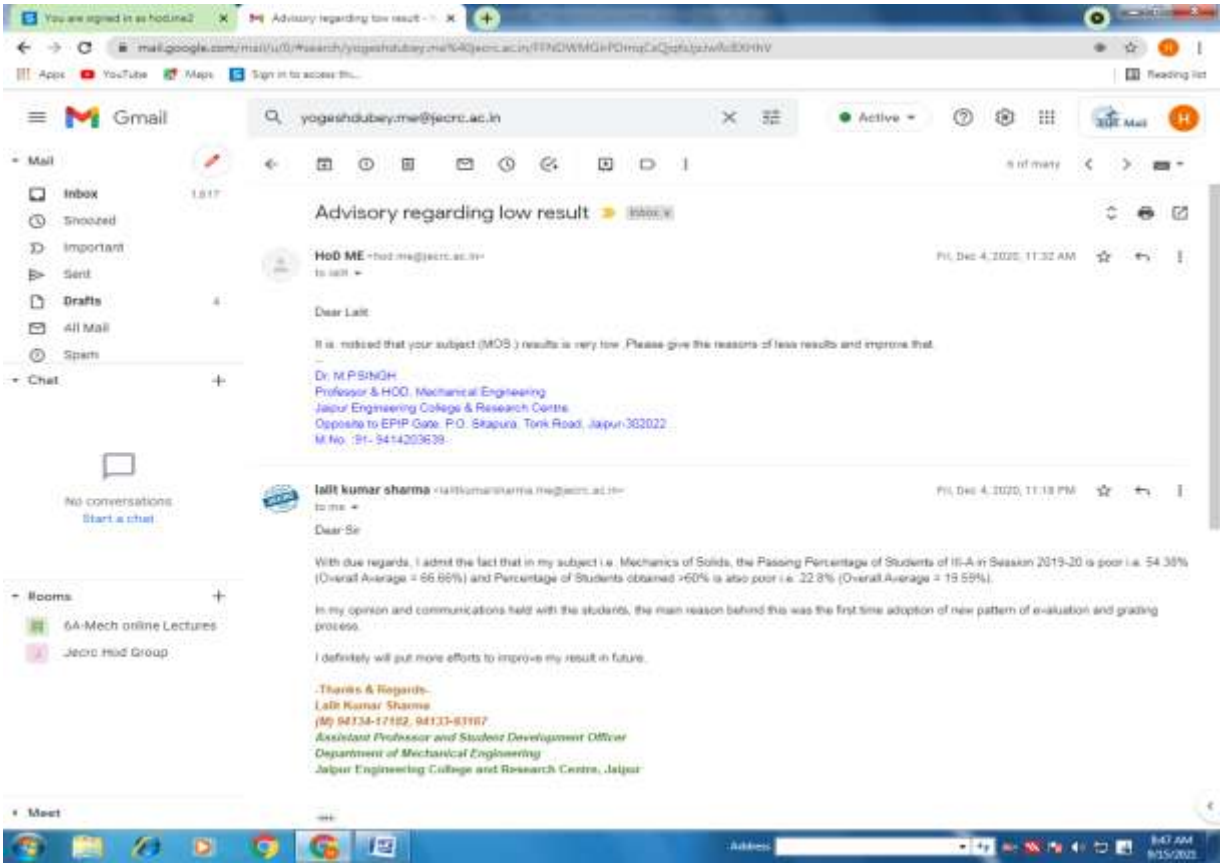


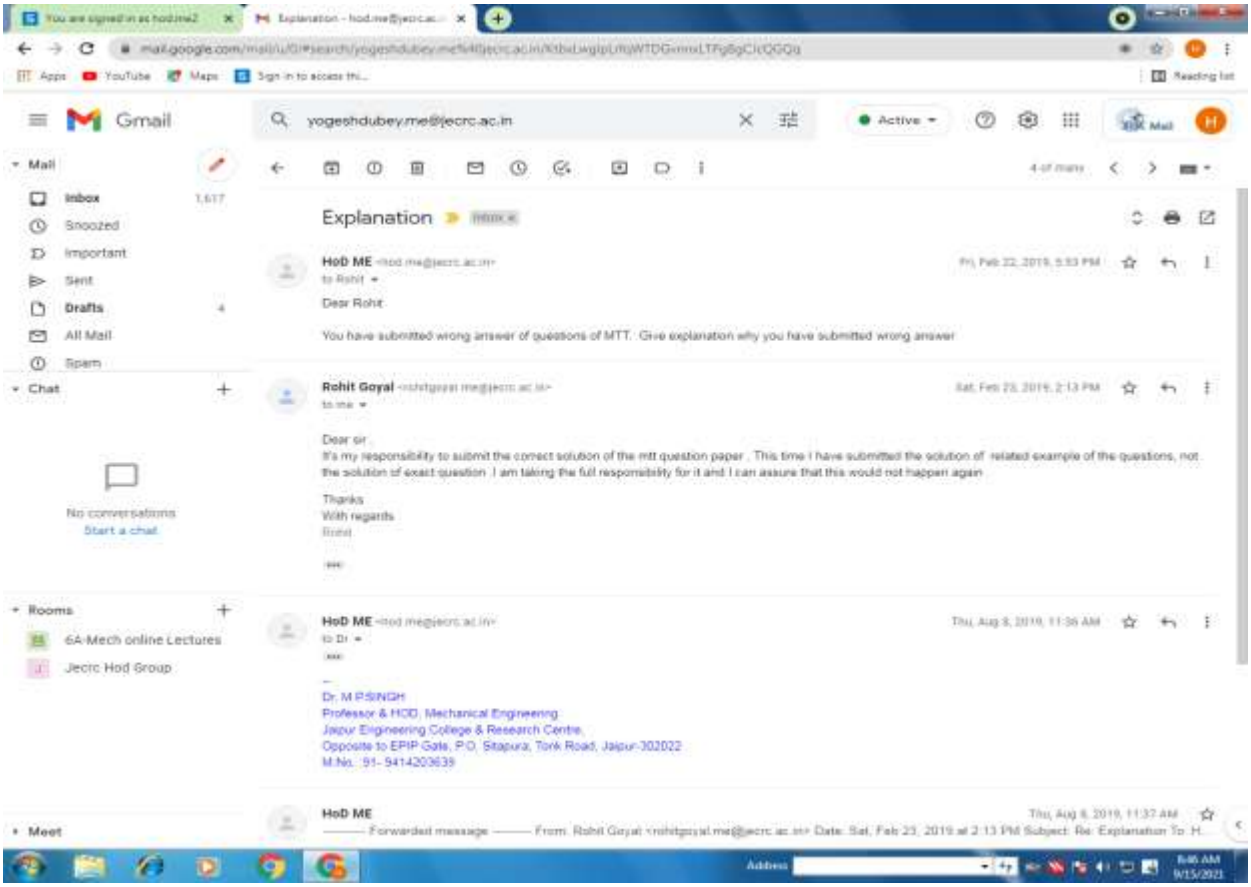
Student's Teaching learning Feedback forms received from students and summary as follows

Parameters	Responses		Action taken
	≥60	<60	
To what extent the teacher discusses course outcomes and program outcomes in the class.	95.74%	4.26%	The students appreciate the efforts made by faculty members regarding the discussion of COs & POs. Few students required more discussion regarding the same. HOD advised to all faculty members to increase the frequency of discussion of COs &Pos in classroom.
To what extent the teacher encourages participation and discussion in class.	95.5	4.5	The faculty members encourage innovative participation of students to make active discussions in classroom teaching. HOD advised to all faculty members to increase the participation and discussion in class. Also increase the involvement of slow learners in discussion.
To what extent teacher maintains regularity and punctuality in class.	96.74	3.26	The students appreciated the regularity and punctuality of faculty members in classroom. HoD advised to faculty members regarding regularity and punctuality in class.
To what extent the teacher motivates students for participation in extracurricular activities.	92.23	7.77	The students appreciate the efforts made by the faculty members. Also, faculty members are advised to motivate the students to make maximum involvement in extracurricular activities. Also, HoD insured the students that there will be no loss related to academic during the time period of the participation in extracurricular activities.
To what extent the teacher provides mentoring for academic and non-academic matters	95.0	5.0	The students appreciated the faculty members. HoD advised to mentors to increase the frequency of active mentoring sessions, especially for slow learners.
To what extent faculty members deliver online lecture and e-notes through google classroom	95.5	4.5	The students appreciate the efforts made by the faculty members. HoD advised the faculty members to upload advanced study materials like GATE, IES etc materials, lecture videos, lab experiments videos.
To what extent the faculties provide the assignments and discussion related to problem	96.24	3.76	Almost all faculties provide the quality assignment to the students. HOD advised to faculty members to enhance the difficulty level of assignments by incorporate complex problems. Also

solving approach			provide last year GATE, IES etc questions in assignments for fast learners and provide extra discussion time for slow learners.
To what extent faculties provide notes/ppt /e-materials through online platform.	95.74	4.26	The students appreciate the efforts made by the faculty members. HoD advised the faculty members to upload advanced study materials, lecture videos, lab experiments videos/ NPTEL/ Swayam/ Swayam Prabha links to students.
To What extent grievances related issues are addressed	95.5	4.5	The students appreciate the efforts made by the department. Almost all the grievances are addressed. HOD instructed all faculty members to address all grievances related issues of students at time.

Hea... Mech... JECRC, Jaipur


Gmail
yogeshdubey.me@jecrc.ac.in
Advisory regarding low result
HoD ME
Dear Lalit
It is noticed that your subject (MOS) results is very low .Please give the reasons of less results and improve that.
Dr. M.P.SINGH
Professor & HOD, Mechanical Engineering
Jaipur Engineering College & Research Centre,
Opposite to EPIP Gate, P.O. Sitapura, Tonk Road, Jaipur-302022
M.No. :91- 9414203639
lalit kumar sharma
Dear Sir
With due regards, I admit the fact that in my subject i.e. Mechanics of Solids, the Passing Percentage of Students of III-A in Session 2019-20 is poor i.e. 54.38% (Overall Average = 66.66%) and Percentage of Students obtained >60% is also poor i.e. 22.8% (Overall Average = 19.59%).
In my opinion and communications held with the students, the main reason behind this was the first time adoption of new pattern of e-valuation and grading process.
I definitely will put more efforts to improve my result in future.
Thanks & Regards,
Lalit Kumar Sharma
(M) 94134-17102, 94133-83107
Assistant Professor and Student Development Officer
Department of Mechanical Engineering
Jaipur Engineering College and Research Centre, Jaipur
Inbox
Snoozed
Important
Sent
Drafts
All Mail
Spam
Chat
No conversations
Start a chat
Rooms
6A-Mech online Lectures
Jecrc Hod Group
Meet


Gmail
yogeshdubey.me@jecrc.ac.in
Explanation
HoD ME
Dear Rohit
You have submitted wrong answer of questions of MTT. Give explanation why you have submitted wrong answer
Rohit Goyal
Dear sir ,
It's my responsibility to submit the correct solution of the mtt question paper . This time I have submitted the solution of related example of the questions, not the solution of exact question . I am taking the full responsibility for it and I can assure that this would not happen again
Thanks
With regards
Rohit
HoD ME
Dr. M.P.SINGH
Professor & HOD, Mechanical Engineering
Jaipur Engineering College & Research Centre,
Opposite to EPIP Gate, P.O. Sitapura, Tonk Road, Jaipur-302022
M.No. :91- 9414203639
HoD ME
Inbox
Snoozed
Important
Sent
Drafts
All Mail
Spam
Chat
No conversations
Start a chat
Rooms
6A-Mech online Lectures
Jecrc Hod Group
Meet

Criterion-2 Program Curriculum and Teaching- Learning Process			
S. NO	**CRITERIA**	**OBSERVATION MADE BY NBA**	**COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)**
2.2.2	**2.2.2 Quality of internal semester question papers, assignments and evaluation**	Evaluation of internal examination papers needs greater attention. Quality of question papers and assignments, evaluation is not up to the mark.	The Internal semester question paper for each subject is divided into different sections as per affiliated university (RTU) guidelines. While finalizing the question paper previous university exam papers, GATE, IES, PSU and other competitive exams question papers are taken into consideration. According to level of toughness the questions are prepared (viz., analyzing the problems, implementation of modern tools, formulating the problems etc.), which is termed as Bloom's Taxonomy. The questions are mainly prepared based on the Course Outcomes. To ensure the quality of internal semester question papers, solution of question papers and scrutinize of answer sheets, the department has drafted a committee named as Moderation and scrutinizing Committee and any question paper needs up gradation is instructed to revise question paper. Faculty members also provide assignment/question bank having question of previous year question papers/GATE/IES/PSU question to all students. Assignments are given to the students to achieve the outcomes of the courses to promote the self-learning. After Internal semester exam, each course handling faculty member evaluates the answer scripts within a week after completion of the examination. Further the solutions are discussed in the class which enables students to understand the mistakes. They prepare reports to analysis the learning level of the students to attain the course outcomes (COs) of each subject.. Course Outcome (CO) is evaluated based on the performance of student's in internal assessments and in university examination of a course. Internal assessment contributes 20% and university assessment contributes

			80% to the total attainment of a course outcomes CO. Grievance forms related to evaluation of answer script is provided to the students and necessary actions are taken within stipulated time to resolve any grievance. https://jecrcfoundation.com/student-assessment-guidelines https://www.jecrcfoundation.com/Student-Grievance-Mechanism

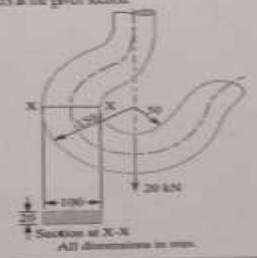
JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE
JECRC Campus, Shri Ram Ki Nangal, Via-Vatika, Jaipur

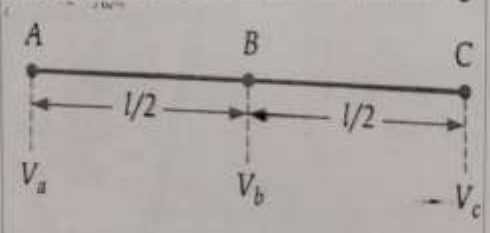
MTT-II (SET-A)

Academic Year: 2020-2021(ODD Semester)

Course	:	**B.Tech.**	**Date**	:	**21/11/2020**
Semester/ Section	:	**5-A/B**	**Time Duration**	:	**1:30 hour**
Subject & Subject Code	:	**DME-I (5ME4-04)**	**Max. Marks**	:	**40**

Course Outcomes	
CO3	To estimate the stresses and strains induced in different m/c element subjected to torsion and bending.
CO4	To design threaded fasteners.

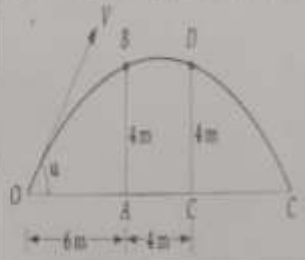
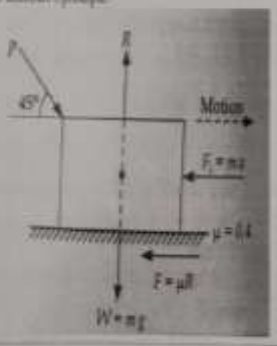
Q. No.	CO	Questions	Marks
		PART- A: Attempt All Questions (5x2 = 10Marks)	
1.	CO3	Elucidate nipping in laminated spring?	2
2.	CO3	Demystify the utility of the center bolt and rebound clip in a leaf springs?	2
3.	CO3	Illuminate the circumstances in which hollow shafts are preferred over solid shafts?	2
4.	CO4	Explicate winkler bach formula in curved beam.	2
5.	CO4	Illustrate three practical applications of curved beam.	2
		PART-B: Attempt ANY THREE Questions (3x5 = 15Marks)	
1.	CO3	Compare the weight, strength and stiffness of a hollow shaft of the same external diameter as that of solid shaft. The inside diameter of the hollow shaft being 1/3 the external diameter. Both of the shafts have the same material and length.	5
2.	CO3	Design a leaf spring for the following specifications: Total load=140kN; number of springs supported the load= 4; maximum number of leaves=10;span of spring=1000mm; Permissible deflection= 80mm. Take young modulus E=200 kN/mm^2 and allowable stress in spring material as 600MPa.	5
3.	CO3	A steel solid shaft transmitting 15 kW at 200 r.p.m. is supported on two bearings 750 mm apart and has two gears keyed to it. The pinion having 30 teeth of 5 mm module is located 100 mm to the left of the right hand bearing and delivers power horizontally to the right. The gear having 100 teeth of 5 mm module is located 150 mm to the right of the left hand bearing and receives power in a vertical direction from below. Using an allowable stress of 54 MPa in shear, determine the diameter of the shaft.	5
4.	CO3	Explicate nipping in a leaf spring? Discuss its role. List the materials commonly used for the manufacture of the leaf springs.	5
		PART-C: Attempt ANY THREE Question (3x5 = 15Marks)	
1.	CO4	Design and draw a protective type of cast iron flange coupling for a steel shaft transmitting 15 kW at 200 rpm and having an allowable shear stress of 40 MPa. The working stress in the bolts should not exceed 30 MPa. Assume that same material is used for shaft and key and that the crushing stress is twice the value of its shear stress. The maximum torque is 25% greater than the full load torque. The shear stress for the cast iron is 14 MPa.	5
2.	CO4	The crane hook carries a load of 20 kN as shown in figure below. The section at X-X is rectangular whose horizontal side is 100 mm. Find the stresses in the inner and outer fibers at the given section.  	5
3.	CO4	Explicate classification of keys. Draw neat sketches of different types of keys and state their applications.	5
4.	CO4	Elucidate the design procedure of Bushed-pin Flexible coupling.	5

1.	CO3	Setup the following expression for the flat belt drive $\frac{T_1}{T_2} = e^{\mu\theta}$ Where T_1 and T_2 are the tension on tight and slack side of belt. And θ is angle of contact and μ is the coefficient of friction between belt and pulley rim.	5
2.	CO3	Two blocks A and B weighing 50kg and 80kg respectively are in the equilibrium in the position shown in the fig. Calculate the force P required to move the lower block B and tension in the cable. take coefficient of friction μ all contact surfaces to be 0.3. 	5
3.	CO4	A particle moves with uniform acceleration along a straight line ABC. The speeds of the particle at positions A and C are 5 cm/s and 25 cm/s respectively. If the point B lies midway between A and C, find out the ratio of times taken by the particle to travel 	5
4.	CO4	Two adjacent guns having the muzzle velocity of 400 m/s fire simultaneously at angles α_1 and α_2 for the same target at a range 4800m. Calculate the time difference between the hits. Assume gravitational acceleration $g = 9.80$ m/s^2.	5

PART-C: Attempt ANY THREE Question (3×5 = 15Marks)

1.	CO3	Show that for maximum power transmission, the centrifugal tension should not exceed one third of total tension.	5
2.	CO3	A ladder 5m long and weighting 300N is placed against a vertical wall with its lower end 2.5m from the wall. A man weighing 750N climbs the ladder and sits at its top. To avoid slipping of ladder, its bottom is held by a string tied to the wall. If the coefficient of friction for both the contact surfaces is 0.2, calculate the tension induced in the string?	5

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE
JECRC Campus, Shri Ram Ki Nangal, Via-Vatika, Jaipur

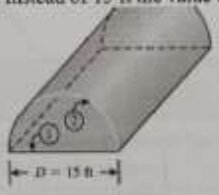
3.	CO4	A jet water discharging from a nozzle hits a vertical screen placed at a distance of 6m from the nozzle at a height of 4m. When the screen is shifted 4m away from its initial position, the jet hits the screen again at the same point. Determine the angle and velocity with which the jet issues from the nozzle 	5
4.	CO4	A block of mass 50 kg, resting on a horizontal plane, is required to be given an acceleration of 2m/s towards right by applying a push P at an angle of 45 degree with the horizontal. Assuming that coefficient of friction between the block and plane is 0.4, work-out the magnitude of push P. Obtain your solution by applying D'alembert's principle. 	5

		large room whose walls are at a temperature of (a) 300 K and (b) 280 K	
4.	CO3	Established the expression for the effectiveness of parallel heat exchanger by NTU method.	05

PART-C: Attempt ANY THREE Questions (3x5 = 15Marks)

1.	CO3	Crude oil at 22℃ enters a 20-cm-diameter pipe with an average velocity of 20 cm/s. The average pipe wall temperature is 2℃. Crude oil properties are as given below. Calculate the rate of heat transfer and pipe length if the crude oil outlet temperature is 20℃.	05

T ℃	ρ kg/m³	k W/m-K	μ mPa-s	c_p kJ/kg-K
2.0	900	0.145	60.0	1.80
22.0	890	0.145	20.0	1.90

2.	CO3	A furnace is shaped like a long semi cylindrical duct of diameter D = 5 m. The base and the dome of the furnace have emissivities of 0.5 and 0.9 and are maintained at uniform temperatures of 350 and 1000 K, respectively. Determine the net rate of radiation heat transfer from the dome to the base surface per unit length during steady operation. [Note: Instead of 15 ft the value of D is 5m] 	05
3.	CO3	A double pipe parallel flow H.E. use oil (cp = 1.88 kJ/kg.K) at an initial temperature of 205°C to heat water, flowing at 225kg/hr from 16°C to 44°C. The oil flow rate is 270 kg/hr. a) what is the heat transfer area required for an overall heat transfer coefficient of 340 W/m2 .K. b) Determine the number of transfer unit (NTU). c) Calculate the effectiveness of the H.E.	05
4.	CO3	In a counter-flow heat exchanger, the hot fluid is cooled from 110°C to 80°C by a cold fluid which gets heated from 30°C to 60°C. LMTD for the heat exchanger is	05

JECRC,JAIPUR

Department of Mechanical Engineering

Assignment-I

Sub: - Heat Transfer **Code**: 5ME4-02

CO1

Q1- Derivation for cylindrical Cartesian Coordinates for heat conduction equation.

Q2-A 30 cm thick layer wall of 5 m ×3 m size is made of red brick (K=0.3W/m-deg).It is covered on both sides by layers of plaster,2 cm thick (K=0.6 W/m-deg).the wall has a window size of 1 m× 2 m.The window door is made of 12mm thick glass(K=1.2 W/m-deg).If the inner and outer surface temperatures are 15 and 40^0C ,make calculations for the rate of heat flow through the wall.

Q5-Derive General 3-Dimensoinal conduction equation for Cylindrical coordinates.

Q6-A 2 mm diameter wire with 0.8 mm thick layer of insulation (k=0.15 W/m-deg is used in a certain electric heating application. The insulated surface is exposed to atmosphere withh= 40 W/m2deg.What percentage change in heat transfer rate would occur if critical thickness of insulation is used?It may assume that the temperature difference between surface of wire and surrounding air remains unchanged?

Q7- Elucidate the modes of heat transfer with examples of conduction, convection, radiation.

Q8--Derive General 3-Dimensoinal conduction equation for Spherical coordinates.

Q9-A copper rod 0.5 cm diameter and 50 cm long protrudes from a wall maintained at a temperature of 500^oC. The surrounding temperature is 30^oC. Convective heat transfer coefficient is 40 W/m^2K and thermal conductivity of material is 300 W/mK. Determine:

Total heat transfer rate from rod

Temperature of the rod at 20 cm from wall

Q10- Elucidate Fin with its different types.

PREVIOUS YEAR GATE/IES QUESTIONS

Q11-For a given heat flow and for the same thickness, the temperature dropacross the material will be maximum for

(a) Copper (b) Steel (c) Glass-wool(d) Refractory brick

Q12-A steel ball of mass 1kg and specific heat 0.4 kJ/kg is at a temperature of 60°C. It is dropped into 1kg water at 20°C. The final steady state temperature of water is: [GATE-1998]

(a) 23.5°C (b) 300°C (c) 35°C (d) 40°C

Q13-A steel ball of mass 1kg and specific heat 0.4 kJ/kg is at a temperature of 60°C. It is dropped into 1kg water at 20°C. The final steady state temperature of water is: [GATE-1998]

(a) 23.5°C (b) 300°C (c) 35°C (d) 40°C

Q14-In descending order of magnitude, the thermal conductivity of

a. Pure iron, [GATE-2001]
b. Liquid water,
c. Saturated water vapour, and
d. Pure aluminium can be arranged as

Q15-A copper block and an air mass block having similar dimensions are subjected to symmetrical heat transfer from one face of each block. The other face of the block will be reaching to the same temperature at a rate: [IES-2006]

(a) Faster in air block
(b) Faster in copper block
(c) Equal in air as well as copper block
(d) Cannot be predicted with the given information

Q16-A plane wall is 25 cm thick with an area of 1 m2, and has a thermal conductivity of 0.5 W/mK. If a temperature difference of 60°C is imposed across it, what is the heat flow? [IES-2005]

(a) 120W (b) 140W (c) 160W (d) 180W

Q17-Which one of the following expresses the thermal diffusivity of a substance in terms of thermal conductivity (k), mass density (ρ) and specific heat (c)? [IES-2006]

(a) k2 ρc (b) 1/ρkc (c) k/ρc (d) ρc/k2

Q18-A furnace is made of a red brick wall of thickness 0.5 m and conductivity 0.7 W/mK. For the same heat loss and temperature drop,this can be replaced by a layer of diatomite earth of conductivity 0.14 W/mK and thickness [IES-1993]

(a) 0.05 m (b) 0.1 m (c) 0.2 m (d) 0.5 m

CO3/Q19-A stainless steel tube (ks = 19 W/mK) of 2 cm ID and 5 cm OD is insulated with 3 cm thick asbestos (ka = 0.2 W/mK). If the temperature difference between the innermost and outermost surfaces is 600°C, the heat transfer rate per unit length is: [GATE-2004]

(a) 0.94 W/m (b) 9.44 W/m (c) 944.72 W/m (d) 9447.21 W/m

CO3/Q20-A composite wall of a furnace has 3 layers of equal thickness having thermal conductivities in the ratio of 1:2:4. What will be the temperature drop ratio across the three respective layers? [IES-2009]

(a) 1:2:4 (b) 4:2:1 (c) 1:1:1 (d) log4:log2:log1

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

(Affiliated to Rajasthan Technical University, Kota)

AWARD LIST (2019-20) [MTT-I]

Class: II B. Tech. IV Semester Branch: Mechanical Engineering

Subject & Code: Theory of Machines [4ME4-07] Faculty: Abhishek Kumar

S. No.	RTU Roll No.	Name of student	Marks CO1 (MM 21)	Marks CO2 (MM 19)	Target Achieved CO1 (Y/N)	Target Achieved CO2 (Y/N)
1		AAKASH GARG	12	13	N	Y
2		AARYANSH PANDEY	14	11	Y	N
3		AASIM ALI	16	9	Y	N
4		ABHISHEK HADA	10	15	N	Y
5		ABHISHEK JADON	13	12	Y	Y
6		ABHISHEK KUMAR	21	10	Y	N
7		ABHISHEK SHARMA	12	13	N	Y
8		ABHISHEK SHARMA	16	19	Y	Y
9		AJAY MEERWAL	20	8	Y	N
10		AKASH SINGHAL	13	12	Y	Y
11		AKSHAT CHATURVEDI	12	13	N	Y
12		AKSHAT JAIN	10	15	N	Y
13		AKSHAT MANGAL	10	10	N	N
14		AMAN KHAN	11	14	N	Y
15		AMBAR SHUKLA	20	8	Y	N
16		AMIT MAHUR	20	10	Y	N
17		ANIKET MAHESHWARI	12	13	N	Y
18		ANKUR SHARMA	13	12	Y	Y
19		ANURAG BARMAN	20	5	Y	N
20		ARUN RAJ SINGH NARUKA	AB	AB	Y	Y
21		ARVIND SINGH GORA	10	6	N	N
22		ARYAMAN KHADOLIYA	9	16	N	Y
23		ARYAN BAHETI	15	10	Y	N
24		ASHUTOSH BARWAL	14	11	Y	N
25		ASHUTOSH SINGH JAT	12	13	N	Y
26		ASHUTOSH YADAV	20	8	Y	N
27		ASIF ALI	10	8	N	N
28		BADAL SINGH SHEKHAWAT	19	9	Y	N

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE
Department of Mechanical Engineering

Theory of Machines (GATE/IES)

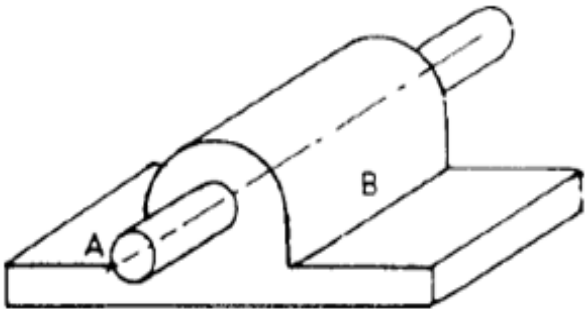
1. Match List I with List II and select the correct answer **[IES-2002]**

List I (Kinematic pairs)	List II (Practical example)
A. Sliding pair	1. A road roller rolling over the ground
B. Revolute pair	2. Crank shaft in a journal bearing in an engine
C. Rolling pair	3. Ball and socket joint
D. Spherical pair	4. Piston and cylinder
	5. Nut and screw

	A	B	C	D		A	B	C	D
(a)	5	2	4	3	(b)	4	3	1	2
(c)	5	3	4	2	(d)	4	2	1	3

1. Ans. (d)

2. A round bar A passes through the cylindrical hole in B as shown in the given figure. Which one of the following statements is correct in this regard?



(a) The two links shown form a kinematic pair.
(b) The pair is completely constrained.
(c) The pair has incomplete constraint.
(d) The pair is successfully constrained. **[IES-1995]**

2. Ans. (b)

3. Consider the following statements **[IAS 1994; IES-2000]**

1. A round bar in a round hole form a turning pair.
2. A square bar in a square hole forms a sliding pair.
3. A vertical shaft in a footstep bearing forms a successful constraint.

Of these statements
(a) 1 and 2 are correct
(b) 2 and 3 are correct
(c) 1 and 3 are correct
(d) 1, 2 and 3 are correct

3. Ans. (b)

4. Match List-I with List-II and select the correct answer using the codes given below the Lists: **[IES-1999]**

List-I	List-II
A. 4 links, 4 turning pairs	1. Complete constraint
B. 3 links, 3 turning pairs	2. Successful constraint
C. 5 links, 5 turning pairs	3. Rigid frame
D. Footstep bearing	4. Incomplete constraint

Code:	A	B	C	D		A	B	C	D
(a)	3	1	4	2	(b)	1	3	2	4
(c)	3	1	2	4	(d)	1	3	4	2

4. Ans. (d) 4 links and 4 turning pairs satisfy the equation $L = \frac{3}{2}(j + 2)$; It is case of Complete constraint. 3 links and 3 turning pairs form rigid frame. Foot step bearing results in successful constraint and 5 links and 5 turning pairs provide incomplete constraint.

5. The connection between the piston and cylinder in a Reciprocating engine corresponding to
(a) completely constrained kinematic pair
(b) incompletely constrained kinematic pair
(c) successfully constrained kinematic pair (d) single link **[IAS 1994]**
5. Ans. (c)

6. Match the items in columns I and II **[GATE-2006]**

Column I	Column II
P. Higher kinematic pair	1. Grubler's equation
Q. Lower kinematic pair	2. Line contact
R. Quick return mechanism	3. Euler's equation
S. Mobility of a linkage	4. Planer
	5. Shaper
	6. Surface contact

(a) P-2, Q-6, R-4, S-3 (b) P-6, Q-2, R-4, S-1
(c) P-6, Q-2, R-5, S-3 (d) P-2, Q-6, R-5, S-1
6. Ans. (d)

7. The minimum number of links in a single degree-of-freedom planar mechanism with both higher and lower kinematic pairs is **[GATE-2002]**
(a) 2 (b) 3 (c) 4 (d) 5
7. Ans. (c)

8. Consider the following statements: **[IES-2005]**
1. The degree of freedom for lower kinematic pairs is always equal to one.
2. A ball-and-socket joint has 3 degrees of freedom and is a higher kinematic pair
3. Oldham's coupling mechanism has two prismatic pairs and two revolute pairs.

Which of the statements given above is/are correct?
(a) 1, 2 and 3 (b) 1 only (c) 2 and 3 (d) 3 only
8. Ans. (a)

9. Which of the following are examples of forced closed kinematic pairs?
1. Cam and roller mechanism 2. Door closing mechanism **[IES-2003]**
3. Slider-crank mechanism 4. Automotive clutch operating mechanism
Select the correct answer using the codes given below:
Codes:
(a) 1, 2 and 4 (b) 1 and 3 (c) 2, 3 and 4 (d) 1, 2, 3 and 4
9. Ans. (a)

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

EXAMINATION ANSWER BOOK

(To be filled in by the candidates)

Name of the Candidate: Ankur Mittal

Class: B.Tech VIII th Sem, MECH (A1)

Roll No.: 12

Subject & Paper: Power Generation

Day & Date: Tuesday, 25-02-20

Session: 2019-20

Supplementary Used (Nos.):

Signature of Candidate: Ankur

Signature of Invigilator:

N.B. Candidates Should fill in the above particulars before they begin to write their answers.

Use blank space below for starting your answer.

For the use of Examiner		
Q.No.	Marks	
1.	06	04
2.	06	07
3.	04	07
4.		
5.		
6.		
7.		
8.	16 + 18 = 34	
Total	34/40	

Examiner's Signature

Part-A

Ans 1) Reheating in thermal power plant means the steam is heated again to become superheat after being passed from turbine. 02

Ans 2) Thermal efficiency of steam power plant

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

EXAMINATION ANSWER BOOK

CO1 = 14
CO2 = 13
CO3 = 22
CO4 = 07

(To be filled in by the candidates)

Name of the Candidate: LOKESH KUMAR DUBEY

Class: 7th Sem, Mechanical, Section 'A'

Roll No.: 53

Subject & Paper: MNM

Day & Date: Wednesday, 23/10/2019

Session: 2019 - 2020

Supplementary Used (Nos.):

Signature of Candidate: Lokesh

Signature of Invigilator:

N.B. Candidates Should fill in the above particulars before they begin to write their answers.

Use blank space below for starting your answer.

For the use of Examiner	
Q.No.	Marks
1.	7+7 = 14
2.	6+7 = 13
3.	6+6 = 12
4.	6+4 = 10
5.	3+4 = 07
6.	
7.	
8.	
Total	56/80

Examiner's Signature

UNIT - 1

Q1 ⇒ Ans 1: Micro-cutting tools:

→ Micro-cutting tools are the tools which is helpful in machining of workpiece at micro-level (10⁻⁶ scale).

Criterion-2 Program Curriculum and Teaching- Learning Process			
S. NO	**CRITERIA**	**OBSERVATION MADE BY NBA**	**COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)**
2.2.3	**2.2.3. Quality of student projects**	Rubrics is established but not followed for evaluation and monitoring of projects and projects quality is not good.	Based on the rubrics, student projects are evaluated and continuous monitoring is done by the concerned mentor of the project. The primary aim of conducting the projects for the students is to inculcate and apply the knowledge gained through Theory and Lab based learning to provide solutions to real world problems. The students are encouraged to undertake quality projects which addresses the engineering, industrial, environmental, and societal needs To ensure the quality and monitoring of projects, department analyse continuous evaluation and progress through Project assessment Committee. Progress report presentation followed by viva-voce has been carried out twice in a semester in front of Project assessment committee for review of the progress and suggestions thereafter. • A presentation followed by viva voce is also carried out at the end of semester also in front of the external examiner and other students. • All the students are mandatory to write a research paper on their project and present the same during the national conference of the department organized every year. Some papers are published in journals also. • External experts from industry and eminent institution are invited during the presentation for expert comments. • All the papers in the form of conference proceeding is also maintained in the department and also uploaded on website as link given below. • All the project titles are mapped with all the Program outcomes (POs) and Program specific outcomes (PSOs) for evaluation of POs and PSOs attainment as per rubric. • Some students apply their project ideas for **patent** • Some students apply their project ideas for **Start-up** **Impact analysis of Projects** • New innovative ideas are evolved. • Skills or abilities of students improved.

			• Knowledge on various aspects of project management was developed. • Confidence level of the students was boosted. • Improved team work spirit. • Implementation and deployment of the project for social benefits. • Document preparation and presentation.

SOME PROJECTS:

Group no.	Roll No.	Team Members	Title of project	Project Guide	Relevance with PO'S
A-3	3	ABHINAV SHARMA	Design of Lockwood/Hillary Valve less pulse jet engine	Mr Akhilesh Paliwal	PO1, PO2, PO3,PO4,PO5, PO6, PO8, PO9, PO10,PO11, PO12
	7	ABHISHEK TRIVEDI			
	8	ADITYA JOSHI			
A-4	4	ABHISHEK BANTHIYA	Analysis of Different methods to find out Testing and performance of Engine	Dr. M.P. Singh	PO1, PO2, PO3,PO4,PO5, PO6, PO8, PO9, PO10,PO11, PO12
	27	CHINMAY JAIN			
	28	CHIRAG GUPTA			

	30	DAYARAM DEV			
A-6	6	ABHISHEK SONI	Fabrication of Lockwood/Hillary Valve less pulse jet engine	Mr Akhilesh Paliwal	PO1, PO2, PO3,PO4,PO5, PO6, PO8, PO9, PO10,PO11, PO12
	10	ADITYA MARWAL			
	33	DEVESH GAUR			
	38	GOPIRAJ SINGH SHEKHAWAT			
A-10	15	ARPIT OJHA	Analysis of sustainable composite material	Mr. Kuldeep Sharma	PO1, PO2, PO3,PO4,PO5, PO6, PO8, PO9, PO10,PO11, PO12
	23	BHAWESH SHARMA			
A-11	36	GARVIT TYAGI	Design of air compressed engine	Dr. M.P. Singh	PO1, PO2, PO3,PO4,PO5, PO6, PO8, PO9, PO10,PO11, PO12
	37	GAURAV MISHRA			
	18	ATISHAY JAIN			
	44	HIMANSHU NAMA			
A-12	19	AVINASH CHOUDHARY	Design and analysis of Survellience Drone	Mr. kuldeep Sharma	PO1, PO2, PO3,PO4,PO5, PO6, PO8, PO9, PO10,PO11, PO12
	47	JANAK SINGH NATHAWAT			
	48	JAYVARDHAN SINGH NIRWAN			
	31	DEEPAK SINGH			

A-17	40	HARSHUL AGRAWAL	Construction material lifted by using solenoid engine	Mr. Lalit kumar sharma	PO1, PO2, PO3,PO4,PO 5, PO6, PO8, PO9, PO10,PO11, PO12
A-18	41	HARSHVARDHA N LODHI	Fabrication of Hydrogen GENERATOR	Dr Rishi Pareek	PO1, PO2, PO3,PO4,PO 5, PO6, PO8, PO9, PO10,PO11, PO12PO8, PO9, PO11, PO12
	45	HITIK KHANDELWAL			
	46	ISHAN PANCHAL			
	55	LALIT GOYAL			
A-19	50	KAUSHAL BANG	Construction of Platfrom Jack with working model	Dr Fauzia Siddiqui	PO1, PO2, PO3,PO4,PO 5, PO6, PO8, PO9, PO10,PO11, PO12
	63	MUDIT KANKARIYA			
	26-C	JINESH SONAWAT			
	134	PARVINDER SINGH			

Jaipur Engineering College and Research Centre, Jaipur

Department of Mechanical Engineering

Date: - 07/09/2019

Notice

It is informed to all B.Tech VII semester students that they have to present their Minor / Major project Title in form of PPT as per below given format and schedule. It will be decided at the time of presentation whether the title chosen is feasible to continue as project or not. Presence of respective project supervisor is mandatory at the time of presentation.

Presentation schedule

Section	Date	Venue
A	16-09-2019	BT-07
B	17-09-2019	BT-07
C	18-09-2019	BT-07

Presentation content:

Title
Novelty
Project outcome
Approximate budget
Time schedule

Note : No group is allowed without project registration form duly signed by respective project supervisor

Mr. Akhilesh Paliwal
(Project Coordinator)

Dr. Bhuvnesh Bharadwaj
(Project Coordinator)

Dr. Rishi Pareek
(Project Coordinator)
(Section C)

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE , JAIPUR

DEPARTMENT OF MECHANICAL ENGINEERING

B.Tech VII Sem (A) Section (2019-20)

S. No.	Roll No.	Team Members	Title of project	Project Guide	Evaluation (10)					Relevance with PO'S	Remarks
					Usefulness of the project (3)	Safety (2)	Ethics & Communication (2)	Project Management (3)	Total (10)		
A-1	47-A	KOMAL KUMAR	DUAL SIDE WATER PUMPING SYSTEM BY USING SCOTCH YOKE MECHANISM	Mr. Abhishek Kumar	2	1	2	2	7	PO1, PO2, PO3, PO5, PO6, PO8, PO9, PO11, PO12	ACCEPT
	3-A	AMIT KUMAR TINKAR									
	61-A	MOHD ASIF KHAN									
A-2	13-A	ANSHUMAN PACHOLI	PROTOTYPE OF ABRASIVE JET MACHINE FOR METAL CUTTING PURPOSE	Mr. Srikant Bansal	2	1	2	2	7	PO1, PO2, PO3, PO6, PO8, PO9, PO11, PO12	ACCEPT
	36-A	MANISH KHATRI									
	15-A	ARCHIT MISHRA									
	16-A	ARPIT CHOUDHARY									
A-3	17-A	ARPIT KASLIWAL	KINETIC ENERGY RECOVERY SYSTEM	Mr. Abhishek Kumar	2	1	1	2	6	PO1, PO2, PO3, PO5, PO6, PO8, PO9, PO11, PO12	ACCEPT
	6-A	AJAY SHARMA									
	23-A	CHIRAG TALWAR									
	12-A	ANKUR MITTAL									
	1-C	ABHISHEK JAIN									
A-4	11-A	ANKIT KUMAWAT	MULTI DIRECTIONAL WIND MILL (HYBRID)	Mr. Tej Bahadur	2	1	2	1	6	PO1, PO2, PO3, PO6, PO8, PO9, PO11, PO12	ACCEPT
	18-A	ASHOK KUMAR SAINI									
	19-A	ASHUTOSH MEWARA									
	20-A	AUGUSTIN JOY MARKER									
	21-A	BAL KISHAN DHAKER									
A-5	23-A	BHARAT KHANDELWAL	SANITARY WARE DESIGNING WITH FFF TECHNOLOGY	Mrs. Priti Bodkhe	1	2	1	2	6	PO1, PO2, PO3, PO6, PO8, PO9, PO11, PO12	ACCEPT
	8-A	AKASH AGRAWAL									
	10-A	ANIL KUMAR SAINI									
	42-A	JASWANT SINGH GEHLOT									
	40-A	HIMANSHU SHARMA									
A-6	24-A	CHIRAG MAHESHWARI	IMPLEMENTATION OF AUTOMATION AND A I IN WORKSHOP	Mr. Kuldeep Sharma	2	1	2	1	6	PO1, PO2, PO3, PO5, PO6, PO8, PO9, PO11, PO12	ACCEPT
A-7	39-A	HIMANSHU MAHIPAL	DESIGN AND FABRICATION OF PAPER SHREDDER	Dr. Fauzia Siddique	2	1	2	2	7	PO1, PO2, PO3, PO6, PO8, PO9, PO11, PO12	ACCEPT
	41-A	HIMANSHU SINGHAL									
	45-A	KEVAL NAGAR									
	37-A	HIMANSHU JAIN									
	1-A	ABHISHEK GUPTA									
	3-A	ABHISHEK RAJPUT									
A-8	57-A	MANISH SHARMA	DRYLIN OR LINEAR BALL BEARING TESTING AND FIND THE LEAST TORRIENCE	Mr. Akhilesh Paliwal	1	2	1	2	6	PO1, PO2, PO3, PO5, PO6, PO8, PO9, PO11, PO12	ACCEPT
	5-A	ADITYA SANADHYA									
	32-A	DINESH SUTHAR									
	51-A	LALIT PAREEK									
A-9	53-A	MANISH GANGWAR	SOLATR VEGITABLE DRYER	Mrs. Priti Bodkhe	2	2	1	2	7	PO1, PO2, PO3, PO6, PO8, PO9, PO11, PO12	ACCEPT
	33-A	LOKESH KUMAR DUBEY									
	52-A	LOKESH DHYAWANA MEENA									
	58-A	MAYUR SEN									
	72-A	RAHUL KHANDELWAL									
A-10	60-A	MOHAMMED SAQUIB KHAN	DESIGN, FABRICATION AND TESTING OF HIGH EFFICIENCY DOMESTIC GAS BURNER	Dr. Rishi Pareek	2	1	2	2	7	PO1, PO2, PO3, PO6, PO8, PO9, PO11, PO12	ACCEPT
	64-A	NEEL RAJ KAUSHIK									
	49-A	LAKSHY ZAVERI									
	81-B	RISHABH DUTT SHARMA									
A-11	67-A	PANKAJ JANGID	INBUILT HYDRAULIC VEHICLE LIFTING JACK	Mr. Kuldeep Sharma	2	1	1	2	6	PO1, PO2, PO3, PO5, PO6, PO8, PO9, PO11, PO12	ACCEPT
	68-A	PANKAJ KUMAR CHAHAR									
	70-A	POONAM KUMARI									
	75-B	RAJAT GUPTA									
	54-A	LOVEKESH GUPTA									
A-12	82-B	ROHIT GEHLOT	DESIGN, FABRICATION AND TESTING OF LOW COST SOLAR STILL	Dr. Rishi Pareek	2	1	2	2	7	PO1, PO2, PO3, PO6, PO8, PO9, PO11, PO12	ACCEPT
	26-A	DARSHAN BAID									
	71-A	PRASIT JAIN									
	124-B	AMAN MAHESHWARI									
	29-A	DEVANSH SHARMA									
A-13	33-A	DIVIK MATHUR	ADJUSTABLE SHELVES AND FOLDING BAR REFRIGERATOR	Mr. Kuldeep Sharma	2	2	1	2	7	PO1, PO2, PO3, PO5, PO6, PO8, PO9, PO11, PO12	ACCEPT
	31-A	DHEERAJ VERMA									
	56-A	HIMANSHU CHHAPARWAL									
	105-B	SUBHAM AGARWAL									
	50-A	LAKSHYARAJ SINGH RATHORE									
A-14	66-A	OM PRAKASH	FUSED DEPOSITION MODELING (FDM) FILAMENT TEST AND FABRICATION OF 9 MODELS BY 3D PRINTING	Mr. Aashish Nagpal	2	1	1	2	6	PO1, PO2, PO3, PO6, PO8, PO9, PO11, PO12	ACCEPT
	115-B	VIKASH KUMAR									
	38-A	HIMANSHU JAIN									
	65-A	NEHAL SHAMS									
	78-B	RAMUMESH CHOUDHARY									

Project Coordinator

HOD

(A-1)

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE (JECRC) JAIPUR

MECHANICAL ENGINEERING DEPARTMENT

MINOR / MOJOR PROJECT REGISTRATION FORM 2022-2023

1. Team members:

Roll No.	Name of student	Signature
47-A	KOMAL KUMAR	
81-A	Md. ASif khan	
9-A	AMIT KUMAR TINKAR	

2. Title of project: Scotch yoke - Mechanism for (dual water Pump cycle)

3. Type of Project: Fabrication/Design/Experimental/Theoritical/Industrial/Industrial case study/IndustrialSurvey/IndustrialManagement/Productivity/Robotics/Software and Other (specify)
4. Date of commencement: 6/08/22
5. Planned Duration: 7 months
6. Brief Summary of Project: (attach extra sheet if required)

This is a Kinematic mechanism to improve the volumetric efficiency of pump through scotchyoke mechanism.

7. Expected benefits: efficiency will increase
8. Name of supervisor: ABhishek KUMAR

I agree to be supervisor of the projects

(Signature of the Supervisor)

Project coordinator

Jaipur Engineering college & Research Centre
Department of Mechanical Engineering
Project Progress Report

Group No: A-8 Year: 19-20
Project Title: Acrylin & linear Ball bearing testing & find the wear tolerance on 3D printer

Group Member's Name:

1	16EJCME055	Lalit Pareek
2	16EJCME005	Aditya Sanadhya
3	16EJCME096	Dinesh Suthar
4	16EJCME061	Manish Sharma

Name of Guide: Mr. Akhilesh Paliwal

Sr.No.	Date	Work Done	Signature of Student	Signature of Guide
1	16 Aug 2019	Literature Survey Studied more than 15 Research Papers.	Lalit Pareek, Aditya Sanadhya, Dinesh Suthar, Manish Sharma	
2	09 sept 2019	Problem Definition and Objectives Identify the problem the existing system.	Lalit Pareek, Aditya Sanadhya, Dinesh Suthar, Manish Sharma	
3	20 oct 2019	Overall Methodology Chart · Understanding · Identification · Inspection	Lalit Pareek, Aditya Sanadhya, Dinesh Suthar, Manish Sharma	
4	1 Nov 2019	Material Availiability and Procurement (mfg. project)/Identification of design procedure (Design Project) etc. material Purchased	Lalit Pareek, Aditya Sanadhya, Dinesh Suthar, Manish Sharma	
5	3 feb 2020	50% project complition 3-D Printer classes taken by all four students	Lalit Pareek, Aditya Sanadhya, Dinesh Suthar, Manish Sharma	
6	14/feb/2020	Fabrication/ Design and analysis/ data processing, etc. All students started Printing the Prototype the Items	Lalit Pareek, Aditya Sanadhya, Dinesh Suthar, Manish Sharma	
7	2/03/2020	Testing/ Data Interpretation/Results and conclusion Students Completed Project and finding final Conclusion	Lalit Pareek, Aditya Sanadhya, Dinesh Suthar, Manish Sharma	
8	12/03/2020	Thesis/Report Writing 70% Project Report done some changes need.	Lalit Pareek, Aditya Sanadhya, Dinesh Suthar, Manish Sharma	

Jaipur Engineering College and Research Centre, Jaipur

Department of Mechanical Engineering

Date: - 7/11/2019

Notice

This is informing to all B.Tech VII semester students that they have to present their minor project presentation for final internal assessment and Submit your synopsis in spiral binding duly signed by your guide at given schedule.

Presentation schedule

Group Number	Date	Venue
A1 to A14	3-12-2019	BT-07
B1 to B 13	4-12-2019	BT-07
C1 to C15	5-12-2019	BT-07

Every group should prepare synopsis of your concerned project which includes following points:

1. Contents
2. Literature review (at least 8 research/review papers of recent previous years)
3. Problem definition and objective. (Times new Roman, 12 font size with 1.5 line spacing and Justify)
4. Cost estimation of project in proper format.

NOTE: Submit synopsis in spiral binding.

Mr. Akhilesh Paliwal
(Project Coordinator)
(Section A)

Dr. Bhuvnesh Bharadwaj
(Project Coordinator)
(Section B)

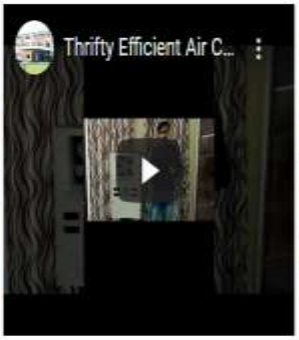
Dr. Rishi Pareek
(Project Coordinator)
(Section C)

jecrcfoundation.com/mechanical-engineering/projects

Apps Getting Started Imported From Fire...

About Us Placements IQAC Departments Research Extension Events & Activities Student's Corner Faculty Corner Gallery SAR NAAC Co Us

Some Projects



ISST Journal of Mechanical Engineering, Vol. 10 No. 1-2, (January - December 2019), p.p. 36-41
ISSN 0976-7371 © Intellectuals Society for Socio-Techno Welfare

MS Received from RITDME-2018 held on 6-7 April, 2018 at JECRC, Jaipur

ANALYSIS AND CHARACTERISTICS OF BLENDED WING BODY AIRCRAFT

Anirudh Jain*, Mudit Garg and Lalit Kumar Sharma
Department of Mechanical Engineering, Jaipur Engineering College and Research Centre, Jaipur-302022, Rajasthan, India
Email : anirudhjain548@gmail.com, muditgarg76@gmail.com, lalitkumarsharma.me@jecrc.ac.in

Received on: 10.Apr.2018

Accepted on : 29.Mar.2019

ABSTRACT

This paper puts forward a design idea for blended wing body (BWB). The study will focus on the aerodynamic characteristics such as Mach number and pressure variation over the body with the help of mechanical software tools, from these results we can find the aerodynamic efficiency(lift force to drag force ratio) so that we can compare the performance characteristics with conventional aircraft. Because aerodynamic design is carried out under the constraints of BWB design requirements, the design configuration fulfils the demands for interior layout and provides a solid foundation for continuous work.

Keywords: *Blended Wing Body, Solidworks, Flow Simulation*

INTRODUCTION TO CONCEPT OF BWB

A Blended wing body (BWB or *Hybrid Wing Body*, HWB) is a fixed-wing aircraft having no clear dividing line between the wings and the main body of the craft. The form is composed of distinct wing and body structures, though the wings are smoothly blended into the body, unlike a flying wing which has no distinct fuselage. A BWB design may or may not be tailless.

Blended Wing Body (BWB) aircrafts differ from usual commercial designs (tube and wings (TAW)) in the idea that the main body of the aircraft could (and should) help in the lift effort of the whole structure. This design derived from the flying wing appeared as an answer to NASA's 1988's prerogative to propose a new revolutionary long range transport aircraft [3]. This concept, with more extensive

Furthermore, due to the intuitive position of the engines on this configuration (over the fuselage), this design should allow for less noise propagation in consideration to the ground observer, making this aircraft more suitable for in-city airports.

LITERATURE REVIEW

LI Peifeng, ZHANG Binqian, CHEN Yingchun, YUAN Changsheng, LIN Yu (2011) extrapolate Aerodynamics Design Methodology for Blended Wing Body Transport aiming design methodology to design 300-passenger BWB configuration which concludes BWB configuration achieves high lift to drag ratio (improvement is 2) and pitch trim at cruise condition, fulfils positive zero lift pitching moment and static stability design requirements, and has

ISST Journal of Mechanical Engineering, Vol. 10 No. 1-2, (January - December 2019), p.p. 21-24
ISSN 0976-7371 © Intellectuals Society for Socio-Techno Welfare

MS Received from RITDME-2018 held on 6-7 April, 2018 at JECRC, Jaipur

RECENT ADVANCEMENT IN DIAMOND COATED CUTTING TOOLS

Bharat Agarwal*, Javed Khan, and Abhishek Kumar
Department of Mechanical Engineering, Jaipur Engineering College and Research Centre,
Jaipur-302022, Rajasthan, India
Email : iambharat1810@gmail.com, zavedkhan137@gmail.com

Received on: 10.Apr.2018

Accepted on : 29.Mar.2019

ABSTRACT

Diamond coating tools have been increasingly used for machining advanced materials and cutting tools applications. A technology named Chemical Vapor Deposition (CVD) is developed to produce diamond coatings which consist of nano-diamond crystals embedded into a hard amorphous diamond-like carbon matrix. It can be classified into nanocrystalline diamond (NCD) and microcrystalline diamond (MCD). This paper considers analysis of the properties and performance of the diamond coated tools such as cutting performance, cutting edge, cutting force wear performance, residual stresses, etc.

Keywords: Chemical Vapor Deposition (CVD), Nanocrystalline diamond (NCD), microcrystalline diamond, Diamond coated tools.

1. LITERATURE REVIEW

The study done by Maneesh Chandran, ET. Al. reports us about the wear performance of diamond coated WC-Co cutting tools with a CrN interlayer by machining Al-Si Alloys. They studied the wear performance by using turning tests and impact tests. After combining the studies of turning and impact tests, they concluded that diamond coatings on WC-10%Co tools with a CrN interlayer are better tools for machining of Al-Si alloys and other high impact applications.

Ravikumar Dumpala, Et. Al. studied about the wear

The study did by both Jamal Sheikh-Ahmad and Parikshit Chipalkati reports us about the effect of cutting edge geometry on Thermal Stresses and Failure of Diamond Coated tools. Finite element analysis and simulation of thermally induced residual stresses was conducted using a transient thermo-mechanical coupled solver. It was found that the above propertiesdepends on the nose radii, cutting edge and film thickness.

Ramasubramanian Kannan, Et.Al. studied about the nanocrystalline diamond coated tool performance in machining of LM6 Aluminium alloy. They showed the

Office of the Controller General of Patents, Designs & Trade Marks
Department of Industrial Policy & Promotion,
Ministry of Commerce & Industry,
Government of India

INTELLECTUAL PROPERTY INDIA

Application Details

APPLICATION NUMBER	202011027817
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	30/06/2020
APPLICANT NAME	Jaipur Engineering College and Research Centre
TITLE OF INVENTION	TWIRL GAS BURNER
FIELD OF INVENTION	MECHANICAL ENGINEERING
E-MAIL (As Per Record)	dr.keertigupta@gmail.com
ADDITIONAL-EMAIL (As Per Record)	mohit.gambhir@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	28/08/2020

Application Status

APPLICATION STATUS	Awaiting Request for Examination

Criterion-2 Program Curriculum and Teaching- Learning Process			
S. NO	**CRITERIA**	**OBSERVATION MADE BY NBA**	**COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)**
2.2.4	**2.2.4 Initiatives related to industry interaction**	No industry supported laboratories seen. Impact analysis of institute industry interaction is very minimal and no action is taken for impact analysis.	1. Department has two Industry supported laboratories viz. Automobile research laboratory (Equipment worth rupees 50 Lakh is provided by the Baba Automobile Pvt. Limited) and Machine design laboratory (related software are provided by CADD centre, Jaipur). 2. Various training and activities are carried out through these laboratories for skill enhancement for students. 3. These laboratories are also utilized by the students during their project work and for analysis purpose for writing research papers. 4. Students also visit various industries after the end of fourth and Sixth semester for mandatory industrial training of thirty days and fifteen days training is mandatory after second semester, is also serving as industry institute interaction. 5. Various industries do visit for campus recruitment for mechanical engineering students and also provide feedbacks to the department on various issues. 6. Some of the industrial visits and technical talks are the outcome of industry -institute relationship and are included as content beyond syllabus for knowledge enhancement. 7. Department signed MOU with Bharatiya Skill University for training on advanced machines. **8.** Skill enhancement of the students is also carried out through FACE academy and it is mandatory for all pre final year students. **9.** Department collects the feedback from the students and necessary actions are taken for impact analysis. **Impact analysis: Sixty eight (68) students have been placed in Designing and hybrid vehicles industries in last two years.**

Memorandum of Understanding

Between

Baba Automobile Pvt. Ltd., Jaipur

And

JECRC Foundation, Jaipur

This Memorandum of Understanding (MOU) sets the terms and understanding between Baba Automobile Pvt. Ltd. and JECRC Foundation for provision of Automobile Center of Excellence at JECRC College, Jaipur (Raj).

This MOU will be applicable to arrange the facilities to students of B.Tech and Diploma Mechanical, Electrical, Automobile (All year) to participate in Automobile Training/Internship.

The above goals will be accomplished by undertaking the following activities:

1. That Baba Automobile Pvt. Ltd. will arrange all the facilities to conduct automobile training for all students of B.Tech & Diploma Mechanical, Electrical (All year) students. Details of engines which will be available for training are as follows are mentioned in tabular form.
2. That all apparatus, engines, tools, shall be arranged by Baba Automobile in the premises of JECRC College to provide in depth knowledge of above engines.
3. That the training duration will be throughout the year as per time table provided by head of department (ME) irrespective of the time.
4. That the lab space and Cabin space for Automobile faculties will be provided by JECRC College.
5. That an ISO certified certificate or any other study material will be provided by Baba Automobile on the completion of training.
6. Maintenance cost of all components will be bear by Baba automobile.
7. Some Sunday and holiday will be utilized for training as mutual consent.

List of 2- wheeler Engines

2-Wheeler Engines	4- Wheeler Engines
1. Bajaj Pulsar 220 cc engine.	8. Hero Honda passion.
2. Honda Shine Engine.	9. Bajaj Discover Engine.
3. Hero Splendor Engine.	10. Bajaj Platina.
4. LML Freedom 150 cc engine.	11. Tvs Sport Engine.
5. Tvs Apache Engine.	12. Tvs Victor Engine.
6. Honda Activa Automatic CVT Engine.	13. Honda Unicorn Engine.
7. Scooty Engine.	14. Automatic CVT Engine.

List of 4-wheeler Engines

4-Wheeler Engines	4- Wheeler Engines
1. AUDI V-6 Petrol Engine	8. MARUTI SUZUKI 3 CYLINDER PETROL ENGINE.
2. AUDI V-6 Diesel Engine	9. Maruti Suzuki 4 cylinder Petrol Engine.
3. MERCEDES BENZ ENGINE	10. Hyundai Verna CRDI Engine.
4. [illegible] AUTOMATIC TRANSMISSION	11. Tata Indigo Car Engine.
5. [illegible] SEMI AUTOMATIC TRANSMISSION	12. Toyota diesel Engine.
6. TATA [illegible] DIESEL ENGINE	13. Hyundai Car Diesel Engine.
7. MAHINDRA SCORPIO DIESEL ENGINE	14. Skoda Car Engine.
15. TATA Truck 18- wheeler Start Engine.	16. Tata Truck Engine For Practical.

List Start Car, Bike, Scooty.

- Tvs Victor one Start Bike.
- LML Freedom one Start Bike.
- Hero/Honda/Bajaj one Start Bike.
- Honda Activa one start Scooty.
- MERCEDES BENZ CAR for Practical & Overhauling.

List of Tool, Machines, Accessories.

- Welding Machine.
- Grinding machine.
- Cutting Machine.
- Drilling Machine.
- Open Spanners 50 Nos.
- Close Spanner 50 – Nos.
- Audi Engine Special Tools.
- Mercedes Engine Special Tools.
- Automatic Transmission Special Tools.
- 4 – Wheeler Differential System.
- Power Steering/ ELECTRICAL STEERING System

Details of training Centre Equipments / Cars / Engine and Auxiliaries

FOUR- WHEELER CAR SECTION (Rs. 11 - Lakhs)

1. MERCEDES BENZ Working car for Practical or Scanning Purpose. **(Rs. 8 -lakhs)**
2. TATA SAFARI / SEDAN Car for Practical Session. **(3 lakhs)**

FOUR- WHEELER ENGINE SECTION (Rs. 14 Lakhs)

3. AUDI- V-6 Twin Turbocharged Diesel Engine **(2.5 lakhs)**
4. AUDI- V-6 Twin Turbocharged Petrol Engine**. (2.5 lakhs)**
5. MERCEDES Engine **(3 lakhs)**
6. BMW Automatic Transmission **(1.5 lakhs)**
7. Maruti Suzuki 4- Cylinder Diesel Engine. **(1 -lakh)**
8. Tata Safari Diesel Engine **(1 lakh)**
9. Tata Indigo Diesel Engine. **(75,000)**
10. Honda City Diesel Engine. **(75,000)**
11 Skoda Car Engine. **(1 lakh)**

FOUR- WHEELER TRANSMISSION SECTION. (5 -lakh)

12. Front Wheel Drive AUDI Automatic transmission. **(1.5 lakhs)**
13. Rear Wheel Drive MERCEDES Automatic Transmission. **(1.5 lakhs)**
14. Maruti Suzuki 5 Speed Manual Transmission. **(1 -lakh)**
15.Honda Rear Wheel Drive Manual transmission. **(1 -lakh)**

FOUR- WHEELER STEERING SYSTEM SECTION . (2 -lakh)

16. Manual Steering Sytem with Rack Pinion Arrangement. **(45,000)**
17. power Steering system with Rack Pinion Arrangement. **(45,000)**
18. Maruti Suzuki cars ELECTRIC Steering System **(55,000)**
19. Toyota cars ELECTRIC Steering System **(55,000)**

FOUR- WHEELER DIFFERENTIAL SYSTEM SECTION .(4 lakhs)

20. Maruti Suzuki Rear Wheel Drive Differential System. **(45,000)**
21. Tata Cars front Wheel Drive Differential System. **(55,000)**
22. MERCEDES BENZ INDEPENDENT Limited Slip Advanced Differential. **(1.5 lakhs)**
23 .Electric Vehicle Differential system with Electric Motors. **(1.5 lakhs)**

FOUR- WHEELER BRAKING & SUSPENSION SYSTEM SECTION (4 lakhs)

24. Front Wheel DUAL DISK Braking System **(40,000)**
25. Rear Wheel DRUM Braking System **(40,000)**
26. MERCEDES BENZ Brake Vacuum Booster **(70,000)**
27. MERCEDES BENZ ABS (Anti Braking System Unit) **(1.5 lakhs)**
28. AUDI E-B-D (Equal Braking Distribution) System**. (1 lakh)**

FOUR- WHEELER AIR BAG & OTHER AUXILIARIES SYSTEM SECTION. (4.15 Lakhs)

29. MERCEDES BENZ Steering Air Bag System **(1-lakh)**
30. MERCEDES BENZ Side Windows Air Bag System **(50,000)**
31. Car Engine Self Starter Motor for Engine Starting **(35000)**
32. Car Engine Alternator System for Battery Charging**.(35000)**
35. Air Filter Units**.(10,000)**
36. Carburetor Systems**.(10.000)**
37. Fuel Injector Systems. **(75000)**
38. and Some Other Auxiliaries systems. **(1 lakh)**

TWO - WHEELER CAR SECTION (6.7 Lakhs)

39 .BAJAJ Pulsar-220 CC Engine (30,000)
40. TVS Apache 180 CC Engine. (30,000)
41. LML Freedom 125 CC Engine. (30,000)
42. HONDA Eterno Engine. (30,000)
43. TVS Victor 150 CC Engine. (30,000)
44. HONDA Activa 110 CC Engine (30,000)
45. HONDA Shine 125 CC Engine (30,000)
46. BAJAJ Discover 150 CC Engine (30,000)
47. TVS MAX 100 2 Stroke. (30,000)
48. Rajdoot 2 stroke. (30,000)
50. START BIKE FOR PRACTICAL SESSION (30,000)
51.START SCOOTY FOR PRACTICAL SESSION (30,000)
52. ELECTRIC WORKING 2-Wheeler for Electric Vehicle Development Training. (30,000)
53. Wiring System. (40,000)
54. Suspension System. (20,000)
55. Carburetion Systems. (20,000)
56. FI Systems. (20,000)
57. Sensors Systems. (60,000)
58. Self-starting and Charging System. (20,000)
59. Tuning of 2- wheelers. (40,000)
60. and Other all Systems of 2- wheeler. (60,000)

- Electromagnetic Suspension Model
- BS-4, BS-6 System
- ECU Systems With Testing [illegible] by Laptop
- S-ECU for Electrical Engg. Students.
- Disk Brake System.
- Drum Brake System.
- OBD/MPFI System.
- Air bag system

Financial Terms & Conditions

- A security amount of Rs 5 lakh given to Baba Automobile.
- security amount 5 Lakh pay at the time of signing MOU (by cheque/NEFT/RTGS in favour of nireesh baba automobile pvt ltd or baba automobile)
- The duration of lab installation Shall be maximum 30 days after signing MOU.
- Security amount 5 lakhs refund to jecrc college at the End of MOU without any depreciation.
- 20% Amount of total fee received by outside students shall be share of JECRC & will be transferred to JECRC a/c at the end of month and rest 80 % share will be of Baba Automobile.

This MOU is at will may be modified by mutual consent of authorized officials from Baba Automobile and JECRC. This MOU shall become effective upon signature by the authorized officials from Baba automobile and JECRC and will remain in effect for minimum one year and can be further extended by mutual consent.

In the absence of mutual agreement by the authorized officials from Baba Automobile and JECRC, this MOU shall end after provision of training.

Requirements

1. Space for Engines
2. Faculty Sitting Area/office.
3. Suitable Furniture for Engines
4. Space for Tools
5. Light Facility
6. Banner, booking, flex arranged by college.

Contact Information:

Baba Automobile Pvt. Ltd.
Mr. Nireesh Baba
Director

Pratap Nagar, Jaipur, Rajasthan
Contact: +91-[illegible]

JECRC Foundation Jaipur
Dr. V. K. Chandna
Principal JECRC
[illegible]
Contact: [illegible]

Dated: [illegible]

Mr. Nireesh Baba
(Director, Baba Automobile Pvt. Ltd.)

Mr. Dr. V. K. Chandna
(.......... JECRC Foundation, Jaipur)

Counter Signed By: [illegible]
Kartik Mohan (Training Head)

Counter Signed By: [illegible]
(.......... [illegible])

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MOU) entered on 30th Oct.-2017.
By and Between

CADD Centre Training Services Pvt. Ltd. Chennai, having its local office at No. 106-107 Mahima Majesty, Ram Gali No. 6, Raja Park Jaipur. (hereinafter referred as "**CADD Centre**" for the sake of brevity) and represented by its Centre head, – **Mr. Rajeev Bhargava** which expression shall mean and include its successors in office and assigns.

And

Principal, JECRC Tonk Road, Jaipur, Rajasthan, (herein after referred as "JECRC" represented by its Dr. Vinay Kumar Chandna (Principal), which expression shall mean and include its successors in office and assigns.

Objective of the program:

In today's world, CAD-CAM has become an indispensable skill required to make every professional employable and productive in the work place. The objective of the training program is:

- To train the students of JECRC Jaipur at their college campus for CAD and 3D printing by "CADD CENTRE"
- To train the students of JECRC Jaipur on the concepts and soft tools of CAD – CAM, as per the industrial / corporate requirements.
- To facilitate them to excel in their workplace.
- To bridge the skill gap between the individuals and the industry.

Course Fees and Training Program Detail:-

As per annexure 1

COURSEWARE

CADD Centre's Curriculum & Product development (CPD) team develops the courseware. Each book is conceived, prepared and printed after a thorough research on industry specific courses. The team consists of engineers, industry experts who are involved in the development of courseware. The course material is developed specially

for instructor-lead training as well as self-study material. The CPD team reviews the curriculum and updates as needed. Every student who enrolls for a course is provided with a reference manual which is of World Class Standards, comprehensive in coverage and with a nice layout that pleases the eyes!

SUBJECTS:

THEORY

PRACTICALS / LAB

PROJECT BASED ASSESMENT:

Students are encouraged to work on their own projects during the training program. Project-based learning helps students to learn the subject and understand to meet the international standards. Project-based learning encourages students to use information, ideas, skill, to answer real-world questions and solve them. Projects will be assessed by the instructor.

The advantages of project-based learning:

- Provides real-world orientation.
- Encourages higher-order thinking skills.
- Allows the instructor to be a facilitator of learning.
- Provides for ongoing student self-assessment.

CADD Centre through its Raja Park, Jaipur Shall Provide

- The proprietary and internationally acclaimed CADD Centre course material to each Student.
- Provide qualified trainers for the course.
- Periodical assessments of students for their further improvement.
- Certificate of Completion will provided to every student who will successfully complete the training program.
- CADD Centre will provide "Certificate of Association" between CADD Centre with JECRC Jaipur.
- Permit JECRC Jaipur to use CADD Centre logo as the Skill Development Partner.

JURISDICTION

All matters, queries, disputes, or differences, whatsoever, arising between the parties touching the construction, meaning, operation or effect of this Memorandum of Understanding or out of or relating to this Memorandum of Understanding or breach thereof shall settled through arbitration in accordance with the relevant Arbitration Act in force at such time. The Arbitration award shall be binding on both parties.

This Memorandum of Understanding shall come into effect from 30th Oct. 2017.

For: **JECRC, Jaipur**

Name: **Dr. Vinay Kumar Chandna**
Designation: Principal
Date: 30th Oct. 2017

for: **MULTI CAD SOLUTION (CADD CENTRE).**

Name: **Mr. RAJEEV BHARGAVA**
Designation: **Centre Head**
Date: 30th Oct. 2017

LIVEWIRE
FOR LIVE CAREERS

JECRC

MEMORANDUM OF UNDERSTANDING

Between

LIVEWIRE (A division of CADD CENTRE TRAINING SERVICES)

(By Its Raja Park, Jaipur Centre)

And

JECRC Foundation, JAIPUR

LIVEWIRE
FOR LIVE CAREERS

21/8/19

PRINCIPAL
Jaipur Engineering College &
Research Centre
Tonk Road, Jaipur-302022

BHARTIYA SKILL DEVELOPMENT UNIVERSITY, JAIPUR

SCHOOL OF MANUFACTURING SKILLS

JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE JAIPUR (JECRC) represented by its B.V.K. Chaudhary ----,

WHEREAS:

A) The BSDU is engaged in providing skills training in various faculties based on Swiss Dual System of Skills Training. The BSDU awards certificates, diplomas, advance diplomas and B. Voc. Degrees to students after 10+2 schooling. It also awards M. Voc. And Ph.D. Degrees to the Candidates. BSDU has a flexible program and students can enter/exit at any time. The whole curriculum has been aligned to UGC/AICTE/NSDC/Sector councils.

B) The JECRC is an engineering college approved by AICTE & affiliated to Rajasthan Technical University, Kota focused on undergraduate and graduate programs, and research.

C) Both the institutions intend to cooperate and focus their efforts on cooperation within areas of Training, Education, Research and Development.

D) Both the institutions being legal entities in themselves desire to sign this MOU for advancing their mutual interests.

NOW THEREFORE, IN COSIDERATION OF THE MUTUAL PROMISES SET FORTH IN THIS MOU, BOTH THE INSTITUTIONS HERE AGREE AS FOLLOWS:

CLAUSE 1

CO-OPERATION

1. Both the institutions are united by common interests and objectives, and they shall establish channels of communication and co-operation that will promote and advance their respective operation within the institutions and its related wings. The Parties shall keep each other informed of potential opportunities and shall share all information that may be relevant to secure additional opportunities for one another.
2. The co-operation between BSDU and JECRC will facilitate effective utilization of the intellectual capabilities of the both Parties providing significant inputs to them in developing suitable teaching/ training systems, keeping in mind the needs of each other.
3. The general terms of co-operation shall be governed by this MOU. Both shall cooperate with each and shall, as promptly as is reasonably practical, enter into all relevant agreements, deeds and documents (the 'Definitive Documents') as may be required to give effect to the actions contemplated in terms of this MOU. The term of Definitive Documents shall be mutually decided between the Parties, Along with the Definitive Documents. This MOU shall represent the entire understanding as to the subject matter hereof and shall supersede any prior understanding between the Parties on the subject matter hereof.

10/12/2020

MEMORANDUM OF UNDERSTANDING
GETTING ASSOCIATED FOR INTELLECTUAL PROPERTY ACTIVITIES WITH JECRCCOLLEGE

This Memorandum of Understanding (MoU) is made on this Tuesday, the 24th day of December 2019 by and between

JECRC College having its main campus address asPlot No. IS-2036 to IS-2039 Ramchandrapura Industrial Area Jaipur, Sitapura, Vidhani, Rajasthan 303905(hereinafter referred to as **'JECRCCollege'**, which expression shall include their subsidiaries, branch offices, associations, administrator, legal heirs, group institutions, etc.).

AND

Verispire Inc., a California, (USA) registered companythrough its Indian entity Verispire Technologies pvt. Ltd. (herein after referred to as 'Verispire') having its offices at C-25, Second Floor, Sector 8, Noida, Uttar Pradesh 201301, which expression shall include their subsidiaries, branch offices, associations, administrator, legal heirs, etc.

1. BACKGROUND:

1.1. Verispire is an intellectual property consulting company engaged in creating valuable business assets for our clients by safeguarding their intellectual property. We provide the best in class and wide array of intellectual property consulting services to our clients worldwide.

1.2. JECRC College has its campus in Jaipur, the capital city of Rajasthan and the famous tourist and business city in north-western India. The 32-acre JU campus combines unique classical architecture and thoughtful layout and landscaping to create a perfect learning ecosystem. JECRC College is driven by the spirit of innovation-led research. This is spelt out in infrastructure as well as practices.

1.3. Verispire also conducts hands-on workshops, lecture series and seminars to educate and train the in-house personnel of companies, educational institutions, government and semi-government bodies towards aspects of creation, management and commercialization of IP.

1.4. Whereas, JECRC COLLEGE is desirous of getting associated with Verispire for Developing Innovation and Research initiatives or streamlining existing IP process, if any with the following primary objectives:

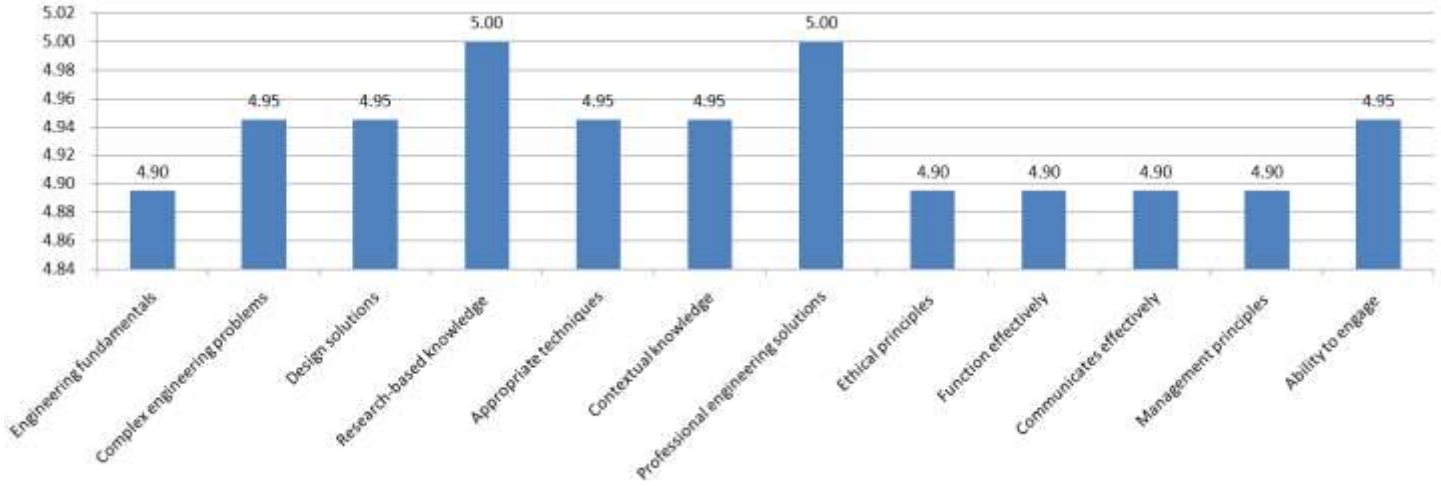
1.4.1. **Facilitate in developing IPCurate Labs with all the activities mentioned in the proposal and mutually agreed (Annexure A)**
1.4.2. Facilitate patent searching, drafting and patent filing.
1.4.3. Facilitate in patent prosecution cycle
1.4.4. **Provide complete IP management**
1.4.5. Encourage creativity and innovation.
1.4.6. Provide other IP filings (Trademark, Design, Copyright, etc), the time taken to do each task mentioned clearly in Annexure C

24/12/19

PRINCIPAL
College &

The overall analysis of 5th semester ME industrial training for the academic year 2020-21 is as follows:

Overall impact analysis of all students (94 responses)



Impact Analysis of Industrial Training

- Students are exposed to real time practical experience of the concepts studied in the classrooms and realized the practical importance of the subjects.
- Industrial training creates more interest in the subjects.
- Students are inspired to do hard work and get placed in such industries.
- Students were exposed to the industry standards and workplace culture.

The summary of analysis with action taken of 5th semester ME industrial training for the academic year 2020-21 is as follows:

Parameters	Responses		Action taken
	<60 %	≥60 %	
1. To what extent the industrial training apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.	2.1	97.9	Most of the students is satisfied with the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems. Guest lectures will be introduced to overcome more complex engineering problems.

2. To what extent the industrial training identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.	1.1	98.9	Most of the students is satisfied with the industrial training identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences. More guest lectures will be introduced to overcome more complex engineering problems.
3. To what extent the industrial training design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.	1.1	98.9	Most of the students is satisfied with the industrial training design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations. More social activities will be introduced by department.
4. To what extent the industrial training use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.	0	100	All the students is satisfied with the industrial training use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions. More information based lectures and visits will be introduced.
5. To what extent the industrial training create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.	1.1	98.9	Most of the students is satisfied with the industrial training create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations. More lectures of IT tools and visits will introduce.
6. To what extent the industrial training apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent	1.1	98.9	Most of the students is satisfied with the industrial training apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice. More professional training will

responsibilities relevant to the professional engineering practice.			introduce.
7. To what extent the industrial training understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.	0	100	All the students is satisfied with the industrial training understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. More environmental knowledge will introduce.
8. To what extent the industrial training apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.	2.1	97.9	Most of the students is satisfied with the industrial training apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. More ethics lectures will introduce.
9. To what extent the industrial training function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.	2.1	97.9	Most of the students is satisfied with the industrial training function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. More industrial visits and internship will introduce.
10. To what extent the industrial training communicates effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.	2.1	97.9	Most of the students is satisfied with the industrial training communicates effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions. More project based learning will introduce.
11. To what extent the industrial training demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects in multidisciplinary environments.	2.1	97.9	Most of the students is satisfied with the industrial training demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects in multidisciplinary environments. More extra curricular activities will introduce to boost leadership quality in student.

12. To what extent the industrial training recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological changes needed.	1.1	98.9	Most of the students is satisfied with the industrial training recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological changes needed. More technological knowledge will introduce with practical.

<table>
<tr><th colspan="4">Criterion-2 Program Curriculum and Teaching- Learning Process</th></tr>
<tr><th>S. No</th><th>CRITERIA</th><th>OBSERVATION MADE BY NBA</th><th>COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)</th></tr>
<tr><td>2.2.5</td><td>2.2.5. Initiatives related to industry internship/summer training</td><td>Only few tours and trainings are organised for students. Impact analysis and feedback lack desired seriousness.</td><td>Department increased Industry institution relationship by organised of industrial visits, training and different activities for students in academic years.
<table>
<tr><th>Event</th><th>No. of Students</th></tr>
<tr><td>Mandatory Industrial training after third year to all students for 45 Days</td><td>349</td></tr>
<tr><td>Mandatory industrial training of 15 Days after first Year and 30 days after second year</td><td>447</td></tr>
<tr><td>Industrial training to students through Internshala</td><td>14</td></tr>
<tr><td>Certificate courses by the students through Coursera</td><td>115</td></tr>
<tr><td>Analytical skill enhancement through FACE academy</td><td>318</td></tr>
<tr><td>industrial visits</td><td>13
(No. of industries visit)</td></tr>
<tr><td>Add-on courses (Technical Training/workshops) through CADD centre and Baba automobile</td><td>16
(No. of workshops)</td></tr>
</table>
<table>
<tr><th>Event</th><th>Feedback link</th></tr>
<tr><td>Industrial visit</td><td>https://jecrcfoundation.com/jf-data/NBA/ME/Industrial-Visit/Industrial-Visits-2019-20.pdf</td></tr>
<tr><td>in-house training</td><td>https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/AutoCAD.pdf

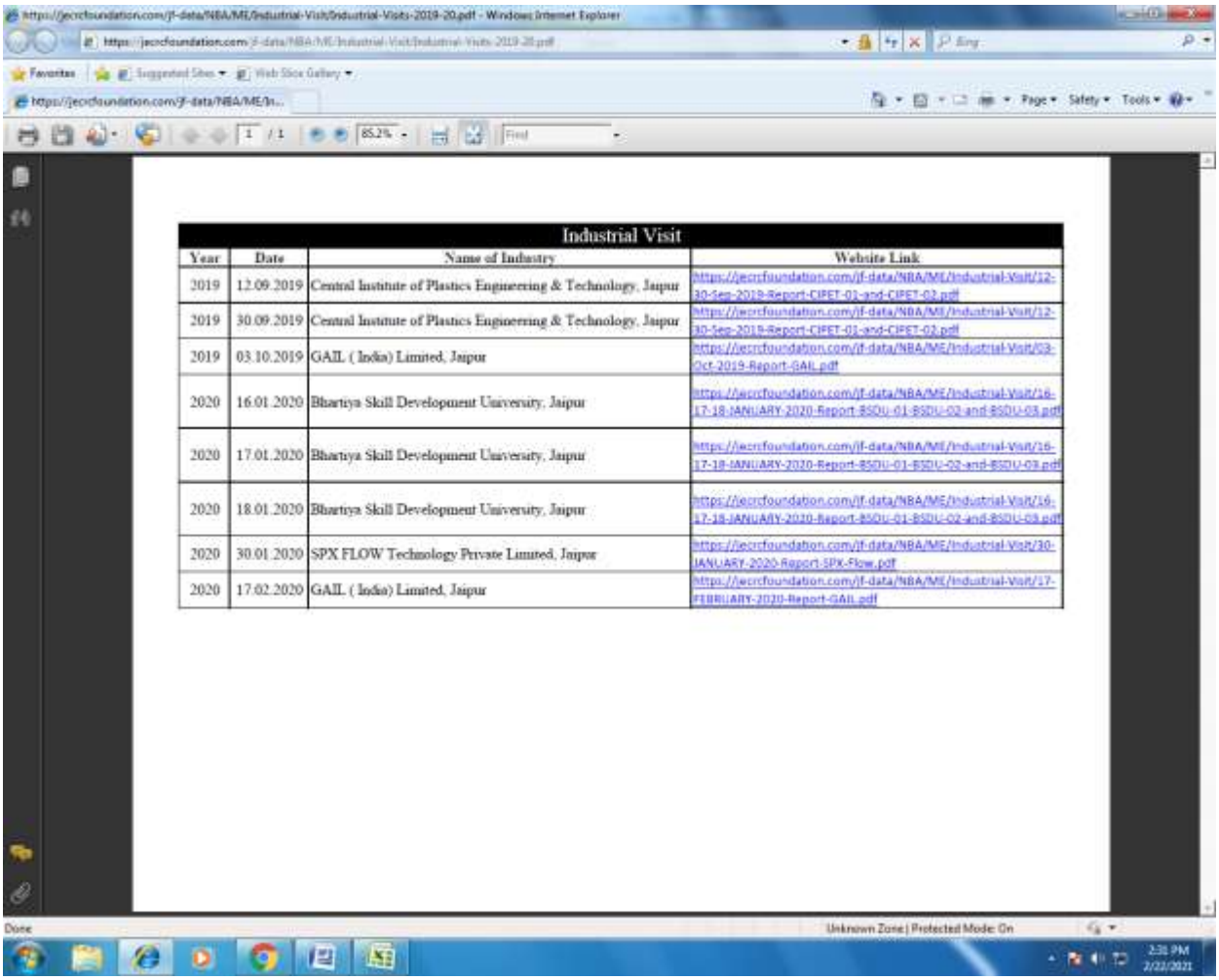
https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Introduction-of-Electric-Vehicles.pdf

https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Solidworks.pdf</td></tr>
</table></td></tr>
</table>

				https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Working-and-Disassembling-of-Electric-Vehicle.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/ANSYS.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Comparison-of-Electric-Vehicle-with-Conventional-Automobile.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Creo.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Hybrid-and-Advanced-Electric-Vehicles.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/3D-Printing-Technology.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/3D-Printing-Technology-finalyear.pdf https://jecrcfoundation.com/jf-data/ADDON/Differentaspect2019-20.pdf https://jecrcfoundation.com/jf-data/ADDON/3DPrinting2019-20.pdf https://jecrcfoundation.com/jf-data/ADDON/differentaspect2018-19.pdf https://jecrcfoundation.com/jf-data/ADDON/L3D2019-20.pdf https://jecrcfoundation.com/jf-data/ADDON/3Dprinting2018-19.pdf https://jecrcfoundation.com/jf-data/ADDON/automobileworkshop.pdf

Impact Analysis of Industrial visit

- Students are exposed to real time practical experience of the concepts studied in the classrooms and realized the practical importance of the subjects.
- Industrial visit creates more interest in the subjects.
- Students are inspired to do hard work and get placed in such industries.
- Students were exposed to the industry standards and workplace culture.



Industrial Visit

Year	Date	Name of Industry	Website Link
2019	12.09.2019	Central Institute of Plastics Engineering & Technology, Jaipur	https://jecrcfoundation.com/jf-data/NBA/ME/Industrial-Visit/12-30-Sep-2019-Report-CIPET-01-and-CIPET-02.pdf
2019	30.09.2019	Central Institute of Plastics Engineering & Technology, Jaipur	https://jecrcfoundation.com/jf-data/NBA/ME/Industrial-Visit/12-30-Sep-2019-Report-CIPET-01-and-CIPET-02.pdf
2019	03.10.2019	GAIL (India) Limited, Jaipur	https://jecrcfoundation.com/jf-data/NBA/ME/Industrial-Visit/03-Oct-2019-Report-GAIL.pdf
2020	16.01.2020	Bhartiya Skill Development University, Jaipur	https://jecrcfoundation.com/jf-data/NBA/ME/Industrial-Visit/16-17-18-JANUARY-2020-Report-BSDU-01-BSDU-02-and-BSDU-03.pdf
2020	17.01.2020	Bhartiya Skill Development University, Jaipur	https://jecrcfoundation.com/jf-data/NBA/ME/Industrial-Visit/16-17-18-JANUARY-2020-Report-BSDU-01-BSDU-02-and-BSDU-03.pdf
2020	18.01.2020	Bhartiya Skill Development University, Jaipur	https://jecrcfoundation.com/jf-data/NBA/ME/Industrial-Visit/16-17-18-JANUARY-2020-Report-BSDU-01-BSDU-02-and-BSDU-03.pdf
2020	30.01.2020	SPX FLOW Technology Private Limited, Jaipur	https://jecrcfoundation.com/jf-data/NBA/ME/Industrial-Visit/30-JANUARY-2020-Report-SPX-Flow.pdf
2020	17.02.2020	GAIL (India) Limited, Jaipur	https://jecrcfoundation.com/jf-data/NBA/ME/Industrial-Visit/17-FEBRUARY-2020-Report-GAIL.pdf

UNIVERSITY OF MICHIGAN

COURSE CERTIFICATE

06/18/2020

prabhat agarwal

has successfully completed

Introduction to Thermodynamics: Transferring Energy from Here to There

an online non-credit course authorized by University of Michigan and offered through Coursera

Arthur F. Thurnau Professor,
Mechanical Engineering, Aerospace Engineering

Verify at coursera.org/verify/HKRVDXK8KQBN
Coursera has confirmed the identity of this individual and their participation in the course.

INTERNSHALA TRAININGS

Certificate of Training

Bhanu Pratap Singh Kuntal

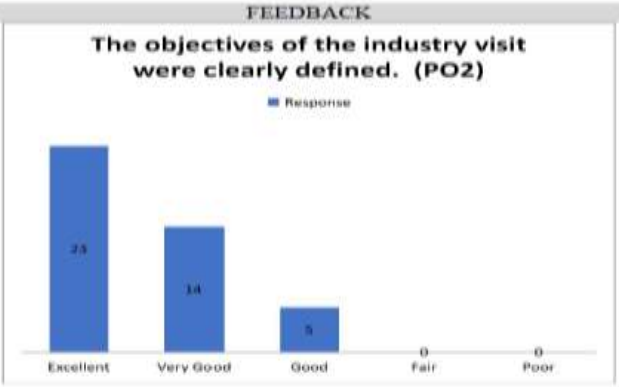
has successfully completed a six weeks online training on **Web Development** from 5th May, 2020 to 16th June, 2020. The training consisted of HTML & CSS, Bootstrap, SQL and PHP modules. In the final assessment, Bhanu Pratap scored 65% marks. We wish Bhanu Pratap all the best for the future.

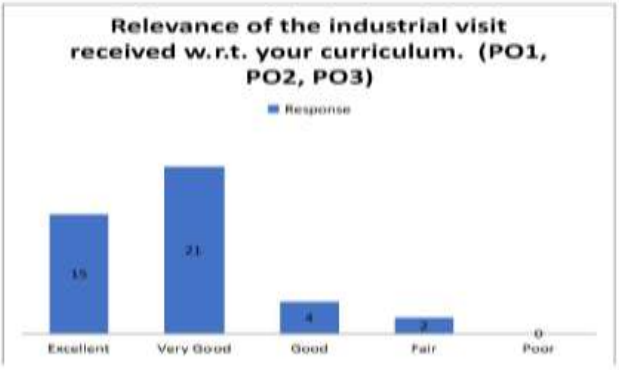
Sarvesh Agrawal
Founder & CEO, Internshala

Date of certification: 2020-05-31 Certificate no.: [illegible]
For certificate authentication, please visit https://trainings.internshala.com/verify_certificate

Batch: II Year [3B] **30-09-2019**

FEEDBACK





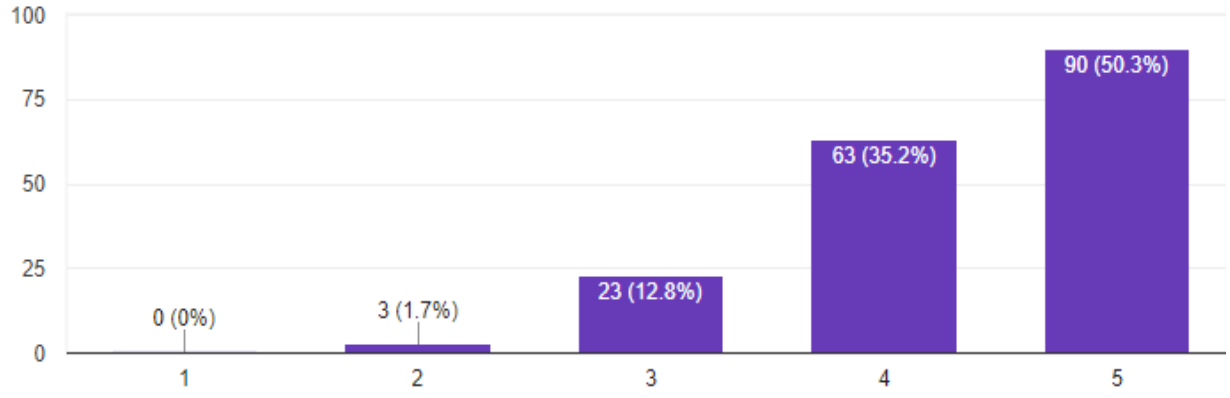
Impact/Learning Experience of the student from the Training/ Internship

179 responses

Good
Very good
I have learned auto cad 2d and 3d
Excellent
To understand the degree system
Learnt about designing
Basic Knowledge of AutoCAD and Python
It was a great experience about intelligent machines and concept of wind energy and wind turbines
In this training if learned about CARLA software and fusion 360. I also learned about different safety measures used in automotive industry. also how to make decision trees for automatically vehicles.

Level of opportunity given for you to work on real time problem or practical problem or on the day to day activities of the organization.

179 responses



<table>
<tr><td colspan="4">Criterion-3 Course Outcomes and Program Outcomes
3.1 Establish the correlation between thecourses and the POs & PSOs</td></tr>
<tr><td>S. NO</td><td>CRITERIA</td><td>OBSERVATION MADE BY NBA</td><td>COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)</td></tr>
<tr><td>3.1.2</td><td>3.1.2 CO-PO/PSOs matrices of courses selected in 3.1.1 (six matrices)</td><td>CO-PO/PSO matrices show lack of understanding.

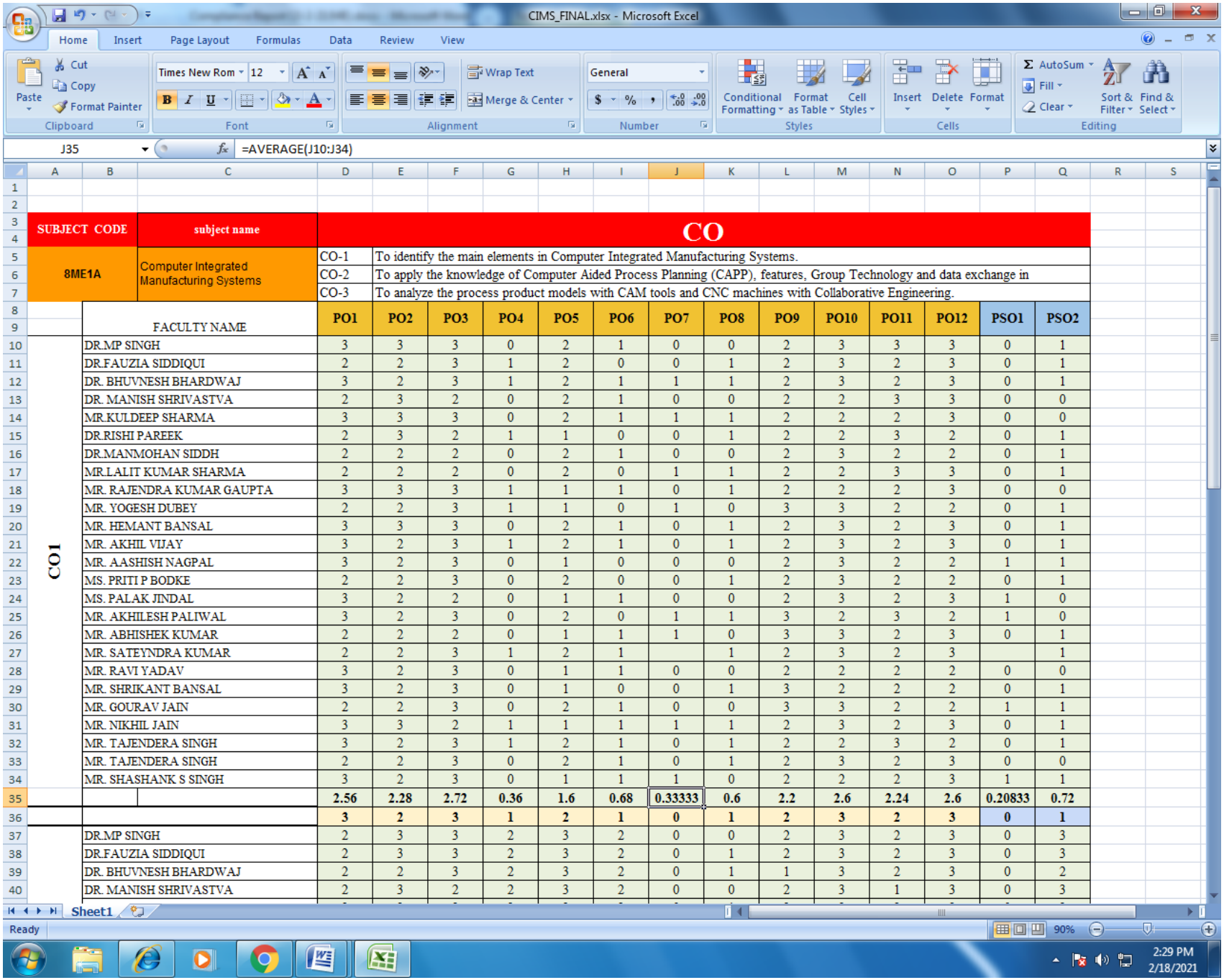
On the other hand in the attainment tables of PO, some PO against different subjects has no weightage.</td><td>1. Workshops and FDP on OBE are conducted for faculty members by Rajasthan Technical university in association with NBA and through NITTTR , Chandigarh.
2. Department has provided a sheet containing COs of all subjects and POs/PSOs to all faculty members for preparing relationship of CO-PO/PSO matrices and ask them to map COs with all POs/PSOs. After that department calculated average mapping and assign final mapping according to below mentioned criteria.
<table>
<tr><td>Average mapping (m)</td><td>Value given</td><td>Level of Relationship</td></tr>
<tr><td>m< 0.5</td><td>0</td><td>No</td></tr>
<tr><td>0.5≤ m≤1</td><td>1</td><td>Low</td></tr>
<tr><td>1< m ≤2</td><td>2</td><td>Medium</td></tr>
<tr><td>2< m ≤3</td><td>3</td><td>High</td></tr>
</table>
3. Each faculty member maintains a course file that includes vision, mission, course outcomes, relationship between CO-PO-PSO, evaluation of COs, identification of slow learner and fast learner, internal question paper mapped with COs, solution of question paper with step marking, assignment to weak students, information about student’s performance etc., reflects the understanding of faculty members.
4. Weightage of knowledge of OBE is also included in the yearly appraisal form of faculty members.</td></tr>
<tr><td>3.1.3</td><td>3.1.3 Program level Course PO/PSOs matrix of ALL courses</td><td>Almost all CO-PO/ PSO matrices, programme level course-PO/PSO matrices show lack of understanding.</td><td>1.Workshops and FDP on OBE are conducted for faculty members through NITTTR ,Chandigarh and Rajasthan Technical university in association with NBA
2. Department has provided a sheet containing COs of all subjects and POs/PSOs to all faculty members for preparing relationship of CO-PO/PSO matrices and ask them to map COs with all POs/PSOs. After that department calculated average mapping and assign final mapping according to below mentioned criteria.</td></tr>
</table>

	including first year courses		

Average mapping (m)	Value given	Level of Relationship
m< 0.5	0	**No**
0.5≤ m≤1	1	**Low**
1< m ≤2	2	**Medium**
2< m ≤3	3	**High**

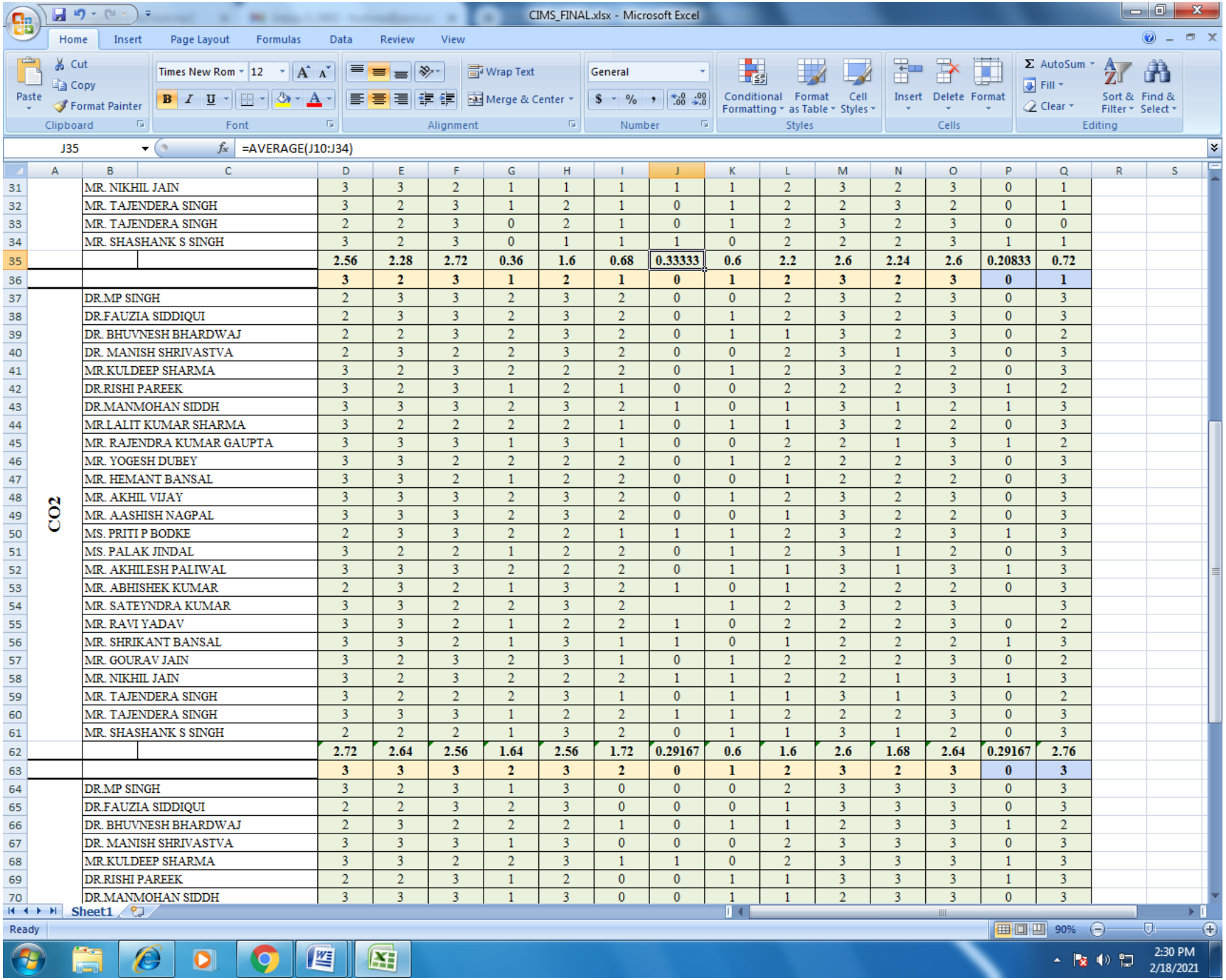
1. Each faculty member maintains a course file that includes vision ,mission, course outcomes, relationship between CO-PO-PSO, evaluation of COs ,identification of slow learner and fast learner, internal question paper mapped with COs, solution of question paper with step marking, assignment to weak students, information about student's performance etc., reflects the understanding of faculty members
2. Weightage of knowledge of OBE is also included in the yearly appraisal form of faculty members

(https://jecrcfoundation.com/jff/me/CO-PO%20Mapping.pdf)

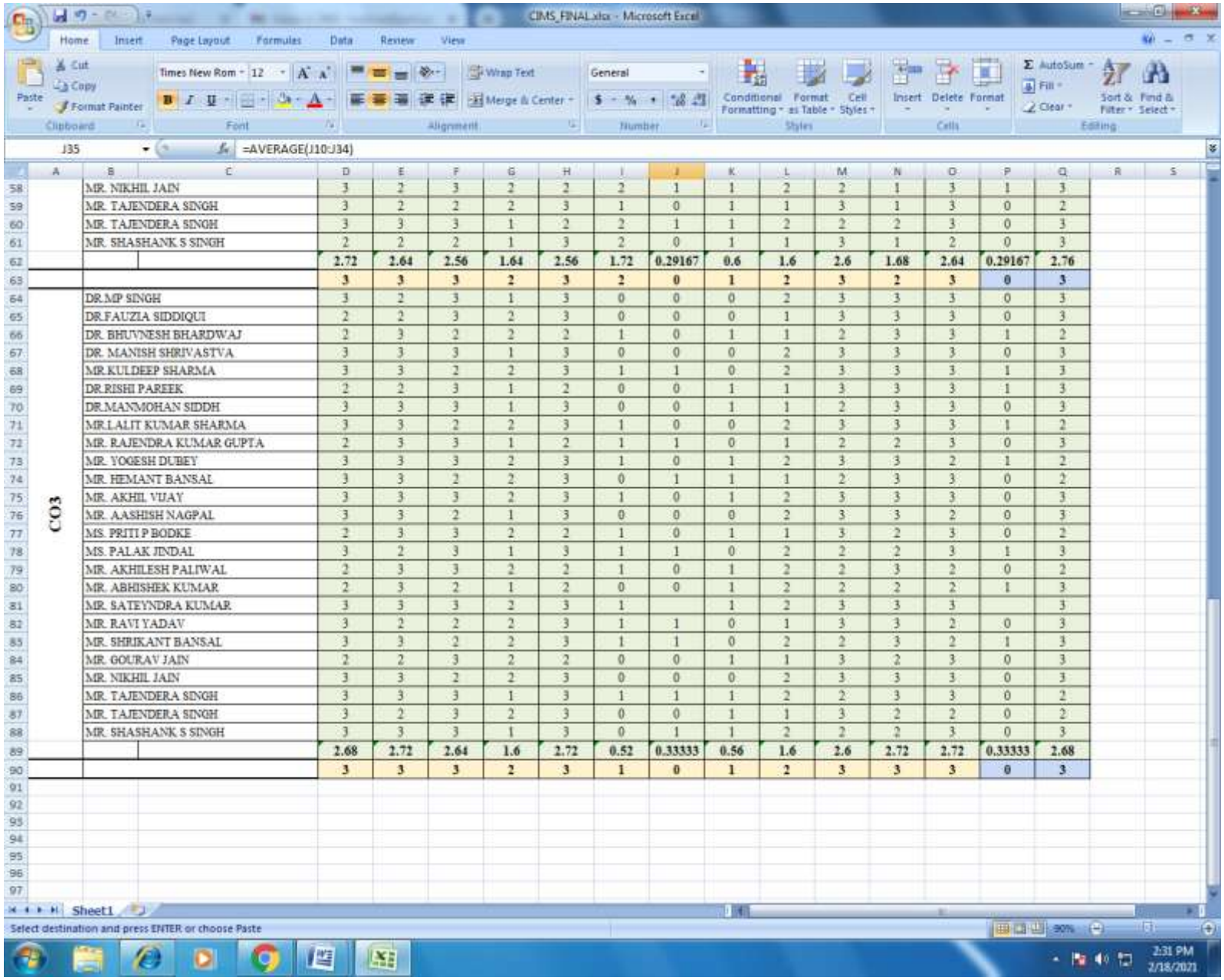


SUBJECT CODE	subject name	CO	
8ME1A	Computer Integrated Manufacturing Systems	CO-1	To identify the main elements in Computer Integrated Manufacturing Systems.
		CO-2	To apply the knowledge of Computer Aided Process Planning (CAPP), features, Group Technology and data exchange in
		CO-3	To analyze the process product models with CAM tools and CNC machines with Collaborative Engineering.

	FACULTY NAME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	DR.MP SINGH	3	3	3	0	2	1	0	0	2	3	3	3	0	1
	DR.FAUZIA SIDDIQUI	2	2	3	1	2	0	0	1	2	3	2	3	0	1
	DR. BHUVNESH BHARDWAJ	3	2	3	1	2	1	1	1	2	3	2	3	0	1
	DR. MANISH SHRIVASTVA	2	3	2	0	2	1	0	0	2	2	3	3	0	0
	MR.KULDEEP SHARMA	3	3	3	0	2	1	1	1	2	2	2	3	0	0
	DR.RISHI PAREEK	2	3	2	1	1	0	0	1	2	2	3	2	0	1
	DR.MANMOHAN SIDDH	2	2	2	0	2	1	0	0	2	3	2	2	0	1
	MR.LALIT KUMAR SHARMA	2	2	2	0	2	0	1	1	2	2	3	3	0	1
	MR. RAJENDRA KUMAR GAUPTA	3	3	3	1	1	1	0	1	2	2	2	3	0	0
	MR. YOGESH DUBEY	2	2	3	1	1	0	1	0	3	3	2	2	0	1
	MR. HEMANT BANSAL	3	3	3	0	2	1	0	1	2	3	2	3	0	1
	MR. AKHIL VIJAY	3	2	3	1	2	1	0	1	2	3	2	3	0	1
	MR. AASHISH NAGPAL	3	2	3	0	1	0	0	0	2	3	2	2	1	1
	MS. PRITI P BODKE	2	2	3	0	2	0	0	1	2	3	2	2	0	1
	MS. PALAK JINDAL	3	2	2	0	1	1	0	0	2	3	2	3	1	0
	MR. AKHILESH PALIWAL	3	2	3	0	2	0	1	1	3	2	3	2	1	0
	MR. ABHISHEK KUMAR	2	2	2	0	1	1	1	0	3	3	2	3	0	1
	MR. SATEYNDRA KUMAR	2	2	3	1	2	1		1	2	3	2	3		1
	MR. RAVI YADAV	3	2	3	0	1	1	0	0	2	2	2	2	0	0
	MR. SHRIKANT BANSAL	3	2	3	0	1	0	0	1	3	2	2	2	0	1
	MR. GOURAV JAIN	2	2	3	0	2	1	0	0	3	3	2	2	1	1
	MR. NIKHIL JAIN	3	3	2	1	1	1	1	1	2	3	2	3	0	1
	MR. TAJENDERA SINGH	3	2	3	1	2	1	0	1	2	2	3	2	0	1
	MR. TAJENDERA SINGH	2	2	3	0	2	1	0	1	2	3	2	3	0	0
	MR. SHASHANK S SINGH	3	2	3	0	1	1	1	0	2	2	2	3	1	1
		2.56	**2.28**	**2.72**	**0.36**	**1.6**	**0.68**	**0.33333**	**0.6**	**2.2**	**2.6**	**2.24**	**2.6**	**0.20833**	**0.72**
		3	**2**	**3**	**1**	**2**	**1**	**0**	**1**	**2**	**3**	**2**	**3**	**0**	**1**
	DR.MP SINGH	2	3	3	2	3	2	0	0	2	3	2	3	0	3
	DR.FAUZIA SIDDIQUI	2	3	3	2	3	2	0	1	2	3	2	3	0	3
	DR. BHUVNESH BHARDWAJ	2	2	3	2	3	2	0	1	1	3	2	3	0	2
	DR. MANISH SHRIVASTVA	2	3	2	2	3	2	0	0	2	3	1	3	0	3



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
31		MR. NIKHIL JAIN		3	3	2	1	1	1	1	1	2	3	2	3	0	1		
32		MR. TAJENDERA SINGH		3	2	3	1	2	1	0	1	2	2	3	2	0	1		
33		MR. TAJENDERA SINGH		2	2	3	0	2	1	0	1	2	3	2	3	0	0		
34		MR. SHASHANK S SINGH		3	2	3	0	1	1	1	0	2	2	2	3	1	1		
35				**2.56**	**2.28**	**2.72**	**0.36**	**1.6**	**0.68**	**0.33333**	**0.6**	**2.2**	**2.6**	**2.24**	**2.6**	**0.20833**	**0.72**		
36				**3**	**2**	**3**	**1**	**2**	**1**	**0**	**1**	**2**	**3**	**2**	**3**	**0**	**1**		
37		DR.MP SINGH		2	3	3	2	3	2	0	0	2	3	2	3	0	3		
38		DR.FAUZIA SIDDIQUI		2	3	3	2	3	2	0	1	2	3	2	3	0	3		
39		DR. BHUVNESH BHARDWAJ		2	2	3	2	3	2	0	1	1	3	2	3	0	2		
40		DR. MANISH SHRIVASTVA		2	3	2	2	3	2	0	0	2	3	1	3	0	3		
41		MR.KULDEEP SHARMA		3	2	3	2	2	2	0	1	2	3	2	2	0	3		
42		DR.RISHI PAREEK		3	2	3	1	2	1	0	0	2	2	2	3	1	2		
43		DR.MANMOHAN SIDDH		3	3	3	2	3	2	1	0	1	3	1	2	1	3		
44		MR.LALIT KUMAR SHARMA		3	2	2	2	2	1	0	1	1	3	2	2	0	3		
45		MR. RAJENDRA KUMAR GAUPTA		3	3	3	1	3	1	0	0	2	2	1	3	1	2		
46		MR. YOGESH DUBEY		3	3	2	2	2	2	0	1	2	2	2	3	0	3		
47		MR. HEMANT BANSAL		3	3	2	1	2	2	0	0	1	2	2	2	0	3		
48	CO2	MR. AKHIL VIJAY		3	3	3	2	3	2	0	1	2	3	2	3	0	3		
49		MR. AASHISH NAGPAL		3	3	3	2	3	2	0	0	1	3	2	2	0	3		
50		MS. PRITI P BODKE		2	3	3	2	2	1	1	1	2	3	2	3	1	3		
51		MS. PALAK JINDAL		3	2	2	1	2	2	0	1	2	3	1	2	0	3		
52		MR. AKHILESH PALIWAL		3	3	3	2	2	2	0	1	1	3	1	3	1	3		
53		MR. ABHISHEK KUMAR		2	3	2	1	3	2	1	0	1	2	2	2	0	3		
54		MR. SATEYNDRA KUMAR		3	3	2	2	3	2		1	2	3	2	3		3		
55		MR. RAVI YADAV		3	3	2	1	2	2	1	0	2	2	2	3	0	2		
56		MR. SHRIKANT BANSAL		3	3	2	1	3	1	1	0	1	2	2	2	1	3		
57		MR. GOURAV JAIN		3	2	3	2	3	1	0	1	2	2	2	3	0	2		
58		MR. NIKHIL JAIN		3	2	3	2	2	2	1	1	2	2	1	3	1	3		
59		MR. TAJENDERA SINGH		3	2	2	2	3	1	0	1	1	3	1	3	0	2		
60		MR. TAJENDERA SINGH		3	3	3	1	2	2	1	1	2	2	2	3	0	3		
61		MR. SHASHANK S SINGH		2	2	2	1	3	2	0	1	1	3	1	2	0	3		
62				**2.72**	**2.64**	**2.56**	**1.64**	**2.56**	**1.72**	**0.29167**	**0.6**	**1.6**	**2.6**	**1.68**	**2.64**	**0.29167**	**2.76**		
63				**3**	**3**	**3**	**2**	**3**	**2**	**0**	**1**	**2**	**3**	**2**	**3**	**0**	**3**		
64		DR.MP SINGH		3	2	3	1	3	0	0	0	2	3	3	3	0	3		
65		DR.FAUZIA SIDDIQUI		2	2	3	2	3	0	0	0	1	3	3	3	0	3		
66		DR. BHUVNESH BHARDWAJ		2	3	2	2	2	1	0	1	1	2	3	3	1	2		
67		DR. MANISH SHRIVASTVA		3	3	3	1	3	0	0	0	2	3	3	3	0	3		
68		MR.KULDEEP SHARMA		3	3	2	2	3	1	1	0	2	3	3	3	1	3		
69		DR.RISHI PAREEK		2	2	3	1	2	0	0	1	1	3	3	3	1	3		
70		DR.MANMOHAN SIDDH		3	3	3	1	3	0	0	1	1	2	3	3	0	3		



58		MR. NIKHIL JAIN	3	2	3	2	2	2	1	1	2	2	1	3	1	3		
59		MR. TAJENDERA SINGH	3	2	2	2	3	1	0	1	1	3	1	3	0	2		
60		MR. TAJENDERA SINGH	3	3	3	1	2	2	1	1	2	2	2	3	0	3		
61		MR. SHASHANK S SINGH	2	2	2	1	3	2	0	1	1	3	1	2	0	3		
62			**2.72**	**2.64**	**2.56**	**1.64**	**2.56**	**1.72**	**0.29167**	**0.6**	**1.6**	**2.6**	**1.68**	**2.64**	**0.29167**	**2.76**		
63			**3**	**3**	**3**	**2**	**3**	**2**	**0**	**1**	**2**	**3**	**2**	**3**	**0**	**3**		
64	CO3	DR.MP SINGH	3	2	3	1	3	0	0	0	2	3	3	3	0	3		
65		DR.FAUZIA SIDDIQUI	2	2	3	2	3	0	0	0	1	3	3	3	0	3		
66		DR. BHUVNESH BHARDWAJ	2	3	2	2	2	1	0	1	1	2	3	3	1	2		
67		DR. MANISH SHRIVASTVA	3	3	3	1	3	0	0	0	2	3	3	3	0	3		
68		MR.KULDEEP SHARMA	3	3	2	2	3	1	1	0	2	3	3	3	1	3		
69		DR.RISHI PAREEK	2	2	3	1	2	0	0	1	1	3	3	3	1	3		
70		DR.MANMOHAN SIDDH	3	3	3	1	3	0	0	1	1	2	3	3	0	3		
71		MR.LALIT KUMAR SHARMA	3	3	2	2	3	1	0	0	2	3	3	3	1	2		
72		MR. RAJENDRA KUMAR GUPTA	2	3	3	1	2	1	1	0	1	2	2	3	0	3		
73		MR. YOGESH DUBEY	3	3	3	2	3	1	0	1	2	3	3	2	1	2		
74		MR. HEMANT BANSAL	3	3	2	2	3	0	1	1	1	2	3	3	0	2		
75		MR. AKHIL VIJAY	3	3	3	2	3	1	0	1	2	3	3	3	0	3		
76		MR. AASHISH NAGPAL	3	3	2	1	3	0	0	0	2	3	3	2	0	3		
77		MS. PRITI P BODKE	2	3	3	2	2	1	0	1	1	3	2	3	0	2		
78		MS. PALAK JINDAL	3	2	3	1	3	1	1	0	2	2	2	3	1	3		
79		MR. AKHILESH PALIWAL	2	3	3	2	2	1	0	1	2	2	3	2	0	2		
80		MR. ABHISHEK KUMAR	2	3	2	1	2	0	0	1	2	2	2	2	1	3		
81		MR. SATEYNDRA KUMAR	3	3	3	2	3	1		1	2	3	3	3		3		
82		MR. RAVI YADAV	3	2	2	2	3	1	1	0	1	3	3	2	0	3		
83		MR. SHRIKANT BANSAL	3	3	2	2	3	1	1	0	2	2	3	2	1	3		
84		MR. GOURAV JAIN	2	2	3	2	2	0	0	1	1	3	2	3	0	3		
85		MR. NIKHIL JAIN	3	3	2	2	3	0	0	0	2	3	3	3	0	3		
86		MR. TAJENDERA SINGH	3	3	3	1	3	1	1	1	2	2	3	3	0	2		
87		MR. TAJENDERA SINGH	3	2	3	2	3	0	0	1	1	3	2	2	0	2		
88		MR. SHASHANK S SINGH	3	3	3	1	3	0	1	1	2	2	2	3	0	3		
89			**2.68**	**2.72**	**2.64**	**1.6**	**2.72**	**0.52**	**0.33333**	**0.56**	**1.6**	**2.6**	**2.72**	**2.72**	**0.33333**	**2.68**		
90			**3**	**3**	**3**	**2**	**3**	**1**	**0**	**1**	**2**	**3**	**3**	**3**	**0**	**3**		

D Y Patil College of Engineering,

Akurdi Pune - 411044

!! तमसो मा ज्योतिर्गमय !!

PARTICIPATION CERTIFICATE

Three weeks 8 Credit Course on:

WhatsApp Outcome Based Education Faculty Development Program

(March 24 to April 14, 2020)

Certificate Earned by
Dr Mahendra Pratap Singh
Mechanical Engineering Department
Jaipur Engineering College & Research Centre, Jaipur,Rajsthan
(Demonstrated Active Learning during FDP)

Competencies Earned
Game Pedagogy, HOTs based CO-PO, CO-PSO, NBA- OBE Processes

Dr Vinay Kulkarni
FDP Course Coordinator

Dr Mrs P Malathi
Vice Principal

Dr Vijay M Wadhai
Principal

Balaji Reddie
President Deming Forum India

Dr Jayakrishnan M
Senior Research Scientist, NPTEL IITM

Dr Sameer Sahasrabuddhe
Senior Project Research Scientist, NPTEL IITB

2020-12-12 13:38

D Y Patil College of Engineering, Akurdi

Pune – 411044

!! तमसो मा ज्योतर्गमय!

PARTICIPATION CERTIFICATE

Three weeks 8 Credit Course on:
WhatsApp Outcome Based Education Faculty Development Program (March 24 to April 14, 2020)

CERTIFICATE EARNED BY
DR FAUZIA SIDDIQUI
MECHANICAL ENGINEERING DEPARTMENT JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE
JAIPUR, RAJASTHAN
(DEMONSTRATED ACTIVE LEARNING DURING FDP)

Competencies Earned Game Pedagogy, HOTs based CO-PO, CO-PSO, NBA- OBE Processes

Dr Vinay Kulkarni
FDP Course Coordinator

Dr Mrs P Malathi
Vice Principal

Dr Vijay M Wadhai
Principal

Balaji Reddie
President Deming Forum India

Dr Jayakrishnan M
Senior Research Scientist, NPTEL IITM

Dr Sameer Sahasrabuddhe
Senior Project Research Scientist, NPTEL IITB

Find Validity of this certificate in

2020-12-12 13:39

D Y Patil College of Engineering,

Akurdi Pune - 411044 !! तमसो मा ज्योततर्मय !!

PARTICIPATION CERTIFICATE

Three weeks 8 Credit Course on:

WhatsApp Outcome Based Education Faculty Development Program

(March 24 to April 14, 2020)

Certificate Earned by

DR.BHUVNESH BHARDWAJ

Mechanical Engineering Department

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE, JAIPUR

(Demonstrated Active Learning during FDP)

Competencies Earned
Game Pedagogy, HOTs based CO-PO, CO-PSO, NBA- OBE Processes

Dr Vinay Kulkarni
FDP Course Coordinator

Dr Mrs P Malathi
Vice Principal

Dr Vijay M Wadhai
Principal

Balaji Reddie
President Deming Forum India

Dr Jayakrishnan M
Senior Research Scientistist, NPTEL, IITM

Dr Sameer Sahasrabuddhe
Senior Project Research Scientist, NPTEL IITB

2020-12-12 13:39

NBA Awareness Webinar
on
Outcome Based Education and Accreditation

NATIONAL BOARD OF ACCREDITATION

Participation Certificate

This is to certify that

Prof./ Dr./ Mr./ Ms. Lalit Kumar Sharma

From **JECRC Jaipur**

has attended the NBA Awareness Webinar on ***"Outcome Based Education and Accreditation"*** on 4th December 2020, jointly organized by NBA and Rajasthan Technical University Kota for the Engineering Colleges in Rajasthan.

Prof. V. K. Chandna
(Principal, JECRC Jaipur)
Nodal Officer
NBA Awareness Webinar
RTU Kota

S.NO.	CRITERIA 3.2Attainment of Course Outcomes	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
3.2.1	**3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based**	Assignments are only given to weaker students.	• Faculty members provide assignment, question bank having question of previous year question papers/GATE/IES/PSU etc. to all students**.** In assignment, each question is mapped to one or more CO. • In addition to this, if obtained marks by the student in any CO < 60% in midterm examination, then the student is considered weak in that particular CO and additional assignment based on that particular CO is given to that student.
3.2.2	**3.2.2 Record the attainment of Course Outcomes of all courses with respect to set attainment levels**	Attainment process has not been adequately implemented**.** PO attainment is calculated only on the basis of internal test marks and not on end semester examination marks.	● PO attainment = Direct attainment + Indirect attainment ● Direct attainment = 80 % weightage of end semester examination (ESE) + 20% weightage of Mid-term examination (MTE) = 0.8x + 0.2y x= ESE, y=MTE ● Indirect attainment = Surveys from stakeholders, placement data, participation of students in curricular and co-curricular activities ● CO attainment = 0.8x+0.2y Where x = End semester examination (ESE) y = Mid-term examination (MTE) ● Direct attainment and indirect attainment are mapped with PO attainment through rubrics as given in table.

CO ATTAINMENT FOR YEAR 2019-20

SUBJECT CODE	Subject Name		ESE(80%)	MTE (20%)	TOTAL(100%)
			x	y	.8x+.2y
8ME1A	Computer Integrated Manufacturing Systems	CO-1	49.73	68.89	53.56
		CO-2	49.73	70.72	53.93
		CO-3	49.73	95.47	58.88
8ME2A	Laws for Engineers	CO-1	48.36	61.19	50.93
		CO-2	48.36	62.64	51.22
		CO-3	48.36	76.76	54.04
8ME3A	Power Generation	CO-1	46.73	50.73	47.53
		CO-2	46.73	49.65	47.31
		CO-3	46.73	77.77	52.94
		CO-4	46.73	96.66	56.72
8ME4.1A	Product Development and Launching	CO-1	55.98	78.00	60.38
		CO-2	55.98	85.00	61.78
		CO-3	55.98	86.00	61.98
		CO-4	55.98	84.00	61.58
8MEPR	Project Lab	CO-1	98.91	100.00	99.13
		CO-2	98.91	100.00	99.13
		CO-3	98.91	100.00	99.13
		CO-4	98.91	100.00	99.13
8ME5A	CAM Lab	CO-1	66.66	97.23	72.77
		CO-2	66.66	97.23	72.77
8ME6A	CAD Lab	CO-1	72.13	98.91	77.49
		CO-2	72.13	98.91	77.49
8ME7A	Industrial Engineering Lab - II	CO-1	79.78	90.23	81.87
		CO-2	79.78	89.90	81.80
8MESM	Seminar	CO-1	55.43	84.12	61.17
		CO-2	55.43	86.30	61.60
		CO-3	55.43	89.90	62.32
7ME1A	Finite Element Methods	CO-1	61.00	42.24	57.25
		CO-2	61.00	37.05	56.21
		CO-3	61.00	41.48	57.10
7ME2A	Refrigeration & Air-conditioning	CO-1	61.60	74.20	64.12
		CO-2	61.60	57.57	60.79
		CO-3	61.60	84.80	66.24
		CO-4	61.60	94.20	68.12
7ME3A	OPARATION RESEARCH	CO-1	47.82	53.40	48.94
		CO-2	47.82	14.65	41.19
		CO-3	47.82	33.50	44.96
		CO-4	47.82	48.60	47.98
7ME4A	Turbomachines	CO-1	48.00	52.00	48.80

		CO-2	48.00	52.00	48.80
		CO-3	48.00	51.00	48.60
		CO-4	48.00	49.00	48.20
7ME5A	**Operations Management**	CO-1	61.41	77.42	64.61
		CO-2	61.41	68.18	62.76
		CO-3	61.41	70.12	63.15
		CO-4	61.41	62.24	61.58
7ME6.1A	**Micro and Nano Manufacturing**	CO-1	55.19	65.49	57.25
		CO-2	55.19	39.06	51.96
		CO-3	55.19	19.40	48.03
		CO-4	55.19	9.47	46.05
7ME7A	**Thermal Engineering Lab-II**	CO-1	72.60	81.40	74.36
		CO-2	74.60	79.30	75.54
7ME8A	**FEM Lab**	CO-1	58.20	81.29	62.82
		CO-2	58.20	81.17	62.79
7MEPR	**Project Lab**	CO-1	99.45	99.45	99.45
		CO-2	99.45	99.45	99.45
		CO-3	99.45	99.45	99.45
		CO-4	99.45	99.45	99.45
7METR	**Practical Training & Industrial visit**	CO-1	96.42	98.45	96.83
		CO-2	97.18	98.45	97.43
6ME3-01	**Measurement And Metrology**	CO-1	59.00	66.54	60.51
		CO-2	59.00	72.79	61.76
		CO-3	59.00	73.73	61.95
		CO-4	59.00	71.10	61.42
		CO-5	59.00	74.29	62.06
6ME4-02	**Computer Integrated Manufacturing Systems (CIMS)**	CO-1	57.00	65.01	58.60
		CO-2	57.00	65.38	58.68
		CO-3	57.00	88.65	63.33
6ME4-03	**Mechanical Vibrations**	CO-1	50.73	41.02	48.79
		CO-2	50.73	30.40	46.66
		CO-3	50.73	74.05	55.39
		CO-4	50.73	72.39	55.06
6ME4-04	**Design Of Machine Elements-II**	CO-1	56.90	42.85	54.09
		CO-2	56.90	47.35	54.99
		CO-3	56.90	44.44	54.41
		CO-4	56.90	45.33	54.59
6ME4-05	**Quality Management**	CO-1	52.77	20.02	46.22
		CO-2	52.77	12.87	44.79
		CO-3	52.77	93.02	60.82
		CO-4	52.77	83.06	58.83
		CO-5	52.77	87.86	59.79

6ME5-11	**Refrigeration And Air Conditioning**	CO-1	66.17	74.20	67.78
		CO-2	66.17	57.57	64.45
		CO-3	66.17	84.80	69.90
		CO-4	66.17	94.20	71.78
6ME4-21	**Cims lab.**	CO-1	55.00	93.83	62.77
		CO-2	55.00	93.83	62.77
6ME4-23	**Machine Design Practice – II**	CO-1	55.24	75.00	59.19
		CO-2	55.24	77.00	59.59
6ME4-24	**Thermal Engineering Lab-1**	CO-1	83.08	82.00	82.86
		CO-2	83.08	85.00	83.46
6ME4-25	**VIB. LAB.**	CO-1	83.08	50.00	76.46
		CO-2	83.08	50.00	76.46
5ME4-01	**MECHATRONIC SYSTEMS**	CO-1	53.37	89.14	60.52
		CO-2	53.37	89.05	60.51
		CO-3	53.37	94.24	61.54
		CO-4	53.37	91.42	60.98
		CO-5	53.37	97.05	62.11
5ME4-02	**HEAT TRANSFER**	CO-1	52.80	61.17	54.47
		CO-2	52.80	57.16	53.67
		CO-3	52.80	53.91	53.02
		CO-4	52.80	67.95	55.83
5ME4-03	**Manufacturing Technology**	CO-1	50.28	61.17	52.46
		CO-2	50.28	57.16	51.66
		CO-3	50.28	53.91	51.01
		CO-4	50.28	67.95	53.81
5ME4-04	**Design Of Machine Elements – I**	CO-1	27.77	58.37	33.89
		CO-2	27.77	46.57	31.53
		CO-3	27.77	42.51	30.72
		CO-4	27.77	35.69	29.35
5ME4-05	**Principles Of Management**	CO-1	49.44	57.00	50.95
		CO-2	49.44	59.00	51.35
		CO-3	49.44	57.00	50.95
		CO-4	49.44	58.00	51.15
5ME3-21	**Mechatronic Lab**	CO-1	75.84	97.00	80.07
		CO-2	75.84	96.00	79.87
		CO-3	75.84	95.00	79.67
		CO-4	75.84	95.00	79.67
5ME4-12	**Automobile Engineering**	CO-1	53.88	41.39	51.38
		CO-2	53.88	34.41	49.99
		CO-3	53.88	19.62	47.03
		CO-4	53.88	29.20	48.94
		CO-5	53.88	29.22	48.95

5ME4-23	**Production engineering lab.**	CO-1	69.90	95.60	75.04
		CO-2	69.90	94.90	74.90
5ME4-24	**Machine Design Practice - I**	CO-1	72.77	94.44	77.10
		CO-2	72.77	94.44	77.10
5ME4-25	**IT LAB**	CO-1	65.56	84.43	69.33
		CO-2	65.56	84.43	69.33
4ME2-01	**Data analytics**	CO-1	57.01	41.00	53.81
		CO-2	57.01	100.00	65.61
4ME1-03	**TC**	CO-1	90.35	83.00	88.88
		CO-2	90.35	76.50	87.58
		CO-3	90.35	78.50	87.98
		CO-4	90.35	70.00	86.28
		CO-5	90.35	79.50	88.18
4ME3-04	**Digital Electronics**	CO-1	83.33	83.00	83.26
		CO-2	83.33	76.50	81.96
		CO-3	83.33	78.50	82.36
		CO-4	83.33	70.00	80.66
		CO-5	83.33	69.50	80.56
4ME4-05	**Fluid Mechanics and Fluid Machines**	CO-1	63.33	56.66	62.00
		CO-2	63.33	85.00	67.66
		CO-3	63.33	86.66	68.00
		CO-4	63.33	85.00	67.66
4ME4-06	**Manufacturing Processes**	CO-1	50.00	63.98	52.80
		CO-2	50.00	95.40	59.08
		CO-3	50.00	85.32	57.06
		CO-4	50.00	81.58	56.32
4ME4-07	**Theory of machines**	CO-1	50.00	66.38	53.28
		CO-2	50.00	42.73	48.55
		CO-3	50.00	91.20	58.24
		CO-4	50.00	88.14	57.63
		CO-5	50.00	81.01	56.20
4ME3-21	**Digital Electronics lab**	CO-1	96.50	90.35	95.27
		CO-2	96.50	85.08	94.22
		CO-3	96.50	79.82	93.16
4ME4-22	**Fluid Mechanics lab**	CO-1	92.00	91.33	91.87
		CO-2	92.00	81.60	89.92
4ME4-23	**Production practice lab**	CO-1	96.00	98.30	96.46
		CO-2	96.00	97.50	96.30
4ME4-24	**Theory of machines Lab**	CO-1	96.42	64.81	90.10
		CO-2	96.42	68.51	90.84
		CO-3	96.42	72.56	91.65
3ME2-01	**Advance Engineering**	CO-1	46.29	35.00	44.03

	Mathematics-I	CO-2	46.29	27.00	42.43
		CO-3	46.29	40.00	45.03
		CO-4	46.29	29.00	42.83
		CO-5	46.29	9.00	38.83
3ME1-02/ 3ME1-03	**TC/MEFA**	CO-1	88.87	30.33	77.16
		CO-2	88.87	33.10	77.72
		CO-3	88.87	26.40	76.38
		CO-4	88.87	43.50	79.80
3ME3-04	**ENG. MECH.**	CO-1	50.45	49.98	50.36
		CO-2	50.45	46.30	49.62
		CO-3	50.45	53.13	50.99
		CO-4	50.45	32.93	46.95
3ME4-05	**Engineering Thermodynamics**	CO-1	49.54	31.57	45.95
		CO-2	49.54	25.43	44.72
		CO-3	49.54	20.00	43.63
3ME4-06	**Materials Science and Engineering**	CO-1	57.27	60.65	57.95
		CO-2	57.27	45.00	54.82
		CO-3	57.27	56.66	57.15
		CO-4	57.27	48.36	55.49
3ME4-07	**Mechanics of Solids**	CO-1	52.00	47.00	51.00
		CO-2	52.00	51.00	51.80
		CO-3	52.00	43.00	50.20
3ME4-21	**Machine drawing practice**	CO-1	84.00	78.04	82.81
		CO-2	86.00	64.40	81.68
3ME4-22	**Materials Testing Lab**	CO-1	72.00	78.00	73.20
		CO-2	75.00	73.00	74.60
3ME4-23	**Basic Mechanical Engineering Lab**	CO-1	82.00	90.00	83.60
		CO-2	84.00	88.33	84.87
3ME4-24	**Programming using MATLAB**	CO-3	64.00	67.00	64.60
		CO-4	64.00	64.00	64.00
3ME7-30	**Industrial Training**	CO-1	64.00	67.00	64.60
		CO-2	64.00	64.00	64.00

INDIRECT ATTAINMENT TOOL (POs/PSOs)

	PO1			
INDIRECT	Parameters	Target	Attainment	Rubrics
	Placement	3	2.1	≥70% students placed then Target achieved Else = Pro rata
	Co-curriculer activities	2	2	≥80% students placed then Target achieved Else = Pro rata
	Course Exit survey	3	2.6	Pro rata
	Student Exit survey	3	2.7	Pro rata
	Alumni survey	3	2.7	Pro rata
		2.8	2.42	

S. NO	**CRITERIA**	**OBSERVATION MADE BY NBA**	**COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)**
3.3.2	**3.3.2 Provide results of evaluation of each PO & PSO**	PO/PSO attainment: for all subjects PO attainment was not calculated using ESE marks	● The PO/PSO attainment has been carried out by considering direct and indirect attainment tool. ● Direct attainment is carried out using internal examination result and end semester examination ● Indirect assessment is carried out through Placements, Students co/extracurricular achievements awards, course exit survey, program exit survey from students and Alumni feedback. ● PO attainment = Direct attainment + Indirect attainment ● Direct attainment = 80 % weightage of end semester examination (ESE) + 20% weightage of Mid-term examination (MTE) = 0.8x + 0.2y x= ESE, y=MTE ● Indirect attainment = Surveys from stakeholders, placement data, participation of students in curricular and co-curricular activities ● Direct assessment and indirect assessment are mapped with PO assessment through rubrics as given in table.

ATTAINMENT OF PO's AND PSO's THROUGH CO's (2019-20)

SUBJECT CODE	subject name		CO ATTAINMENT	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
8ME1A	Computer Integrated Manufacturing Systems	CO-1	0.536	1.607	1.071	1.607	0.536	1.071	0.536	0.000	0.536	1.071	1.607	1.071	1.607	0.000	0.536
		CO-2	0.539	1.618	1.618	1.618	1.079	1.618	1.079	0.000	0.539	1.079	1.618	1.079	1.618	0.000	1.618
		CO-3	0.589	1.766	1.766	1.766	1.178	1.766	0.589	0.000	0.589	1.178	1.766	1.766	1.766	0.000	1.766
8ME2A	Laws for Engineers	CO-1	0.509	0.509	0.509	0.509	1.019	1.019	0.509	0.509	1.528	0.509	1.019	0.509	1.019	0.509	0.509
		CO-2	0.512	0.512	1.024	0.512	0.512	1.024	1.024	0.512	0.512	0.512	1.024	1.024	1.536	1.024	0.512
		CO-3	0.540	0.540	1.621	1.081	0.540	0.540	1.081	0.540	0.540	0.540	0.540	1.081	1.081	0.540	0.540
8ME3A	Power Generation	CO-1	0.475	1.426	0.951	1.426	0.951	0.000	0.000	0.951	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		CO-2	0.473	1.419	0.946	0.946	0.946	0.946	0.000	0.000	0.000	0.000	0.946	0.946	0.000	0.000	0.000
		CO-3	0.529	1.588	1.059	1.059	0.000	1.059	1.059	1.059	0.000	1.059	1.059	1.059	1.059	0.000	0.000
		CO-4	0.567	1.701	0.000	1.134	0.000	0.000	1.134	1.134	1.134	0.000	0.000	0.000	1.134	0.000	0.000
8ME4.1A	Product Development and Launching	CO-1	0.604	1.812	1.812	1.208	1.208	0.000	1.208	1.208	0.604	0.000	0.000	0.604	1.812	1.208	1.208
		CO-2	0.618	1.854	1.854	1.854	1.236	0.000	0.000	1.236	0.000	0.618	1.236	1.236	1.854	1.236	1.236
		CO-3	0.620	1.860	1.240	1.240	1.240	0.000	1.240	1.240	0.620	0.620	1.240	1.240	1.860	1.240	1.240
		CO-4	0.616	1.232	0.616	0.616	1.232	0.000	1.232	1.232	0.000	1.232	1.232	1.232	1.848	1.232	1.232
8ME5A	CAM Lab	CO-1	0.991	2.974	1.983	1.983	2.974	2.974	2.974	1.983	0.991	1.983	2.974	1.983	2.974	0.000	2.974

		CO-2	0.991	2.974	1.983	1.983	2.974	2.974	2.974	1.983	0.991	1.983	2.974	1.983	2.974	0.000	2.974
8ME6A	**CAD Lab**	CO-1	0.991	2.974	1.983	2.974	0.991	2.974	1.983	0.991	0.991	0.000	1.983	0.991	1.983	1.983	1.983
		CO-2	0.991	2.974	1.983	2.974	0.991	2.974	1.983	0.991	0.991	0.000	1.983	0.991	1.983	1.983	1.983
8ME7A	**Industrial Engineering Lab - II**	CO-1	0.819	2.456	2.456	0.819	0.819	0.819	1.637	0.000	0.000	1.637	0.819	0.000	2.456	0.000	0.000
		CO-2	0.818	2.454	1.636	0.818	1.636	0.818	1.636	0.000	0.000	1.636	0.818	0.818	2.454	0.000	0.000
8MEPR	**Project-2**	CO-1	0.991	2.974	2.974	2.974	1.983	1.983	1.983	1.983	1.983	2.974	2.974	2.974	2.974	2.974	2.974
		CO-2	0.991	2.974	2.974	2.974	1.983	1.983	1.983	1.983	0.991	2.974	2.974	1.983	2.974	2.974	0.000
		CO-3	0.991	1.983	1.983	1.983	0.991	0.991	1.983	1.983	1.983	1.983	2.974	0.991	2.974	2.974	2.974
		CO-4	0.991	2.974	2.974	2.974	2.974	2.974	1.983	1.983	1.983	1.983	1.983	2.974	2.974	2.974	1.983
8MESM	**Seminar**	CO-1	0.612	1.835	1.835	1.223	1.223	1.835	1.223	1.835	1.223	1.835	1.835	1.223	1.223	1.223	1.835
		CO-2	0.616	1.848	1.848	1.848	1.848	1.848	1.232	1.232	1.848	1.848	1.232	1.232	1.232	1.848	1.848
		CO-3	0.623	1.246	1.246	1.870	1.246	1.870	1.246	1.246	1.870	1.870	1.870	1.246	1.870	1.246	1.246
7ME1A	**Finite Element Methods**	CO-1	0.572	1.717	1.717	1.717	1.145	1.717	0.572	0.000	0.572	0.000	0.572	1.145	0.572	1.145	1.145
		CO-2	0.562	1.686	1.686	1.686	1.686	1.686	1.124	0.562	1.124	0.000	1.124	1.686	1.124	1.124	1.124
		CO-3	0.571	1.713	1.713	1.713	1.713	1.713	0.571	1.142	1.142	0.571	1.713	1.142	1.142	1.142	1.142
7ME2A	**Refrigeration & Air-conditioning**	CO-1	0.641	1.924	1.924	1.924	1.282	0.000	1.282	1.282	0.641	0.000	0.641	0.000	0.641	0.000	1.282
		CO-2	0.608	1.824	1.824	1.216	1.824	0.608	0.608	1.216	0.608	0.000	0.608	0.608	0.608	0.000	1.216
		CO-3	0.662	1.987	1.987	1.987	1.325	1.325	1.325	0.662	0.662	0.000	0.662	1.987	1.325	0.000	1.325
		CO-4	0.681	2.044	2.044	2.044	2.044	1.362	1.362	0.681	1.362	0.681	1.362	2.044	1.362	0.000	1.362

7ME3A	**Operations Research**	CO-1	0.489	1.468	1.468	0.979	0.489	1.468	0.000	0.000	0.000	1.468	0.979	1.468	0.979	0.000	0.000
		CO-2	0.412	1.236	1.236	0.824	0.412	1.236	0.000	0.000	0.000	1.236	0.824	1.236	0.824	0.000	0.000
		CO-3	0.450	1.349	1.349	0.899	0.450	1.349	0.000	0.000	0.000	1.349	0.899	1.349	0.899	0.000	0.000
		CO-4	0.480	1.439	1.439	0.960	0.480	1.439	0.000	0.000	0.000	1.439	0.960	1.439	0.960	0.000	0.000
7ME4A	**Turbomachines**	CO-1	0.488	1.464	1.464	0.976	0.976	0.488	0.976	0.976	0.488	0.488	0.976	1.464	0.976	0.976	0.976
		CO-2	0.488	1.464	1.464	1.464	1.464	0.976	0.976	0.976	0.488	0.488	0.976	1.464	0.976	0.976	0.488
		CO-3	0.486	1.458	1.458	1.458	1.458	0.486	0.972	0.972	0.486	0.486	1.458	0.972	1.458	0.486	0.972
		CO-4	0.482	1.446	1.446	1.446	1.446	0.482	0.964	0.482	0.482	0.964	0.964	0.482	1.446	0.482	0.482
7ME5A	Operations Management	CO-1	0.646	1.938	0.646	0.646	0.646	0.000	1.292	0.646	0.000	0.000	0.646	0.646	1.938	0.000	0.000
		CO-2	0.628	1.883	1.883	1.255	1.255	0.628	0.628	1.255	0.628	0.628	0.000	0.000	1.255	1.255	1.255
		CO-3	0.632	1.895	1.263	1.895	0.632	1.895	0.632	0.000	0.632	0.632	0.632	1.263	1.895	0.632	1.263
		CO-4	0.616	1.847	1.232	1.847	1.232	0.616	1.232	0.616	0.616	1.847	0.616	1.847	1.847	1.232	1.232
7ME6.1A	**Micro and Nano Manufacturing**	CO-1	0.573	1.718	1.145	0.573	1.145	1.718	1.145	1.145	0.000	0.573	1.145	0.573	1.718	1.145	0.000
		CO-2	0.520	1.559	1.039	0.520	1.039	1.559	1.039	1.039	0.000	0.520	1.039	0.520	1.559	1.039	0.000
		CO-3	0.480	1.441	0.961	0.480	0.961	1.441	0.961	0.961	0.000	0.480	0.961	0.480	1.441	0.961	0.000
		CO-4	0.460	1.381	0.921	0.460	0.921	1.381	0.921	0.921	0.000	0.460	0.921	0.460	1.381	0.921	0.000
7ME7A	**Thermal Engineering Lab-II**	CO-1	0.744	2.231	2.231	2.231	2.231	0.744	1.487	1.487	0.744	1.487	1.487	1.487	1.487	0.744	0.744
		CO-2	0.755	2.266	2.266	2.266	2.266	0.755	1.511	1.511	0.755	0.755	1.511	1.511	1.511	1.511	0.755

7ME8A	**FEM Lab**	CO-1	0.628	1.885	1.256	0.000	1.256	1.885	0.000	0.000	0.628	0.628	1.256	0.000	0.628	1.256	1.256
		CO-2	0.628	1.884	1.884	1.884	1.884	1.884	1.256	0.628	0.628	0.628	1.256	1.256	1.256	1.256	1.256
7METR	**Practical Training & Industrial visit**	CO-1	0.995	2.984	1.989	0.995	0.995	1.989	2.984	1.989	2.984	2.984	1.989	0.000	2.984	1.989	0.995
		CO-2	0.995	2.984	1.989	0.995	0.995	1.989	2.984	1.989	2.984	2.984	1.989	0.000	2.984	1.989	0.995
		CO-3	0.995	2.984	1.989	1.989	1.989	1.989	2.984	1.989	2.984	2.984	1.989	0.000	2.984	1.989	0.995
7MEPR	**Project-1**	CO-1	0.995	2.984	2.984	2.984	1.989	1.989	1.989	1.989	1.989	1.989	2.984	2.984	2.984	2.984	2.984
		CO-2	0.974	2.923	2.923	2.923	1.949	1.949	1.949	1.949	0.974	2.923	2.923	1.949	2.923	2.923	0.000
		CO-3	0.974	1.949	1.949	1.949	0.974	0.974	1.949	1.949	1.949	1.949	2.923	0.974	2.923	2.923	2.923
		CO-4	0.974	2.923	2.923	2.923	2.923	2.923	1.949	1.949	1.949	1.949	1.949	2.923	2.923	2.923	1.949
6ME3-01	**Measurement And Metrology**	CO-1	0.605	1.815	1.210	0.000	1.210	1.210	0.605	0.000	0.000	0.000	0.605	0.000	1.815	1.210	1.210
		CO-2	0.618	1.853	1.235	0.000	1.235	1.235	0.000	0.000	0.000	0.618	1.235	0.618	1.235	1.853	1.235
		CO-3	0.619	1.858	1.239	0.619	0.619	1.858	0.000	0.000	0.619	1.239	1.239	1.239	1.858	1.858	1.858
		CO-4	0.614	1.843	1.228	0.000	1.228	0.614	0.000	0.000	0.614	0.614	1.228	1.228	1.228	1.843	1.228
		CO-5	0.621	1.862	1.241	0.621	1.241	1.241	0.000	0.000	0.000	0.000	1.862	0.000	1.862	1.241	1.241
6ME4-02	**Computer Integrated Manufacturing Systems (CIMS)**	CO-1	0.586	1.758	1.172	1.172	1.172	1.758	0.000	0.586	0.586	0.000	0.586	1.172	0.586	1.172	1.172
		CO-2	0.587	1.760	1.174	1.760	1.174	1.760	0.587	0.587	0.587	0.587	1.174	1.760	0.587	1.174	1.174
		CO-3	0.633	1.900	1.900	1.900	1.900	1.900	0.633	0.633	0.633	1.267	1.267	1.900	0.633	1.267	1.267
6ME4-03	**Mechanical Vibrations**	CO-1	0.488	1.464	1.464	0.976	0.488	0.000	0.976	0.488	0.976	0.488	0.488	0.000	0.488	1.464	0.976

		CO-2	0.467	1.400	1.400	1.400	0.933	0.000	0.467	0.000	0.467	0.467	0.000	0.467	0.467	1.400	0.933
		CO-3	0.554	1.662	1.662	1.108	1.662	0.554	1.108	0.000	0.554	0.000	0.000	0.554	0.554	1.662	0.554
		CO-4	0.551	1.652	1.101	1.101	1.101	1.101	1.101	1.101	0.000	0.551	0.551	0.000	1.101	1.652	0.551
6ME4-04	**Design Of Machine Elements- II**	CO-1	0.541	1.623	1.623	1.623	1.623	1.082	1.623	1.082	1.082	1.082	1.082	0.541	1.082	1.623	1.082
		CO-2	0.550	1.650	1.650	1.650	1.650	1.650	1.100	1.100	0.550	1.100	1.650	1.100	1.100	1.650	1.650
		CO-3	0.544	1.632	1.632	1.632	1.632	1.088	1.088	0.544	0.544	1.088	1.632	1.088	1.088	1.632	1.632
		CO-4	0.546	1.638	1.638	1.638	1.638	1.092	0.546	0.546	0.546	1.092	1.638	1.092	1.092	1.638	1.092
6ME4-05	**Quality Management**	CO-1	0.462	1.387	0.462	0.462	0.924	0.000	0.924	0.462	1.387	0.000	0.000	0.000	1.387	0.924	0.924
		CO-2	0.448	1.344	1.344	1.344	1.344	0.896	0.000	0.000	0.000	0.000	0.000	0.000	1.344	0.000	0.000
		CO-3	0.608	1.825	0.608	0.608	1.216	0.000	1.216	0.000	1.216	0.608	0.000	0.000	1.825	0.608	0.608
		CO-4	0.588	1.765	1.177	1.177	1.177	0.000	1.177	0.588	0.000	0.000	0.000	0.000	1.765	0.000	0.588
		CO-5	0.598	1.794	1.794	1.794	1.794	0.598	0.000	0.000	0.000	0.000	0.000	0.000	1.794	0.000	0.598
6ME5-11	**Refrigeration And Air Conditioning**	CO-1	0.678	2.033	2.033	2.033	1.356	0.000	1.356	1.356	0.678	0.000	0.678	0.000	0.678	0.000	1.356
		CO-2	0.645	1.934	1.934	1.289	1.934	0.645	0.645	1.289	0.645	0.000	0.645	0.645	0.645	0.000	1.289
		CO-3	0.699	2.097	2.097	2.097	1.398	1.398	1.398	0.699	0.699	0.000	0.699	2.097	1.398	0.000	1.398
		CO-4	0.718	2.153	2.153	2.153	2.153	1.436	1.436	0.718	1.436	0.718	1.436	2.153	1.436	0.000	1.436
6ME4-21	**Cims lab.**	CO-1	0.628	1.883	1.883	1.883	1.255	1.883	0.000	0.000	0.628	0.628	1.255	1.883	1.255	1.255	1.255
		CO-2	0.628	1.883	1.883	1.883	1.255	1.883	0.000	0.000	0.628	0.628	1.255	1.883	1.255	1.255	1.255

6ME4-22	**Vibration Lab**	CO-1	0.592	1.776	1.776	1.184	0.000	1.184	0.592	0.000	0.000	1.184	0.592	1.184	1.184	1.776	1.184
		CO-2	0.596	1.788	1.788	0.596	1.192	1.788	1.192	0.596	0.596	1.192	0.596	1.788	0.596	1.788	0.596
6ME4-23	**Machine Design Practice – II**	CO-1	0.829	2.486	2.486	2.486	2.486	1.657	0.829	1.657	0.829	1.657	1.657	1.657	1.657	2.486	2.486
		CO-2	0.835	2.504	2.504	2.504	2.504	0.835	1.669	0.835	0.835	1.669	1.669	1.669	1.669	1.669	0.835
6ME4-24	**Thermal Engineering Lab-1**	CO-1	0.765	2.294	0.765	0.765	0.000	0.000	0.765	1.529	0.765	0.000	0.765	0.000	1.529	1.529	0.000
		CO-2	0.765	2.294	1.529	0.765	2.294	0.765	0.765	0.765	0.000	0.000	0.765	0.765	0.765	0.765	0.765
5ME3-01	**Mechatronic Systems**	CO-1	0.605	1.816	0.605	0.605	0.605	0.605	1.816	1.816	1.816	1.210	1.210	1.210	1.816	1.210	0.605
		CO-2	0.605	1.815	0.605	1.815	0.605	0.605	1.210	1.210	0.605	1.210	1.210	0.605	1.210	1.210	1.210
		CO-3	0.615	1.846	1.846	1.846	1.846	1.231	1.231	0.615	1.231	0.615	1.846	1.231	1.846	1.231	1.231
5ME4-02	**Heat Transfer**	CO-1	0.545	1.634	1.089	0.545	1.089	0.000	0.545	0.545	0.000	0.000	0.545	0.000	1.089	1.634	0.545
		CO-2	0.537	1.610	1.073	0.537	1.073	0.000	0.537	0.537	0.000	0.000	0.537	0.000	1.610	1.610	0.537
		CO-3	0.545	1.634	1.089	1.089	1.089	0.545	0.545	1.089	0.545	0.000	0.545	1.089	1.634	1.634	0.000
		CO-4	0.537	1.610	0.537	1.073	0.537	0.000	1.073	1.073	0.537	0.537	1.073	1.073	1.610	1.073	0.000
5ME4-03	**Manufacturing Technology**	CO-1	0.530	1.591	1.591	0.530	1.060	1.591	0.530	0.000	0.530	0.000	1.060	1.060	1.591	1.591	0.000
		CO-2	0.558	1.675	1.675	1.117	1.117	1.117	0.558	0.000	0.558	0.000	0.558	0.558	1.675	1.675	0.000
		CO-3	0.525	1.574	1.049	0.525	0.000	1.049	0.000	0.000	0.525	0.000	0.000	0.525	1.049	1.574	0.000
		CO-4	0.517	1.550	0.517	0.517	0.000	1.033	0.000	0.517	0.517	0.517	0.000	0.517	1.550	1.550	0.000
5ME4-04	**Design Of Machine Elements – I**	CO-1	0.510	1.530	1.530	1.530	1.530	1.020	0.510	1.020	0.510	1.020	1.020	1.020	1.020	1.530	1.020
		CO-2	0.538	1.614	1.614	1.614	1.614	0.538	0.538	1.076	0.538	0.538	1.076	1.076	1.076	1.614	1.076

		CO-3	0.339	1.017	1.017	1.017	1.017	0.678	0.678	0.339	0.339	0.678	0.339	0.678	0.678	1.017	1.017
		CO-4	0.315	0.946	0.946	0.946	0.946	0.631	0.315	0.315	0.631	0.631	0.946	0.631	0.631	0.631	0.631
5ME4-05	**Principles Of Management**	CO-1	0.307	0.307	0.000	0.000	0.000	0.000	0.922	0.000	0.922	0.000	0.000	0.922	0.922	0.614	0.000
		CO-2	0.294	0.294	0.881	0.000	0.881	0.881	0.881	0.881	0.000	0.881	0.881	0.881	0.881	0.587	0.000
		CO-3	0.510	1.529	0.000	0.000	1.529	1.529	1.529	1.529	1.529	1.529	1.529	1.529	1.529	1.019	0.000
		CO-4	0.514	0.000	0.000	0.000	0.000	0.000	1.541	0.000	1.541	1.541	0.000	1.541	1.541	1.027	0.000
5ME4-12	**Automobile Engineering**	CO-1	0.510	1.529	1.019	0.510	0.000	0.000	0.000	0.510	0.000	1.019	0.510	1.019	1.019	1.529	0.510
		CO-2	0.512	1.535	0.512	0.000	0.000	0.512	0.512	0.000	0.000	1.023	0.512	1.023	0.000	1.535	0.512
		CO-3	0.801	2.402	0.801	0.801	0.801	2.402	0.000	0.000	0.000	0.801	0.801	0.000	0.000	2.402	0.801
		CO-4	0.799	2.396	0.000	0.799	0.000	1.597	0.799	0.000	0.000	0.799	1.597	0.000	1.597	2.396	1.597
		CO-5	0.797	2.390	0.000	0.797	0.000	0.797	2.390	0.797	0.000	0.797	0.797	0.000	1.593	2.390	1.593
5ME3-21	**Mechatronics lab.**	CO-1	0.797	2.390	2.390	1.593	1.593	1.593	1.593	0.797	0.000	1.593	0.797	0.797	0.797	0.797	1.593
		CO-2	0.514	1.541	1.541	1.028	1.028	1.028	1.028	0.514	0.000	0.514	0.514	0.000	0.514	1.028	1.028
		CO-3	0.500	1.500	1.500	1.000	1.000	1.000	1.000	0.500	0.000	0.500	0.500	0.500	1.000	1.000	1.000
		CO-4	0.470	1.411	1.411	1.411	1.411	0.941	0.470	0.470	0.000	0.941	0.470	0.470	0.941	0.941	0.000
5ME4-22	**Heat transfer lab.**	CO-1	0.489	1.468	0.489	0.489	0.489	0.000	0.489	0.979	0.000	0.979	0.489	0.000	1.468	0.979	0.489
		CO-2	0.489	1.468	0.979	0.979	0.489	0.489	0.489	0.979	0.000	0.979	0.489	0.489	1.468	1.468	0.000
5ME4-23	**Production engineering**	CO-1>	0.750	2.251	1.501	0.750	2.251	0.000	0.750	0.000	0.750	0.000	1.501	1.501	1.501	2.251	0.750

	lab.	CO-2	0.749	2.247	2.247	0.749	1.498	0.000	0.000	0.749	0.749	0.000	1.498	0.000	1.498	2.247	0.749
5ME4-24	**Machine Design Practice - I**	CO-1	0.771	2.313	2.313	2.313	1.542	0.771	0.771	1.542	0.771	1.542	1.542	1.542	1.542	2.313	1.542
		CO-2	0.771	2.313	2.313	2.313	2.313	1.542	1.542	0.771	0.771	1.542	1.542	1.542	1.542	2.313	1.542
	IT LAB	CO-1	0.693	2.080	2.080	2.080	2.080	2.080	2.080	2.080	2.080	2.080	2.080	2.080	2.080	2.080	2.080
		CO-2	0.693	2.080	2.080	2.080	2.080	2.080	2.080	2.080	2.080	2.080	2.080	2.080	2.080	2.080	2.080
4ME2-01	**Data analytics**	CO-1	0.538	1.076	0.538	0.000	0.000	0.000	0.000	0.000	0.000	0.538	0.538	0.000	0.538	0.000	0.000
		CO-2	0.656	1.312	0.656	0.000	0.000	0.000	0.000	0.000	0.000	0.656	0.656	0.000	0.656	0.000	0.000
4ME102	**TC/MEFA**	CO-1	0.889	0.000	0.889	0.000	1.778	0.000	1.778	0.889	0.000	0.889	2.666	1.778	0.889	0.000	0.000
		CO-2	0.876	0.000	0.876	0.000	2.627	0.000	1.752	0.876	0.000	0.876	2.627	1.752	0.876	0.000	0.000
		CO-3	0.880	0.000	0.880	0.000	2.639	0.000	1.760	0.880	0.880	0.880	2.639	1.760	0.880	0.000	0.000
4ME3-04	**Digital Electronics**	CO-1	0.863	2.588	2.588	0.863	0.000	0.863	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		CO-2	0.882	1.764	1.764	0.882	1.764	0.000	0.882	0.882	0.000	0.000	0.000	0.000	0.882	0.000	0.000
		CO-3	0.833	1.665	1.665	0.833	1.665	0.000	0.833	0.833	0.000	0.000	0.000	0.000	0.833	0.000	0.000
		CO-4	0.820	2.459	1.639	2.459	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		CO-5	0.824	2.471	1.647	0.824	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.824	0.000	0.000
4ME4-05	**Fluid Mechanics and Fluid Machines**	CO-1	0.807	2.420	0.807	1.613	1.613	0.000	0.000	0.000	0.807	0.000	0.807	0.807	2.420	0.000	0.000
		CO-2	0.806	2.417	1.611	0.806	1.611	0.000	0.000	0.000	0.806	0.000	1.611	0.806	2.417	0.000	0.000
		CO-3	0.620	1.860	1.240	0.620	1.860	0.000	0.620	1.240	1.240	0.000	1.860	1.860	1.860	0.000	0.000

		CO-4	0.677	2.030	1.353	1.353	1.353	0.000	0.677	1.353	1.353	0.000	2.030	2.030	2.030	0.000	0.000
4ME4-06	**Manufacturing Processes**	CO-1	0.680	2.040	0.000	0.680	0.680	0.000	0.680	0.680	0.000	0.000	1.360	0.680	2.040	2.040	0.000
		CO-2	0.677	2.030	1.353	0.677	0.000	0.677	0.677	0.677	0.000	0.000	0.677	0.677	1.353	2.030	0.000
		CO-3	0.528	1.584	0.528	1.056	0.000	0.528	0.528	0.528	0.000	0.000	0.528	0.000	1.584	1.584	0.000
		CO-4	0.591	1.772	0.591	0.591	0.000	0.000	0.591	0.591	0.000	0.000	0.591	0.000	1.182	1.772	0.000
4ME4-07	**Theory of machines**	CO-1	0.571	1.712	1.712	1.712	1.141	0.000	0.000	0.000	0.000	0.000	0.000	1.141	1.141	1.141	0.000
		CO-2	0.563	1.689	1.126	1.126	1.126	0.000	0.563	0.000	0.000	0.000	0.000	0.000	1.689	1.689	0.000
		CO-3	0.533	1.598	1.598	1.598	1.066	0.000	0.533	0.000	0.000	0.000	0.000	0.533	1.066	1.598	0.000
		CO-4	0.485	1.456	1.456	0.971	0.971	0.000	0.000	0.000	0.000	0.000	0.000	0.971	0.971	1.456	0.000
		CO-5	0.582	1.747	1.165	1.165	1.165	0.582	1.165	0.582	0.582	0.000	0.000	0.582	1.165	1.747	0.000
4ME3-21	**Digital Electronics lab**	CO-1	0.576	1.729	0.576	0.000	1.729	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.729	0.000	0.000
		CO-2	0.562	1.686	1.686	1.124	1.686	0.000	0.000	1.124	0.000	0.000	0.000	0.000	1.686	0.000	0.000
		CO-3	0.953	2.858	2.858	1.905	2.858	0.000	0.000	1.905	0.000	0.000	0.000	0.000	2.858	0.000	0.000
4ME4-22	**Fluid Mechanics lab**	CO-1	0.932	2.795	1.863	0.932	0.932	0.000	0.000	0.932	0.932	1.863	0.932	0.000	2.795	0.000	0.000
		CO-2	0.899	2.698	1.798	0.899	0.899	0.000	0.899	0.899	0.899	1.798	0.899	0.000	2.698	0.000	0.000
4ME4-23	**Production practice lab**	CO-1	0.899	2.698	0.000	0.899	0.000	0.000	0.899	0.899	0.000	1.798	0.000	0.899	1.798	2.698	0.899
		CO-2	0.965	2.894	1.929	1.929	0.965	0.000	0.965	0.965	0.000	1.929	0.000	0.965	1.929	2.894	0.965
4ME4-24	**Theory of machines Lab**	CO-1	0.963	2.889	2.889	1.926	1.926	0.000	0.963	0.000	0.000	0.963	0.963	1.926	2.889	2.889	0.000
		CO-2	0.901	2.703	1.802	1.802	0.901	0.000	0.901	0.000	0.000	0.901	0.901	0.901	2.703	2.703	0.000

		CO-3	0.908	2.725	2.725	1.817	0.908	1.817	1.817	0.908	0.908	0.908	0.908	1.817	1.817	2.725	0.000
3ME2-01	**Advance Engineering Mathematics-I**	CO1	0.916	2.749	0.916	0.000	0.000	0.000	0.000	0.000	0.000	0.916	0.916	0.000	0.916	0.000	0.000
		CO-2	0.440	1.321	0.440	0.000	0.000	0.000	0.000	0.000	0.000	0.440	0.440	0.000	0.440	0.000	0.000
		CO-3	0.424	1.273	0.424	0.000	0.000	0.000	0.000	0.000	0.000	0.424	0.424	0.000	0.424	0.000	0.000
		CO-4	0.450	1.351	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.450	0.450	0.000	0.450	0.000	0.000
3ME1-02/ 3ME1-03	**TC/MEFA**	CO-1	0.428	0.428	1.285	0.857	1.285	0.857	1.285	1.285	1.285	0.857	0.857	1.285	1.285	0.428	1.285
		CO-2	0.388	1.165	1.165	0.777	0.777	0.777	1.165	0.777	1.165	1.165	0.777	1.165	1.165	0.777	1.165
		CO-3	0.772	2.315	2.315	1.543	1.543	2.315	2.315	1.543	1.543	2.315	1.543	2.315	1.543	2.315	2.315
		CO-4	0.777	2.331	2.331	1.554	1.554	1.554	1.554	1.554	2.331	1.554	1.554	2.331	1.554	0.777	2.331
3ME3-04	**ENG. MECH.**	CO-1	0.764	2.291	1.528	2.291	0.764	0.764	0.764	1.528	0.764	0.764	2.291	1.528	1.528	1.528	1.528
		CO-2	0.798	2.394	2.394	2.394	0.798	0.798	0.798	1.596	0.798	0.798	2.394	1.596	1.596	1.596	1.596
		CO-3	0.504	1.511	1.007	1.511	0.504	0.000	0.504	1.007	0.504	0.504	1.511	1.007	0.504	1.007	1.007
		CO-4	0.496	1.489	0.992	1.489	0.496	0.000	0.496	0.992	0.496	0.496	1.489	0.992	0.992	0.992	0.992
3ME4-05	**Engineering Thermodynamics**	CO-1	0.510	1.530	1.530	0.510	1.020	0.000	1.020	1.020	0.510	0.000	0.510	0.000	1.530	1.020	0.000
		CO-2	0.469	1.408	1.408	0.939	0.939	0.000	0.469	0.469	0.469	0.000	0.469	0.000	1.408	0.939	0.000
		CO-3	0.459	1.378	1.378	0.919	0.919	0.459	0.919	0.919	0.000	0.000	0.459	0.000	1.378	0.919	0.000
3ME4-06	**Materials Science and Engineering**	CO-1	0.447	1.342	1.342	0.894	0.894	0.447	1.342	1.342	1.342	0.894	0.894	0.894	0.894	1.342	0.000
		CO-2	0.436	1.309	0.873	0.873	1.309	0.873	0.873	1.309	0.873	0.436	1.309	0.873	0.873	1.309	0.000

		CO-3	0.579	1.738	1.738	1.159	1.159	0.579	1.159	1.159	1.738	1.159	1.738	1.738	1.738	1.738	0.000
		CO-4	0.548	1.644	1.644	1.096	1.096	0.548	1.644	1.096	1.644	1.096	1.644	1.096	1.644	1.644	0.000
3ME4-07	**Mechanics of Solids**	CO-1	0.571	1.714	1.714	1.714	1.143	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.714	0.000
		CO-2	0.555	1.665	1.110	1.110	1.110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.665	1.665	0.000
		CO-3	0.510	1.530	1.530	1.530	1.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.020	1.530	0.000
3ME4-21	**Machine drawing practice**	CO-1	0.518	1.554	1.036	0.518	0.518	0.000	0.518	0.000	0.000	1.036	1.036	0.000	1.554	1.036	1.036
		CO-2	0.502	1.506	1.004	1.004	1.506	1.506	0.502	0.000	0.000	1.004	1.004	0.000	1.506	1.506	1.506
3ME4-22	**Materials Testing Lab**	CO-1	0.828	2.484	2.484	1.656	1.656	2.484	2.484	1.656	2.484	0.828	1.656	1.656	2.484	2.484	1.656
		CO-2	0.817	1.634	2.450	1.634	2.450	1.634	2.450	1.634	1.634	1.634	1.634	1.634	1.634	2.450	2.450
3ME4-23	**Basic Mechanical Engineering Lab**	CO-1	0.732	2.196	2.196	2.196	1.464	0.732	0.732	1.464	0.732	0.732	1.464	1.464	2.196	2.196	1.464
		CO-2	0.746	2.238	1.492	2.238	1.492	0.746	0.746	1.492	0.746	0.746	1.492	1.492	2.238	2.238	0.746
3ME4-24	**Programming using MATLAB**	CO-1	0.836	2.508	2.508	1.672	2.508	2.508	0.836	0.000	0.836	0.000	1.672	1.672	2.508	2.508	0.000
		CO-2	0.849	2.546	2.546	1.697	2.546	2.546	0.849	0.000	0.849	0.000	1.697	1.697	2.546	2.546	0.000
3ME7-30	**Industrial Training**	CO-1	0.646	1.938	1.938	1.292	1.292	1.292	1.938	1.938	1.292	1.938	1.938	1.938	1.292	1.938	1.292
		CO-2	0.640	1.280	1.280	1.920	1.920	1.920	1.280	1.920	1.920	1.280	1.280	1.280	1.920	1.280	1.920

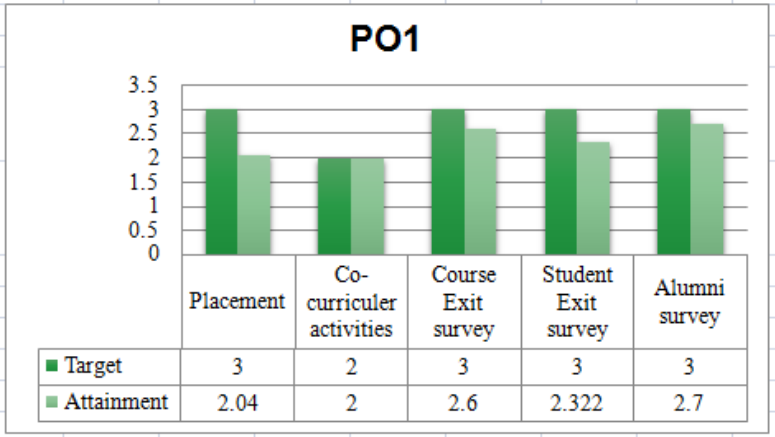
PO ATTAINMENT 2019-20 FINAL - Microsoft Excel

Home Insert Page Layout Formulas Data Review View

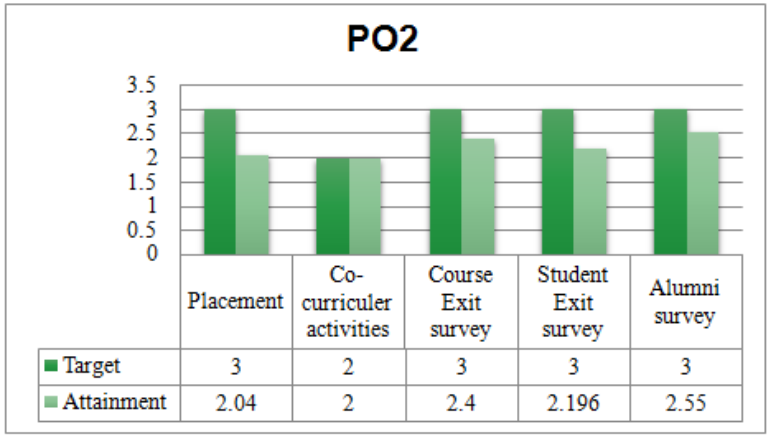
K25

INDIRECT ATTAINMENT (POs/PSOs)

	PO1			
INDIRECT	Parameters	Target	Attainment	Rubrics
	Placement	3	2.04	≥70% students placed then Target achieved Else = Pro rata
	Co-curriculer activities	2	2	≥80% students placed then Target achieved Else = Pro rata
	Course Exit survey	3	2.6	Pro rata
	Student Exit	3	2.322	Pro rata
	Alumni survey	3	2.7	Pro rata
		2.8	2.3324	

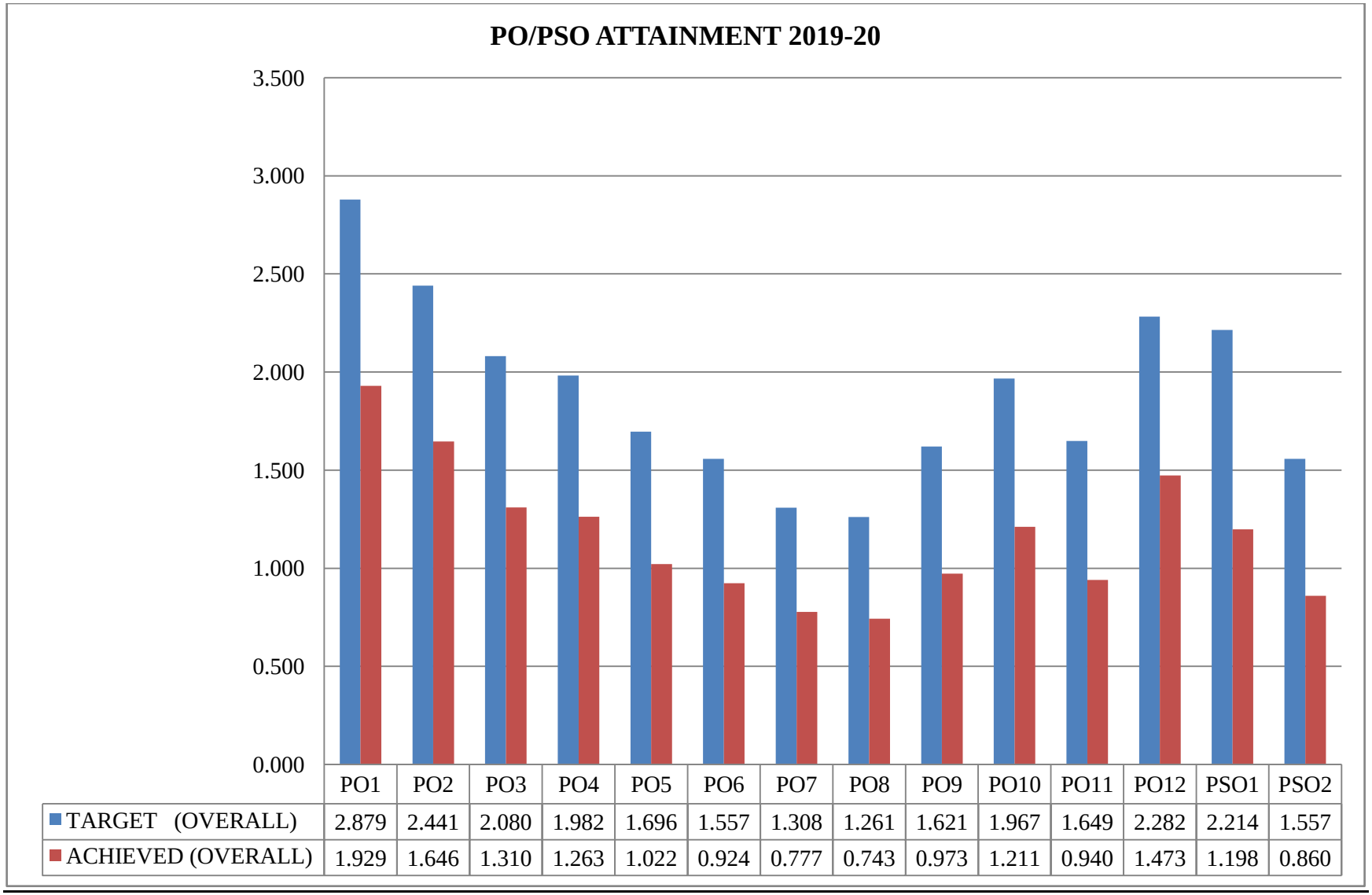


	PO2			
INDIRECT	Parameters	Target	Attainment	Rubrics
	Placement	3	2.04	≥70% students placed then Target achieved Else = Pro rata
	Co-curriculer activities	2	2	≥80% students placed then Target achieved Else = Pro rata
	Course Exit survey	3	2.4	Pro rata
	Student Exit	3	2.196	Pro rata
	Alumni survey	3	2.55	Pro rata
		2.8	2.2372	

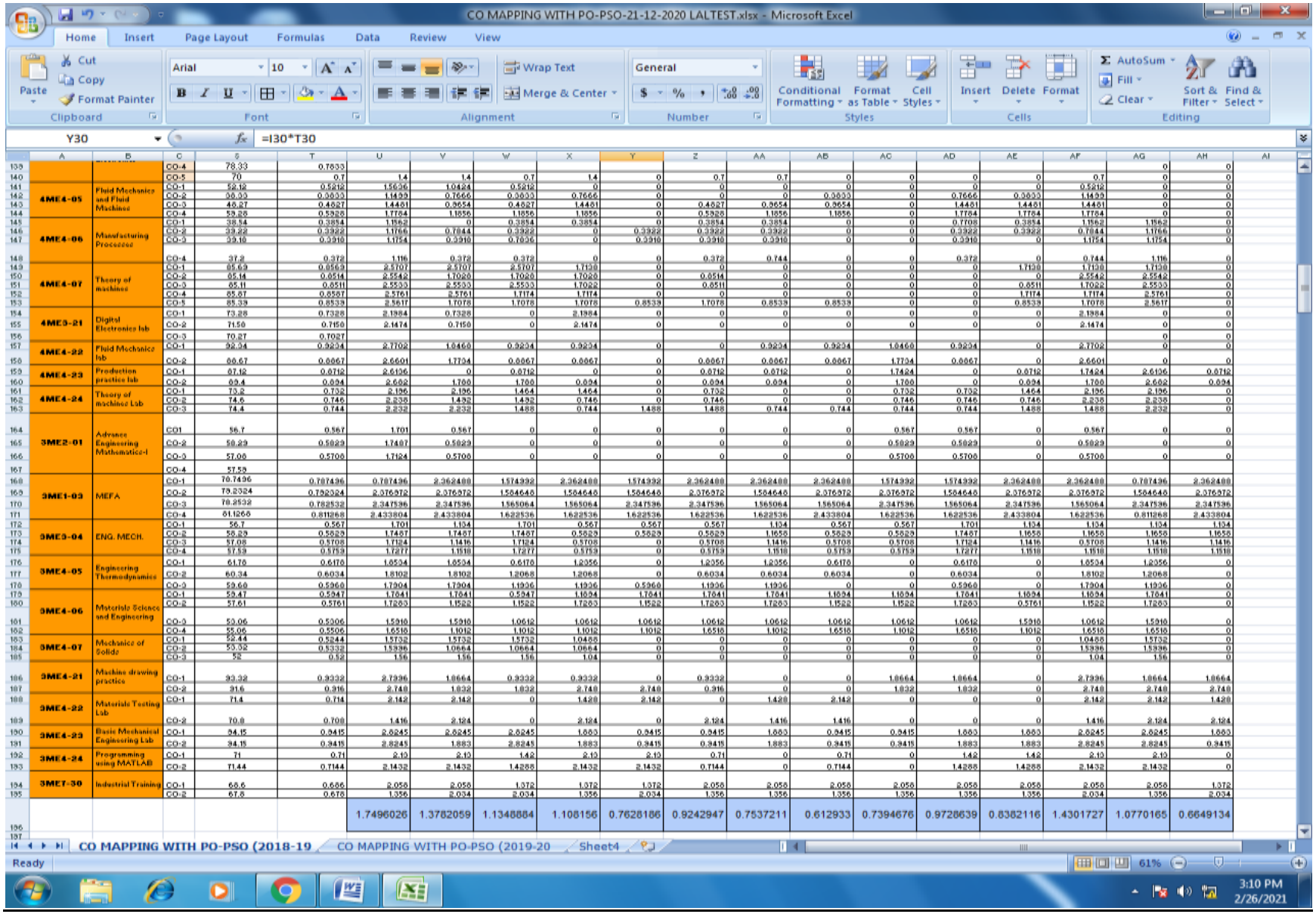


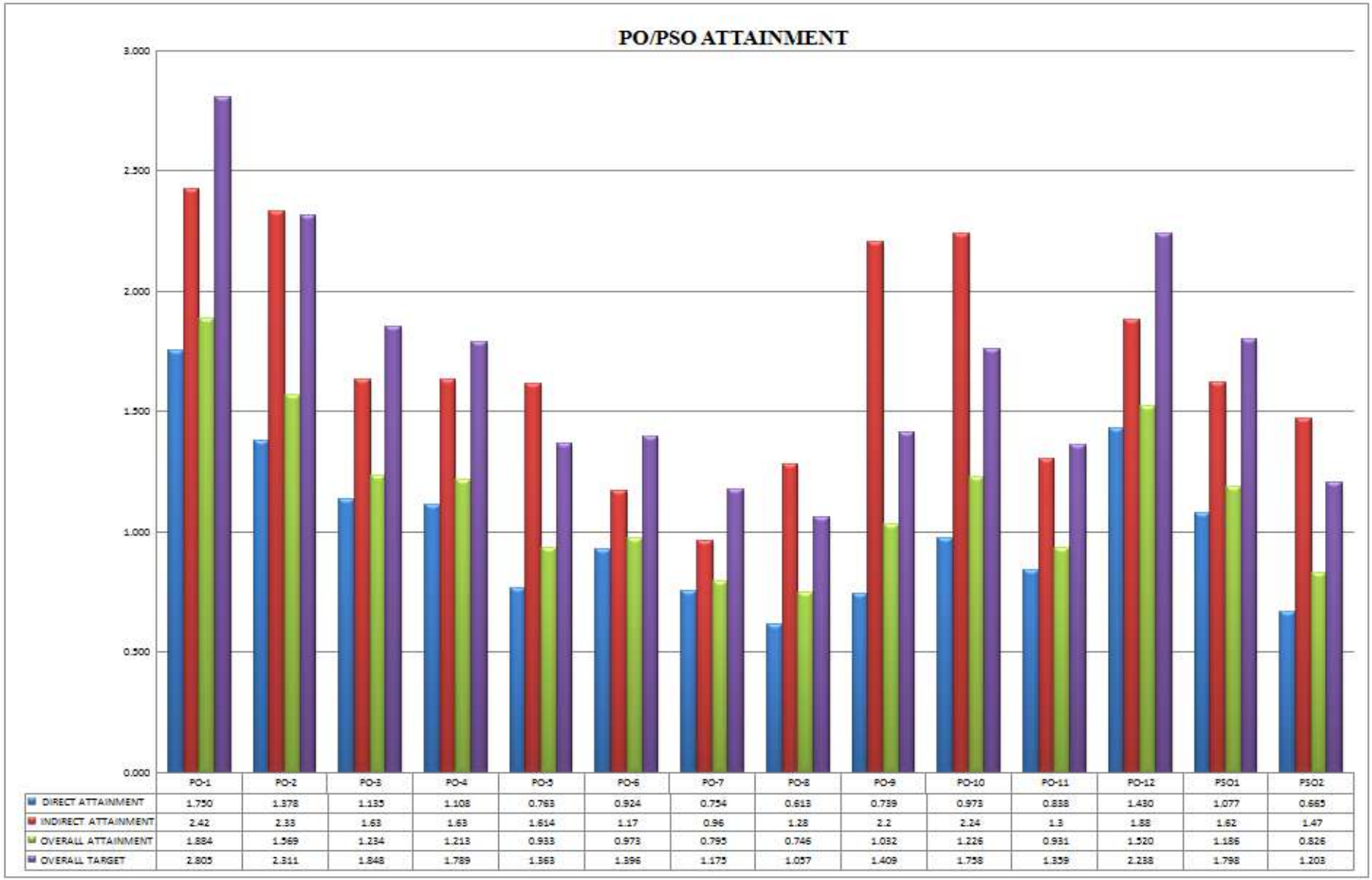
PO ATTAINMENT DIRECT (2019-20 | PO ATTAINMENT OVERALL(2019-20) | PO ATTAINMENT INDIRECT | CO MAPPING WITH PO-PSO(2019-20)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
TARGET (DIRECT)	2.90	2.35	2.10	1.98	1.62	1.60	1.34	1.18	1.38	1.76	1.66	2.30	2.27	1.50
ACHIEVED (DIRECT)	1.83	1.47	1.25	1.19	0.89	0.91	0.77	0.66	0.77	1.05	0.91	1.45	1.17	0.77
TARGET (INDIRECT)	2.8	2.8	2	2	2	1.4	1.2	1.6	2.6	2.8	1.6	2.2	2	1.8
ACHIEVED (INDIRECT)	2.332	2.33	1.56	1.57	1.55	0.97	0.8	1.07	1.79	1.84	1.07	1.55	1.32	1.21
TARGET (OVERALL)	2.87	2.44	2.08	1.98	1.69	1.55	1.30	1.26	1.62	1.96	1.64	2.2	2.21	1.55
ACHIEVED (OVERALL)	1.92	1.64	1.31	1.26	1.02	0.92	0.77	0.74	0.97	1.21	0.94	1.47	1.19	0.85

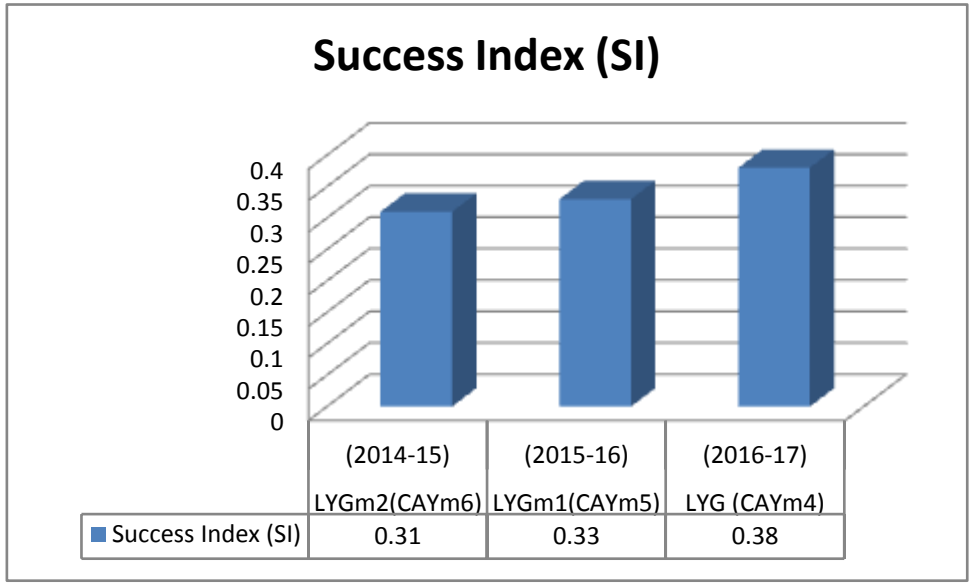


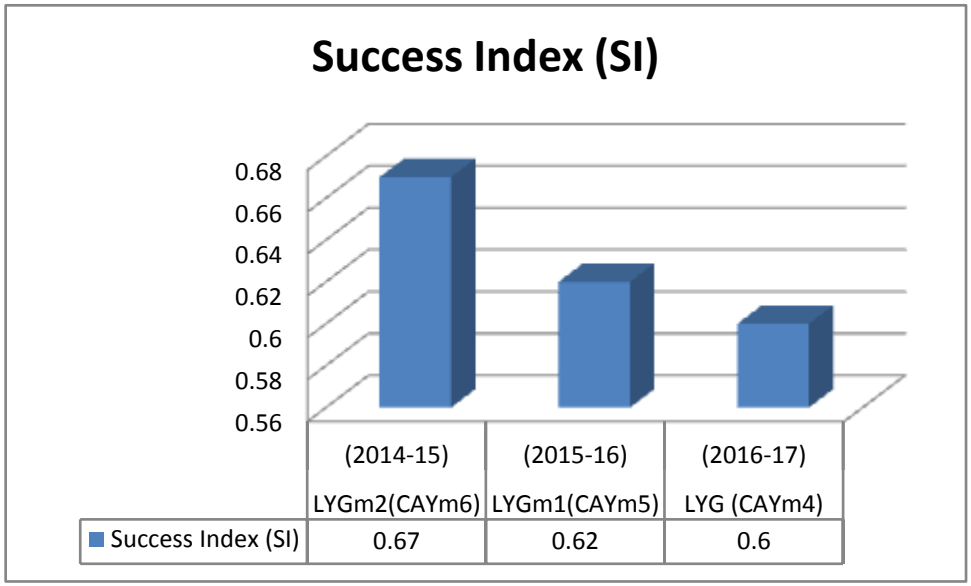
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
TARGET (OVERALL)	2.879	2.441	2.080	1.982	1.696	1.557	1.308	1.261	1.621	1.967	1.649	2.282	2.214	1.557
ACHIEVED (OVERALL)	1.929	1.646	1.310	1.263	1.022	0.924	0.777	0.743	0.973	1.211	0.940	1.473	1.198	0.860

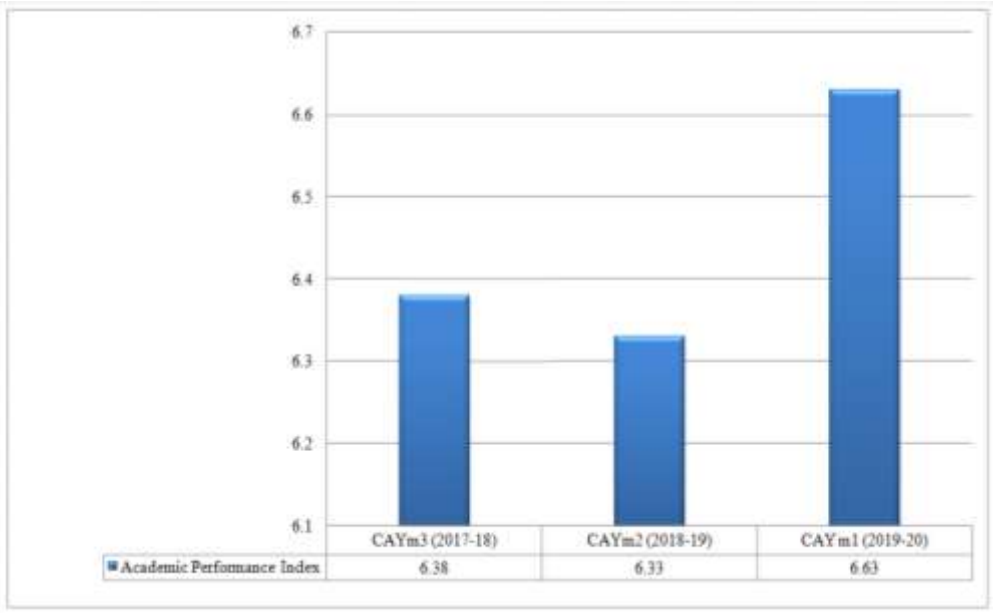

CO MAPPING WITH PO-PSO-21-12-2020 LALTEST.xlsx - Microsoft Excel
Home
Insert
Page Layout
Formulas
Data
Review
View
Cut
Copy
Format Painter
Paste
Arial
10
Wrap Text
Merge & Center
General
Conditional Formatting
Format as Table
Cell Styles
Insert
Delete
Format
AutoSum
Fill
Clear
Sort & Filter
Find & Select
Clipboard
Font
Alignment
Number
Styles
Cells
Editing
Y30
=I30*T30
CO MAPPING WITH PO-PSO (2018-19
CO MAPPING WITH PO-PSO (2019-20
Sheet4
Ready
61%
3:10 PM
2/26/2021

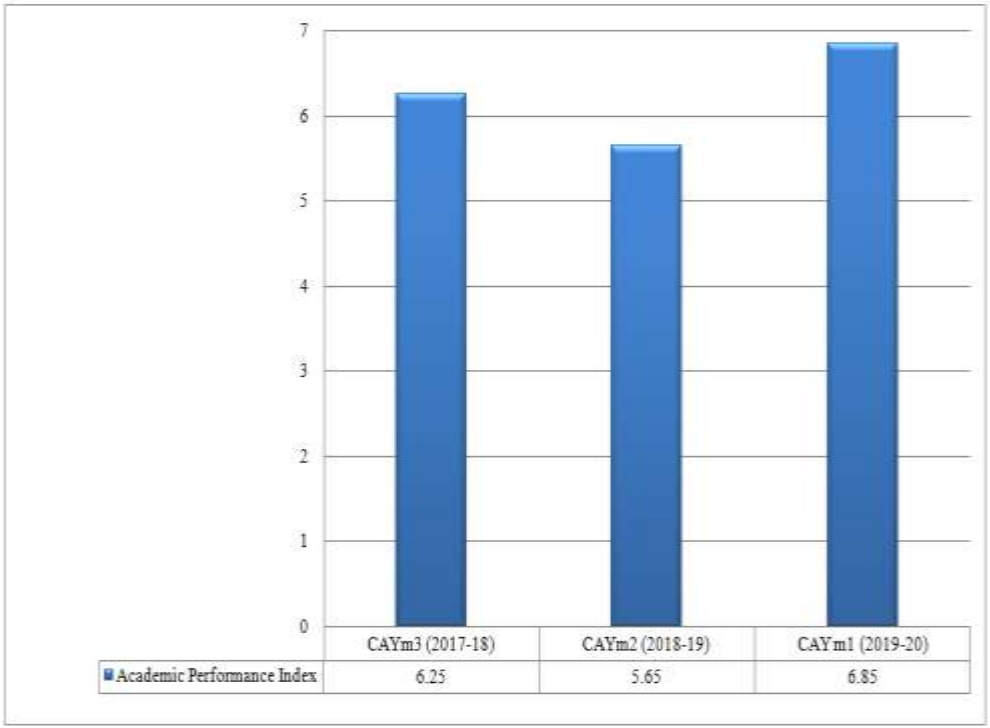


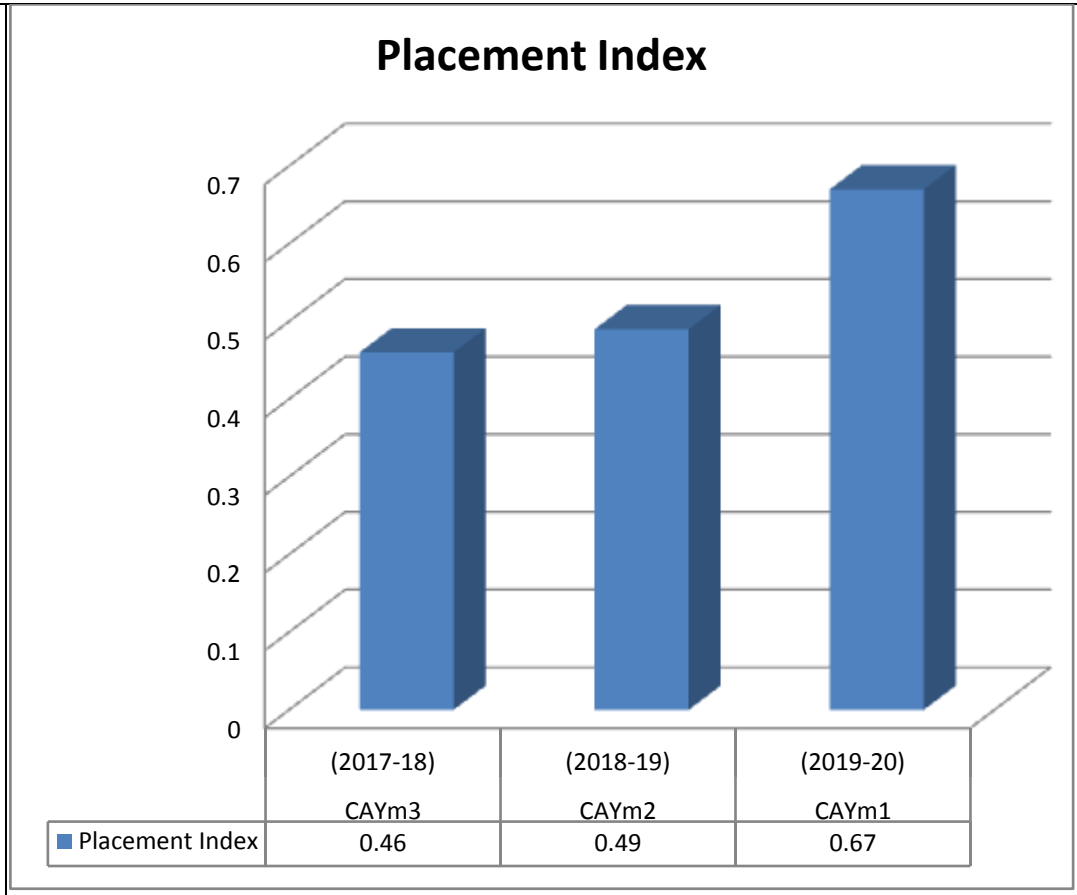
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12	PSO1	PSO2
DIRECT ATTAINMENT	1.750	1.378	1.135	1.108	0.763	0.924	0.754	0.613	0.739	0.973	0.838	1.430	1.077	0.665
INDIRECT ATTAINMENT	2.42	2.33	1.63	1.63	1.614	1.17	0.96	1.28	2.2	2.24	1.3	1.88	1.62	1.47
OVERALL ATTAINMENT	1.884	1.569	1.234	1.213	0.933	0.973	0.795	0.746	1.032	1.226	0.931	1.520	1.186	0.826
OVERALL TARGET	2.805	2.311	1.848	1.789	1.363	1.396	1.175	1.057	1.409	1.758	1.359	2.238	1.798	1.203

Criterion- 4 Student's Performance			
S. No	**CRITERIA**	**OBSERVATION MADE BY NBA**	**COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)**
4.2.1	**4.2.1 Success rate without backlogs in any Semester/year of study Without Backlog means no compartment or failures in any semester/ year of study**	Low success rate	**Success rate is increased by 7% as shown in bar chart.** 

S. NO	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
4.2.2	**4.2.2 Success rate with backlog in stipulated period (actual duration of the program)**	Needs improvement	**Backlog is reduced by 7%.** 

S. NO	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
4.3	**Academic Performance in Third Year**	Needs improvement	**Academic performance in third year is increased by 5%.** 

4.4	**Academic Performance in Second Year**	Needs improvement	**Academic performance in second year is increased by 6%.** 
4.5	**Placement, Higher studies and Entrepreneurship**	Needs improvement	**Placement, Higher studies and Entrepreneurship are increased by 21%.**



https://jecrcfoundation.com/placement-stats

<table>
<tr><td colspan="4">Criterion-5 Faculty Information and Contributions</td></tr>
<tr><td><u>S. No</u></td><td>CRITERIA</td><td><u>OBSERVATION MADE BY NBA</u></td><td><u>COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)</u></td></tr>
<tr><td>5.1</td><td>Student-Faculty Ratio (SFR)</td><td>Average SFR= 19.90</td><td>
<table>
<tr><td>Year</td><td>CAYm2 (2018-19)</td><td>CAYm1 (2019-20)</td><td>CAY (2020-21)</td></tr>
<tr><td>SFR</td><td>17.21</td><td>17.41</td><td>18.6</td></tr>
<tr><td colspan="2">Average SFR</td><td colspan="2">17.93</td></tr>
</table>
</td></tr>
<tr><td>5.2</td><td>Faculty Cadre Proportion</td><td>Needs improvement.</td><td>
<table>
<tr><td>Year</td><td>CAYm2 (2018-19)</td><td>CAYm1 (2019-20)</td><td>CAY (2020-21)</td></tr>
<tr><td>Cadre Ratio</td><td>25</td><td>25</td><td>25</td></tr>
</table>
</td></tr>
<tr><td>5.3</td><td>Faculty qualification</td><td>Qualification needs enhancement</td><td>
<table>
<tr><td colspan="2">2020-21</td><td colspan="2">2019-20</td><td colspan="2">2018-19</td></tr>
<tr><td colspan="2">Total Faculty =29</td><td colspan="2">Total Faculty =31</td><td colspan="2">Total Faculty =33</td></tr>
<tr><td>Ph.D</td><td>M. Tech</td><td>Ph.D</td><td>M. Tech</td><td>Ph.D</td><td>M.Tech</td></tr>
<tr><td>6</td><td>23</td><td>6</td><td>25</td><td>6</td><td>27</td></tr>
</table>

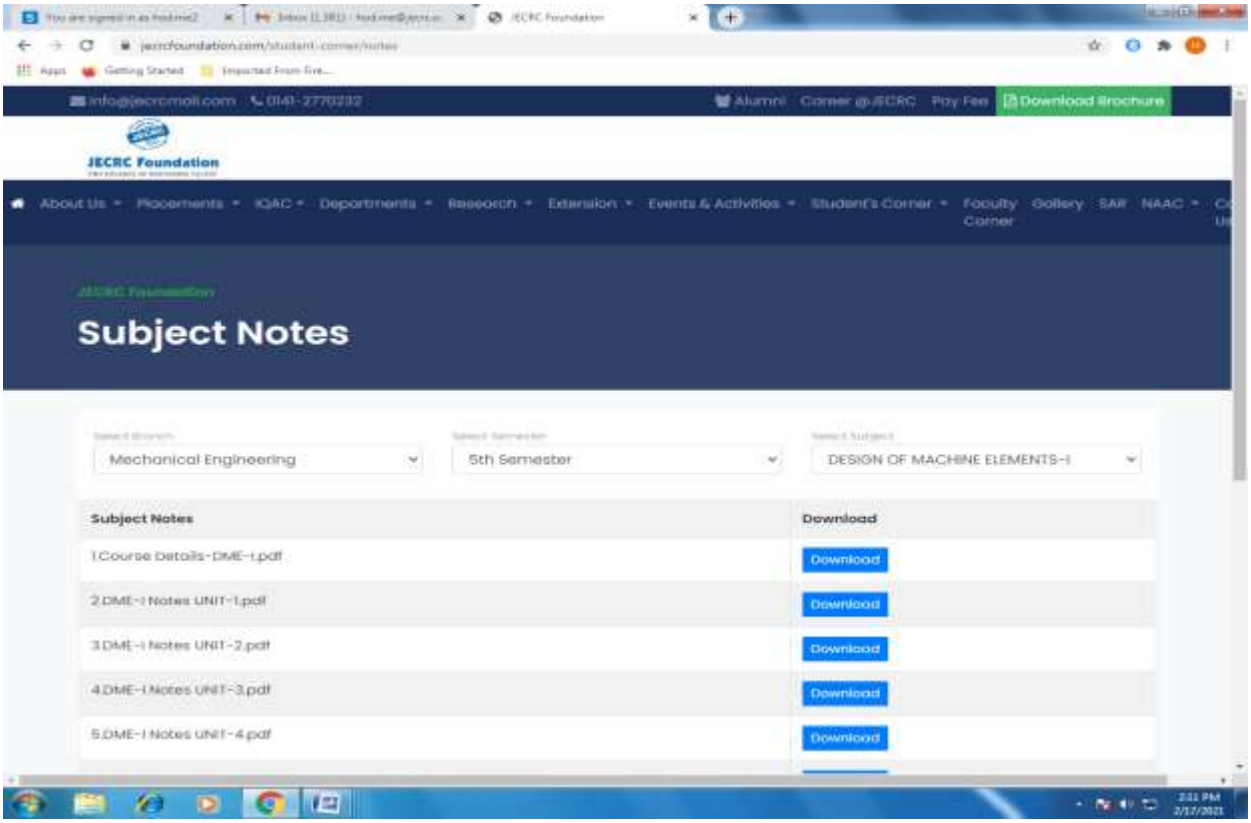
Two faculty members completed their Ph. D degree during 2018-19 & 2019-20.
Three faculty members enrolled in PhD programme during 2019-20 & 2020-21.

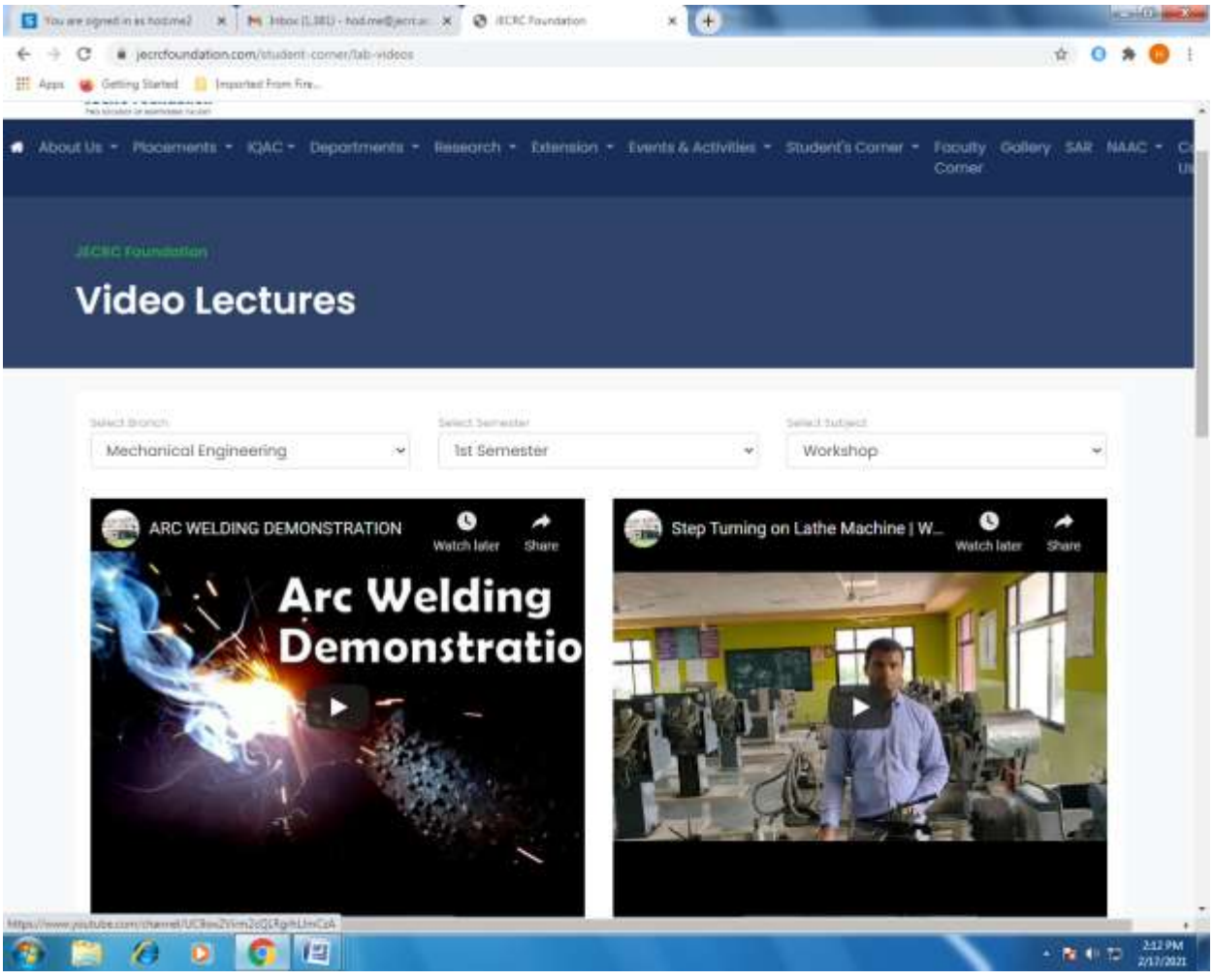
</td></tr>
<tr><td>5.5</td><td>Innovations by the Faculty in Teaching and Learning</td><td>Innovation in teaching-learning is not appreciable and not available on institute website.</td><td>Institute adheres to academic calendar by incorporating various activities through which students are exposed to experimental learning, participative learning and problem solving methodologies.

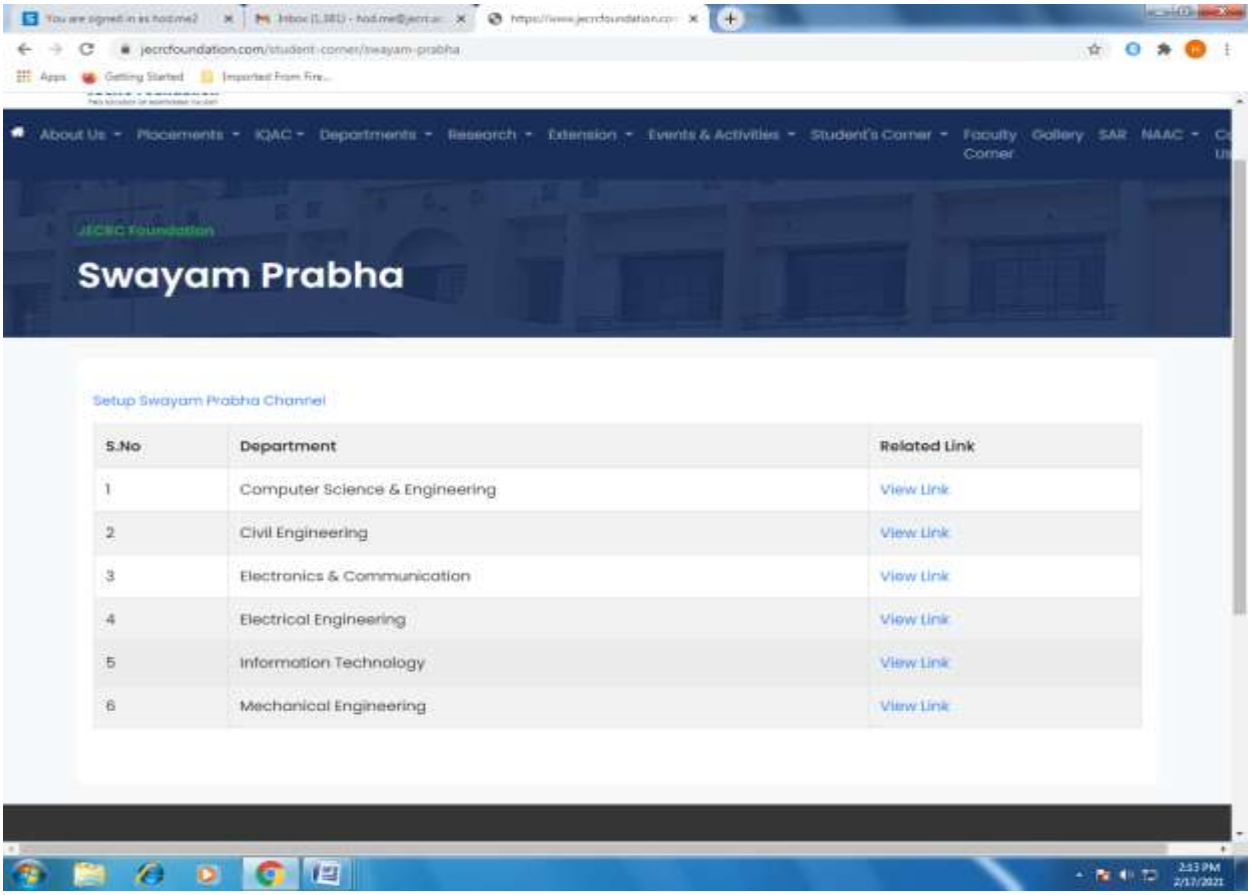
All the faculty members use ICT enabled tools for effective teaching learning and in this process every faculty member has uploaded their video recording (by performing experiments) on website www.jecrcfoundation.com under tab Student’s Corner, and have also uploaded the handouts of course material under this tool. It is one of the innovative practices by faculty members where any student from anywhere can access the same.

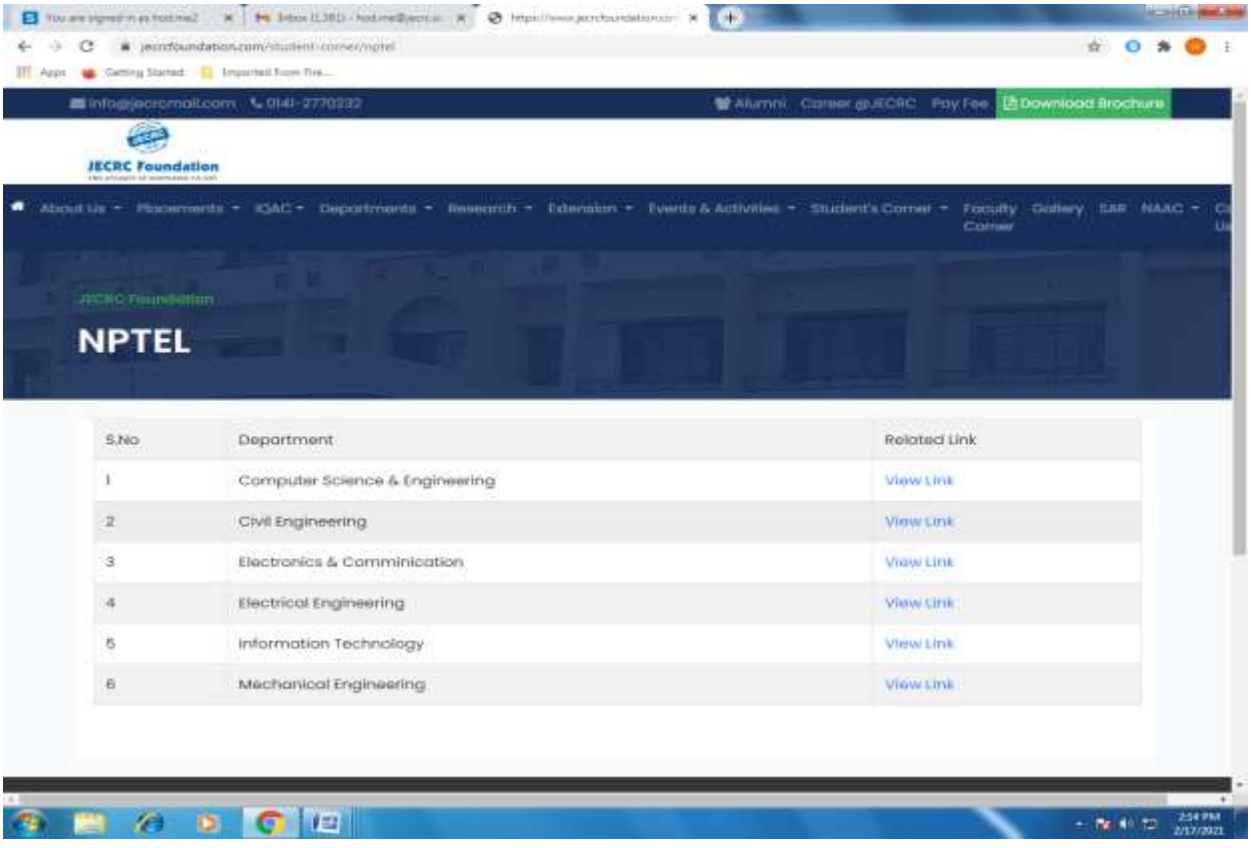
The college has signed MoU with IIT Delhi for utilizing virtual lab tools. Faculty members are utilizing this tool in each department and students are exposed to virtual lab</td></tr>
</table>

			platform. With the help of IIT Delhi all the lectures of NPTEL are been uploaded on intranet of college and faculty members also refer these lectures while delivering quality education to students. Various subjects are mapped with Swayam Prabha portal and lectures from Swayam Prabha are also referred for quality education and also uploaded on student corner tab in ICT. Industry interaction through ICT tool is done by organizing various webinars of alumni, industry experts and a tool MYTAT that provides add on courses, internships opportunities with more than 5000 industries. Students are also provided with on-line classes by faculty members due to Covid Protocl is one of the ICT tool for effective teaching. Further all ICT tools are visible to students and utilized through open access through www.jecrcfoundation.com and are also mapped with program outcomes as direct or indirect tool for assessment. Mechanical Engineering Departmental **YouTube Channel** has received **46000 views** and **600 subscribers** over the time

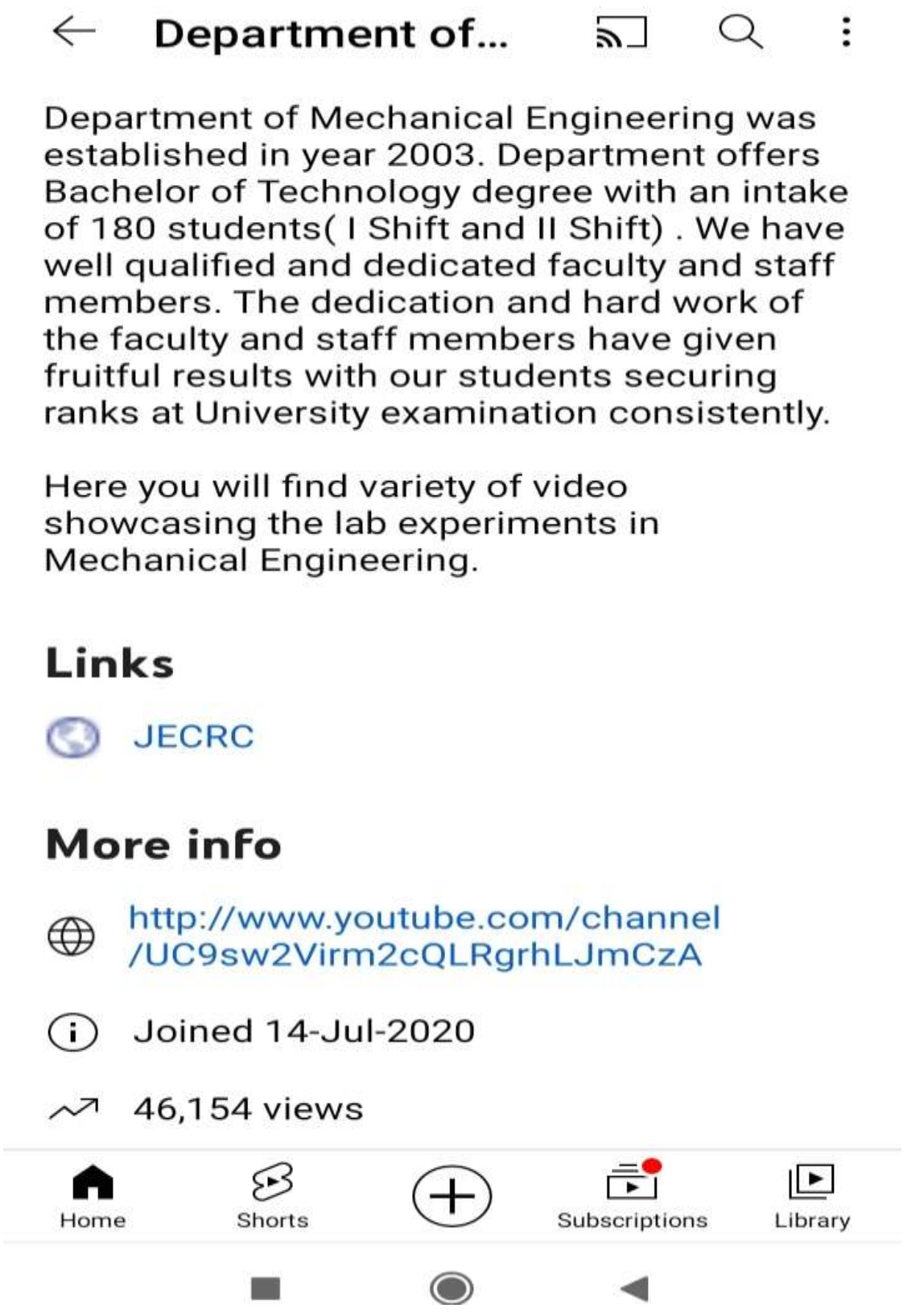

info@jecrcmail.com 0141-2770232
Alumni
Career @ JECRC
Pay Fee
Download Brochure
JECRC Foundation
About Us
Placements
IQAC
Departments
Research
Extension
Events & Activities
Student's Corner
Faculty Corner
Gallery
SAR
NAAC
Subject Notes
Mechanical Engineering
5th Semester
DESIGN OF MACHINE ELEMENTS-I
Subject Notes
Download
1.Course Details-DME-I.pdf
2.DME-I Notes UNIT-1.pdf
3.DME-I Notes UNIT-2.pdf
4.DME-I Notes UNIT-3.pdf
5.DME-I Notes UNIT-4.pdf
Download


jecrcfoundation.com/student-corner/lab-videos
About Us
Placements
IQAC
Departments
Research
Extension
Events & Activities
Student's Corner
Faculty Corner
Gallery
SAR
NAAC
JECRC Foundation
Video Lectures
Mechanical Engineering
1st Semester
Workshop
ARC WELDING DEMONSTRATION
Watch later
Share
Arc Welding Demonstratio
Step Turning on Lathe Machine | W...
Watch later
Share


jecrcfoundation.com/student-corner/swayam-prabha
About Us
Placements
IQAC
Departments
Research
Extension
Events & Activities
Student's Corner
Faculty Corner
Gallery
SAR
NAAC
JECRC Foundation
Swayam Prabha
Setup Swayam Prabha Channel
S.No
Department
Related Link
1
Computer Science & Engineering
View Link
2
Civil Engineering
View Link
3
Electronics & Communication
View Link
4
Electrical Engineering
View Link
5
Information Technology
View Link
6
Mechanical Engineering
View Link


jecrcfoundation.com/student-corner/nptel
info@jecrcmail.com
0141-2770232
Alumni
Career @JECRC
Pay Fee
Download Brochure
JECRC Foundation
About Us
Placements
IQAC
Departments
Research
Extension
Events & Activities
Student's Corner
Faculty Corner
Gallery
SAR
NAAC
JECRC Foundation
NPTEL
S.No
Department
Related Link
1
Computer Science & Engineering
View Link
2
Civil Engineering
View Link
3
Electronics & Comminication
View Link
4
Electrical Engineering
View Link
5
Information Technology
View Link
6
Mechanical Engineering
View Link

YOU TUBE VIWERS



Department of Mechanical Engineering, JECRC

Department of Mechanical Engineering was established in year 2003. Department offers Bach...

Uploads

lecture on phase diagramme materi...

58 views · 4 months ag

lecture on miller indices material sc...

20 views · 4 months ag

lecture on

S. NO	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
5.6	**Faculty as participants in Faculty development/training activities/STTPs**	Needs improvement	**Faculty as participants in Faculty development/training activities/STTPs is improved. List is attached below**:

2019-2020				
Name of teacher who attended	**Department**	**Title of the program**	**Duration (from – to) (DD-MM-YYYY)**	LINK
Dr M.P Singh	Mechanical	WhatsApp Outcome Based Education Faculty Development Program	24/03/2020-14/04/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/MP1.pdf
Dr M.P Singh	Mechanical	Inculcating Universal Human Values in Technical Education	03/05/2020-07/05/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/MP2.pdf
Dr M.P Singh	Mechanical	Hands On Practice on 3D Printing Technology	27/08/2019-31/08/2019	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/MP3.pdf
Dr M.P Singh	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/MP4.pdf
Dr M.P Singh	Mechanical	WORKSHOP ON EXAM REFORMS	09/12/2019-11/12/2019	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/MP5.pdf
Dr M.P Singh	Mechanical	Advance Material Research	15/06/2020-19/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/MP6.pdf
Dr Fauzia Siddiqui	Mechanical	WhatsApp Outcome Based Education Faculty Development Program	24/03/2020-14/04/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/FS1.pdf
Dr Fauzia Siddiqui	Mechanical	Corrosion and its Control	02/06/2020-04/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/FS2.pdf
Dr Fauzia Siddiqui	Mechanical	Design,Thinking ,Innovation & IPR	09/13/2019-13/12/2019	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/FS3.pdf
Dr Fauzia Siddiqui	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/FS4.pdf
Dr Fauzia	Mechani	Teachers Training	24/02/2020	http://jecrcfoundation.com/jf-

Siddiqui	cal	Workshop		data/NBA/ME/FDP-Certificate/2019-20/FS5.pdf
Dr Bhuvnesh Bhardwaj	Mechanical	WhatsApp Outcome Based Education Faculty Development Program	24/03/2020-14/04/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/BB1.pdf
Dr Bhuvnesh Bhardwaj	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/BB2.pdf
Dr Bhuvnesh Bhardwaj	Mechanical	Advance Material Research	15/06/2020-19/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/BB3.pdf
Dr Manish Shrivastava	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/MS.pdf
Mr Kuldeep Sharma	Mechanical	WhatsApp Outcome Based Education Faculty Development Program	24/03/2020-14/04/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/KS1.pdf
Mr Kuldeep Sharma	Mechanical	Advance Material Research	15/06/2020-19/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/KS2.pdf
Mr Satyendra Kumar	Mechanical	Welding for Additive Manufacturing	10/06/2020-15/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/SK1.pdf
Mr Satyendra Kumar	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/SK2.pdf
Ms Priti P Bodkhe	Mechanical	Renewable Energy Utilization	26/05/2020-30/05/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/PB1.pdf
Mr Tej Bahadur Singh	Mechanical	Palagarism,Reseach, Ethics & Patent (PREP)	25/06/2020-27/062020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/TB1.pdf
Mr Tej Bahadur Singh	Mechanical	Additive Manufacturing with Interdisiplinary Applications	29/06/2020-03/07/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/TB2.pdf
Mr Tej Bahadur Singh	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/TB3.pdf
Mr Tej Bahadur Singh	Mechanical	CAD- CAM and Advanced Manufacturing	02/03/2020-07/03/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/TB4.pdf
Mr Yogesh Dubey	Mechanical	Emerging Trends in Mechanical Engineering	08/06/2020-12/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/YD1.pdf
Mr Yogesh Dubey	Mechanical	Palagarism,Reseach, Ethics & Patent (PREP)	25/06/2020-27/062020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/YD2.pdf
Mr Yogesh Dubey	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-

				Certificate/2019-20/YD3.pdf
Mr Lalit kr Sharma	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/LKS1.pdf
Mr Lalit kr Sharma	Mechanical	CAD- CAM and Advanced Manufacturing	02/03/2020-07/03/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/LKS2.pdf
Dr Rishi Pareek	Mechanical	LATEX	01/06/2020-07/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/RP1.pdf
Dr Rishi Pareek	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/RP2.pdf
Mr Akhilesh Paliwal	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/AP1.pdf
Mr Hemant Bansal	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/HB1.pdf
Mr Ravi Yadav	Mechanical	Welding for Additive Manufacturing	10/06/2020-15/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/RY1.pdf
Mr Ravi Yadav	Mechanical	Recent Advances in Material Characterization	23/05/2020-28/05/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/RY2.pdf
Mr Ravi Yadav	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/RY3.pdf
Mr Ravi Yadav	Mechanical	CAD- CAM and Advanced Manufacturing	02/03/2020-07/03/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/RY4.pdf
MR Hukum Chand	Mechanical	Image Classification using MATLAB	24/25/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/HCN1.pdf
MR Hukum Chand	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/HCN2.pdf
Mr Nitin Chabbara	Mechanical	Advance Material Research	15/06/2020-19/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/NC1.pdf
Mr Nitin Chabbara	Mechanical	Outcome Base Education & Accreditation	25/05/2020-29/05/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/NC2.pdf
Mr Nitin Chabbara	Mechanical	MIGRATION OF IT INFRA USING CLOUD	20/05/2020-21/05/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/NC3.pdf
Mr Nitin Chabbara	Mechanical	Palagarism,Reseach, Ethics & Patent (PREP)	25/06/2020-27/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/NC4.pdf
Mr Nitin Chabbara	Mechanical	Emerging Trends in Mechanical Engineering	08/06/2020-12/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/NC5.pdf
Ms Palak Jindal	Mechanical	Palagarism,Reseach, Ethics & Patent	25/06/2020-27/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-

		(PREP)		Certificate/2019-20/PJ1.pdf
Ms Palak Jindal	Mechanical	Advance Material Research	15/06/2020-19/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/PJ2.pdf
Mr Akhil vijay	Mechanical	Academic leadership,Teaching & learning Methods,Research plan,Patents etc	08/06/2020-15/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/AV1.pdf
Mr Akhil vijay	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/AV2.pdf
Mr Akhil vijay	Mechanical	REJUVENATION OF BODY,MIND & SOUL	15/06/2020-19/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/AV3.pdf
Mr Akhil vijay	Mechanical	Mechanical Behaviour of advance material & its scope for Engineering Application	10/06/2020-14/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/AV4.pdf
Mr Akhil vijay	Mechanical	Technological Advances in power switching converters for RES & FT for E-vehicles	01/06/2020-05/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/AV5.pdf
Mr Akhil vijay	Mechanical	Advance Material Research	15/06/2020-19/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/AV6.pdf
Mr Akhil vijay	Mechanical	Artificial Intellenge	22/05/2020-26/05/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/AV7.pdf
Mr Akhil vijay	Mechanical	Environmental Sustainability and Green Energy	29/06/2020-03/07/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/AV8.pdf
Mr Dayal S Rathore	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/DSR1.pdf
Mr Jitendra Gupta	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/JG1.pdf
Mr Rajendra Gupta	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/RKG1.pdf
Mr Ashish Nagpal	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/AN1.pdf
Mr Ashish Nagpal	Mechanical	Advance Material Research	15/06/2020-19/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/AN2.pdf
Dr Manmohan Siddh	Mechanical	Application of renewable energy systems-Recent trends and Future	22/06/2020-27/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/MM1.pdf

		aspects		
Dr Manmohan Siddh	Mechanical	Emerging Trends in Mechanical Engineering	8/06/2020-12/06/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/MM2.pdf
Mr Abhishek Kumar	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/AK1.pdf
Mr Satya Prakash Saini	Mechanical	IOT in Manufacturing	06/01/2020/10/01/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/SPS1.pdf
Mr Srikant Bansal	Mechanical	Bio energy : Technologies and Transitions	18/05/2020-22/05/2020	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2019-20/SB1.pdf

2018-2019				
Teachers undergoing online/ face-to-face Faculty Development Programmes (FDP). (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)				
Name of teacher who attended	**Department**	**Title of the program**	**Duration (from – to) (DD-MM-YYYY)**	LINK
Mr Hemant Bansal	Mechanical	Teaching Methodology	03/07/2018-05/07/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/hb1.pdf
Mr Akhil Vijay	Mechanical	Teaching Methodology	03/07/2018-05/07/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/av1.pdf
Mr Shrikant Bansal	Mechanical	Teaching Methodology	03/07/2018-05/07/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/sb1.pdf
Ms Palak Jindal	Mechanical	Teaching Methodology	03/07/2018-05/07/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/pj1.pdf
Mr Kuldeep Sharma	Mechanical	Teaching Methodology	03/07/2018-05/07/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/ks1.pdf
Mr Tej Bahadur Singh	Mechanical	Teaching Methodology	03/07/2018-05/07/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/tb1.pdf
Mr Ravi Yadav	Mechanical	Teaching Methodology	03/07/2018-05/07/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/ry1.pdf
Dr M P Singh	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/mp1.pdf
Dr Fauzia Siddqui	Mechanical	Optimization Techniques with Engineering Applications	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/fs1.pdf

		through ICT		
Dr Manish Shrivastava	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/ms1.pdf
Dr Bhuvnesh Bhardwaj	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/bb1.pdf
Mr Kuldeep Sharma	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/ks2.pdf
Dr Rishi Pareek	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/rp1.pdf
Dr Manmohan Siddh	Mechanical	3D Printing	25/03/2019-29/03/2019	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/mm1.pdf
Mr Lalit Kr Sharma	Mechanical	Finite Element methods in Engineering for Industries and Academia	13/05/2019-17/05/2019	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/lks1.pdf
Mr Lalit Kr Sharma	Mechanical	Recent advances in MechanicalEngineering	20/06/2019-22/06/2019	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/lks2.pdf
Mr Lalit Kr Sharma	Mechanical	Green Buildings: An initiative of civil Engineers to save the environment	25/06/2019-26/06/2019	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/lks3.pdf
Mr Aashish Nagpal	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/an1.pdf
Mr Hemant Bansal	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/hb2.pdf
Mr Satyendra Kumar	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/sk2.pdf
Mr Akhil Vijay	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/av2.pdf
Mr Srikant Bansal	Mechanical	Optimization Techniques with	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-

		Engineering Applications through ICT		data/NBA/ME/FDP-Certificate/2018-19/sb2.pdf
Mr Abhishek Kumar	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/ak1.pdf
Mr Dayal Singh rathore	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/dsr1.pdf
Mrs Palak Jindal	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/pj2.pdf
Mrs Priti Bodkhe	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/pb1.pdf
Mr Rajendra Kr Gupta	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/rkg1.pdf
Mr Akhilesh Paliwal	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/ap1.pdf
Mr Yogesh Dubey	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/yd1.pdf
Mr Hukum Chand Nagar	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/hcn1.pdf
Mr Nitin Chabbra	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/nc1.pdf
Mr Dilip Prajapati	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/dp1.pdf
Mr Jitendra Gupta	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/jg1.pdf
Mr Ravi Yadav	Mechanical	Optimization Techniques with	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-

		Engineering Applications through ICT		data/NBA/ME/FDP-Certificate/2018-19/ry2.pdf
Mr Tej bahadur Singh	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/tb2.pdf
Mr Shashank Shekhar Singh	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/sss1.pdf
Mr Gaurav Jain	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/gj1.pdf
Mr Ravindra Kumar	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/rk1.pdf
Devesh kumar	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/dk1.pdf
Ravi kr jangid	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/rj1.pdf
Rohit Goyal	Mechanical	Optimization Techniques with Engineering Applications through ICT	10/12/2018-14/12/2018	http://jecrcfoundation.com/jf-data/NBA/ME/FDP-Certificate/2018-19/rg1.pdf

SESSION 2020-21				
Name of teacher who attended	**Deapartment**	**Title of the program**	**Duration (from – to) (DD-MM-YYYY)**	**LINK**
Dr M P Singh	Mechanical	Additive Technologies in Metallurgy & Mechanical engineering	26/05/2021-10/06/2021	https://drive.google.com/file/d/1qjdf33LuIi29v1n69LgRkLQioV9QWGgy/view?usp=sharing
Dr M P Singh	Mechanical	Electric Research Trends in Manufacturing(Part-3)	15/03/2021-20/03/2021	https://drive.google.com/file/d/1WHSc8rSeCQOS5l_ri5v0SUg-0IU6sOcb/view?usp=sharing

Dr M P Singh	Mechanical	Emtrepreneurial Mentoring Skills	21/09/2020-26/09/2020	https://drive.google.com/file/d/1U_mlXf17VXHK13yLDq-CvOXho_RorfgR/view?usp=sharing
Dr M P Singh	Mechanical	Design Aspects and Industry 4.0	10/09/2020-14/09/2020	https://drive.google.com/file/d/1e3UUbrVNe32DmmDdZqXzMRsT08yRV1-z/view?usp=sharing
Dr M P Singh	Mechanical	What is mind "the mind " and what is Artificial Intelligence?	28/06/2020-21/07/2020	https://drive.google.com/file/d/1TG_RnDNrS_Npi3FQlAM7jDOGLiZQe8tr/view?usp=sharing
Dr M P Singh	Mechanical	Digital Manufacturing & Design	26/06/2020-07/07/2020	https://drive.google.com/file/d/183Dsfb9y8B5Q6cPP2aQCAiMrIuY6D_j8/view?usp=sharing
Dr M P Singh	Mechanical	Intelligent Machining	26/06/2020-10/07/2020	https://drive.google.com/file/d/1xTtSt_VcXf4FWG-jhKGflNGgOxaaMm55/view?usp=sharing
Dr M P Singh	Mechanical	Work smarter, not harder: Time Management for Personal & Professional Productivity	26/06/2020-06/07/2020	https://drive.google.com/file/d/1RNlnKsHI9VbxDirmVU2NZ5w_cxi0eCkE/view?usp=sharing
Dr M P Singh	Mechanical	Quantum Computing	02/03/2021-06/03/2021	https://drive.google.com/file/d/1vTygY-L00E0RgHqubMB8LF6XL0T8H7rP/view?usp=sharing
Dr. Fauzia Siddiqui	Mechanical	“Inculcating Universal Human Values in Technical Education”	12/10/2020-16/10/2020	https://drive.google.com/file/d/1L0a7rVd8sUVQxJv1f6MXxZmtUHALEEES/view?usp=sharing
Dr.Bhuvnesh Bhardwaj	Mechanical	“Inculcating Universal Human Values in Technical Education”	12/10/2020-16/10/2020	https://drive.google.com/file/d/1O9fHFv7tqlvR21bJ7_ftRXLkAziF93iZ/view?usp=sharing
Dr Manish Shrivastava	Mechanical	“Inculcating Universal Human Values in Technical Education”	09/07/2020-13/07/2020	https://drive.google.com/file/d/1jD3Zaxh-vQOYHNRff7_grYnexlKDdLib/view?usp=sharing

Dr Manoj Gupta	Mechanical	Nonlinear Proplems in Mechanical and Physical Systems	07/06/2021-11/06/2021	https://drive.google.com/file/d/1hFuiIAgHVINx4fBaorJKlsoJOfyvoCLl/view?usp=sharing
Dr Rishi Pareek	Mechanical	“Inculcating Universal Human Values in Technical Education”	28/09/2020-02/10/2020	https://drive.google.com/file/d/12zf6xiibfBJ-iBzbd7jrMiKVPl7ZDNOr/view?usp=sharing
Mr Kuldeep Sharma	Mechanical	Universal Human Values	23/11/2020-27/11/2020	https://drive.google.com/file/d/12a_A57avApQ_WxwE8Ddkj3TLm7XkFxXU/view?usp=sharing
Dr. Man Mohan Siddh	Mechanical	“Inculcating Universal Human Values in Technical Education”	9/07/2020-13/07/2020	https://drive.google.com/file/d/1Va4Zshh3D4evg2u5ntRW5pog_56melsr/view?usp=sharing
Mr Lalit Kr.Sharma	Mechanical	“Inculcating Universal Human Values in Technical Education”	23/07/2020-27/07/2020	https://drive.google.com/file/d/1RhfDtxMAkZw-_JNx2F5TJdYCagaE6ku5/view?usp=sharing
Lalit Kumar Sharma	Mechanical	ADDITIVE MANUFACTURING	16/02/2021-20/02/2021	https://drive.google.com/file/d/1NPD2kB7lGUvtR9nOr9rscgfoVMT5CNEe/view?usp=sharing
Lalit Kumar Sharma	Mechanical	Systems Engineering	28/09/2020-02/10/2020	https://drive.google.com/file/d/1pm-y0Vy1tb9s1b1nFTpKSrIKjpZLqnzP/view?usp=sharing
Lalit Kumar Sharma	Mechanical	Advancements in Green and Sustainable Energy	26/12/2020 - 30/12/2020	https://drive.google.com/file/d/1j4EswuZTQVl_xkngMqmZdXz8ajVZK6vV/view?usp=sharing
Lalit Kumar Sharma	Mechanical	Machine Learning:Practical Approach for Beginners	08/08/2020-22/08/2020	https://drive.google.com/file/d/1NFQdx-0Np4yknXldC4yqkQLEaiPNA0-1/view?usp=sharing
Lalit Kumar Sharma	Mechanical	ANSYS & SOLIDWORKS	19/04/2021-24/04/2021	https://drive.google.com/file/d/1vSRXh2UFk9jeMbebQSwdmFpvpwgRTMKF/view?usp=sharing

Lalit Kumar Sharma	Mechanical	Current Trends in Solar and Wind Technologies	16/01/2021 - 20/01/2021	https://drive.google.com/file/d/1Z02cN0hX-oDXPCAhp-5_t4QPOo8VUOo7/view?usp=sharing
Lalit Kumar Sharma	Mechanical	Solar & Smart Grid Technology	04/01/2021- /08/01/2021	https://drive.google.com/file/d/1zBDF2O6ZgamzNVALm3LniyZ6J8doDmYi/view?usp=sharing
Lalit Kumar Sharma	Mechanical	Recent Trends in Advanced Machining and Additive Manufacturing	07/09/2020 - 11/09/2020	https://drive.google.com/file/d/14YOZdN9vdULblmNjESI8okSsF9Sx84CJ/view?usp=sharing
Lalit Kumar Sharma	Mechanical	Solar Thermal Engineering for Sustainable Future	24/08/2020 - 28/08/2020	https://drive.google.com/file/d/1rRONRSfD-B2OH-jpqx5vYSKSCKvsWoMJ/view?usp=sharing
Mr Rajendra Kr.Gupta	Mechanical	"Inculcating Universal Human Values in Technical Education"	26/10/2020- 30/10/2020	https://drive.google.com/file/d/1p5_jV3RfbKSHbvzFtFv0WMsyP7sEYSJ6/view?usp=sharing
Mr Rajendra Kr.Gupta	Mechanical	Integration of Renewable Energy Sources	02/11/2020- 07/11/2020	https://drive.google.com/file/d/10rDJa-AaG_y1Zr0Nkx5E4ln3Mf0MX8cJ/view?usp=sharing
Mr Rajendra Kr.Gupta	Mechanical	Solar & Smart Grid Technology	04/01/2021- 08/01/2021	https://drive.google.com/file/d/1fEjhIpGjArxlXgrAp-7qYWWsmLd1ht3J/view?usp=sharing
Mr Tej Bahadur Singh	Mechanical	"Inculcating Universal Human Values in Technical Education"	12/10/2020- 16/10/2020	https://drive.google.com/file/d/1EftGQujO0Q6QYs2JbjoQ5jS6xNP6-2fl/view?usp=sharing
Mr Tej Bahadur Singh	Mechanical	Advanced Optimization Techniques for research Problem Solveing	04/08/2020- 08/08/2020	https://drive.google.com/file/d/1mPpObkDOoz2A46E0iGqpDQWSVDsjUt3N/view?usp=sharing
Mr Aashish Nagpal	Mechanical	"Inculcating Universal Human Values in Technical Education"	28/09/2020- 2/10/2020	https://drive.google.com/file/d/1mSlTx2sm26AcuX2HxqKmkmH-GVLah7jj/view?usp=sharing

Mr Dayal Singh Rathore	Mechanical	“Inculcating Universal Human Values in Technical Education”	23/07/2020-27/07/2020	https://drive.google.com/file/d/14Cw4emHNi1TiRTCe5w-1OBZjytCpmYFT/view?usp=sharing
Mr Dayal Singh Rathore	Mechanical	Issues and Challenges In Grid Integration with Renewable Energy Sources	21/09/2020-25/09/2020	https://drive.google.com/file/d/1xAURVKrFjAD2iyiVQR4JCE_eYBqBkqjz/view?usp=sharing
Mr Dayal Singh Rathore	Mechanical	Effect of Covid-19 on Stock Market	25/01/2021-29/01/2021	https://drive.google.com/file/d/17kE4noTMgxm2ccAGpc5ojInDMG13o3JC/view?usp=sharing
Mr Dayal Singh Rathore	Mechanical	Higher Study Opportuinty for Technical Students	2/3/2021-6/03/2021	https://drive.google.com/file/d/1wK_UeKmVau_CWuB-peAqT8wAN6LCtn6z/view?usp=sharing
Mr Akhil Vijay	Mechanical	“Inculcating Universal Human Values in Technical Education”	12/10/2020-16/10/2020	https://drive.google.com/file/d/10bUCqfA1AAKU19x6B_YmiFxtlJFkAx-e/view?usp=sharing
Mr Akhil Vijay	Mechanical	HUMAN KINETICS	09/07/2020-13/07/2020	https://drive.google.com/file/d/1_Rul554JFejOnQvjoy3kJxb-sZzlUlTD/view?usp=sharing
Mr Akhil Vijay	Mechanical	EMERGING TRENDS IN CIVIL ENGINEERING	25/07/2020-29/07/2020	https://drive.google.com/file/d/1lxTSiPcKx4LM4RDtGJ3jI8rrKURiI3c0/view?usp=sharing
Mr Akhil Vijay	Mechanical	INDUSTRIAL INTERNET OF THINGS	12/08/2020-16/08/2020	https://drive.google.com/file/d/11eZ1-vviStMx3wySumP9gcwF7szkMF0h/view?usp=sharing
Mr Akhil Vijay	Mechanical	INTEGRATION OF RENEWABLE ENERGY SOURCES	02/11/2020-07/11/2020	https://drive.google.com/file/d/1VT9FHhdTPFeUp-o2sibdWMBOZ2SVdsET/view?usp=sharing

Mr Akhil Vijay	Mechanical	SOLAR & SMART GRID TECHNOLOGY " (SSGT-2021)	04/01/2021-08/01/2021	https://drive.google.com/file/d/1-NUMPkXvrP_vG9rszToSyzH0HDVEz_I-/view?usp=sharing
Mr Akhil Vijay	Mechanical	EFFECTS OF COVID-19 ON STOCK MARKET	25/01/2021-29/01/2021	https://drive.google.com/file/d/1snzoYTXW03ziRzdPu8XYShlWANnoIgTv/view?usp=sharing
Mr Akhil Vijay	Mechanical	QUANTUM COMPUTING	02/03/2021-06/03/2021	https://drive.google.com/file/d/1lUIocmdfdzg7OkVnXa-JjgO7c77Z73O1/view?usp=sharing
Mr Dilip Kumar Prajapati	Mechanical	“Inculcating Universal Human Values in Technical Education”	5/08/2020-9/08/2020	https://drive.google.com/file/d/1oTQupVjfp1p5ZhYIRHQ1ft2MSPMwFvZ3/view?usp=sharing
Mr Ravi Yadav	Mechanical	Universal Human Values	23/11/2020-27/11/2020	https://drive.google.com/file/d/16Rkao1eOtjCzpQmkhD_LNX0QgGhJvhEj/view?usp=sharing
Mr Ravi Yadav	Mechanical	Industry 4.0	14/09/2020-18/09/2020	https://drive.google.com/file/d/16g76q5Hw5DJGKNJiPsCCVOMyG7iKGOCv/view?usp=sharing
Mr Ravi Yadav	Mechanical	Quantum Computing	02/03/2021-06/03/2021	https://drive.google.com/file/d/1IN-wbhXZJAwrS0_d9l4icJMIEhgtGh-v/view?usp=sharing
Mr Ravi Yadav	Mechanical	Recent Trends in Advanced Machining and Additive Manufacturing	07/09/2020-11/09/2020	https://drive.google.com/file/d/1ucAZm2-UfdNOZcmLgvVrtNfUkmQ9_3Uv/view?usp=sharing
Mr Abhishek Kumar	Mechanical	“Inculcating Universal Human Values in Technical Education”	12/10/2020-16/10/2020	https://drive.google.com/file/d/1VCa53XE0JvhbObhUrveBWQoYGt6M3szh/view?usp=sharing
Mr Abhishek Kumar	Mechanical	Academia to Industry: Challenges and Opportunities	31/08/2020-05/09/2020	https://drive.google.com/file/d/1-zXYlFqX-fzAciZdUnGpVxowU3_WCk0u/view?usp=sharing

Mr Abhishek Kumar	Mechanical	Advances in manufacturing and characterization Process	24/08/2020-29/08/2020	https://drive.google.com/file/d/1YEFlcPCob6u2yON2c7FF6fg3li0wGq0L/view?usp=sharing
Mr Abhishek Kumar	Mechanical	Research trends in Mechanical Engineering	07/09/2020-12/09/2020	https://drive.google.com/file/d/131r3U_Q5aSWbMXOpBF8jpu_7URKl_lVy/view?usp=sharing
Mr Abhishek Kumar	Mechanical	Emerging Trends in Nano-Electronics	21/09/2020-25/09/2020	https://drive.google.com/file/d/14ZikBdBdF-m7daA8vl4ZqbH7zqtQVuPf/view?usp=sharing
Mr Abhishek Kumar	Mechanical	Recent Trends in Advanced Machining and Additive Manufacturing	07/09/2020-11/09/2020	https://drive.google.com/file/d/1Sn4u1GK9HQoDqeUTkPg9xaGSbax7qROE/view?usp=sharing
Mr Abhishek Kumar	Mechanical	Finite Element Methods and Application	16/09/2020-20/09/2020	https://drive.google.com/file/d/14CIxxX3XaH75d4VfmmOLmOnkztqw6A3B/view?usp=sharing
Mr Abhishek Kumar	Mechanical	Integration of Renewable Energy Sources	02/11/2020-07/11/2020	https://drive.google.com/file/d/1yQA6G-MK7KrpaGdp54NhT-r-RsjA_sj6/view?usp=sharing
Mr Abhishek Kumar	Mechanical	Renewable Energy	14/12/2020-18/12/2020	https://drive.google.com/file/d/1MNlLAoL5un7tuRi-6M2KoZqv-DExOi9D/view?usp=sharing
Mr Abhishek Kumar	Mechanical	Magical Mathematical and Optimization	21/09/2020-25/09/2020	https://drive.google.com/file/d/1ry2KwW3Nj9RxsxfhXjjEfA0tA9Tl1R5I/view?usp=sharing
Mr Nitin Chhabra	Mechanical	“Inculcating Universal Human Values in Technical Education”	5/08/2020-9/08/2020	https://drive.google.com/file/d/1YmNJ9DIl2BA5AZ6W_38Flc2WZMxkqZsW/view?usp=sharing
Nitin Chhabra	Mechanical	Integration of renewable energy sources	02/11/2020-07/11/2020	https://drive.google.com/file/d/1HNhIfxeb90_YvTcFkHS6isa4xXEOoKCs/view?usp=sharing

Mr Satyendra Kumar	Mechanical	“Inculcating Universal Human Values in Technical Education”	12/10/2020-16/10/2020	https://drive.google.com/file/d/1tOg8_icVMJTOFs_hGsoUQJa9JYzcyzA1/view?usp=sharing
Mr Satya Prakash Saini	Mechanical	“Inculcating Universal Human Values in Technical Education”	23/07/2020-27/07/2020	https://drive.google.com/file/d/1ezSqUMJ2yCW1zmn9muKWevQeq83KgiQc/view?usp=sharing
Mr Satya Prakash Saini	Mechanical	Soalr and Smart Grid Technology	04/01/2021-08/01/2021	https://drive.google.com/file/d/1-LQBFQlIkN94enGr7yRYs4NV2zmffRP0/view?usp=sharing
Mr Shrikant Bansal	Mechanical	“Inculcating Universal Human Values in Technical Education”	12/10/2020-16/10/2020	https://drive.google.com/file/d/1ZsW4YA6GWToazQfl7VKJxqc0xmdjbN3w/view?usp=sharing
Mr Shrikant Bansal	Mechanical	SOLAR & SMART GRID TECHNOLOGY	04/01/2021-08/01/2021	https://drive.google.com/file/d/1FE5SctsB2NMxMLim9NWK4bFbwv74ZLSh/view?usp=sharing
Mr Shrikant Bansal	Mechanical	INTEGRATION OF RENEWABLE ENERGY SOURCES	02/11/2020-07/11/2020	https://drive.google.com/file/d/12kEGDKDPcuGfwn8cFxEzClDervcdnCkE/view?usp=sharing
Mr Shrikant Bansal	Mechanical	IPR and Need for Collaborative to deal with Pandemic like Covid-19	13/07/2020-17/07/2020	https://drive.google.com/file/d/1XDdmMAyHAzssAP3PyOjKSSstfZ9J2j-4/view?usp=sharing
Mr Hemant Bansal	Mechanical	“Inculcating Universal Human Values in Technical Education”	12/10/2020-16/10/2020	https://drive.google.com/file/d/1fxPzGx6TurxFgitvOA37vzqcI49ACteB/view?usp=sharing
Mr Akhilesh Paliwal	Mechanical	“Inculcating Universal Human Values in Technical Education”	23/07/2020-27/07/2020	https://drive.google.com/file/d/1xiyoSSnJLwTSCOZlQMM0HsOCl1uZmgxs/view?usp=sharing
Mr Akhilesh Paliwal	Mechanical	Electric Research Trends in Manufacturing(Part-1)	05/10/2020-10/10/2020	https://drive.google.com/file/d/1XWhssQ-mOtCwx6ijK_ecUiRwcR_2yZb3/view?usp

				=sharing
Mr Akhilesh Paliwal	Mechanical	Nanotechnology and Functional Materials	02/11/2020-07/11/2020	https://drive.google.com/file/d/19xjFS0RikNkcWTsu_cv9oAtoYDUNKxAv/view?usp=sharing
Mr Akhilesh Paliwal	Mechanical	Effect of Covid-19 on Stock Market	25/01/2021/29/01/2021	https://drive.google.com/file/d/1HG4o3Md43vjSQCjUclXUXEAHod9jJ0_w/view?usp=sharing
Ms. Palak Jindal	Mechanical	“Inculcating Universal Human Values in Technical Education”	12/10/2020-16/10/2020	https://drive.google.com/file/d/13OOsfC6oW0TLnbewkxEEglMw-9nbu6Mm/view?usp=sharing
Ms. Palak Jindal	Mechanical	HUMAN KINETICS	09/07/2020-13/07/2020	https://drive.google.com/file/d/1WdYH943vbyyoKg74KO8R-FDlnIuTSsKd/view?usp=sharing
Ms. Palak Jindal	Mechanical	INTEGRATION OF RENEWABLE ENERGY SOURCES	02/11/2020-07/11/2020	https://drive.google.com/file/d/1pyAQVN-HFvbf6zedbTri2YeLyHxXTh76/view?usp=sharing
Ms. Palak Jindal	Mechanical	SOLAR & SMART GRID TECHNOLOGY	04/01/2021-08/01/2021	https://drive.google.com/file/d/1ALUI-NX7F_zzvS6ye8TG5oeTtJZsTI1B/view?usp=sharing
Mr Yogesh dubey	Mechanical	“Inculcating Universal Human Values in Technical Education”	12/10/2020-16/10/2020	https://drive.google.com/file/d/1Uq4U-UOuwnmov1PonJzxxXWHy2ODKyok/view?usp=sharing
Mr Yogesh dubey	Mechanical	Manufacturing Practices and Industry 4.0	02/02/2021-06/02/2021	https://drive.google.com/file/d/19ZhMOfDVxfQ1vVAz9rf9zNfbvb60yHGW/view?usp=sharing
Mr Yogesh dubey	Mechanical	Renewable Energy Technologies	26/02/2021-02/03/2021	https://drive.google.com/file/d/1BPjSbKgbe37uKCTy2wBGf0IAH0wR6nra/view?usp=sharing

Mr Yogesh dubey	Mechanical	Industry 4.0 and Smart Manufacturing : Opportunities and Challenges	20/07/2020-24/07/2020	https://drive.google.com/file/d/1F8IkaNWyldmM6RwfM5-jE-0lX6BdcUlD/view?usp=sharing
Mr Yogesh dubey	Mechanical	Recent Trends in Manufacturing	28/07/2020-01/08/2020	https://drive.google.com/file/d/1YBtD8rFyUL1AmsshG2l8mPaouZqZmnlC/view?usp=sharing
Mr Yogesh dubey	Mechanical	Electric Research Trends in Manufacturing	05/10/2020-10/10/2020	https://drive.google.com/file/d/1znkcswb2nurvFC3P8M01oNX2mbavGr4C/view?usp=sharing

S. NO	**CRITERIA**	**OBSERVATION MADE BY NBA**	**COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)**
5.7.1	**5.7.1 Academic Research**	Number of quality publications are fewer, students are yet to be awarded PhD	• Faculty members published research papers in reputed journals (SCI, SCOPUS, UGC approved journals etc.) • Also, two faculty members completed their Ph. D degree during 2018-19 & 2019-20. • Three faculty members have been enrolled in PhD programme

List of Publications

S.No.	Title of paper	Name of Author/s	Name of the Journal	Year of Publication	ISSN Number	LINK
1	A framework for managing the agri-fresh food supply chain quality in Indian industry	Dr. MANMOHAN	Management of Environmental Quality	2020-21	1477-7835	https://doi.org/10.1108/MEQ-05-2020-0085
2	Prediction and optimization of abrasive wear loss of ultrahigh strength martensitic steel using response surface methodology, Harris Hawk and artificial neural network	Dr. Bhuvenesh Bhardwaj	International Journal of System Assurance Engineering and Management	2020-21	0975-6809	https://doi.org/10.1007/s13198-021-01160-5
3	Investigation on the effect of Al2O3 and B4C ceramic particles on mechanical properties of AA7075 Metal matrix composites	Dr. Bhuvenesh Bhardwaj	SAE International Journal of Materials & Manufacturing	2020-21	1946-3987	https://doi.org/10.4271/05-13-03-0022
4	Optimization of Process Parameter by using CNC Wire Electrical Discharge Machine through Taguchi Method	Dr. M.P.SINGH	International Journal of Engineering and Advanced Technology (IJEAT)	2020-21	2249-8958	https://www.ijeat.org/wp-content/uploads/papers/v9i6/F1497089620.pdf

5	Effect of Arm Posture and Isometric Hand Loading on Shoulders Muscles	Lalit Kumar Sharma	Conference Proceedings of ICDLAIR2019. Lecture Notes in Networks and Systems, vol 175. Springer, Cham.	2020-21	978-3-030-67187-7	https://doi.org/10.1007/978-3-030-67187-7_29
6	Investigation of Mechanical Properties in Silicon Carbide Fiber Composite	Dr Bhuvnesh Bhardwaj	Manufacturing Engineering, Lecture notes on Multidisciplinary Industrial Engineering, Springer	2019-2020	978-981-15-4619-8_29	https://doi.org/10.1007/978-981-15-4619-8_29
7	Identification of Drivers and barriers of sustainable manufacturing :Optimization Methods in Engineering	Dr M P Singh	Lecture Notes on Multidisciplinary Industrial Engineering. Springer, Singapore	2019-2020	978-981-15-4549-8	https://doi.org/10.1007/978-981-15-4550-4_14
8	An ISM Approach to Performance Indicators of sustainable Manufacturing through MICMAC analysis in Indian Manufacturing Industry: Optimization Methods in Engineering	Dr M P Singh	Lecture Notes on Multidisciplinary industrial Engineering. Springer, Singapore	2019-2020	978-981-15-4549-8	https://doi.org/10.1007/978-981-15-4550-4_1
9	Ranking of Drivers of Sustainable Manufacturing	Dr M P Singh	International Journal of Recent Technology and Engineering	2019-2020	2277-3878	https://www.researchgate.net/publication/339202079_E6077018520
10	Dry sliding wear behaviour of Al 7075/Al2O3/B4C composites using mathematical modelling and statistical analysis	Dr Bhuvnesh Bhardwaj	Material Research Express, IOP Publishing Ltd	2019-2020	2053-1591	https://iopscience.iop.org/article/10.1088/2053-1591/ab546a/meta
11	Resin based restorative dental materials: characteristics and	Dr Bhuvnesh Bhardwaj	Japanese Dental Science review,	2019-2020	1882-7616	https://doi.org/10.1016/j.jdsr.2019.09.004

	future perspectives		Elseveir			
12	Effect of Tool Rotation of Surface Roughness During Electro Discharge Machining of Hastelloy C-276	Dr Bhuvnesh Bhardwaj	Manufacturing Engineering, Lecture notes on Multidisciplinary Industrial Engineering,Springer	2019-2020	978-981-15-4619-8_18	https://doi.org/10.1007/978-981-15-4619-8_18
13	Effect of Tool Rotation on Metal Removal Rate During Electro Discharge Machining of Hastelloy C-276	Dr Bhuvnesh Bhardwaj	Manufacturing Engineering, Lecture notes on Multidisciplinary Industrial Engineering, Springer	2019-2020	978-981-15-4619-8_12	https://doi.org/10.1007/978-981-15-4619-8_12
14	Air Erosion Behavior of SiC - Filled Carbon Fiber -Epoxy Composites	Dr Bhuvnesh Bhardwaj	Manufacturing Engineering, Lecture notes on Multidisciplinary Industrial Engineering, Springer	2019-2020	978-981-15-4619-8_30	https://doi.org/10.1007/978-981-15-4619-8_30
15	Performance obstacles in sustainable manufacturing - model building and validations	Dr M P Singh	Journal of advances in Management research, EMERALD Publishing	2019-2020	*0972-7981*	https://doi.org/10.1108/JAMR-03-2020-0031
16	Multiresponse Optimization of EDM Machining Parameters Using Taguchi Methodolgy with grey relational analysis	Dr Bhuvnesh Bhardwaj	Optimization Methods in Engineering, Lecture notes on Multidisciplinary Industrial Engineering,Springer	2019-2020	978-981-15-4550-2_21	https://doi.org/10.1007/978-981-15-4550-4_21

17	Fast Responsive Soft Bio mimetic robotic Actuator	Mr Rohit Goyal	Materials Today Proceedings,Elseveir	2019-2020	2214-7853	https://doi.org/10.1016/j.matpr.2019.05.009
18	Noise reduction of deep groove ball bearing (6205) by process optimization-An Experimental	Dr M P Singh	International Journal of Engineering and Advanced technology	2018-2019	2249-8958	https://www.ijeat.org/wp-content/uploads/papers/v8i5/E7112068519.pdf
19	Modelling based experimental investigation on polymerizationshrinkage and micro-hardness of nano alumina filled resin based dental material	Dr Bhuvnesh Bhardwaj	Journal of the Mechanical Behavior of Biomedical Materials,Elseveir	2018-2019	1751-6161	https://doi.org/10.1016/j.jmbbm.2019.06.026
20	Study of Sliding Wear behavior of alumina oxide filled fiber composite using design of experiment	Dr Bhuvnesh Bhardwaj	Advances in Industrial and production Engineering, Lecture Notes in Mechanical engineering,Springer Nature Singapore	2018-2019	978-981-13-6412-9	https://doi.org/10.1007/978-981-13-6412-9_68
21	Barriers analysis for sustainable manufacturing implementation in Indian manufacturing industries using interpretive structural modelling	Dr M P Singh	International Journal of Advanced Research in Engineering and Technology	2018-2019	0976-6480	https://ssrn.com/abstract=3527447
22	Case study on quality control tools for bearing industries	Dr M P Singh	International Journal of Scientific & Engineering Research	2018-2019	2229-5518	https://www.ijser.org/researchpaper/Case-Study-on-quality-control-tools-for-Bearing-industries.pdf
23	Chargers(EVSE) and their stations with business model for India	Dr Fauzia Siddiqui	International Journal of Scientific & Engineering Research	2018-2019	2229-5518	https://www.ijser.org/researchpaper/ELECTRIC-VEHICLE-CHARGERS-EVSE-AND-THEIR-STATIONS-WITH-BUSINESS-MODEL-FOR-INDIA.pdf
24	Identification of microvariables for supply management prctices in context of flexible	Dr Fauzia Siddiqui	International Journal of Scientific & Engineering	2018-2019	2229-5518	https://www.researchgate.net/publication/316892856_Micro_Variables_Identification_for_SUPPLY_Chain_Management_Practices_in_Co

	system in indian gas industry		Research			ntext_of_Flexible_System_in_Indian_Gas_Industry
25	Roadmap for future :Vision 2030 and its impact on Saudi Arabis's Energy sector	Dr Fauzia Siddiqui	International Journal of Scientific & Engineering Research	2018-2019	2229-5518	https://www.ijser.org/researchpaper/Roadmap-for-future-Vision-2030-and-its-Impact-on-Saudi-Arabias-Energy-Sector.pdf
26	The Pathway to Zero waste : Case study of Saudia Arabia's Solid waste Management Techniques	Dr Fauzia Siddiqui	International Journal of Scientific & Engineering Research	2018-2019	2229-5518	https://www.ijser.org/researchpaper/The-Pathway-to-Zero-Waste-Case-Study-of-Saudii-Arabias-Solid-Waste-Management-Techniques.pdf
27	Review on Process Parameter of EDM & micro EDM	Dr Bhuvnesh Bhardwaj	International Journal of Scientific &Engineering Research	2018-2019	2229-5518	https://www.ijser.org/researchpaper/Review-on-Process-Parameter-of-EDM-micro-EDM.pdf
28	Al 6351 T6 as a Brake Rotor Material	Dr Rishi Pareek	International Journal of Scientific &Engineering Research	2018-2019	2229-5518	https://www.ijser.org/researchpaper/Al-6351-T6-as-a-Brake-Rotor-Material.pdf
29	Comparative analysis of ethanol fuel productionfrom sweet sorghum and sugarcane.	Dr Rishi Pareek	International Journal of Scientific & Engineering Research	2018-2019	2229-5518	https://www.ijser.org/researchpaper/Comparative-analysis-of-ethanol-fuel-production-from-sweet-sorghum-and-sugarcane.pdf
30	Production of Biogas from Cow Manure by Adding Various Additives	Dr Rishi Pareek	International Journal of Scientific & Engineering Research	2018-2019	2229-5518	https://www.ijser.org/researchpaper/Production-of-Biogas-from-Cow-Manure-by-Adding-Various-Additives.pdf
31	Ergonomics Blueprint of EOT Crane Cabins : A case study from steel plant within India	Mr Abhishek Kumar	International Journal of Scientific & Engineering Research	2018-2019	2229-5518	https://www.ijser.org/onlineResearchPaperViewer.aspx?Ergonomic-Blueprint-of-EOT-Crane-Cabins-A-Case-Study-from-Steel-Plant-within-India.pdf
32	Taguchi Method Approach for Multi Factor Optimization of S1 Tool Steel in Electrochemical Machining	Mr Yogesh Dubey	International Journal of Research and Analytical Reviews	2018-2019	2348-1269	https://www.researchgate.net/publication/342246824_Taguchi_Method_Approach_for_Multi_Factor_Optimization_of_S1_Tool_Steel_in_Electrochemical_Machining
33	Ergonomics Blueprint of EOT	Mr Yogesh	International Journal	2018-	2229-	https://www.ijser.org/onlineResearchPaperViewer.aspx?Ergonomic-

	Crane Cabins : A case study from steel plant within India	Dubey	of Scientific & Engineering Research	2019	5518	Blueprint-of-EOT-Crane-Cabins-A-Case-Study-from-Steel-Plant-within-India.pdf
34	Ergonomics Blueprint of EOT Crane Cabins : A case study from steel plant within India	Mr Rajendra Kr Gupta	International Journal of Scientific & Engineering Research	2018-2019	2229-5518	https://www.ijser.org/onlineResearchPaperViewer.aspx?Ergonomic-Blueprint-of-EOT-Crane-Cabins-A-Case-Study-from-Steel-Plant-within-India.pdf
35	Review on Process Parameter of EDM & micro EDM	Mr Akhil Vijay	International Journal of Scientific &Engineering Research	2018-2019	2229-5518	https://www.ijser.org/researchpaper/Review-on-Process-Parameter-of-EDM-micro-EDM.pdf
36	Mechanical Stresses distribution in functionally graded material's artificial hip joints implants using mathematical model	Mr Satyendra Kumar	International Journal of Scientific &Engineering Research	2018-2019	2229-5518	https://www.ijser.org/researchpaper/Computational-Study-of-Distribution-of-Mechanical-Stress-in-Artificially-Replaced-Hip-Joint-Implants-Using-Mathematical-Model.pdf
37	Chargers(EVSE) and their stations with business model for India	Mr Satyendra Kumar	International Journal of Scientific &Engineering Research	2018-2019	2229-5518	https://www.ijser.org/researchpaper/ELECTRIC-VEHICLE-CHARGERS-EVSE-AND-THEIR-STATIONS-WITH-BUSINESS-MODEL-FOR-INDIA.pdf

Sr. No. 3076 ID No. 2012RME9547

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

अभिषद् की अनुशंसा पर

मन मोहन सिद्ध

को

विद्या वाचस्पति

की उपाधि प्रदान करता है।

शोधप्रबंध शीर्षक

एन एम्पिरिकल स्टडी ऑफ एग्रि–फ्रेश फूड सप्लाई चैन क्वालिटी (ए एफ एस सी क्यु) इन सेलेक्ट इण्डियन इंडस्ट्रीज़

आज भारतीय गणराज्य के अन्तर्गत जयपुर में यह उपाधि दी गई है।

दिनांक २९ दिसम्बर, २०१८

Malaviya National Institute of Technology Jaipur

upon the recommendation of the Senate confers on

Man Mohan Siddh

the degree of

Doctor of Philosophy

Thesis title in

An Empirical Study of Agri-fresh Food Supply Chain Quality (AFSCQ) in Select Indian Industries

Given this day at Jaipur in the Republic of India

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR
(Institution of National Importance under NITs Act, Established by Govt. of India)
मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर
JLN Marg, Jaipur-302017 (India)

Academic Section

Provisional Admission Letter 2020-21

Name of the Student:	LALIT KUMAR SHARMA
Contact No:	9413417182
Father's Name:	BAL KRISHNA SHARMA
Permanent Adress:	Gopal Bhawan, Ward No. 7, Phulera JAIPUR - 303338
E-Mail:	erlksjecrc@gmail.com
Department:	MECHANICAL ENGINEERING
Program:	Ph.D
Specilization:	
ID No:	2020RME9060
Institute E-Mail Id:	2020RME9060@mnit.ac.in

Institute Contacts:

Academic Section:	AR/DR	E-Mail: erp.acad@mnit.ac.in
Head of the Department:	MURARI LAL MITTAL	E-Mail: mlmittal.mech@mnit.ac.in
DRGC Convener:		E-Mail:
Supervisor:		E-Mail:

Pending Documents:

Instructions:

1. You are required to submit the "pending documents" before __-__-_____, 2020, failing which your admission is liable to be cancelled.

2. The Institute domain e-mail id and password shall be sent to your e-mail.

3. Enterprise Resource Planning (ERP) login and password shall be sent to your Institute e-mail id. ERP is the web based application for academic and administrative processes in the Institute (**www.mniterp.org**).

5. For Hostel allotment, Submit your Fee receipt in the hostel office. For further information, e-mail: hosteloffice@mnit.ac.in, Contact: 09549891444 (M)

6. Hostel allotment priority: 1st Priority: Persons with differential ability (PWD); 2nd Priority: Persons from Abroad; 3rd Priority: Persons from outside Rajasthan; 4th Priority: Persons from outside Jaipur.

Student Signature

Academic Section

This is a Computer generated document printed on 122.15.2.242 @ 23-09-2020 13:50:37

STUDENT COPY

JECRC University
Plot No. IS-2036 to 2039, Ramchandrapura
Industrial Area, Vidhani, Sitapura Extension,
Jaipur - 303905, Rajasthan, India
Phone: 0141 - 6565602, 2771519
Email: info@jecrcuniversity.edu.in

BUILD YOUR WORLD

Approved by UGC (Estd.Under the Act No.13-2012 of the GOR)

Fee Receipt (Bank)

Receipt No.: BR36131 Batch: JUNE 2019 Date: 16/06/2019

Name: Yogesh Dubey Father Name: Gopesh Dubey

Program: Ph.D in Engineering Admission No.: 19PHEN016 Uni. Roll No.: 19PHEN016

S.No.	Account Head	Amount
1	ANNUAL ACADEMIC FEE	30000.000
	Total	30000.000

Currency: INR

Total In Words: INR Thirty Thousand and Zero only

Instrument Number: JU/2019/1293 Instrument Date: 15/06/2019

Instrument's Bank Name: HDFC

Parent Phone No.: 9549041790

Next Due Date:

Particulars: Fees Submitted By: Yogesh Dubey-19PHEN016 Received By: Yogesh Joshi Sponsorship Amount /Payment Mode: Online ANNUAL ACADEMIC FEES 30000.00

Yogesh Joshi

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

JECRC/REG/2021-22/2799

07/09/2021

ANNEXURE V

NO OBJECTION CERTIFICATE

The undersigned is pleased to permit Mr. Hemant Bansal who is working in this organization for the last 04 years and is presently holding the rank/position of Assistant Professor for pursuing the programme (course) at NIT Jalandher in the Department of Industrial & Production Engineering with specialization in the following areas:

1. Production Engineering

His conduct and character is good. We are ready to relieve him during study hours (usually 8-10 hours of classroom instructions in a week) to undergo the Masters' programme / (usually about 6 hours of classroom instructions in a week) to undergo the Ph.D. programme as per time-table of the Institute, which follows slot system. We understand that the duration of course work is expected to be 4 semesters for Part-Time M.Tech. Programme/ 3 semesters for part-time Ph.D. programme, while total duration is expected to be 3 years for part time M.Tech./ 5 years for part-time Ph.D.

07/09/21

Place: Jaipur
Date: 07.09.2021

Prof. (Dr.) R.K .Mangal
(Registrar)
Registrar
Jaipur Engineering College & Research Centre Tonk Road, Jaipur-302022 (Rajasthan)

JECRC Foundation
www.jecrcfoundation.com

Jaipur Engineering College and Research Centre
Approved by AICTE & Affiliated to RTU
JECRC Campus, Shri Ram Ki Nangal,
Via Sitapura RIICO, Opp. EPIP Gate, Tonk Road, Jaipur 302 022
t: 0141 2770120, 2770232 e: info@jecrcmail.com

Dr B R AMBEDKAR NATIONAL INSTITUTE OF TECHNOLOGY

Registration Form (Ph.D)

(Students are advised to retain a Photostat copy of this registration form and deposit the same, duly filled and sign of HOD on or before the date of registration as specified in the Academic Calendar)

Registration / Roll Number ________ Branch: IPE Batch: ____ Semester: Ist

Name of the student (in English) HEMANT BANSAL (in Hindi) हेमन्त बंसल

Father's Name: Satya Prakash Mother's Name: Kamlesh Bansal

Parent's Address: 12/602, kaveri path, mansarovar nagar, Jaipur (Raj)

Telephone No. 9414457852 E-mail h.b_mech@yahoo.com Current CGPA —

Date of Registration: 08/09/21 (with / without Late Fee)

Details of the Courses passed till date (Only for Ph. D) & courses to be registered in the current semester

Course Code	Course Title	L	T	P	C	Consent of Teacher (if applicable)	Remarks/ Pre requisite
RID-102	Research methodology.	03	00	00	00		
IP-563	Physical metallurgy	03	00	00	00		
IP-565	Advanced Welding	03	00	00	00		
IP-594	Surface engineering	03	00	00	00		
	TOTAL				-		

Title of dissertation: Welding

Name of Supervisor(s): Dr. Vikram Sharma & Dr. Rakesh k. Sharma

Summary of the dissertation work performed since last semester/registration (by the student):
(Please attach separate sheet verified by the Supervisor(s))

Details of publications in the International Journals/ National Journals/ Proceedings of International/ National Conferences since the last registration. (The student must attach reprints/ Photostat copies of the publications)

Comments of the Supervisor(s) about the progress of the student ________

Signature of the Supervisor(s): ________

Registration in the Departments is subject to payment of all the dues mentioned below:

1. No dues from Library ________ 2. No dues from Previous Semester Hostel ________
3. Payment of Mess Advance ________ (To be verified from respective hostel)
4. Payment of Semester fee

Fee details to be filled by the student (Copy of Online Fee receipt be attached)			
Name of the Bank	Transaction Date	Transaction Number	Amount
HDFC BANK (online)	03/09/21	1102673414	29500/-

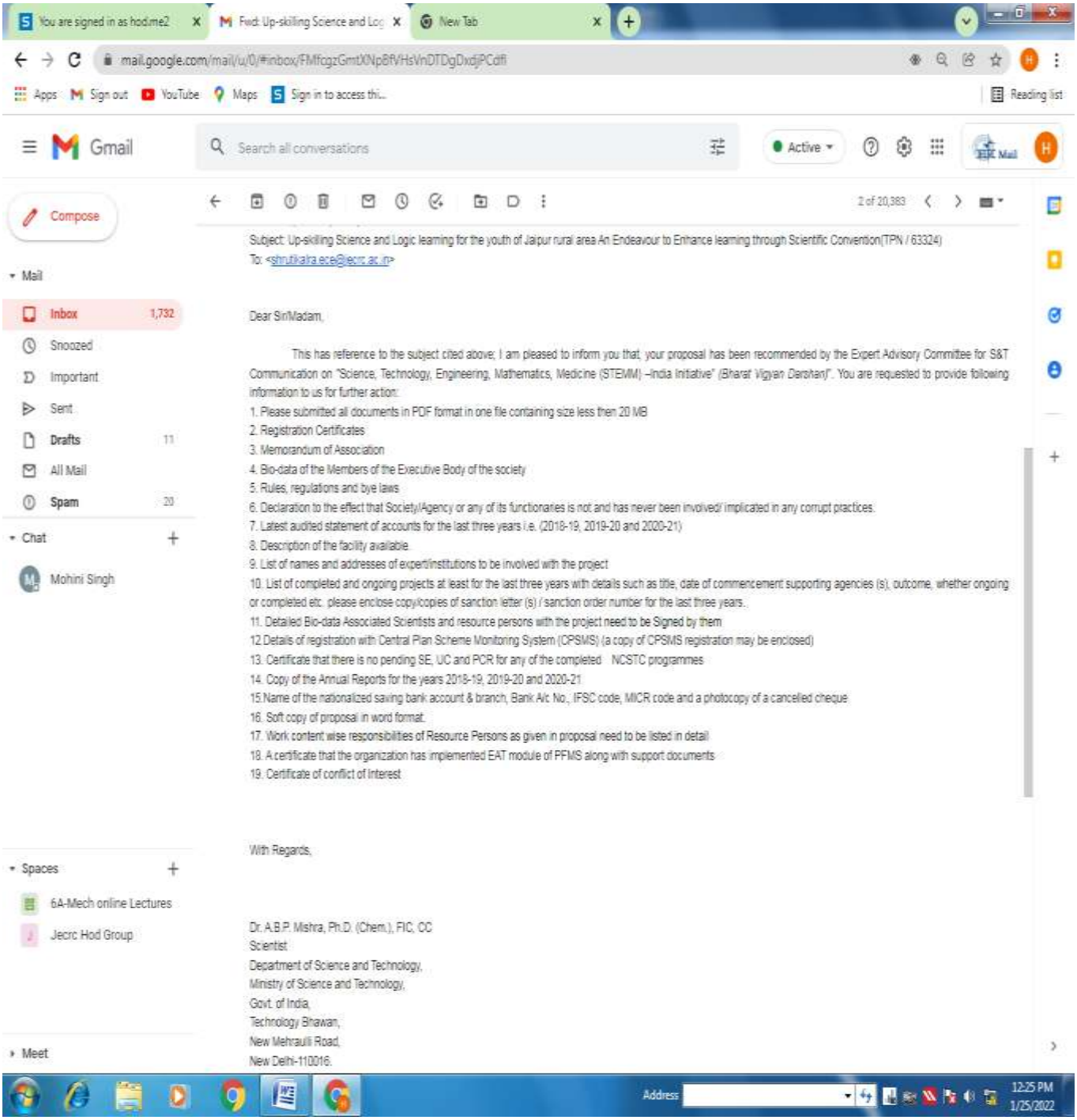
(To be verified by the concerned department)

Certified that all the information given above are correct and true to the best of my knowledge and belief and nothing has been concealed therein. If any wrong information is found on my part, I shall be liable to face the disciplinary action.

(Signature of Student)

Recommended/Not Recommended for Registration (Please Tick)

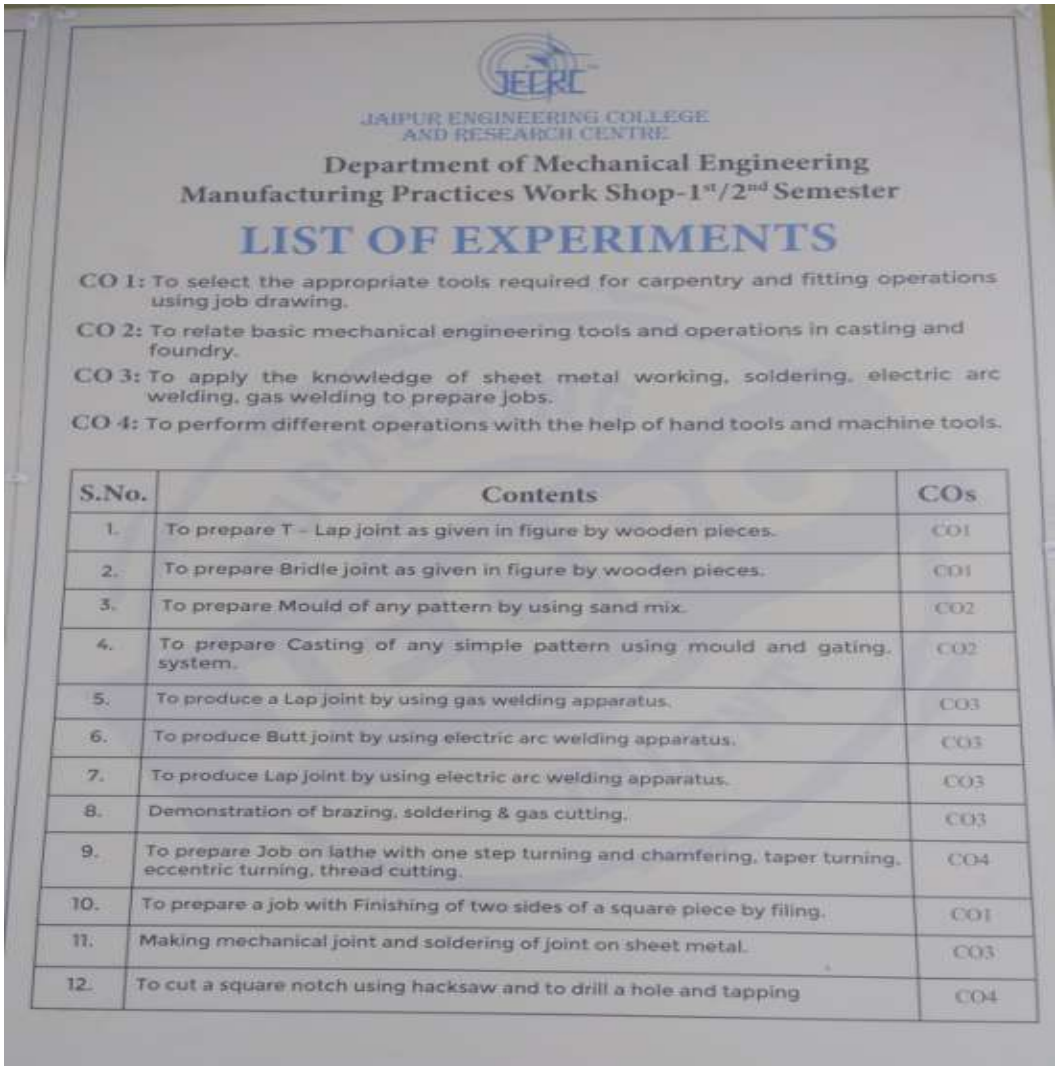
S. NO	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
5.7 .2	**5.7 .2 Sponsored Research**	No research funding from outside agencies has been received.	Research Project entitled "Up-skilling Science and Logic learning for the youth of Jaipur rural area An Endeavour to Enhance learning through Scientific Convention(TPN / 63324) has been approved by "Science, Technology, Engineering, Mathematics, Medicine (STEMM) –India Initiative" *(Bharat Vigyan Darshan)*" Amount: Rs. 2569000/- Co-Investigator: Dr Mahendra Pratap Singh(Professor, Mechanical Department) Mr Manish Jain(Associate Professor Mechanical Department)


You are signed in as hodme2
Fwd: Up-skilling Science and Log
New Tab
mail.google.com/mail/u/0/#inbox/FMfcgzGmtXNp8fVHsVnDTDgDxdjPCdfl
Apps
Sign out
YouTube
Maps
Sign in to access thi...
Reading list
Gmail
Search all conversations
Active
Compose
2 of 20,383
Subject: Up-skilling Science and Logic learning for the youth of Jaipur rural area An Endeavour to Enhance learning through Scientific Convention(TPN / 63324)
To: <shrutikalra.ece@jecrc.ac.in>
Mail
Inbox 1,732
Snoozed
Important
Sent
Drafts 11
All Mail
Spam 20
Chat
Mohini Singh
Dear Sir/Madam,
This has reference to the subject cited above; I am pleased to inform you that, your proposal has been recommended by the Expert Advisory Committee for S&T Communication on "Science, Technology, Engineering, Mathematics, Medicine (STEMM) –India Initiative" (Bharat Vigyan Darshan)". You are requested to provide following information to us for further action:
1. Please submitted all documents in PDF format in one file containing size less then 20 MB
2. Registration Certificates
3. Memorandum of Association
4. Bio-data of the Members of the Executive Body of the society
5. Rules, regulations and bye laws
6. Declaration to the effect that Society/Agency or any of its functionaries is not and has never been involved/ implicated in any corrupt practices.
7. Latest audited statement of accounts for the last three years i.e. (2018-19, 2019-20 and 2020-21)
8. Description of the facility available
9. List of names and addresses of expert/institutions to be involved with the project
10. List of completed and ongoing projects at least for the last three years with details such as title, date of commencement supporting agencies (s), outcome, whether ongoing or completed etc. please enclose copy/copies of sanction letter (s) / sanction order number for the last three years.
11. Detailed Bio-data Associated Scientists and resource persons with the project need to be Signed by them
12 Details of registration with Central Plan Scheme Monitoring System (CPSMS) (a copy of CPSMS registration may be enclosed)
13. Certificate that there is no pending SE, UC and PCR for any of the completed NCSTC programmes
14. Copy of the Annual Reports for the years 2018-19, 2019-20 and 2020-21
15.Name of the nationalized saving bank account & branch, Bank A/c No., IFSC code, MICR code and a photocopy of a cancelled cheque
16. Soft copy of proposal in word format.
17. Work content wise responsibilities of Resource Persons as given in proposal need to be listed in detail
18. A certificate that the organization has implemented EAT module of PFMS along with support documents
19. Certificate of conflict of Interest
With Regards,
Spaces
6A-Mech online Lectures
Jecrc Hod Group
Dr. A.B.P. Mishra, Ph.D. (Chem.), FIC, CC
Scientist
Department of Science and Technology,
Ministry of Science and Technology,
Govt. of India,
Technology Bhawan,
New Mehrauli Road,
New Delhi-110016.
Meet
Address
12:25 PM
1/25/2022

Patents published by Faculty members

S.NO.	Topics	Faculty members	Application No.	Date of Publication
1	Solar Electric power distribution and management system for agriculture purposes	Dr Fauzia Siddiqui, Radhey shyam meena, Dr Mohammad Israr	201921006207	2/16/2019
2	Hybrid energy management system using solar, wind ,fuel cell sources for remote region	Dr M P Singh, Dr Fauzia Siddiqui, Radhey shyam meena, Dr Mohammad Israr	202011005557	2/7/2020
3	Improved hand operated embroidery tool for easy operation	Dr MP Singh, Asik Rahaman Dr Mohammad Israr	202011023690	6/26/2020
4	Dustbin system for recycling of plastic waste into fuel using pyrolysis	Dr M P Singh, Dr Fauzia Siddiqui, Dr Ravindra pathak, Dr Mohammad Israr	202011023690	6/26/2020
5	Twirl Gas Burner	Rishi Pareek, Mohammed Saquib Khan, Rishabh Dutt Sharma, Neelraj Kaushik, Lakshay Zaveri	202011027817	8/28/2020

Criterion-5 Faculty Information and Contributions			
S. NO	**CRITERIA**	**OBSERVATION MADE BY NBA**	**COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)**
5.7.3	**5.7.3 Development Activities**	Monograms and instructional materials are not up to the mark	Monogram has been inserted on the instructional materials and other documents. https://jecrcfoundation.com/jf-data/NBA/ME/Lab-Manuals/Lab-Manuals-ME.pdf



JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Department of Mechanical Engineering

Manufacturing Practices Work Shop-1st/2nd Semester

LIST OF EXPERIMENTS

CO 1: To select the appropriate tools required for carpentry and fitting operations using job drawing.

CO 2: To relate basic mechanical engineering tools and operations in casting and foundry.

CO 3: To apply the knowledge of sheet metal working, soldering, electric arc welding, gas welding to prepare jobs.

CO 4: To perform different operations with the help of hand tools and machine tools.

S.No.	Contents	COs
1.	To prepare T - Lap joint as given in figure by wooden pieces.	CO1
2.	To prepare Bridle joint as given in figure by wooden pieces.	CO1
3.	To prepare Mould of any pattern by using sand mix.	CO2
4.	To prepare Casting of any simple pattern using mould and gating system.	CO2
5.	To produce a Lap joint by using gas welding apparatus.	CO3
6.	To produce Butt joint by using electric arc welding apparatus.	CO3
7.	To produce Lap joint by using electric arc welding apparatus.	CO3
8.	Demonstration of brazing, soldering & gas cutting.	CO3
9.	To prepare Job on lathe with one step turning and chamfering, taper turning, eccentric turning, thread cutting.	CO4
10.	To prepare a job with Finishing of two sides of a square piece by filing.	CO1
11.	Making mechanical joint and soldering of joint on sheet metal.	CO3
12.	To cut a square notch using hacksaw and to drill a hole and tapping	CO4

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Department of Mechanical Engineering

MANUFACTURING PRACTICES WORKSHOP LABORATORY

Do's

- Perform the experimental work precisely as directed by the faculty member/instructor.
- Maintain lab cleanliness.
- Report any damage to equipment or furniture immediately to your faculty member/instructor.
- Be sure to follow safety protocols while performing experiments.
- Keep your hairs braid/tied properly.
- Be careful when regulating flow from Oxygen/Acetylene cylinders during Gas welding.
- Shut off equipment after performing the experiment.
- Return tool/workpieces to lab instructors after finishing your work.
- Switch off fan and lights when not in use.

Dont's

- Do not enter the laboratory without wearing shoes.
- Do not touch any equipment without prior permission.
- Do not engage in unruly behaviour or boisterous conduct in the laboratory.
- Use of personal audio or video equipment is prohibited in the laboratory.
- Use of cell phones is strictly prohibited.
- Do not change the equipment setting without permission.
- Do not wear loose clothes while performing experiments.
- Do not look at the arc with naked eyes during Arc welding.

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Department of Mechanical Engineering
Thermal Engineering Laboratory II - 7th Semester

LIST OF EXPERIMENTS

CO 1: To enumerate & compare the performance characteristics of engines

CO 2: To calibrate the performance of air conditioning systems, heat pumps and refrigeration systems.

CO 3: To deliberate the parameters of thermal systems.

CO 4: To calculate performance characteristics of turbo machines.

S. No.	Contents	COs
1.	To Perform constant speed load test on a single cylinder diesel engine and to plot performance curves: indicated thermal efficiency, brake thermal efficiency, mechanical efficiency Vs. Brake power and heat balance sheet.	CO 1
2.	To Estimate the Indicated Power, Friction Power and Mechanical Efficiency of a multi-cylinder Petrol Engine (Morse Test).	CO 1
3.	Analysis of engine exhaust gases using Orsat Apparatus / Engine Gas Analyzer.	CO 1
4.	Determination of coefficient of performance of Refrigeration cycle and tonnage capacity of refrigeration unit.	CO 2
5.	To determine the COP and tonnage capacity of a Mechanical heat pump.	CO 2
6.	To study various controls used in Refrigeration and Air conditioning system.	CO 2
7.	Study of Commercial Refrigeration Equipments like Cooling Towers, Hermetically Sealed Compressors, Automotive Swash Plate Compressor etc.	CO 2
8.	To study Automotive Air Conditioning system and components.	CO 2
9.	Determination of Dryness Fraction of steam by combined separating and throttling calorimeter.	CO 3
10.	Study and performance parameters of Simple Steam Turbine	CO 3
11.	Performance characteristics and comparison of Hydraulic Turbines (Pelton, Kaplan and Francis).	CO 4
12.	Study and performance analysis of Gas Turbine Plant.	CO 4
13.	Performance characteristics of Variable and Rated Speed Centrifugal Pump.	CO 4

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Department of Mechanical Engineering
THERMAL ENGINEERING-I & II LABORATORY

Do's

- Perform the experimental work precisely as directed by the faculty member/instructor.
- Maintain lab cleanliness.
- Ensure to follow safety protocols while performing experiments concerned with heating and cooling.
- Report any damage to equipment or furniture immediately to your faculty member/instructor.
- Shut off equipment after performing the experiment.
- Switch off fan and lights when not in use.

Dont's

- Do not enter the laboratory without wearing shoes.
- Do not touch any equipment without prior permission.
- Do not engage in unruly behaviour or boisterous conduct in the laboratory.
- Use of personal audio or video equipment is prohibited in the laboratory.
- Use of cell phones is strictly prohibited.
- Do not change the equipment setting without permission.

S.No	Link
1	http://jecrcfoundation.com/jf-data/NBA/ME/Lab-Manual/3ME4-22-MATERIALS-TESTING-LAB.pdf
2	http://jecrcfoundation.com/jf-data/NBA/ME/Lab-Manual/3ME4-23-BASIC-MECHANICAL-ENGINEERING-LAB.pdf
3	http://jecrcfoundation.com/jf-data/NBA/ME/Lab-Manual/4ME4-22-FLUID-MECHANICS-LAB.pdf
4	http://jecrcfoundation.com/jf-data/NBA/ME/Lab-Manual/4ME4-23-PRODUCTION-PRACTICE-LAB.pdf
5	http://jecrcfoundation.com/jf-data/NBA/ME/Lab-Manual/4ME4-24-THEORY-OF-MACHINES-LAB.pdf
6	http://jecrcfoundation.com/jf-data/NBA/ME/Lab-Manual/5ME4-22-HEAT-TRANSFER-LAB.pdf
7	http://jecrcfoundation.com/jf-data/NBA/ME/Lab-Manual/6ME4-22-VIBRATION-LAB.pdf
8	http://jecrcfoundation.com/jf-data/NBA/ME/Lab-Manual/6ME4-24-THERMAL-ENGINEERING-LAB-I.pdf
9	http://jecrcfoundation.com/jf-data/NBA/ME/Lab-Manual/7ME4-22-THERMAL-ENGINEERING-LAB-II.pdf
10	http://jecrcfoundation.com/jf-data/NBA/ME/Lab-Manual/7ME4-23-QUALITY-CONTROL-LAB.pdf
11	http://jecrcfoundation.com/jf-data/NBA/ME/Lab-Manual/8ME5A-CAM-LAB.pdf
12	http://jecrcfoundation.com/jf-data/NBA/ME/Lab-Manual/8ME6A-CAD-LAB.pdf
13	http://jecrcfoundation.com/jf-data/NBA/ME/Lab-Manual/IFY3-25-2FY3-25-MANUFACTURING-PRACTICES-WORKSHOP.pdf

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE	JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE JECRC Campus, Shri Ram Ki Nangal, Via-Vatika, Jaipur

LAB MANUAL

Lab	:	MATERIALS TESTING LAB
Lab Code	:	3ME4-22
Branch	:	MECHANICAL ENGINEERING
Year	:	2nd YEAR

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Department of Mechanical Engineering
Jaipur Engineering College and Research Centre, Jaipur
(RTU, Kota)

EXPERIMENT 1

Objective: Study of various crystals structures through models of BCC, FCC, HCP, tetrahedral and octahedral voids.

Introduction: In crystallography, crystal structure is a description of the ordered arrangement of atoms, ions or molecules in a crystalline material. Ordered structures occur from the intrinsic nature of the constituent particles to form symmetric patterns that repeat along the principal directions of three-dimensional space in matter. The smallest group of particles in the material that constitutes the repeating pattern is the unit cell of the structure. The unit cell completely defines the symmetry and structure of the entire crystal lattice, which is built up by repetitive translation of the unit cell along its principal axes. The repeating patterns are said to be located at the points of the Bravais lattice. The lengths of the principal axes, or edges, of the unit cell and the angles between them are the lattice constants, also called lattice parameters. The symmetry properties of the crystal are described by the concept of space groups. All possible symmetric arrangements of particles in three-dimensional space may be described by the 230 space groups. The crystal structure and symmetry play a critical role in determining many physical properties, such as cleavage, electronic band structure, and optical transparency.

Unit Cell: Crystal structure is described in terms of the geometry of arrangement of particles in the unit cell. The unit cell is defined as the smallest repeating unit having the full symmetry of the crystal structure.[4] The geometry of the unit cell is defined as a parallelepiped, providing six lattice parameters taken as the lengths of the cell edges (a, b, c) and the angles between them (α, β, γ). The positions of particles inside the unit cell are described by the fractional coordinates (x_i, y_i, z_i) along the cell edges, measured from a reference point. It is only necessary to report the coordinates of a smallest asymmetric subset of particles. This group of particles may be chosen so that it occupies the smallest physical space, which means that not all particles need to be physically located inside the boundaries given by the lattice parameters.

5.7.4	**5.7.4 Consultancy (From Industry)**	No industrial consultancy in assessment years observed.	**Consultancy 7,40,000**

S.No.	Name of faculty	Name of organization to which consultancy provided	Amount
1	Dr. M.P.Singh	Baba Automobiles Pvt. Ltd., Pratap Nagar, Jaipur	65000/-
2	Dr. Bhivnesh Bhardwaj	R tekhno solution	50000/-
3	Mr. Kuldeep Sharma	Balaji Stonex, Agarwal Farm, Mansarover, Jaipur	4,50000/-
4	Lalit Kumar Sharma, Rajendra Kumar Gupta	S. Kalra Refrigeration & Air Conditioner, M.I. Road, Jaipur	175000/-

5.8	**Faculty Performance and appraisal and development system (FPADS)**	Complicated Performa has been developed Concrete data to show implementation of process lacks no proper implementation.	1. Faculty appraisal form has been revised. 2. There are laid down guidelines for the assessment of teaching staff on the basis of various criteria in appraisal form such as • Academic Result • Research Publication • FDP • National and International conference • Research grant • Patent • New skill • Innovation in Teaching • Technical activity organized • Social Initiatives • Participation in institute level activity • Award received etc. 3. The performance of each employee is assessed annually. 4. The outcome of the performance appraisal will reflect in the annual increment, incentives and the promotion of the faculty. Also, appreciation/ advisory are given to faculty members according to their performance. 5. Appraisal system motivates the faculty members for higher study. During 2018-19 & 2019-20, six faculty members enrolled in PhD programme.

Date of joining – 31.1.2014
Contact no:- 9252812133

JECRC JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE	Jaipur Engineering college and research centre, Shri Ram ki Nangal, via Sitapura RIICO Jaipur-302 022.	Academic year- 2013-14

FACULTY APPRAISAL FORM

Total 200 points

Name of Faculty Member: Nitin Chaudhary
Designation: Asst. Professor
Department: Mech. Engg.

S. No.	Item Name	Maximum Points	Points obtained	Annexure attached with page No.
1	Total theory subjects taught during the session...1+1... Minimum 2 subjects are to be assigned to a faculty member with 15 points each per semester. If a faculty member is taking 1 subject in a semester then the points assigned in this section will be 15 only and remaining will be assigned to section 2 and 4 each with equal diatribution. (a) 60% students having B grade in...ME... subject Yes/No (b) 60% students having B grade in...BME... subject Yes/No (c) 60% students having B grade in..... subject Yes/No (d) 60% students having B grade in..... subject Yes/No	30	7.5 + 7.5	1
2	Research Publication: SCI / Scopus / web of science indexed publication: 15 points, publication having ISSN / UGC approved: 10 points, National level publication: 5 points/ Paper presentation in International conference = 10 points/ Paper presentation in National Conference =5 Points	30 10,	30 15 10	2-4
3	Faculty development programme 10 point average (one faculty development programme minimum 5 days attended 5 points, 2 points for attending 2 days workshop, subject to maximum of 10)	10	10 ✓	5-6
4	Research grants average 20 points for having grant of more than 5 lakhs, 15 points for 2-5 lakhs, and 5 points up to 2 lakhs. If only project submitted to DST/other govt. agency: 5 points. Books published with International publisher 10 points. Books published with National publisher 5 points.	20	-	-
5	Patent 10 points / Product development (10)	20	10,	7-9
6	New Skills (Training, value added courses) 5 points / additional specialization 5 points / certification course (Coursera, Swayam, NPTEL etc.) 5 points. *In what way the new skills will be utilized for the benefit of students* (Summarize in a separate Paper).	15	15 ✓	10-13
7	Innovation in teaching learning 5 points, video lecture 5 points, online prepared MOOCs 5 points, Online notes uploading 5	20	15 ✓	14-15

	points (Updating of course content/Preparation of resource material/Laboratory Manual, Developing and imparting Remedial courses/ Make up classes/ Conduction of computer assisted teaching/web based learning)			
8	Technical activity organized/Participated (1 point / activity) (Guest lecture, Seminar/Webinar, Technical fest, Educational tour, Industry visit, publication of magazine/ newsletter in departmental)	5	5	16-20
9	Projects guided based on the idea of SIH/Project based learning/Industrial project	10	-	-
10	Institute level activity organized / participated (1 point / activity) (sports, cultural fest, social activities such as flood and drought relief, orphanage home and old age home relief or any other similar activity)	5	2	21-22
11	Any award received (1 point), session chair in conference (1 point), guest lecture (1 point), invited talk (1 point), appreciation letter (1 point), External Examiner, BoS etc.	5	1	23-24
12	HOD recommendation	30	25	
	(i) (Outcome Based Knowledge) (Check list MTT Performa) (10)		8	
	(ii) Departmental Responsibilities (10) Mentor/class, coordinator, Examination incharge/Coordinator Lab Incharge, Time Table Incharge, NAAC/NBA coordinator TPO, Social Incharge, Project coordinator, Seminar coordinator		8	25-26
	(iii)Students feedback course exit and teaching learning (10)		9	
	Total	200	105.5	

108 100.5 + 7.5 =

Verified by IQAC

Note: HOD will verify the documentary proof.

Signature of Faculty Signature of HOD IQAC

Signature of Principal

Note: Faculty member getting ZERO in critera-1 or criteria-2 for the consecutive three years (CAY, CAY-1, CAY-2) appropriate action will be taken.

As per RTU 'B' Grade means marks range 70 to 75%

Jaipur Engineering College & Research Centre

From : OS Office	To : Mr. Nitin Chhabra, ME

12.02.2021

APPRECIATION LETTER

Mr. Nitin Chhabra
Assistant Professor

Through Program Coordinator/HOD

Congratulations!

As per the faculty self appraisal report submitted by you for the session 2019-20 has evaluated by the IQAC and found satisfactory. You have scored total 108 points out of 200.

Institute appreciates efforts & association. We hope that you will sustain such performance in the years to come.

API scores of previous year: -

2017-18	2018-19
71/200	117/200

Received 13/2/21

PRINCIPAL

Copy to –
1. Vice Chairman
2. Director
3. Concerned Program coordinator/HOD
4. Concerned faculty member
5. Personal file

Jaipur Engineering College & Research Centre

From : OS Office	To : Mr. Abhishek Kumar, ME

28/08/19

Advisory Note

Mr. Abhishek Kumar
Assistant Professor

Through Program Coordinator/HOD

As per the faculty appraisal form submitted by you for the session 2018-19, you have scored total 88 points out of 200. You are hereby advised to improve your performance during the session 2019-20.

API scores of previous year: -

2016-17	2017-18
86/200	90/200

V. Pal

PRINCIPAL

Copy to:-
1. Vice Chairman
2. Director
3. Concerned Program coordinator/HOD
4. Concerned faculty member
5. Personal File

JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE

OO No:- 241
Date: - 14/2/2019

OFFICE ORDER

The Salary of Dr. Man Mohan Siddh, Assistant Professor, Department of Mechanical Engineering is hereby revised from Rs. 33978/- to Rs. 50000/- w.e.f 01.02.2019, on acquiring the Ph.D degree along with change of the Grade Pay .

Dr. Man Mohan Siddh will also get a sum of Rs. 5000/- as an annual increment for the next three years. The DOI will remain unchanged.

Now, his restructured salary shall be as under–

1. Pay–27697/-
2. AGP–8000/- (Basic Pay=27697+8000=35697/-)
3. DA@20% on BP -7139/-
4. HRA @7.5% - 2677/-
5. Special Allowance -4486/- Total -50000/-

Principal

Copy to: -

1. Vice–Chairman, JECRC
2. Director, JECRC
3. HoD, ME
4. Dr. Man Mohan Siddh, AP, ME
5. Accounts Department
6. OS/ Personal file.

JECRC

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Ref: JECRC/00/38(1)/2019-20

Date: 15/10/19

OFFICE ORDER

Dr. Man Mohan Siddh, Assistant Professor, Department of Mechanical Engineering is hereby promoted to Associate Professor w.e.f 01.11.2019 under the pay Scale of 37400-67000, AGP 9000, on the same salary and terms & conditions.

New Salary bifurcation shall be as under –

1. Pay – 37400/-
2. AGP – 9000/- (Basic Pay=37400+9000=46400/-)
3. HRA @7.5% - 3480/-
4. Special Allowance -120/- Total -50000/-

Date of Increment will remain unchanged.

V. R...

Principal

Copy to: -

1. Vice –Chairman, JECRC
2. Director, JECRC
3. HoD, ME
4. Dr. Man Mohan Siddh, Assistant Professor, ME
5. Accounts Department
6. OS/ Personal file.

JECRC Foundation
www.jecrcfoundation.com

Jaipur Engineering College and Research Centre
Approved by AICTE & Affiliated to RTU
JECRC Campus, Shri Ram Ki Nangal,
Via Sitapura RIICO, Opp. EPIP Gate, Tonk Road, Jaipur 302 022
t: 0141 2770120, 2770232 e: info@jecrcmail.com

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

(Institution of National Importance under NITs Act, Established by Govt. of India)

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

JLN Marg, Jaipur-302017 (India)

Academic Section

Provisional Admission Letter 2020-21

Name of the Student:	LALIT KUMAR SHARMA
Contact No:	9413417182
Father's Name:	BAL KRISHNA SHARMA
Permanent Adress:	Gopal Bhawan, Ward No. 7, Phulera JAIPUR - 303338
E-Mail:	erlksjecrc@gmail.com
Department:	MECHANICAL ENGINEERING
Program:	Ph.D
Specilization:	
ID No:	2020RME9060
Institute E-Mail Id:	2020RME9060@mnit.ac.in

Institute Contacts:

Academic Section:	AR/DR	E-Mail:	erp.acad@mnit.ac.in
Head of the Department:	MURARI LAL MITTAL	E-Mail:	mlmittal.mech@mnit.ac.in
DRGC Convener:		E-Mail:	
Supervisor:		E-Mail:	

Pending Documents:

Instructions:

1. You are required to submit the "pending documents" before __-_____, 2020, failing which your admission is liable to be cancelled.

2. The Institute domain e-mail id and password shall be sent to your e-mail.

3. Enterprise Resource Planning (ERP) login and password shall be sent to your Institute e-mail id. ERP is the web based application for academic and administrative processes in the Institute (**www.mniterp.org**).

5. For Hostel allotment, Submit your Fee receipt in the hostel office. For further information, e-mail: hosteloffice@mnit.ac.in, Contact: 09549891444 (M)

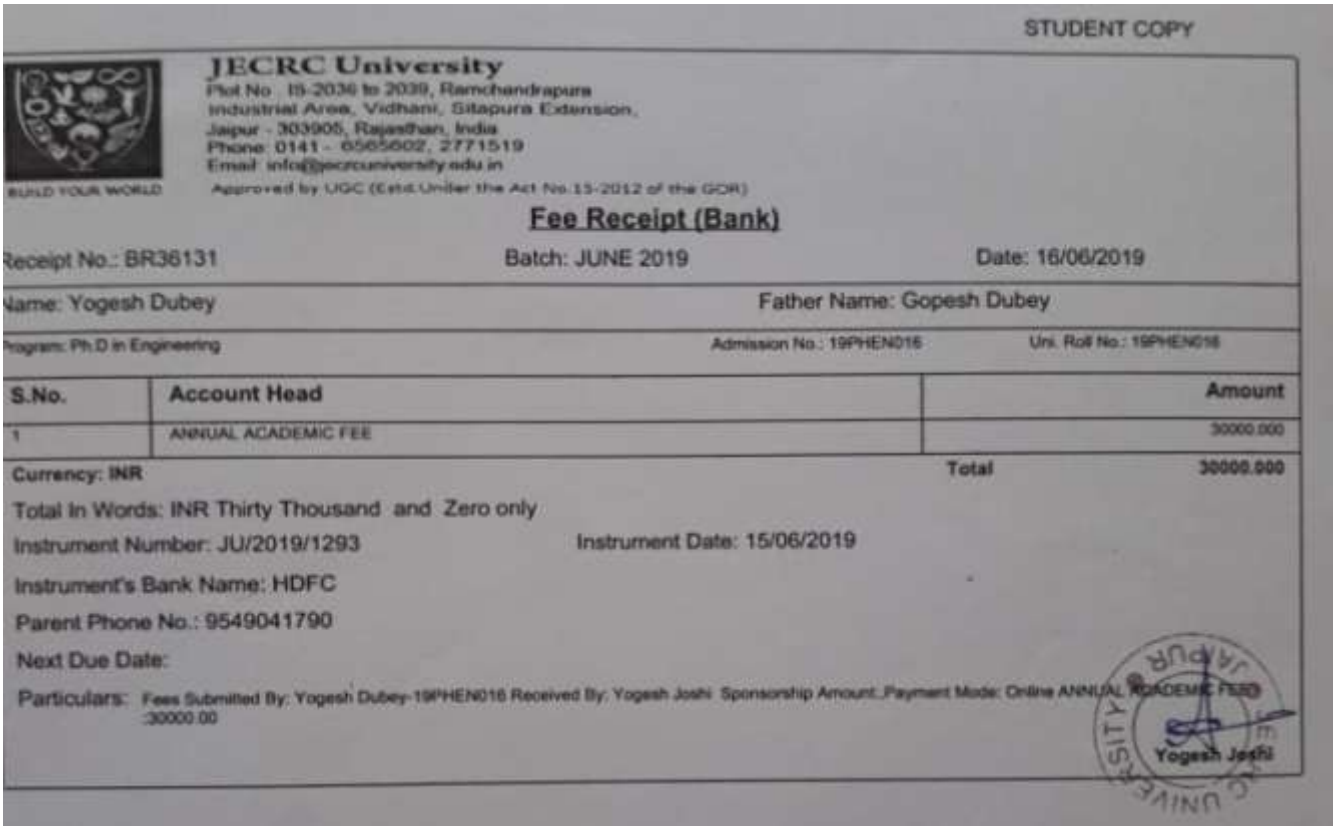
6. Hostel allotment priority: 1st Priority: Persons with differential ability (PWD); 2nd Priority: Persons from Abroad; 3rd Priority: Persons from outside Rajasthan; 4th Priority: Persons from outside Jaipur.

Lalit Kr. Sharma

Student Signature

Academic Section

This is a Computer generated document printed on 122.15.2.242 @ 23-09-2020 13:50:37



STUDENT COPY

JECRC University
Plot No. IS-2036 to 2039, Ramchandrapura
Industrial Area, Vidhani, Sitapura Extension,
Jaipur - 303905, Rajasthan, India
Phone: 0141 - 6565602, 2771519
Email: info@jecrcuniversity.edu.in
BUILD YOUR WORLD
Approved by UGC (Estd.Under the Act No.15-2012 of the GOR)

Fee Receipt (Bank)

Receipt No.: BR36131 Batch: JUNE 2019 Date: 16/06/2019

Name: Yogesh Dubey Father Name: Gopesh Dubey

Program: Ph.D in Engineering Admission No.: 19PHEN016 Uni. Roll No.: 19PHEN016

S.No.	Account Head	Amount
1	ANNUAL ACADEMIC FEE	30000.000
	Total	30000.000

Currency: INR

Total In Words: INR Thirty Thousand and Zero only

Instrument Number: JU/2019/1293 Instrument Date: 15/06/2019

Instrument's Bank Name: HDFC

Parent Phone No.: 9549041790

Next Due Date:

Particulars: Fees Submitted By: Yogesh Dubey-19PHEN016 Received By: Yogesh Joshi Sponsorship Amount: Payment Mode: Online ANNUAL ACADEMIC FEES :30000.00

Yogesh Joshi

Criterion-6: **Facilities and Technical Support**			
S. No	**CRITERIA**	**OBSERVATION MADE BY NBA**	**COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)**
6.2	**Additional Facilities created for improving the quality of learning experience in Laboratories**	Research lab facilities are not available.	Research facilities are available in department whereas equipments and software worth rupees 50 lakh provided to institute by industry partners Baba Automobile Pvt. Limited and CADD centre, Jaipur. Department has two Industry supported laboratories viz. Automobile research laboratory (Equipment worth rupees 50 Lakh is provided by the Baba Automobile Pvt. Limited) and Machine design laboratory (related software are provided by CADD centre, Jaipur). (https://jecrcfoundation.com/jecrc-foundation-mou-with-industry) Various training and activities are carried out through these laboratories for skill enhancement for students as well as placement/start-up opportunity.. Signed MOU with Bharatiya Skill University for training on advanced machines.

CENTRE OF EXCELLENCE (E-VEHICLES & AUTOMATION)

Details of training Centre Equipments / Cars / Engine and Auxiliaries

FOUR- WHEELER CAR SECTION (Rs. 11 - Lakhs)

1. MERCEDES BENZ Working car for Practical or Scanning Purpose. **(Rs. 8 -lakhs)**
2. TATA SAFARI / SEDAN Car for Practical Session. **(3 lakhs)**

FOUR- WHEELER ENGINE SECTION (Rs. 14 Lakhs)

3. AUDI- V-6 Twin Turbocharged Diesel Engine **(2.5 lakhs)**
4. AUDI- V-6 Twin Turbocharged Petrol Engine**. (2.5 lakhs)**
5. MERCEDES Engine **(3 lakhs)**
6. BMW Automatic Transmission **(1.5 lakhs)**
7. Maruti Suzuki 4- Cylinder Diesel Engine. **(1 -lakh)**
8. Tata Safari Diesel Engine **(1 lakh)**
9. Tata Indigo Diesel Engine. **(75,000)**
10. Honda City Diesel Engine. **(75,000)**
11 Skoda Car Engine. **(1 lakh)**

FOUR- WHEELER TRANSMISSION SECTION. (5 -lakh)

12. Front Wheel Drive AUDI Automatic transmission. **(1.5 lakhs)**
13. Rear Wheel Drive MERCEDES Automatic Transmission. **(1.5 lakhs)**
14. Maruti Suzuki 5 Speed Manual Transmission. **(1 -lakh)**
15. Honda Rear Wheel Drive Manual transmission. **(1 -lakh)**

FOUR- WHEELER STEERING SYSTEM SECTION . (2 -lakh)

16. Manual Steering Sytem with Rack Pinion Arrangement. **(45,000)**
17. power Steering system with Rack Pinion Arrangement. **(45,000)**
18. Maruti Suzuki cars ELECTRIC Steering System **(55,000)**
19. Toyota cars ELECTRIC Steering System **(55,000)**

FOUR- WHEELER DIFFERENTIAL SYSTEM SECTION .(4 lakhs)

20. Maruti Suzuki Rear Wheel Drive Differential System. **(45,000)**
21. Tata Cars front Wheel Drive Differential System. **(55,000)**
22. MERCEDES BENZ INDEPENDENT Limited Slip Advanced Differential. **(1.5 lakhs)**
23 .Electric Vehicle Differential system with Electric Motors. **(1.5 lakhs)**

FOUR- WHEELER BRAKING & SUSPENSION SYSTEM SECTION.(4 lakhs)

24. Front Wheel DUAL DISK Braking System **(40,000)**
25. Rear Wheel DRUM Braking System **(40,000)**
26. MERCEDES BENZ Brake Vacuum Booster **(70,000)**
27. MERCEDES BENZ ABS (Anti Braking System Unit) **(1.5 lakhs)**
28. AUDI E-B-D (Equal Braking Distribution) System**. (1 lakh)**

FOUR- WHEELER AIR BAG & OTHER AUXILIARIES SYSTEM SECTION. (4.15 Lakhs)

29. MERCEDES BENZ Steering Air Bag System **(1-lakh)**
30. MERCEDES BENZ Side Windows Air Bag System **(50,000)**
31. Car Engine Self Starter Motor for Engine Starting **(35000)**
32. Car Engine Alternator System for Battery Charging**.(35000)**
35. Air Filter Units**.(10,000)**
36. Carburetor Systems**.(10.000)**
37. Fuel Injector Systems. **(75000)**
38. and Some Other Auxiliaries systems. **(1 lakh)**

TWO - WHEELER CAR SECTION (6.7 Lakhs)

39 .BAJAJ Pulsar-220 CC Engine (30,000)
40. TVS Apache 180 CC Engine. (30,000)
41. LML Freedom 125 CC Engine. (30,000)
42. HONDA Eterno Engine. (30,000)
43. TVS Victor 150 CC Engine. (30,000)
44. HONDA Activa 110 CC Engine (30,000)
45. HONDA Shine 125 CC Engine (30,000)
46. BAJAJ Discover 150 CC Engine (30,000)
47. TVS MAX 100 2 Stroke. (30,000)
48. Rajdoot 2 stroke. (30,000)
50. START BIKE FOR PRACTICAL SESSION (30,000)
51.START SCOOTY FOR PRACTICAL SESSION (30,000)
52. ELECTRIC WORKING 2-Wheeler for Electric Vehicle Development Training. (30,000)
53. Wiring System. (40,000)
54. Suspension System. (20,000)
55. Carburetion Systems. (20,000)
56. FI Systems. (20,000)
57. Sensors Systems. (60,000)
58. Self-starting and Charging System. (20,000)
59. Tuning of 2- wheelers. (40,000)
60. and Other all Systems of 2- wheeler. (60,000)

Memorandum of Understanding

Between

Baba Autoenobile Pvt. Ltd., Jaipur

And

JECRC Foundation, Jaipur

This Memorandum of Understanding (MOU) sets the terms and understanding between Baba Autoenobile Pvt. Ltd. and JECRC Foundation for provision of Autoenobile Center of Excellence at JECRC College, Jaipur Raj.

This MOU will be applicable to arrange the facilities to students of B.Tech and Diploma Mechanical, Electrical, Autoenobile (All year) to participate in Autoenobile Training/Internship.

The above goals will be accomplished by undertaking the following activities:

1. That Baba Autoenobile Pvt. Ltd. will arrange all the facilities to conduct autoenobile training for all students of B.Tech & Diploma Mechanical, Electrical (All year) students. Details of engines which will be available for training are as follows and mentioned in tabular form:
2. That all apparatus, engines, tools, shall be arranged by Baba Autoenobile in the premises of JECRC College to provide in depth knowledge of above engines.
3. That the training duration will be throughout the year as per time table provided by head of department (secn) irrespective of the time.
4. That the lab space and Cabin space for Autoenobile faculties will be provided by JECRC College.
5. That an ISO certified certificate or any other study material will be provided by Baba Autoenobile on the completion of training.
6. Maintenance cost of all components will be bear by Baba autoenobile.
7. Sunday and holiday will be utilized for training as mutual consent.

List of 2- wheeler Engines

2-Wheeler Engines	4- Wheeler Engines
1. Bajaj Pulsar 220 cc engine.	8. Hero Honda passion.
2. Honda Shine Engine.	9. Bajaj Discover Engine.
3. Hero Splendor Engine.	10. Bajaj Platina.
4. UM Freedom 150 cc engine.	11. Tvs Sport Engine.
5. Tvs Apache Engine.	12. Tvs Victor Engine.
6. Honda Activa Automatic CVT Engine.	13. Honda Unicorn Engine.
7. Scooty Engine.	14. Automatic CVT Engine.

List of 4-wheeler Engines

4-Wheeler Engines	4- Wheeler Engines
1. AUDI V-6 Petrol Engine.	9. MARUTI SUZUKI COMPACT PETROL ENGINE.
2. AUDI V-6 Diesel Engine.	10. Maruti Suzuki 4 cylinder Petrol Engine.
3. MERCEDES BENZ CNG AE	11. Hyundai Verna CRDI Engine.
4. BENZ AUTOMATIC TRANSMISSION.	12. Tata Indigo Car Engine.
5. AUDI SEMI AUTOMATIC TRANSMISSION.	13. Toyota diesel Engine.
6. TATA Safari DICOR ENGINE.	14. Hyundai Car Diesel Engine.
7. Mahindra scorpio diesel ENGINE.	15. Skoda Car Engine.
15. TATA Truck 16- wheeler Duel Engine.	16. Tata Truck Engine For Practical.

List Start Car, Bike, Scooty.

- Tvs Victor one Start Bike.
- Um Freedom one Start Bike.
- Hero/Honda/Bajaj one Start Bike.
- Honda Activa one start Scooty.
- MERCEDES BENZ CAR for Practical & Overhauling.

List of Tool, Machines, Accessories.

- Welding Machine.
- Grinding machine.
- Cutting Machine.
- Drilling Machine.
- Open Spanners 50 Nos.
- Close Spanner 50 – Nos.
- Audi Engine Special Tools.
- Mercedes Engine Special Tools.
- Automatic Transmission Special Tools.
- 4 – Wheeler Differential Isolator.
- Power Steering/ ELECTRICAL STEERING System.

- Electromagnetic Suspension Model
- BS-3, BS-6 System
- ECU Systems With TestRig (testing by Laptops)
- S-ECU for Electrical Engg. Students.
- Disk Brake System.
- Drum Brake System.
- CRDI/MPFI System.
- Air bag system

Financial Terms & Conditions

- A security amount of Rs 5 lakh given to Baba Automobile.
- security amount 5 Lakh pay at the time of signing MOU (by cheque/NEFT/RTGS in favour of nireesh baba automobile pvt ltd or baba automobile)
- The duration of lab installation Shall be maximum 30 days after signing MOU.
- Security amount 5 lakhs refund to jecrc college at the End of MOU without any depreciation.
- 20% Amount of total fee received by outside students shall be share of JECRC & will be transferred to JECRC a/c at the end of month and rest 80 % share will be of Baba Automobile.

This MOU is at will may be modified by mutual consent of authorized officials from Baba Automobile and JECRC. This MOU shall become effective upon signature by the authorized officials from Baba automobile and JECRC and will remain in effect for minimum one year and can be further extended by mutual consent.

In the absence of mutual agreement by the authorized officials from Baba Automobile and JECRC, this MOU shall end after provision of training.

Requirements

1. Space for Engines
2. Faculty Sitting Area/office.
3. Suitable Furniture for Engines
4. Space for Tools
5. Light Facility
6. Banner, branding, flex arranged by college.

Contact Information:

Baba Automobile Pvt. Ltd.
Mr. Nireesh Baba
Director

Pratap Nagar, Jaipur, Rajasthan
Contact: +91-[illegible]

JECRC Foundation Jaipur
Dr. V.K. Chandna
Principal JECRC
[illegible]
Contact: [illegible]

Dated: [illegible]

Nireesh Baba
(Director, Baba Automobile Pvt. Ltd.)

Mr. Dr. V.K. Chandna
(........................ JECRC Foundation, Jaipur)

Counter Signed By:
Kartik Muhal (Training Head)

Counter Signed By:
.... (Jankidas ... JECRC ...)

CENTRE OF EXCELLENCE

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MOU) entered on 30th Oct.-2017.
By and Between

CADD Centre Training Services Pvt. Ltd. Chennai, having its local office at No. 106-107 Mahima Majesty, Ram Gali No. 6, Raja Park Jaipur. (hereinafter referred as "**CADD Centre**" for the sake of brevity) and represented by its Centre head, – **Mr. Rajeev Bhargava** which expression shall mean and include its successors in office and assigns.

And

Principal, JECRC Tonk Road, Jaipur, Rajasthan, (herein after referred as "JECRC" represented by its Dr. Vinay Kumar Chandna (Principal), which expression shall mean and include its successors in office and assigns.

Objective of the program:

In today's world, CAD-CAM has become an indispensable skill required to make every professional employable and productive in the work place. The objective of the training program is:

- To train the students of JECRC Jaipur at their college campus for CAD and 3D printing by "CADD CENTRE"
- To train the students of JECRC Jaipur on the concepts and soft tools of CAD – CAM, as per the industrial / corporate requirements.
- To facilitate them to excel in their workplace.
- To bridge the skill gap between the individuals and the industry.

Course Fees and Training Program Detail:-

As per annexure 1

COURSEWARE

CADD Centre's Curriculum & Product development (CPD) team develops the courseware. Each book is conceived, prepared and printed after a thorough research on industry specific courses. The team consists of engineers, industry experts who are involved in the development of courseware. The course material is developed specially

for instructor-lead training as well as self-study material. The CPD team reviews the curriculum and updates as needed. Every student who enrolls for a course is provided with a reference manual which is of World Class Standards, comprehensive in coverage and with a nice layout that pleases the eyes!

SUBJECTS:

THEORY

PRACTICALS / LAB

PROJECT BASED ASSESMENT:

Students are encouraged to work on their own projects during the training program. Project-based learning helps students to learn the subject and understand to meet the international standards. Project-based learning encourages students to use information, ideas, skill, to answer real-world questions and solve them. Projects will be assessed by the instructor.

The advantages of project-based learning:

- Provides real-world orientation.
- Encourages higher-order thinking skills.
- Allows the instructor to be a facilitator of learning.
- Provides for ongoing student self-assessment.

CADD Centre through its Raja Park, Jaipur Shall Provide

- The proprietary and internationally acclaimed CADD Centre course material to each Student.
- Provide qualified trainers for the course.
- Periodical assessments of students for their further improvement.
- Certificate of Completion will provided to every student who will successfully complete the training program.
- CADD Centre will provide "Certificate of Association" between CADD Centre with JECRC Jaipur.
- Permit JECRC Jaipur to use CADD Centre logo as the Skill Development Partner.

BHARTIYA SKILL DEVELOPMENT UNIVERSITY, JAIPUR

SCHOOL OF MANUFACTURING SKILLS

JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE JAIPUR (JECRC) represented by its BJ.V.K.Chaudhe ----,

WHEREAS:

A) The BSDU is engaged in providing skills training in various faculties based on Swiss Dual System of Skills Training. The BSDU awards certificates, diplomas, advance diplomas and B. Voc. Degrees to students after 10+2 schooling. It also awards M. Voc. And Ph.D. Degrees to the Candidates. BSDU has a flexible program and students can enter/exit at any time. The whole curriculum has been aligned to UGC/AICTE/NSDC/Sector councils.
B) The JECRC is an engineering college approved by AICTE & affiliated to Rajasthan Technical University, Kota focused on undergraduate and graduate programs, and research.
C) Both the institutions intend to cooperate and focus their efforts on cooperation within areas of Training, Education, Research and Development.
D) Both the institutions being legal entities in themselves desire to sign this MOU for advancing their mutual interests.

NOW THEREFORE, IN COSIDERATION OF THE MUTUAL PROMISES SET FORTH IN THIS MOU, BOTH THE INSTITUTIONS HERE AGREE AS FOLLOWS:

CLAUSE 1

CO-OPERATION

1. Both the institutions are united by common interests and objectives, and they shall establish channels of communication and co-operation that will promote and advance their respective operation within the institutions and its related wings. The Parties shall keep each other informed of potential opportunities and shall share all information that may be relevant to secure additional opportunities for one another.
2. The co-operation between BSDU and JECRC will facilitate effective utilization of the intellectual capabilities of the both Parties providing significant inputs to them in developing suitable teaching/ training systems, keeping in mind the needs of each other.
3. The general terms of co-operation shall be governed by this MOU. Both shall cooperate with each and shall, as promptly as is reasonably practical, enter into all relevant agreements, deeds and documents (the 'Definitive Documents') as may be required to give effect to the actions contemplated in terms of this MOU. The term of Definitive Documents shall be mutually decided between the Parties, Along with the Definitive Documents. This MOU shall represent the entire understanding as to the subject matter hereof and shall supersede any prior understanding between the Parties on the subject matter hereof.

10/12/2020

BHARTIYA SKILL DEVELOPMENT UNIVERSITY, JAIPUR

SCHOOL OF MANUFACTURING SKILLS

JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE JAIPUR (JECRC) represented by its BJ.V.K.Chaudhe ----,

WHEREAS:

A) The BSDU is engaged in providing skills training in various faculties based on Swiss Dual System of Skills Training. The BSDU awards certificates, diplomas, advance diplomas and B. Voc. Degrees to students after 10+2 schooling. It also awards M. Voc. And Ph.D. Degrees to the Candidates. BSDU has a flexible program and students can enter/exit at any time. The whole curriculum has been aligned to UGC/AICTE/NSDC/Sector councils.
B) The JECRC is an engineering college approved by AICTE & affiliated to Rajasthan Technical University, Kota focused on undergraduate and graduate programs, and research.
C) Both the institutions intend to cooperate and focus their efforts on cooperation within areas of Training, Education, Research and Development.
D) Both the institutions being legal entities in themselves desire to sign this MOU for advancing their mutual interests.

NOW THEREFORE, IN COSIDERATION OF THE MUTUAL PROMISES SET FORTH IN THIS MOU, BOTH THE INSTITUTIONS HERE AGREE AS FOLLOWS:

CLAUSE 1

CO-OPERATION

1. Both the institutions are united by common interests and objectives, and they shall establish channels of communication and co-operation that will promote and advance their respective operation within the institutions and its related wings. The Parties shall keep each other informed of potential opportunities and shall share all information that may be relevant to secure additional opportunities for one another.
2. The co-operation between BSDU and JECRC will facilitate effective utilization of the intellectual capabilities of the both Parties providing significant inputs to them in developing suitable teaching/ training systems, keeping in mind the needs of each other.
3. The general terms of co-operation shall be governed by this MOU. Both shall cooperate with each and shall, as promptly as is reasonably practical, enter into all relevant agreements, deeds and documents (the 'Definitive Documents') as may be required to give effect to the actions contemplated in terms of this MOU. The term of Definitive Documents shall be mutually decided between the Parties, Along with the Definitive Documents. This MOU shall represent the entire understanding as to the subject matter hereof and shall supersede any prior understanding between the Parties on the subject matter hereof.

10/12/2020

MEMORANDUM OF UNDERSTANDING
GETTING ASSOCIATED FOR INTELLECTUAL PROPERTY ACTIVITIES WITH JECRCCOLLEGE

This Memorandum of Understanding (MoU) is made on this Tuesday, the 24th day of December 2019 by and between

JECRC College having its main campus address asPlot No. IS-2036 to IS-2039 Ramchandrapura Industrial Area Jaipur, Sitapura, Vidhani, Rajasthan 303905(hereinafter referred to as **'JECRCCollege'**, which expression shall include their subsidiaries, branch offices, associations, administrator, legal heirs, group institutions, etc.).

AND

Verispire Inc., a California, (USA) registered companythrough its Indian entity Verispire Technologies pvt. Ltd. (herein after referred to as 'Verispire') having its offices at C-25, Second Floor, Sector 8, Noida, Uttar Pradesh 201301, which expression shall include their subsidiaries, branch offices, associations, administrator, legal heirs, etc.

1. BACKGROUND:

1.1. Verispire is an intellectual property consulting company engaged in creating valuable business assets for our clients by safeguarding their intellectual property. We provide the best in class and wide array of intellectual property consulting services to our clients worldwide.

1.2. JECRC College has its campus in Jaipur, the capital city of Rajasthan and the famous tourist and business city in north-western India. The 32-acre JU campus combines unique classical architecture and thoughtful layout and landscaping to create a perfect learning ecosystem. JECRC College is driven by the spirit of innovation-led research. This is spelt out in infrastructure as well as practices.

1.3. Verispire also conducts hands-on workshops, lecture series and seminars to educate and train the in-house personnel of companies, educational institutions, government and semi-government bodies towards aspects of creation, management and commercialization of IP.

1.4. Whereas, JECRC COLLEGE is desirous of getting associated with Verispire for Developing Innovation and Research initiatives or streamlining existing IP process, if any with the following primary objectives:

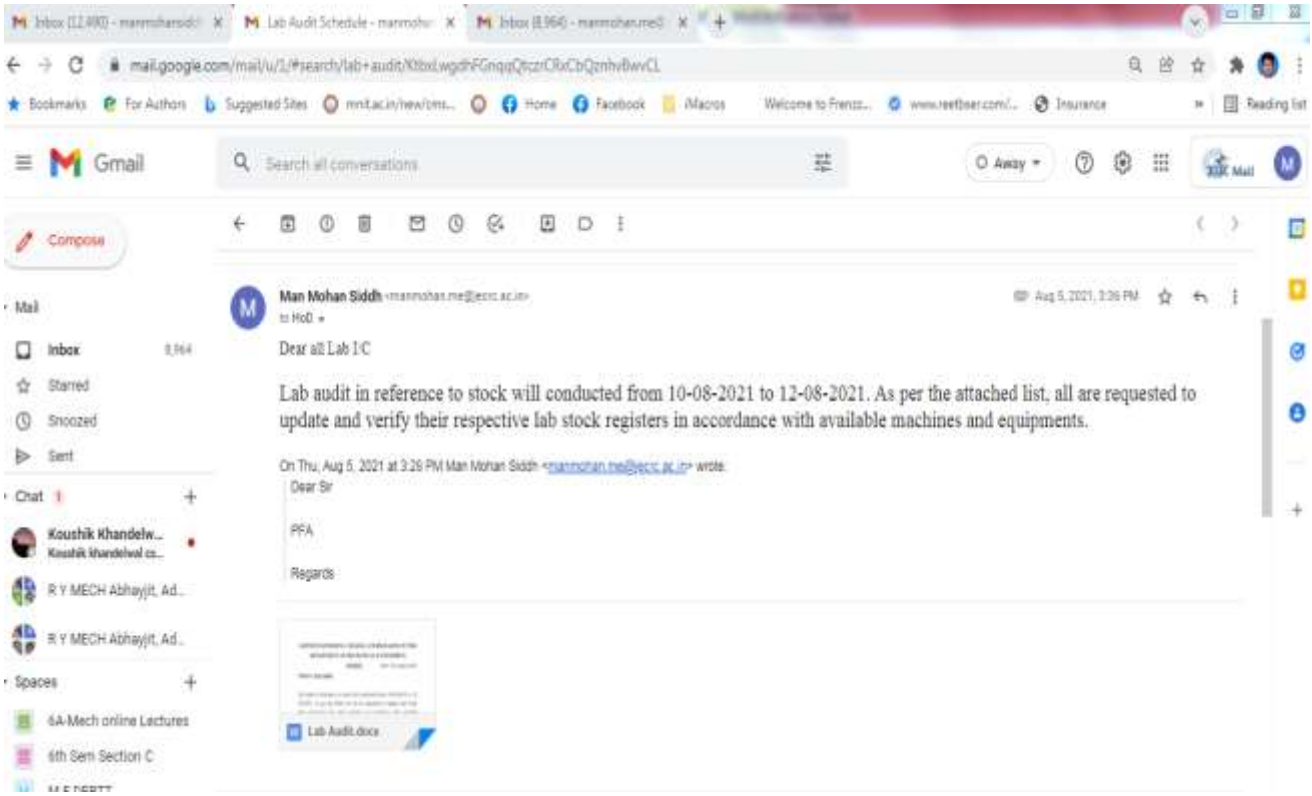
1.4.1. **Facilitate in developing IPCurate Labs with all the activities mentioned in the proposal and mutually agreed (Annexure A)**
1.4.2. Facilitate patent searching, drafting and patent filing.
1.4.3. Facilitate in patent prosecution cycle
1.4.4. **Provide complete IP management**
1.4.5. Encourage creativity and innovation.
1.4.6. Provide other IP filings (Trademark, Design, Copyright, etc), the time taken to do each task mentioned clearly in Annexure C

4/12/19

PRINCIPAL
College &

Automobile (MOONRIDER) CLUB

S. NO	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
6.3	**Laboratories: Maintenance and overall ambience**	Maintenance of equipment like shaper, bearing machine, dynamics lab is not carried out in last one years, 3-4 equipment's are not functioning.	All the equipments are in working conditions. Routine maintenance of equipments is carried out by the technicians. The appraisal of technicians also includes their involvement in the maintenance and repair of lab equipment. Also, Lab audit has been carried out before the commencement of the Session. https://jecrcfoundation.com/pdf/iqac-audit-report/ME%20Audit%20Report.pdf https://jecrcfoundation.com/pdf/iqac-audit-report/2020-21/Academic%20Audit%20scan%20file%202020-21.pdf https://jecrcfoundation.com/pdf/AAA-20-21/ME.pdf


Gmail
Search all conversations
Away
Compose
Mail
Inbox
Starred
Snoozed
Sent
Chat
Spaces
6A-Mech online Lectures
6th Sem Section C
Man Mohan Siddh
to HoD
Aug 5, 2021, 3:26 PM
Dear all Lab I/C
Lab audit in reference to stock will conducted from 10-08-2021 to 12-08-2021. As per the attached list, all are requested to update and verify their respective lab stock registers in accordance with available machines and equipments.
On Thu, Aug 5, 2021 at 3:26 PM Man Mohan Siddh wrote:
Dear Sir
PFA
Regards
Lab Audit.docx

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

DEPARTMENT OF MECHANICAL ENGINEERING

NOTICE Date: 05-August-2021

Subject: Lab Audit

Lab audit in reference to stock will be conducted from 10-08-2021 to 12-08-2021. As per the below list all are requested to update and verify their respective lab stock registers in accordance with available machines and equipments.

Audit Member: 1. Dr. Man Mohan Siddh
2. Dr. Manoj Gupta.

Sr. No.	Name of Laboratory	Schedule	Lab Incharge
1.	Workshop I & II	10 – 08 - 2021	Mr. Satyaprakash Saini
2.	Production Practice Lab	10 – 08 - 2021	Ms. Palak Jindal
3.	Materials Testing Lab	10 – 08 - 2021	Mr. Hukum Chand Nagar
4.	Theory of Machines Lab	10 – 08 - 2021	Mr. Lalit Kumar Sharma
5	Vibration Lab	11- 08 - 2021	Dr. Manoj Gupta
6.	Basic Mechanical Engineering Lab	11- 08 - 2021	Mr. Dayal Singh Rathore
7.	Industrial Engineering Lab / Quality Control Lab	11- 08 - 2021	Mr. Akhil Vijay
8.	Heat Transfer Lab	11- 08 - 2021	Mr. Akhilesh Paliwal
9.	Thermal Engineering Lab	11- 08 - 2021	Mr. Rajendra Kumar Gupta
10.	Fluid Mechanics Lab	12 - 08 - 2021	Mr. Satyaprakash Saini
11.	Production Engineering Lab / Metrology Lab	12 – 08 - 2021	Mr. Shrikant Bansal / Dr. Man Mohan Siddh
12.	Machine Drawing	12 – 08 - 2021	Dr. Man Mohan Siddh
13.	CIMS Lab	12 – 08 - 2021	Mr. Yogesh Dubey
13	MAT Lab	12 – 08 - 2021	Mr. Hemant Bansal
14.	FEA Lab	12 – 08 - 2021	Mr. Hemant Bansal

Head of Deptt

Head of the Department
Mechanical Engineering
JECRC, Jaipur

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

JECRC Campus, Shri Ram Ki Nangal, Via-Vatika, Jaipur

Department of Mechanical Engineering

Lab Audit Report

Name of Laboratory: Manufacturing Practice Workshop (Welding Shop)
Lab Incharge: Mr. Satya Prakash Saini
Lab Technician: Mr. Rajendra Singh Naruka
Audit Date: 10/8/21 Session: 2021-22
Audit member: Dr. Man Mohan Siddh & Dr. Manoj Gupta.

Sr. No.	Comments	Lab In charge (Signature)
1	Lab manual updation required	Signature, 10/8/21
2	More Facemask required	
3	JECRC/ME/WS/007 Welding lead required	
4		
5		
6		
7		
8		
9		
10		

Audit members 10/8/21
(Signature)

Head of Department
(Signature)
Head of the Department
Mechanical Engineering
JECRC, Jaipur

Date: August 10, 2021

To
The HOD,
Department of Mechanical Engineering
Jaipur Engineering College and Research Centre
Jaipur (Rajasthan)

Subject: Regarding Purchasing of Welding Lead in Manufacturing Practices Workshop (Welding Shop).

Respected Sir,

With Reference to mention subject Manufacturing Practices Workshop (Welding Shop) requires purchasing of welding lead for proper functioning of set up.

S No.	Equipment/Part	Quantity
1.	Welding Lead for Welding Set Up	20 ft
2.	Facemask	03 Nos

Approx Rs 800/-
Approx Rs 300/-
Total - Rs 1100/-
Purchased 14/10/24

Kindly do the needful.

Thanking You.

Yours Faithfully

10/8/21
Mr. Satya Prakash Saini
Lab In charge
(Manufacturing Practices Workshop)

15/8/24
Dr. Man Mohan Siddh
Overall Lab In charge

Approx GST. Rs 1100/-
Approved

Dr. M.P. Singh
Head of Department
Head of the Department
Mechanical Engineering
JECRC, Jaipur

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Department of Mechanical Engineering

Lab Audit for year (2021-22)

Name of the Department:Mechanical Engineering
Name of Laboratory: Manufacturing Practices Workshop (Welding Shop)
Lab Incharge: Mr.SatyaPrakashSaini
Lab Technician: Mr.Rajendra Singh Naruka
Audit Date: 10-08-2021 Session: 2021-2022

Members of Staff Present: 1. Dr.Man Mohan Siddh
2. Dr.Manoj Gupta

Sr. No.	Comments	Action Taken	Remark
1.	Lab manual updating required	Lab auditor advised the concerned faculty for updating the lab manual	Manual revised &updated
2.	More facemask required	Lab auditor suggestedfor purchasing of facemask Letter send to HOD regarding purchasing of facemask	Approved for purchasing
3.	JECRC/ME/WS/002 welding lead required	Lab auditor suggested for changing the welding lead Letter send to HOD regarding purchasing of welding lead	Approved for purchasing
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Signature of the HOD with Seal Signature of the Lab Audit Experts

Head of the Department
Mechanical Engineering
JECRC, Jaipur

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

JECRC Campus, Shri Ram Ki Nangal, Via-Vatika, Jaipur

Department of Mechanical Engineering

Lab Audit Report

Name of Laboratory: Manufacturing Practice Workshop (Fitting Shop)

Lab Incharge: Mr. Satya Prakash Saini

Lab Technician: Mr. Hemant Neihwal

Audit Date: 10/8/21 Session: 2021-22

Audit member: Dr. Man Mohan Siddh & Dr. Manoj Gupta

Sr. No.	Comments	Lab In charge (Signature)
1	Updation in lab manual required	Hemant
2	Update maintenance record	Hemant
3	Various type of hammers are required	Hemant
4	Paste sticker at per stock register	Hemant
5	Drill bit set required	Hemant
6	Two Bench vice overhauling required	
7		
8		
9		
10		

Audit members (Signature) 10/8/21

Head of Department (Signature)

Head of the Department Mechanical Engineering JECRC, Jaipur

Date: August 10, 2021

To
The HOD,
Department of Mechanical Engineering
Jaipur Engineering College and Research Centre
Jaipur (Rajasthan)

Subject: Regarding Purchasing of Hammers in Manufacturing Practices Workshop (Fitting Shop).

Respected Sir,

With Reference to mention subject Manufacturing Practices Workshop (Fitting Shop) requires purchasing of hammer for proper functioning of fitting shop.

S No.	Equipment/Part	Quantity
1.	Different types of Hammer (Claw hammer, Ball pein hammer, Straight pein hammer, Cross pein hammer	08 (Each 2)

Approx. Rs 1200/-

Purchased 14/10/24

Kindly do the needful.

Thanking You.

Yours Faithfully

10/8/24
Mr. Satya Prakash Saini
Lab In charge
(Manufacturing Practices Workshop)

Approx Cost Rs. 1200/-

Dr. Man Mohan Siddh
Overall Lab In charge

10/8/24

Approved

Dr. M.P. Singh
Head of Department

Head of the Department
Mechanical Engineering
JECRC, Jaipur

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Department of Mechanical Engineering

Lab Audit for year (2021-22)

Name of the Department:Mechanical Engineering
Name of Laboratory: Manufacturing Practices Workshop (Fitting Shop)
Lab Incharge: Mr.SatyaPrakashSaini
Lab Technician: Mr.HemantNaiwal
Audit Date: 10-08-2021 Session: 2021-22
Members of Staff Present: 1. Dr. Man Mohan Siddh
2. Dr. Manoj Gupta

Sr. No.	Comments	Action Taken	Remark
1.	Lab manual updating required	Lab auditor advised the concerned faculty for updating the lab manual	Manual revised & updated
2.	Update maintenance record	Lab auditor advised for updating maintenance record timely	Record verified & updated
3.	Various types of hammers required	Lab auditor suggested for purchasing different type of hammers Letter send to HOD regarding purchasing the different type of hammers	Approved for purchasing
4.	Paste sticker as per stock register	Lab auditor advised the concerned faculty for paste sticker on all tools and equipment	Pasted
5.	Two Bench vice overhauling required	Lab auditor instructed the concerned technical staff for overhauling	Overhauling Done
6.			
7.			
8.			
9.			
10.			

Signature of the HOD with Seal Signature of the Lab Audit Experts

Head of the Department
Mechanical Engineering
JECRC, Jaipur

<table>
<tr><td colspan="4">Criterion-7 Continuous Improvement</td></tr>
<tr><td><u>S. NO</u></td><td>CRITERIA</td><td><u>OBSERVATION MADE BY NBA</u></td><td><u>COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)</u></td></tr>
<tr><td>7.1</td><td>Actions taken based on the results of evaluation of each of the COs, POs and PSOs</td><td>Target for most POs/ PSOs are shown to have been attained with less understanding.

Action to bridge the gap for mechanical industry requirements is not exercised thoroughly.</td><td>1. Workshops and FDP on OBE are conducted for faculty members by Rajasthan Technical university in association with NBA and through NITTTR ,Chandigarh.
2. Department has provided a sheet containing COs of all subjects and POs/PSOs to all faculty members for preparing relationship of CO-PO/PSO matrices and ask them to map COs with all POs/PSOs. After that department calculated average mapping and assign final mapping according to below mentioned criteria.
<table>
<tr><td>Average mapping (m)</td><td>Value given</td></tr>
<tr><td>m< 0.5</td><td>0</td></tr>
<tr><td>0.5≤ m≤1</td><td>1</td></tr>
<tr><td>1< m ≤2</td><td>2</td></tr>
<tr><td>2< m ≤3</td><td>3</td></tr>
</table>
3. Each faculty member maintains a course file that includes vision, mission, course outcomes, relationship between CO-PO-PSO, evaluation of COs, identification of slow learner and fast learner, internal question paper mapped with COs, solution of question paper with step marking, assignment to weak students, information about student’s performance etc., reflects the understanding of faculty members.
4. Weightage of knowledge of OBE is also included in the yearly appraisal form of faculty members.
5 Gaps are identified systematically. Department regularly collects the feedback from industry experts, employers, placement cell, alumni etc. Collected feedbacks have been analyzed and discussed.
In discussion, department has identified contemporary industry topics that may be included in syllabus and communicated to affiliated University(RTU) for necessary action. Based on gaps identified the department has included various topics to deliver to the students through various means and modes.
To attain the POs/PSOs, systematically content beyond the syllabus has been identified and delivered. Also, different activities have been planned and executed to achieve the target value of PO/PSOs attainment.
6. The topics beyond syllabus have been delivered through experiential learning and participative learning.</td></tr>
</table>

7. In departmental discussion, department decided the modes of delivery of topic beyond the syllabus which are identified through feedback of stake holders and included in the departmental academic calendar before the commencement of session.

These are the modes of delivery of topics beyond syllabus.

Delivery methods	Link
Add-on courses / workshops	https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/AutoCAD.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Introduction-of-Electric-Vehicles.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Solidworks.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Working-and-Disassembling-of-Electric-Vehicle.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/ANSYS.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Comparison-of-Electric-Vehicle-with-Conventional-Automobile.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Creo.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/Hybrid-and-Advanced-Electric-Vehicles.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/3D-Printing-Technology.pdf https://jecrcfoundation.com/jf-data/Updated-SSR/Criteria-1/3D-Printing-Technology-finalyear.pdf https://jecrcfoundation.com/jf-data/ADDON/Differentaspect2019-20.pdf

					https://jecrcfoundation.com/jf-data/ADDON/3DPrinting2019-20.pdf https://jecrcfoundation.com/jf-data/ADDON/differentaspect2018-19.pdf https://jecrcfoundation.com/jf-data/ADDON/L3D2019-20.pdf https://jecrcfoundation.com/jf-data/ADDON/3Dprinting2018-19.pdf https://jecrcfoundation.com/jf-data/ADDON/automobileworkshop.pdf https://jecrcfoundation.com/pdf/addon-certificates/2020-21.pdf https://jecrcfoundation.com/pdf/addon-certificates/2019-20.pdf https://jecrcfoundation.com/pdf/addon-certificates/2018-19.pdf
				Guest lectures by the industry person	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/Guest-Lectures-2019-20.pdf
				Industrial visit s	https://jecrcfoundation.com/jf-data/NBA/ME/Industrial-Visit/Industrial-Visits-2019-20.pdf
				Conferences	https://www.jecrcfoundation.com/pdf/conference-reports/ME%202015-2020.pdf
				Technical clubs/ activities	https://jecrcfoundation.com/jf-data/NBA/ME/MoonRider/Annual%20Report%202019-20.pdf https://jecrcfoundation.com/jf-data/NBA/ME/MoonRider/Annual-Report-2018-19.pdf
			The content beyond the syllabus is delivered through add-on courses, workshops, guest lectures by the industry person, industrial visits, conferences, lectures of course teacher and presentation of student's project etc.		

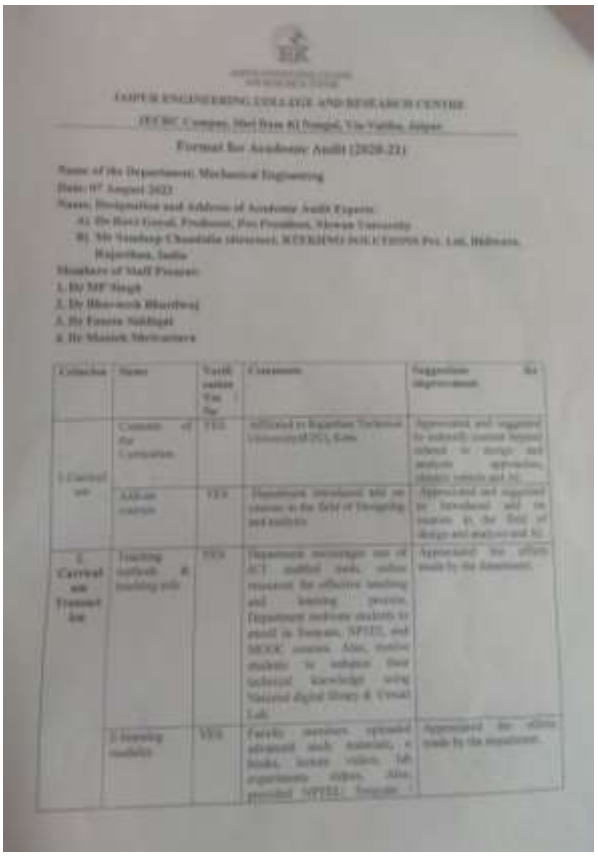
Guest Lecture

Year	Date	Guest name and topic	Website Link
2019	27.08.2019	Sh. Rajeev Bhargava, Mechanical CAD	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/27-Aug-2019-Report-CADD-CENTER.pdf
2019	27.08.2019	Sh. Himanshu Srivastava, Application of Fluid Mechanics in Industries	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/27-Aug-2019-Report-ENGINEERS-ACADEMY.pdf
2019	04.09.2019	Sh. Bhawani Singh, Introduction and Application of MATLAB	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/04-Sep-2019-Report-PVH.pdf
2019	06.09.2019	Sh. Rajeev Bhargava, Practical Applications and Industrial Uses of Mechanical CAD	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/06-Sep-2019-Report-CADD-CENTER-02.pdf
2019	09.10.2019	Sh. Alen Tal, Design Optimization of Functionally Graded Dental Implant for Bone Remodelling	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/09-Oct-2019-Report-US-Scholar.pdf
2020	23.01.2020	Sh. Ravi Kumar Swami, Application of AutoCAD, CATIA, Solidworks and ANSYS software in the Manufacturing Industries	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/23-JANUARY-2020-Report-CADEMATE-01.pdf
2020	24.01.2020	Sh. Girish Kumar, Importance of AutoCAD, CATIA,Solidworks in the Manufacturing Industry	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/24-JANUARY-2020-Report-CADDESK.pdf
2020	25.01.2020	Sh. Ravi Kumar Swami, Application of AutoCAD, CATIA, Solidworks and ANSYS software in the Manufacturing Industries	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/25-JANUARY-2020-Report-CADEMATE-02.pdf
2020	12.02.2020	Sh. Divyendra Srivastava, How to Prepare for CAT and GRE	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/12-FEBRUARY-2020-Report-IMS.pdf
2020	13.02.2020	Sh. Harsh Babel, Careers in Automotive Industries	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/13-FEBRUARY-2020-Report-HARSH-BABEL.pdf
2020	14.02.2020	Sh. Ravindra Dhewa, Importance of digital marketing	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/14-FEBRUARY-2020-Report-Digital-Marketing.pdf
2020	16.02.2020	Sh. Vaibhav Kamalkaka, New Technologies Challenge in Automotive Industries	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/16-FEBRUARY-2020-Report-VAIBHAV-KAMALKAKA.pdf
2020	03.03.2020	Sh. Gaurav Dadheech, Start Up in the in Automotive World and Electric Vehicle Scenario in India	https://jecrcfoundation.com/jf-data/NBA/ME/Guest-Lecture/2019-20/03-MARCH-2020-Report-GAURAV-DADHEECH.pdf

---

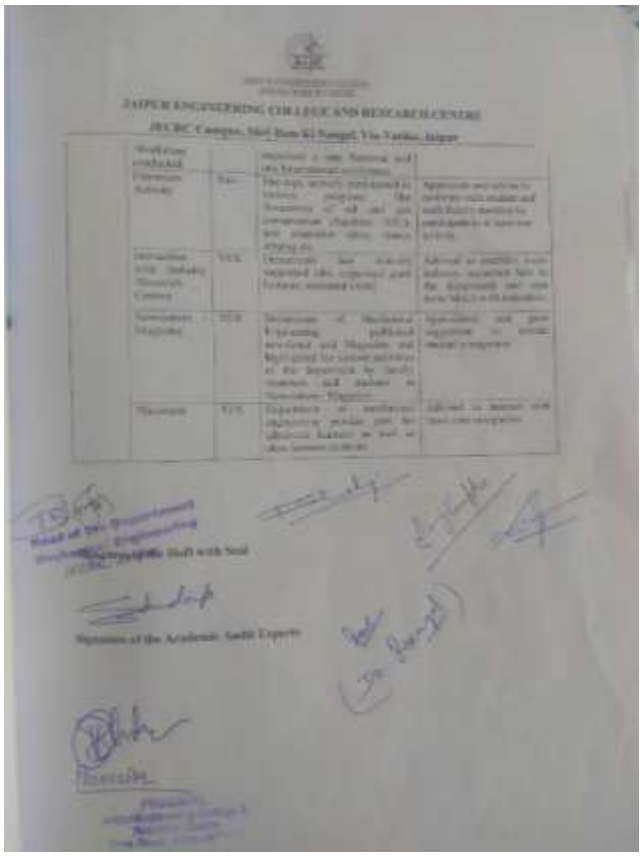
S.No	year	Topic	Link
1	2018	1st International Conference on Recent Innovations & Technological Development in Mechanical Engineering ICRITDME - 2018	https://jecrcfoundation.com/jf-data/Conference/ICRITDME-2018.pdf
2	2019	1st National Conference On Futuristic Trends in Mechanical Engineering NCFTME-2019 16-17 March, 2019	https://jecrcfoundation.com/jf-data/Conference/NCFTME-2019.pdf
3	2019	2nd International Conference on Recent Innovations & Technological Development in Mechanical Engineering ICRITDME - 2019	https://jecrcfoundation.com/jf-data/Conference/ICRITDME-2019.pdf
4	2020	3rd International Conference on Recent Innovations & Technological Development in Mechanical Engineering ICRITDME - 2020 Recent Innovations & Technological Development in Mechanical Engineering ICRITDME-2020	https://jecrcfoundation.com/jf-data/Conference/ICRITDME-2020.pdf
5	2020	2nd National Conference on Futuristic Trends in Mechanical Engineering NCFTME - 2020	https://jecrcfoundation.com/jf-data/Conference/NCFTME-2020.pdf

S. NO	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
7.2	**Academic Audit and actions taken during the period of Assessment**	Process of academic audit needs deeper understanding and strengthening.	Academic and administrative audit has been carried out in the department where Internal and external auditor audited the performance. Report is attached in link for your kind consideration. https://jecrcfoundation.com/pdf/AAA-20-21/ME.pdf https://jecrcfoundation.com/pdf/iqac-audit-report/ME%20Audit%20Report.pdf https://jecrcfoundation.com/pdf/iqac-audit-report/2020-21/Academic%20Audit%20scan%20file%202020-21.pdf

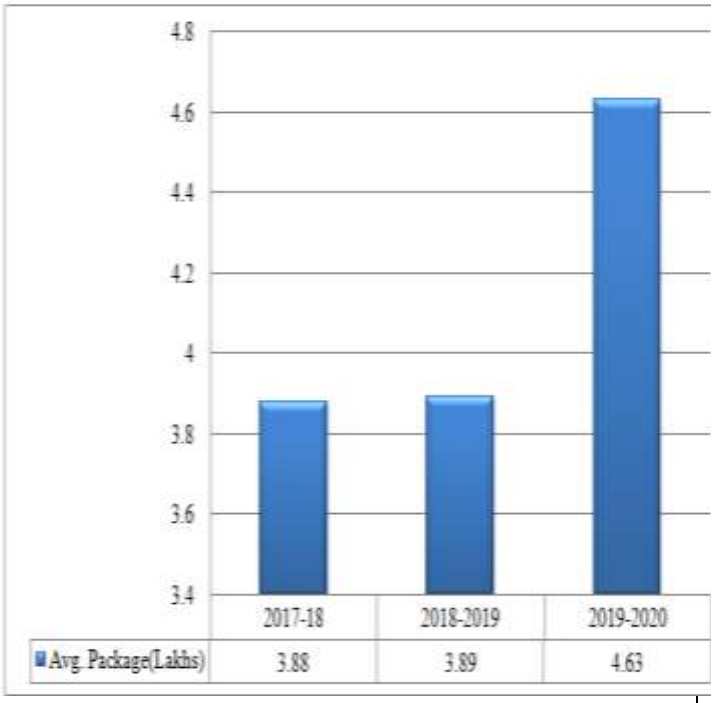


JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Format for Academic Audit (2020-21)



JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

S. No	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
7.3	**Improvement in Placement, Higher Studies and Entrepreneur**	Pay package has been falling year on year and less core companies are conductingcampus drive.	Average Pay package has been increase 19.3% as compared to academic year 2018-19. Also placement index in the academic year 2019-20 increases 37.4 % as compared to academic year2018-19.  https://jecrcfoundation.com/placement-stats

Name of student placed	Email ID	Contact Details	Name of the employer
ABHISHEK GUPTA	agabhigupta64@gmail.com	7820834839	RDC Concrete
ABHISHEK RAJPUT	abhishekrajput042@gmail.com	7231846537	GR Infra
ADITYA SANADHYA	adityasanadhya555@gmail.com	9660066516	Pinnacle
AJAY SHARMA	ajaysharma0148@gmail.com	8619957112	Chegg India
AKASH AGRAWAL	1012akashagrawal@gmail.com	8094413968	ETTL jaipur
AMIT KUMAR TINKAR	amittinkar.ak@gmail.com	8955459388	Baba Automobile
ANKIT KUMAWAT	ankitkumawat2014@gmail.com	7232086279	Infosys RTU-1
ANKUR MITTAL	ankurmittal241997@gmail.com	9680604148	TCS NQT
ANSHUMAN PACHOLI	anshumansharma58@gmail.com	9928347936	Accenture
ARPIT CHOUDHARY	arpit.kargwal@gmail.com	7891092070	TCS-Codevita
ARPIT KASLIWAL	arpitkasliwal26@gmail.com	8058045622	Accenture

ASHOK KUMAR SAINI	ashoksaini03081998@gmail.com	8387024263	Marvel Infocom
ASHUTOSH MEWARA	anshumewara10@gmail.com	7568065612	Accenture
AUGUSTIN JOY MARKER	lazyaugustin@gmail.com	7239804702	Marvel Infocom
BHARAT KHANDELWAL	khandelwalbharat01@gmail.com	9460060693	Accenture
CHIRAG MAHESHWARI	chiragmaheshwari23@gmail.com	9782849436	Pinnacle
CHIRAG TALWAR	chiragtalwar98@gmail.com	7340025079	Chegg India
DARSHAN BAID	darshanbaid123@gmail.com	7792988712	Chegg India
DATTATREY SINGH SHEKHAWAT	dattatrey.ds@gmail.com	8696996411	Accenture
DEEPAK KURUP	deepakkurup21@gmail.com	9680907312	Pinnacle
DHEERAJ VERMA	dheerajverma5051@gmail.com	7820858495	Chegg India
DIVIK MATHUR	mathurdivik@gmail.com	7568692563	TCS NQT
EKANT LABANA	ekantlabana64@gmail.com	8005599226	Baba Automobile
HARDEEP SINGH GULYAR	hardeepsinghhd98@gmail.com	9649172521	BYJUs
HIMANSHU CHHAPARWAL	chhaparwalhimanshu10@gmail.com	9509875607	Chegg India
HIMANSHU JAIN	jainhimanshu2407@gmail.com	9587078882	Accenture
HIMANSHU JAIN	hjbainara124@gmail.com	7611929171	Baba Automobile
HIMANSHU SINGHAL	krzysinghal@gmail.com	9413806771	Pinnacle
JAYANT SOTI	jayantsoti@gmail.com	9829063391	Pinnacle
KARTIK CHOUDHARY	kartikchoudhary2502@gmail.com	9461266117	ETTL jaipur
KEVAL NAGAR	kevalnagar2012@gmail.com	9982731315	ETTL jaipur
KISHAN KUMAWAT	kkumawat195@gmail.com	8824115525	Pinnacle
KOMAL KUMAR	komal241197@gmail.com	6376940005	Marvel Infocom
KRISHNA AGARWAL	kagarwal258@gmail.com	8209621335	Chegg India
LAKSHY ZAVERI	lakshyzaveri98@gmail.com	9783008890	Baba Automobile
LAKSHYARAJ SINGH RATHORE	lakshyarajsinghrathore.2016@gmail.com	8890758898	Alibaba
LALIT PAREEK	lalitprek@gmail.com	8875259354	ETTL jaipur
LOKESH DHYAWANA MEENA	lmeena619@gmail.com	7062141023	Accenture
LOVEKESH GUPTA	lovekeshlove18@gmail.com	9079573819	Accenture
MAYUR SEN	mayursen4@gmail.com	7903521511	ETTL jaipur
MOHAMMED SAQUIB KHAN	mohammedsaquibkhan@gmail.com	7073907831	Accenture
MOHD ASIF KHAN	asifkhan27031998@gmail.com	6375685916	GR Infra
NAVNEET PRIYA	navneetpriyagupta@gmail.com	8441008746	ETTL jaipur

GUPTA			
NEEL RAJ KAUSHIK	neilkaushik193@gmail.com	9079793800	Pinnacle
PANKAJ JANGID	pankajjangid504@gmail.com	9782769543	Baba Automobile
PANKAJ KUMAR CHAHAR	pankajkumarchahar7@gmail.com	8445440782	Chegg India
PIYUSH GIRI	piyushgiri85@gmail.com	7792803436	Accenture Phase 2
POONAM KUMARI	yadavpoonam1997@gmail.com	7690934452	Pinnacle
PRASIT JAIN	prasit.jain.5@gmail.com	9461005706	ETTL jaipur
RAHUL KHANDELWAL	rahulkhandelwal737@gmail.com	9928066375	GR Infra
RAHUL KUMAR MISHRA	rahulkrrocks45@gmail.com	9123260486	ETTL jaipur
RAHUL SHARMA	vishnusharma8213@gmail.com	7976660415	Baba Automobile
RAJAT GUPTA	rajatguptasanark@gmail.com	9649004804	Creditas
RISHABH AHIR	rishabhaheer@gmail.com	7568627124	ALIBABA - TDI
RISHABH BHARDWAJ	rishabhB717898@gmail.com	7976310424	GR Infra
RISHABH DUTT SHARMA	rishabhdsharma@gmail.com	9462511671	Accenture
ROHIT GEHLOT	gehlotrohit86@gmail.com	7725954612	Pinnacle
SAILENDRA YADAV	sailendra97jm@gmail.com	9616019464	Baba Automobile
SANJEEV KUMAR	sanjeevkumar83120@gmail.com	7976545927	Marvel Infocom
SAURABH PANDEY	saurabhramdev11@gmail.com	8949571265	Baba Automobile
SAURABH PATWARI	saurabhpatwari4@gmail.com	9166519114	Chegg India
SAURABH SADARANGANI	saurabhsadarangani@gmail.com	7737375749	Accenture
SAURAV SINGH RATHORE	rathoresaurav13@gmail.com	8441877477	Baba Automobile
SHAILENDRA SHARMA	shailendra.reso@gmail.com	9462706509	TCS NQT
SHREEKANT GAUTTAM	shreekantgauttam58@gmail.com	9024756796	Chegg India
SHUBHAM GARG	subh.grg@gmail.com	8560868638	GR Infra
SHUBHAM KATTA	shubhamkatta123@gmail.com	9799217345	Pinnacle
SHUBHAM KHANDELWAL	khandelwalshubham5775@gmail.com	9460293481	Accenture
SHUBHAM NAGAR	nagarshubham0@gmail.com	8505025629	GR Infra
SHYAM LAL MISHRA	shyamlalmishra449@gmail.com	7877739994	GR Infra
SHYAM PRATAP SINGH RATHORE	shyampratapsingh009@gmail.com	9610055551	GR Infra
SPARSH BHATIA	sanchit.sparsh@gmail.com	9587742407	Alibaba
SUBHAM AGARWAL	subhamagarwal2803@gmail.com	9782211556	TCS NQT

SURYANSH MAHESHWARI	yhurkat@gmail.com	9672982704	Alibaba
TARUN BALWADA	tarun009balwada900@gmail.com	9116910984	Baba Automobile
TARUN DUBEY	tarundubeyphy@gmail.com	9461055663	Accenture
UDAISHAYA SHARMA	udaishaya138@gmail.com	7014266855	Alibaba
USAMA SHERWANI	usamasherwani.2mech20@jecrc.ac.in	7790843175	Pinnacle
VIKASH KUMAR	vikashbharadwaj5@gmail.com	9772280051	Baba Automobile
VINIT SHARMA	vinitsharma467@gmail.com	9461836660	Marvel Infocom
VISHAL CHOUDHARY	vishalc0@hotmail.com	7737424888	TCS NQT
VISHAL MITTAL	vishal.98m31@ymail.com	9529110172	TCS NQT
YASH JAITAWAT	yashjaitawat1998@gmail.com	7023382688	Accenture
MADAN GARG	madangarg1999@gmail.com	7615860963	Chegg India
ADITYA KUMAR PAL	aditya89791@gmail.com	9509629511	Baba Automobile
KULDEEP MATHUR	kuldeepmathur96@gmail.com	9461810132	Baba Automobile
SUJEET KR SINGH	sujeetvkv2013@gmail.com	9664117942	Baba Automobile
SUMIT SHARMA	ss7689896996@gmail.com	7689896996	Baba Automobile
ABHISHEK JAIN	abhishekjain2699@gmail.com	9549305115	Chegg India
ADITI GUPTA	aditiguptajecrc@gmail.com	8233222695	Pinnacle
ALEX ABHINAV ANAND	alexanand444@gmail.com		Pinnacle
ANIL JASWANI	aniljaswani3@gmail.com	9929180801	Baba Automobile
AVNISH BHARDWAJ	avnish.ab20@gmail.com	8809410751	Alibaba
AYUSH AGRAWAL	ayushagrawal2538@gmail.com	7014602653	Chegg India
BHARAT SINGHAL	bharatsinghal.9@gmail.com	8560012996	Accenture
DATTATREYA GORSIA	dattatreyagorsia99@gmail.com	8769445971	Baba Automobile
DIVYANSH SHRANGI	divyanshshrangi98@gmail.com		Pinnacle
FAIZ MOHAMMED	faizm8956@gmail.com	8560843707	Baba Automobile
GAJENDRA SINGH TANWAR	singhtanwargajendra78@gmail.com	8955567230	Baba Automobile
HANUMAN SINGH	hanuman171998singh@gmail.com	9783381936	Chegg India
HEMENDRA SINGH RAO	hemendrasingh1999@icloud.com	8769494970	Baba Automobile
HIMANSHU JOSHI	jhimanshu820@gmail.com	8094566398	Alibaba
JUBEEN KANWAR	jubeenkanwar010@gmail.com	7891274912	Infosys RTU-1
KESHAV BHARDWAJ	kbhardwaj751@gmail.com	9587969096	TCS NQT

KUNDAN KUMAR	kundan773986@gmail.com		Baba Automobile
LAVNEET JHASAL	loveyjhasal@gmail.com	7222831382	TCS NQT
LOKENDRA SINGH	lokendramiddleearth@gmail.com	7891515084	Baba Automobile
MANISH SHARMA	manishsharma050897@gmail.com	7014265525	Chegg India
MOHIT MENARIA	mohitmenaria1998@gmail.com	7821966091	Accenture
NAVEEN KUMAWAT	naveenkumawat42@gmail.com	9928251767	Baba Automobile
NAVENDU SHEKHAR PANDEY	navendu.shekhar.26@hotmail.com	7488486724	Accenture
NIKHIL SHARMA	nikhil07Sharma07@gmail.com	7597619745	Accenture
PANKAJ JANGIR	pankajkumarjangir03@gmail.com	9660293347	Chegg India
PRATYUSH BHARDWAJ	pratyushbhardwaj28@gmail.com	9534902042	BYJUs
ROHIT CHAHAR	rohitchahar21@gmail.com	9521421204	Baba Automobile
SAKSHAM SONI	Rsgolurockstar712@gmail.com	9602893933	Baba Automobile
SARANG CHOUDHARY	sarang.choudhary16@gmail.com	9782879059	Chegg India
SHUBHAM LOHOMI	shubhamlohomi@gmail.com	9460658106	Creditas
SOURAV CHOUDHARY	souravchoudhary13@gmail.com	8386976731	Chegg India
SUMIT JAIN	sumitj2223@gmail.com	9116887933	Pinnacle
SUNIL SHARMA	sunilbagra108@gmail.com	7023303475	TEPL
VAIBHAV PARAKH	vparakh009@gmail.com	9461234499	Baba Automobile
VARUN GAUTAM	Varungjecrc@gmail.com	9001722983	TCS NQT
VIKRAM PRATAP SINGH	vikram.pratapsingh22101999@gmail.com	7424884072	BYJUs
YASH DANGI	yashdangi95@gmail.com	8107489690	Alibaba
YOGESH KUMAR DWIVEDI	yogesh240499dwivedi@gmail.com	9454142193	Accenture

Criteria 8 First Year Academics

S. No.	Criteria	Observations made by NBA (During the last accreditation visit)	Compliance Status (Action taken by the institution)
8.4.1	**8.4.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is based**	Limited assessment processes & tools used; no proper bench mark/ target was in place for computing CO attainment; and only CIE marks are used to measure CO attainments, hence not a valid procedure to measure the learnability.	1. Target has been set to 70%. 2. CO's are evaluated from Internal Assessment including Mid Term Tests, assignment/presentation etc. Data for the year 2020-21 is given in the table below. 3. Assessment from External exam/End term exam (Rajasthan Technical University) which is not based on CO's is also included accordingly. Data is given in the table below 4. Now if we include Internal and External Exam assessment for the CO attainment then it would be as below : 0.2*(Internal Assessment) + 0.8* (External Assessment) CO attainment = **0.8x+0.2y** Where x = End semester examination (ESE) y = Mid-term examination (MTE)

CO ATTAINMENT FOR YEAR 2020-21(Sem-I)

Subject Code	Subject Name	Course Outcome	RTU (80%)	MTT (20%)	TOTAL (100%)
			x	y	.8x+.2y
1FY2-01	Engineering Mathematics-I	CO-1	77.91	19.20	97.11
		CO-2	77.91	9.00	86.91
		CO-3	77.91	19.0	96.91
		CO4	77.91	8.80	86.71
1FY2-02	Engineering Physics	CO-1	72.97	16.20	89.16
		CO-2	72.97	15.96	88.93
		CO-3	72.97	12.56	85.53
		CO-4	72.97	10.00	82.97
1FY2-03	Engineering Chemistry	CO-1	79.22	19.77	98.99
		CO-2	79.22	19.12	98.34
		CO-3	79.22	17.20	96.41
		CO4	79.22	17.86	97.07
1FY2-04	Communication Skills	CO-1	77.11	18.77	95.88
		CO-2	77.11	18.68	95.79
		CO-3	77.11	15.08	92.19
1FY1-05	Human Values	CO-1	78.13	18.77	96.90
		CO-2	78.13	18.68	96.81
		CO-3	78.13	15.08	93.20
1FY3-06	Programming For Problem Solving	CO-1	69.12	NA	69.12
		CO-2	69.12	18.92	88.04
		CO-3	69.12	11.36	80.48
		CO-4	69.12	8.12	77.24
1FY3-07	Basic Mechanical Engineering	CO-1	74.95	19.91	94.86
		CO-2	74.95	19.91	94.86
		CO-3	74.95	19.91	94.86
		CO-4	74.95	19.91	94.86
1FY3-08	Basic Electrical Engineering	CO-1	79.17	19.91	99.08
		CO-2	79.17	19.91	99.08
		CO-3	79.17	19.91	99.08
		CO-4	79.17	19.91	99.08
1FY3-09	Basic Civil Engineering	CO-1	79.17	19.80	98.97
		CO-2	79.17	19.80	98.97
		CO-3	79.17	16.60	95.77
		CO-4	79.17	15.60	94.77
1FY2-20	Engg. Physics Lab	CO-1	79.63	19.52	99.15
		CO-2	79.63	19.36	98.99
1FY2-21	Engg. Chemistry Lab	CO-1	80.00	20.00	100.00
		CO-2	80.00	20.00	100.00
		CO-3	80.00	20.00	100.00
1FY2-22	Language Lab	CO-1	79.63	20.00	99.63

		CO-2	79.63	20.00	99.63
		CO-3	79.63	20.00	99.63
1FY1-23	Human Values Activities	CO-1	80.00	20.00	100.00
		CO-2	79.66	20.00	99.66
		CO-3	79.66	20.00	99.66
1FY3-24	Computer Programming Lab	CO-1	80.00	20.00	100.00
		CO-2	80.00	20.00	100.00
		CO-3	80.00	20.00	100.00
1FY3-26	Basic Electrical Engineering Lab	CO-1	79.46	20.00	99.46
		CO-2	79.46	20.00	99.46
		CO-3	79.46	20.00	99.46
1FY3-27	Basic Civil Engineering Lab	CO1	80.00	20.00	100.00
		CO2	80.00	20.00	100.00
		CO3	80.00	20.00	100.00
1FY3-28	Computer Aided Engineering Graphics	CO1	80.00	18.49	98.49
		CO2	80.00	18.49	98.49
		CO3	80.00	16.95	96.95
1FY3-29	Computer Aided Machine Drawing	CO1	80.00	17.92	94.2
		CO2	80.00	18.93	94.2
		CO3	80.00	18.52	94.2

CO ATTAINMENT FOR YEAR 2020-21(Sem-II)

Subject Code	**Subject Name**	**Course Outcome**	**RTU (80%)**	**MTT (20%)**	**TOTAL (100%)**
			x	**y**	**.8x+.2y**
1FY2-01	Engineering Mathematics-I	CO-1	79.83	19.21	99.04
		CO-2	79.83	19.60	99.44
		CO-3	79.83	19.6	99.43
		CO4	79.83	20.00	99.83
1FY2-02	Engineering Physics	CO-1	80.00	16.20	96.20
		CO-2	80.00	15.96	95.96
		CO-3	80.00	12.56	92.56
		CO-4	80.00	10.00	90.00
1FY2-03	Engineering Chemistry	CO-1	79.86	19.77	99.63
		CO-2	79.86	19.12	98.98
		CO-3	79.86	17.20	97.05
		CO4	79.86	17.86	97.71
1FY2-04	Communication Skills	CO-1	80.00	18.77	98.77
		CO-2	80.00	18.68	98.68
		CO-3	80.00	15.08	95.08
1FY1-05	Human Values	CO-1	79.46	18.77	98.22
		CO-2	79.46	18.68	98.14
		CO-3	79.46	15.08	94.53

1FY3-06	Programming For Problem Solving	CO-1	79.46	-	79.46
		CO-2	79.46	18.92	98.38
		CO-3	79.46	11.36	90.82
		CO-4	79.46	8.12	87.58
1FY3-07	Basic Mechanical Engineering	CO-1	80.00	18.55	98.97
		CO-2	80.00	19.00	98.97
		CO-3	80.00	9.48	98.97
		CO-4	80.00	8.54	98.97
1FY3-08	Basic Electrical Engineering	CO-1	80.00	19.80	98.97
		CO-2	80.00	19.80	98.97
		CO-3	80.00	16.60	98.97
		CO-4	80.00	15.60	98.97
1FY3-09	Basic Civil Engineering	CO-1	79.46	20.00	99.46
		CO-2	79.46	20.00	99.46
		CO-3	79.46	20.00	99.46
		CO-4	79.46	20.00	99.46
1FY2-21	Engg. Chemistry Lab	CO-1	79.46	20.00	99.46
		CO-2	79.46	20.00	99.46
		CO-3	79.46	20.00	99.46
1FY2-22	Engg. Physics Lab	CO-1	80.00	20.00	100.00
		CO-2	80.00	20.00	100.00
		CO-3	80.00	20.00	100.00
1FY2-22	Language Lab	CO-1	80.00	20.00	100.00
		CO-2	80.00	20.00	100.00
		CO-3	80.00	20.00	100.00
1FY1-23	Human Values Activities	CO-1	79.46	20.00	99.46
		CO-2	79.46	20.00	99.46
		CO-3	79.46	20.00	99.46
1FY3-24	Computer Programming Lab	CO-1	79.46	20.00	99.46
		CO-2	79.46	20.00	99.46
		CO-3	79.46	20.00	99.46
1FY3-27	Basic Civil Engineering Lab	CO1	79.46	20.00	99.34
		CO2	79.46	20.00	99.34
		CO3	79.46	20.00	99.34
1FY3-28	Computer Aided Engineering Graphics	CO1	79.46	18.49	95.73
		CO2	79.46	18.49	95.73
		CO3	79.46	16.95	94.2
1FY3-29	Computer Aided Machine Drawing	CO1	80.00	17.92	94.2
		CO2	80.00	18.93	94.2
		CO3	80.00	18.52	94.2

S.No.	Criteria	Observations made by NBA (During the last accreditation visit)	Compliance Status (Action taken by the institution)
8.5.1	**8.5.1 Indicate results of evaluation of each relevant PO/PSO s**	Assessment tools used to measure PO are irrelevant; only indirect assessment tools are used to measuring PSOs and poor PO/PSO attainment values.	• PO Assessment=Directassessment + Indirect Assessment • Direct assessment= 80% weightage of end semester examination (ESE) + 20% weightage of Mid-Term examination (MTE)=0.8x + 0.2 y x=ESE, y=MTE • Indirect assessment=Course exit survey & Co-curricular activities CO assessment=0.8 + 0.2y x=ESE, y=MTE • Direct assessment and indirect assessment are mapped with PO assessment through rubrics as given below:

PO Assessment Tools for First Year

Category	Tools	Rubrics
Direct	Co Attainment	
Indirect	Course Exit Survey	Pro rata
	Co-curricular Activities	>=80% students participated/organized then target achieved else =pro rata

S.No.	Criteria	Observations made by NBA (During the last accreditation visit)	Compliance Status (Action taken by the institution)
8.5.2	**8.5.2 Actions taken based on the results of evaluation of relevant POs /PSOs**	Ineffective actions taken based on results of PO/PSOs	Based on the results of POs action taken are revised to enhance the conceptual knowledge of Mathematics and introduced various activities involving Social and Professional ethics and to pave their way for lifelong learning.

Actions taken based on the results of evaluation of relevant POs

POs	Target Level	Attainment Level	Observations
PO1: Engineering knowledge:			
PO1	2.06	1.85	**Observations:** • Lack of understanding of basic concepts of mathematics, Physics, Mechanics and their application.
Action 1: Prerequisites for all the subjects were discussed before commencement of semester. **Action 2:** Additional classes to be conducted improve the mathematical fundamental basics **Action 3:** E-resources were like NPTEL, youtube.com; learn engineering.org used to help students.			
PO2: Problem analysis:			
PO2	1.56	1.30	**Observations** : • Students were unable to formulate or analyze complex engineering problems by the knowledge of science and mathematics through first year subjects.
Action 1: Students were made to solve problems of GATE, RTU and others competitive examinations. **Action 2**: Students were made to participate in problem solving activities/contests like Ideathons & Hackathons. **Action 3**: Students were mentored to participate in technical events inside and outside the college.			

PO3: Design/development of solutions:			
PO3	1.27	1.13	**Observations** : • More technical events need to be introduced during first year to develop design and development aptitude in students.
Action 1: Students were made to participate in coding based contests like softechhack & smart Business Hackathon **Action 2:** Different engineering problems were addressed through minor projects in First Year laboratories.			
PO4: Conduct investigations of complex problems:			
PO4:	0.88	0.74	**Observations** : • Student's participation in the events where they can deal with complex problems, need to be improved
Action 1: Students were given chance to present their idea/ prototype and work with JECRC Incubation Cell. **Action 2:** Participation in coding contests, workshops and other related activities was improved. **Action 3:** Students wereencouragedto review the problems addressed in research papers from different journals.			
PO5: Modern tool usage:			
PO5	0.85	0.74	**Observations** : • Trainings and add-on courses should be added for First Year students
Action 1: Add on workshops based on modern tool usage like machine learning & python were conducted for First Year students **Action 2:** First year students participated in various technical club activities of the institute and learnt product development using modern tools.			
PO6: The engineer and society:			
PO6	1.36	1.17	**Observations** : • Students needed exposure to assess the social, health & cultural issues through application of reasoning
Action 1: Students were made to participate in activities like "Aanandam" where the students performed the activities like plantations, save water & save energy etc. **Action 2:** Many social activities were organized at institute level like Blood Donation camp where, they worked as coordinators and managed the mechanism and conduction of the event. **Action 3:** Students participated in various social activities likeZarurat (where the students taught the under privilege children after college hours), Cleanliness dive, food and cloth distribution drive etc.			
PO7: Environment and sustainability:			
PO7	1.20	1.07	**Observations** : • Theawareness and understanding related to global and environmental issuesneed to be improved.
Action 1: Webinars were conducted to address the environmental and sustainability issues in engineering. **Action 2:**Students were encouraged to indulge in projects in which global and environmental issues			

<table>
<tr><td colspan="4">were addressed
Action 3: Activities like Cleanliness Drive and Tree Plantation, No Food wastage campaign were organized to address environmental and sustainability issues.</td></tr>
<tr><td colspan="4">PO8: Ethics:</td></tr>
<tr><td>PO8</td><td>1.02</td><td>0.90</td><td>Observations:
Students have Professional ethics and showcase their moral and ethical values time to time. Little effort needs to be done to make them follow the norms of the engineering practice.</td></tr>
<tr><td colspan="4">Action1: Students as well as faculty members attended workshop on Universal Human Values for better understanding of professional ethics & responsibilities.
Action2: Students were encouraged to join the technical as well as social clubs at institute.
Action 3:Students participated in talks/webinars related to ethics.</td></tr>
<tr><td colspan="4">PO9: Individual and team work:</td></tr>
<tr><td>PO9</td><td>1.49</td><td>1.37</td><td>Observations:
Students need to be mentored for team work & to become team leaders starting from their First Year only</td></tr>
<tr><td colspan="4">Action 1: Students were appointed as team leaders or coordinators in various technical & extracurricular activities introduced in first year.
Action 2:They participated as a team in technical activities like Hackathons and cultural activities.</td></tr>
<tr><td colspan="4">PO10: Communication:</td></tr>
<tr><td>PO10</td><td>1.65</td><td>1.48</td><td>Observations:
The communication, presentation and report writing skills are to be further improved among the students.</td></tr>
<tr><td colspan="4">Action 1: Language Lab activities such as group discussions, power writing and public speakingwere conducted.
Action 2: Students were encouraged for self-learning though MOOCs courses and gave presentations in class.
Action 3: Studentswere made to prepare and present the presentations in their regular classes from their curriculum of each subject.</td></tr>
<tr><td colspan="4">PO11: Project management and finance:</td></tr>
<tr><td>PO11</td><td>0.75</td><td>0.61</td><td>Observations:
There was very little scope for students in first year to learn project management and finance.</td></tr>
<tr><td colspan="4">Action 1: They were made to work in teams and make projects by working on every aspect of development of projects.
Action 2: First year students were motivated to be organizers of technical events in the department.</td></tr>
<tr><td colspan="4">PO12: Life-long learning:</td></tr>
<tr><td>PO12</td><td>1.54</td><td>1.38</td><td>Observations :
Participation in technical activities and understanding of new technology is to be</td></tr>
</table>

			improved in first year.
Action 1: Students were motivated to explore and learn online courses through NPTEL, Swayam, Coursera etc. as per the need of technological change. **Action 2:** Students were made to join various technical and social clubs of the college to recognize the need of changing technology.			
Links: **https://jecrcfoundation.com/applied-science/tech_events** **https://jecrcfoundation.com/applied-science/jtechtrix** **https://jecrcfoundation.com/student-corner/notes**			

Criterion 9: Student Support Systems

S. NO	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
9.2	**Feedback analysis and reward /corrective measures taken, if any**	Feedback system exists, but not effectively functioning.	Institute regularly collect and analyse feedback from students and other stakeholders on various issues. After analysing the feedbacks corrective actions are taken. Action taken reports are shared with the stakeholders. Feedback forms, Mechanism and action taken reports are also available on the institute websites. **https://jecrcfoundation.com/iqac/feedback-forms** **https://www.jecrcfoundation.com/pdf/iqac-feedback/1.4.2-Feedback%20Mechanism.pdf** **https://jecrcfoundation.com/iqac/action-taken-report** List of feedback with link is attached below.

List and link of feedback forms

1	Student's Curriculum Feedback Form	https://forms.gle/zf81BNcSCnUtcc2J7
2	Students Feedback On Teaching Learning	https://forms.gle/bmeUV44GyKTkkzay7
3	Students Extra-Curricular Feedback Form	https://forms.gle/FdzxwxoZZEW99usv9
4	Parent's Feedback Form	https://forms.gle/RiwFvop6a5NHqpyG7
5	Student's Facility Feedback Form	https://forms.gle/GhxvQUNrRyGSUsBQA
6	Student's Hostel Facility Feedback Form	https://forms.gle/xeHNUd4dixmNuF2B9
7	Student's Feedback(Transport Facility) Form	https://forms.gle/Y8gAnoQmg9hoTbeJ8
8	General Feedback Form	https://forms.gle/fEwp5T1zbGS2xpvK7

9	Student’s Course Outcome Feedback Form	https://forms.gle/GnxSy4NCVzotjtKBA
10	Student’s Program Exit Feedback Form	https://forms.gle/kV4f2nXJvFqJEzaPA
11	Employee Feedback Form	https://forms.gle/fHumzaPAYSrkQBds8
12	Industrial Training Feedback Form	https://forms.gle/AhmpicDXssa3QWkr9

Student's Feedback on Teaching learning-JECRC 2020-21

Email *

vipuljain.it21@gmail.com

Vision of Jaipur Engineering College and Research Centre

To become a renowned centre of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.

Mission of Jaipur Engineering College and Research Centre

M1. Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.
M2. Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions.
M3. Offer opportunities for interaction between academia and industry.
M4. Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

Student's Feedback on Teaching learning

Dear Students,

We need your valuable feedback for further improvement of Teaching Learning.

Feedback rating range:
Excellent:(5) Very Good:(4) Good:((3) Satisfactory:(2) Needs improvement: (1)

Academic Year: *

2020-21

Student's name: *

Vipul Jain

Parent's Name: *

Sanjay kumar jain

Branch: *

Information Technology

Student's E-mail Id: *

vipuljain.it21@gmail.com

Student's Mobile No.: *

09602345693

To what extent the teacher discusses course outcomes and program outcomes in the class. *

1	2	3	4	5
○	○	○	○	◉

To what extent the teacher encourages participation and discussion in class. *

1	2	3	4	5
○	○	○	○	◉

To what extent teacher maintains regularity and punctuality in class. *

1	2	3	4	5
○	○	○	○	◉

To what extent the teacher motivates students for participation in extracurricular activities *

1	2	3	4	5
○	○	○	○	◉

To what extent the teacher provides mentoring for academic and non-academic matters *

1	2	3	4	5
○	○	○	○	◉

To what extent faculties deliver online lecture and e-notes through Google Classroom. *

1	2	3	4	5
○	○	○	○	◉

To what extent the faculties provide the assignments and discussion related to problem solving approach. *

1	2	3	4	5
○	○	○	○	◉

To what extent faculties provide notes/ppt /e-materials through online platform. *

1	2	3	4	5
○	○	○	○	◉

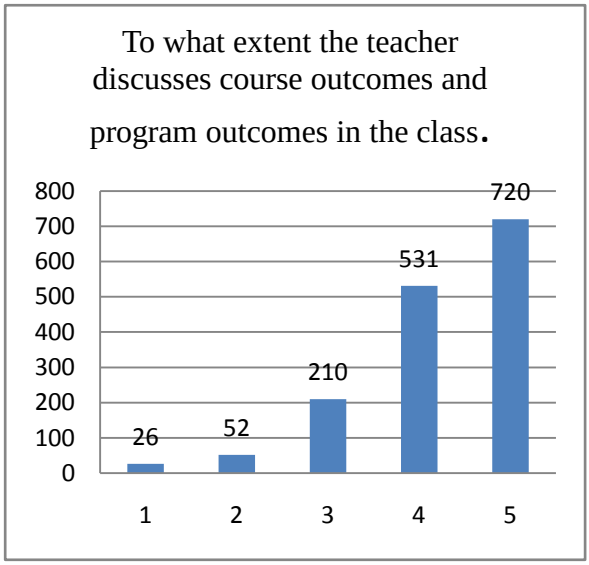
To what extent grievances related issues are addressed. *

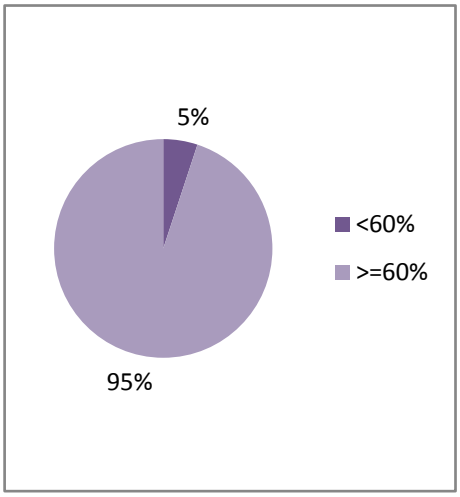
1	2	3	4	5
○	○	○	○	◉

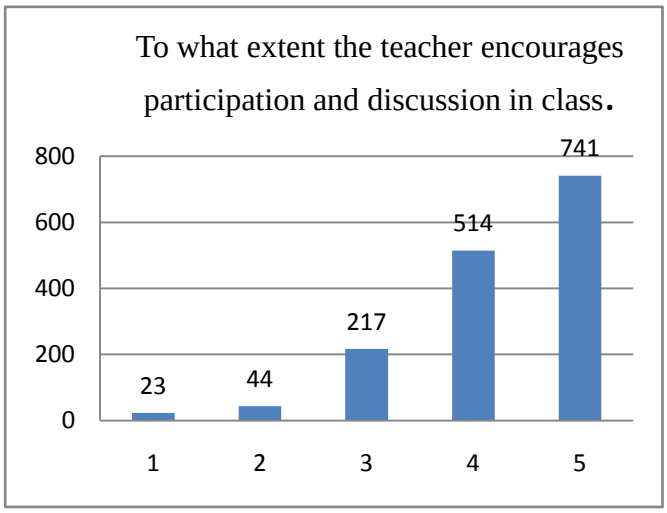
Any suggestion for above parameters.

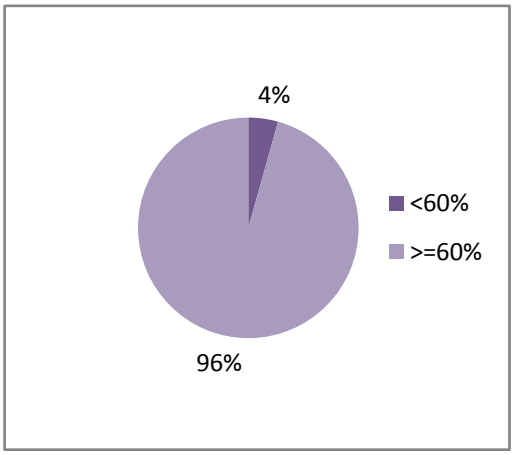
Teaching learning- Feedback (2020-21)

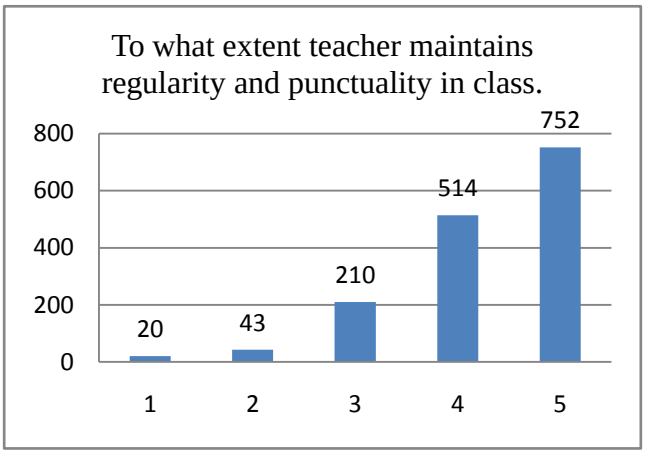
Total Response: 1539

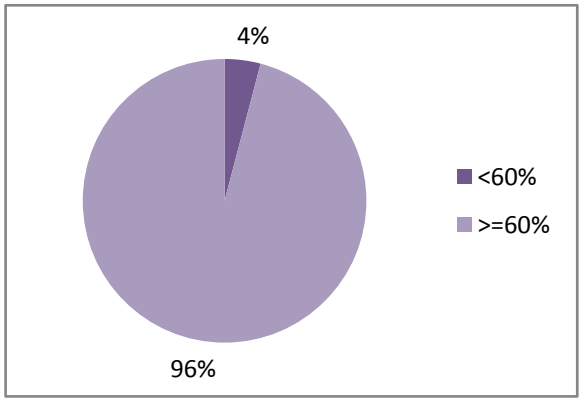


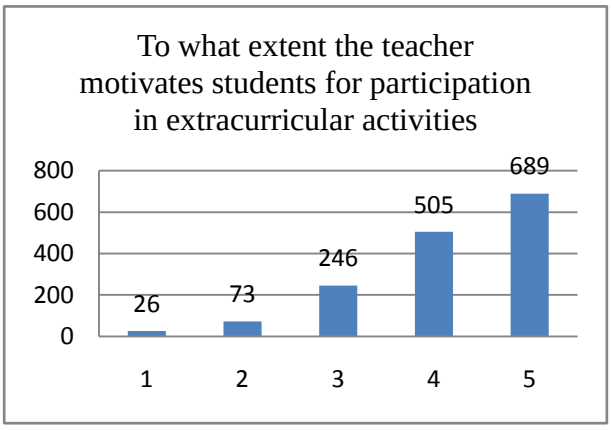


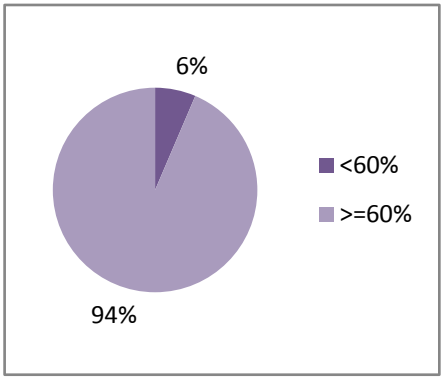


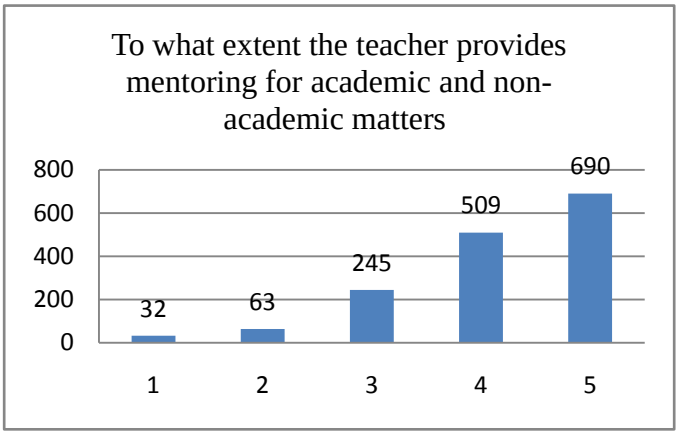


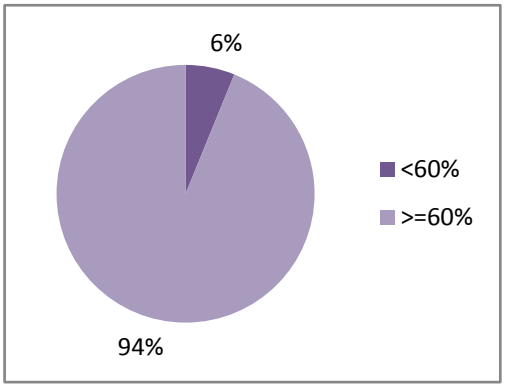


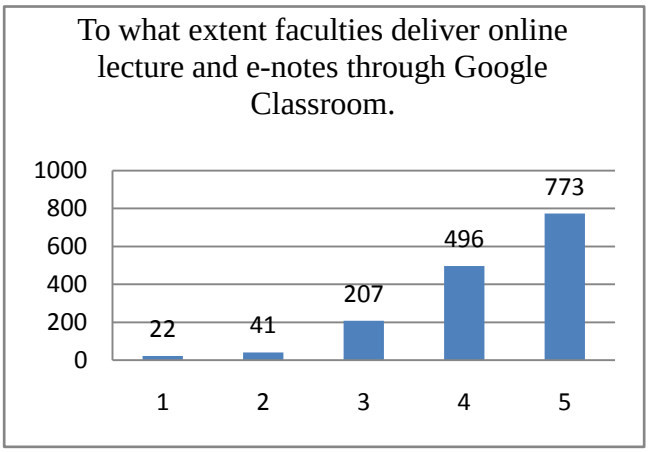


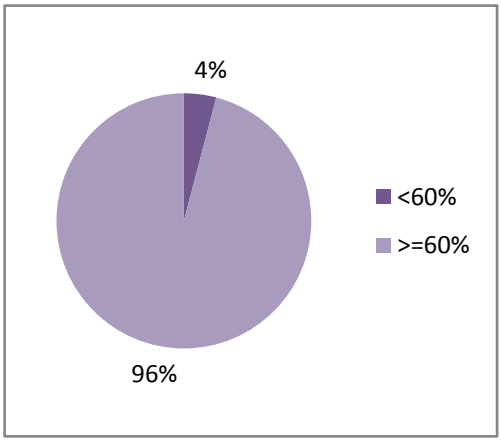

To what extent the teacher motivates students for participation in extracurricular activities
800
600
400
200
0
26
73
246
505
689
1
2
3
4
5

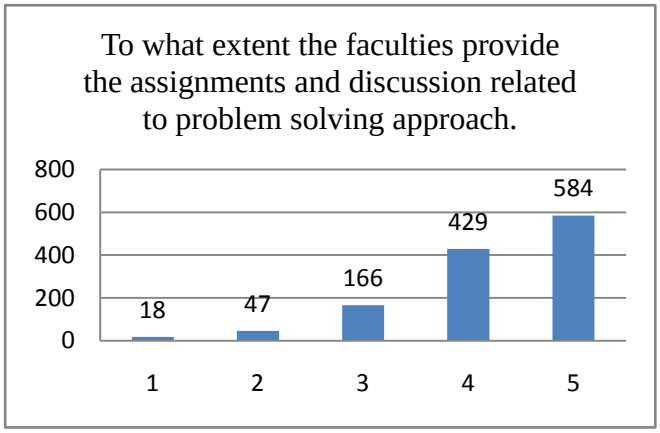

6%
94%
<60%
>=60%

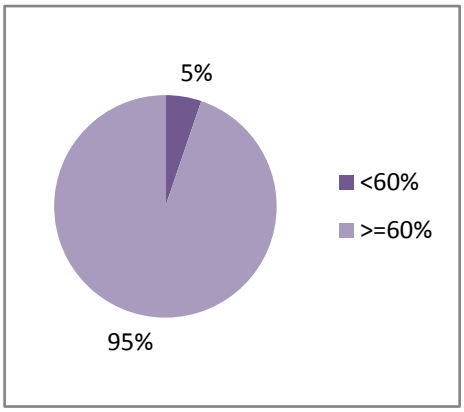

To what extent the teacher provides mentoring for academic and non-academic matters
800
600
400
200
0
32
63
245
509
690
1
2
3
4
5

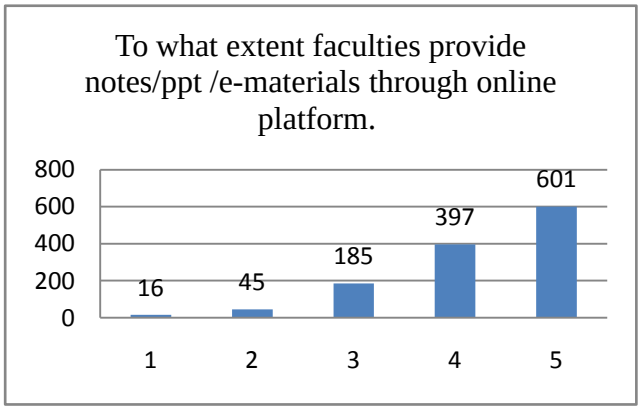

6%
94%
<60%
>=60%

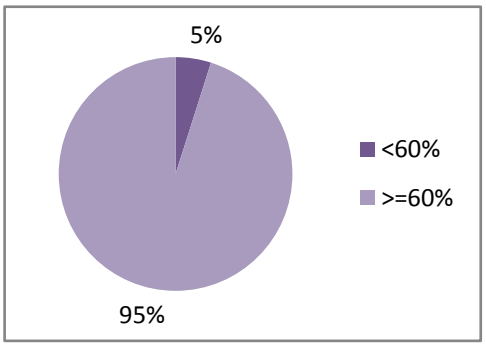

To what extent faculties deliver online lecture and e-notes through Google Classroom.
1000
800
600
400
200
0
22
41
207
496
773
1
2
3
4
5

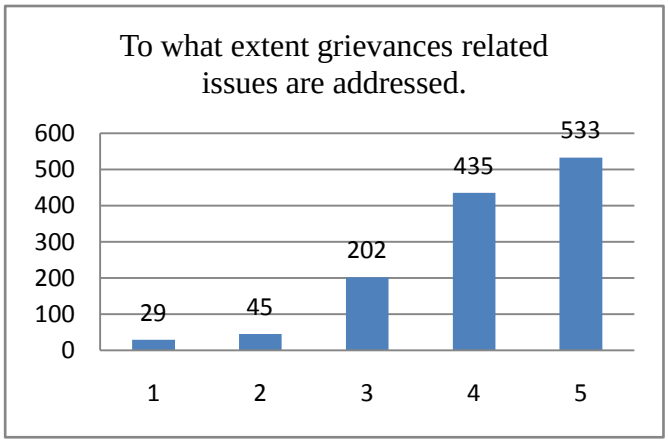

4%
96%
<60%
>=60%

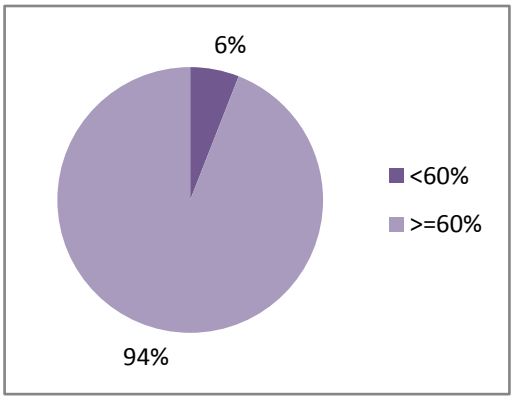

To what extent the faculties provide the assignments and discussion related to problem solving approach.
800
600
400
200
0
18
47
166
429
584
1
2
3
4
5


5%
95%
<60%
>=60%


To what extent faculties provide notes/ppt /e-materials through online platform.
800
600
400
200
0
16
45
185
397
601
1
2
3
4
5


5%
95%
<60%
>=60%


To what extent grievances related issues are addressed.
600
500
400
300
200
100
0
29
45
202
435
533
1
2
3
4
5


6%
94%
<60%
>=60%

Teaching Learning Action Taken (2020-21)

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Action taken report of the teacher feedback of Academic Year 2020-21		
S.No.	**Feedback analysis**	**Action taken**
	Teacher Feedback	
1	Feedback received from CSE, IT, ME,ECE, EE, CE departments that there is no theory paper of following subjects : .	1. Addon courses address greater than 60% of the feedback. 2. On the basis of the feedback, below mentioned Add-on courses are provided to students: a. Electric Vehicles b. Solid works and ANSYS c. Cyber Security d. Data Science and Analytics 3. The information will also be sent to RTU based on the request by RTU, that the university opens the portal for the same.
	1. Data Science and Analytics	
	2. Cyber Security/ Ethical Hacking	
	3. Digital System Design	
	4. PEC Configuration for Battery Charger" in Power Electronics	
	5. Manufacturing of Components and Simulation Practice " in Introduction of MEMS.	
	6. Research techniques	
	7. Smart Device & Smart Cities	
	8. Practical aspects using the Smart Sensors and Wireless Networks	
	9. Real Time Simulators	
	10. Cyber Security	
	11. Electric Vehicles	
	12. Solid works and ANSYS	
	13. Matrix Method	
	14. Hydrology	
2	Depth of course content on **Cloud Computing** is not adeqaute to have significant learning outcomes and Practical required and inform to IQAC.	The suggestion is forwarded to IQAC and an Add-on course of **"Google Cloud Computing Foundation" (GCCF)** is added, which is conducted by Google Cloud from dated 19th April 2021 to 5th July 2021, where 320 students have participated.

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Action taken report of the teacher feedback of Academic Year 2020-21		
S.No.	**Feedback analysis**	**Action taken**
Teacher Feedback		
3	Addition of knowledge and significant learning are required with **Hands-on practice on MongoDB** and inform to IQAC.	The suggestion is forwarded to IQAC by the proper channel and after approval, the workshop on **"Hands-on practice on MongoDB"** was conducted on dated 4th June 2021, where 454 students have participated.
4	There is need of significant learning on **Web development with "Angular"** and inform to IQAC.	Based on feedback, suggestions are forwarded to IQAC and after approval, the workshop on **"Web development with Angular"** was conducted on dated 22nd May 2021, where 158 students have participated.
5	Addition of knowledge and significant learning are required with **International Conference on Materials properties, Communications and Microelectronics** and inform to IQAC.	The suggestion is forwarded to IQAC and after approval, the **"International Conference on Advances in Materials Science, Communication and Microelectronics" (ICAMCM-2021)** is conducted from dated 19th-20th February 2021 with 70 participants.
6	There is need of significant learning on **Nanotechnology** and inform to IQAC.	The suggestion is forwarded to IQAC and after approval, the workshop on **"Emerging Trends in Nano Technology" ETNT-2020** is conducted from dated 21st-25th September 2020 with 266 participants.
7	There is need of significant learning on **"Deep Learning and Machine Learning"**	The suggestion is forwarded to IQAC by the proper channel and after approval, an add-on course on **"Deep learning and machine learning"** is conducted from dated 1st March - 29th March 2021, where 35 students have participated.
8	Knowledge of **Quantum Technology** is required and inform to IQAC.	Based on feedback, the suggestion is forwarded to IQAC and after approval, the workshop on **"Quantum Computing"** is organized from dated 2nd-6th March 2021 with 232 participants.
9	There is need of knowledge of **DevOps** and inform to IQAC.	The suggestion is forwarded to IQAC by the proper channel and got approval to conduct the webinar on **"DevOps- Production Pipeline"** on dated 6th November 2020 with 176 participants.

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Action taken report of the teacher feedback of Academic Year 2020-21		
S.No.	**Feedback analysis**	**Action taken**
	Teacher Feedback	
10	Depth of course content on **3D-printing** is not adeqaute to have significant learning outcomes and Practical required and inform to IQAC.	Based on feedback received, the suggestion is forwarded to IQAC and an Add-on course of **"3D-printing"** is added which was conducted by CADMATE on dated from 14th to 19th June 2021, where 372 students participated.
11	Addition of knowledge and significant learning are required on **Advanced machining technologies** and inform to IQAC.	The suggestion is forwarded to IQAC by the proper channel and after approval, the guest lecture on **"Advanced Machining Technologies"** is conducted.
12	There is need of significant learning on **IoT technology for computer-integrated manufacturing systems in industry** and inform to IQAC.	The suggestion is forwarded to IQAC by the proper channel and got approval to conduct the workshop on **"IoT technology for computer-integrated manufacturing systems in the industry"..**
13	Depth of knowledge are required on **Safety and modes of Gas Transportation.**	The Request is forwarded to IQAC and got approval to conduct the seminar on **"Safety and modes of Gas Transportation".**
14	Depth of course content on **Concrete Technology** is not adeqaute to have significant learning outcomes and Practical required and inform to IQAC.	The suggestion is forwarded to IQAC and an Add-on course of **"Advanced Concrete Technology"** is conducted from dated 1st Sep- 20th Oct 2020 is organized, where 120 students participated.
15	Addition of knowledge and significant learning are required with **Hands-on practice on Ravit** and inform to IQAC.	The suggestion is forwarded to IQAC by the proper channel and got approval to conduct the workshop on **"Civil Engineering Software".**
16	There is need of significant learning on **Remote Sensing** and inform to IQAC.	The suggestion is forwarded to IQAC by the proper channel and got approval to conduct the workshop on **"Remote Sensing"** from dated 31st May-1st June 2021, where 550 students participated.

IQAC Coordinator
IQAC Coordinator
JECRC, Jaipur

IQAC Chairperson
PRINCIPAL
Jaipur Engineering College &
Research Centre
Tonk Road, Jaipur-302022

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Action taken report of the student feedback of Academic Year 2020-21		
S.No.	**Feedback analysis**	**Action taken**
Student feedback		
1	Addition of knowledge on **Cyber Security** are required.	The suggestion is forwarded to IQAC and after approval, the workshop on "Cyber Security" is organized from dated 18th - 22nd June 2021, where 75 students participated.
2	Majority of students are required the session on **essentials in job applications.**	The Request is forwarded to IQAC and got approval to conduct the seminar on "Essentials in Job Applications" on dated 20th May 2021 where 362 students participated.
3	Depth of course content on **Cloud Computing** is not adeqaute to have significant learning outcomes and Practical required.	The suggestion is forwarded to IQAC and an Add-on course of **"Google Cloud Computing Foundation" (GCCF)** is added which was conducted by Google Cloud from dated 19th April 2021 to 5th July 2021, where 320 students have participated.
4	Addition of knowledge are required on **Automation Testing.**	A request is forwarded to IQAC and after approval, the seminar on "Automation Testing" is organized on dated 3rd June 2021 with 249 participants.
5	Addition of knowledge on **Machine Learning** are required.	The suggestion is forwarded to IQAC and after approval, an Add-on Course on "Machine Learning" from dated 1st to 29th March 2021 with 35 participants.
6	Majority of students are required the session on **Embedded system and IoT.**	A request is forwarded to IQAC and got approval to conduct the 30 Days Add-on course on "Embedded systems and IoT", which is conducted from dated 11 Oct 2021 - 20 Nov 2021 with 206 participants.
7	Majority of students are requested for the session on **How the corporate life is different from the campus life.**	The suggestion is forwarded to IQAC and the Invited Talk on "Journey from Campus to Corporate-Life changes" is conducted on dated 7th August 2020 with 162 participants.
8	Addition of knowledge are required on **Embedded System.**	A request is forwarded to IQAC and after approval, the 2-Days Workshop cum Hands-on Practice on "Embedded System" is conducted from dated 5th-6th October 2021 with 91 participants.

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Action taken report of the student feedback of Academic Year 2020-21		
S.No.	**Feedback analysis**	**Action taken**
Student feedback		
9	Motivation among students and faculty is required during the COVID.	The suggestion is forwarded to IQAC and after approval, a webinar on "Motivation through Power and Courage" is conducted on dated 24th September 2020, where 37 students have participated.
10	Addition of knowledge on internship programs are required	The suggestion is forwarded to IQAC and after approval, a webinar on "Introduction about internship program" is organized on dated 29th May 2021, where 55 students have participated.
11	Majority of students are required the session on **different job perspectives and their requirements after engineering.**	A request is forwarded to IQAC and after approval, the webinar on "Best Future Career paths for engineering students-all the cutting edge technologies" is conducted on dated 24th May 2021, where 94 students have participants.
12	Majority of students are required the session on **Deep Learning and machine Learning** as its role is increasing in every field .	The suggestion is forwarded to IQAC and an Add-on course on "Deep Learning and Machine Learning" is organized from dated 29th Jan 2021 - 28 Feb 2021, where 35 students have participated.
13	Addition of knowledge are required on **Grid and integration of renewables into the grid.**	The request is forwarded to IQAC and after approval, a webinar on " Grid system in India" and expert talk on "Renewables in smart grid framework" is organized on dated 14th May 2021 with 209 student participants.
14	Addition of knowledge is required on **Electricity markets.**	A request is forwarded to IQAC and an expert talk on " Distribution Automation and Electricity Market" and an expert talk on "Building energy simulation for load estimation" is conducted on dated 12th June 2021, where 65 students are participants.
15	Knowledge on **Block Chain** is required.	The suggestion is forwarded to IQAC and got approval to conduct the guest lecture/workshop on "BlockChain" dated 2nd Feb 2021 with 70 student participants.

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

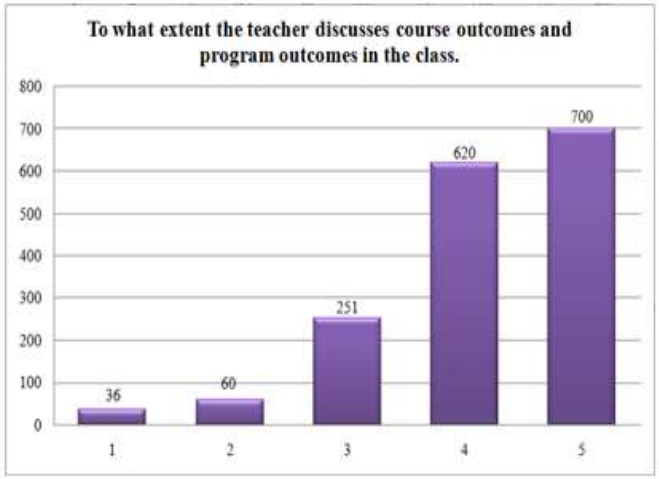
Action taken report of the student feedback of Academic Year 2020-21		
S.No.	**Feedback analysis**	**Action taken**
Student feedback		
16	Students required session on opportunities in IT industry.	The request is forwarded to IQAC and got approval to conduct the expert talk on "Future opportunities for CS & IT professionals" dated 10th May 2021, where 300 students have participated.
17	Students required technical events to **Enhance coding skills or practical knowledge.**	A request is forwarded to IQAC and after approval, a technical event "IT Hackathon" is organized on dated 28th June 2021 with 120 student participants.
18	Majority of students are requested the activites on communication skill .	The request is forwarded to IQAC and after approval, the activity based on "Communication Skills" is organized for the students.
19	Addition of knowledge on **Electric vehicles** is required.	The suggestion is forwarded to IQAC and after approval, a workshop on "Electric Vehicles" is organized on dated 12th-17th April 2021, where 374 students have participated.
20	Majority of students are required the session on **Career enhancement and role of communication skill in E-commerce.**	The request is forwarded to IQAC and after approval, a seminar on "Career enhancement and role of communication skill in E-commerce" is conducted on dated 14th Oct 2020 with 106 student participants.
21	Addition of knowledge are required on **Automation Testing and repairing.**	The suggestion is forwarded to IQAC and after approval, a seminar on "Automation Testing and Repairing" is conducted on dated 5th June 2021 with 171 student participants.

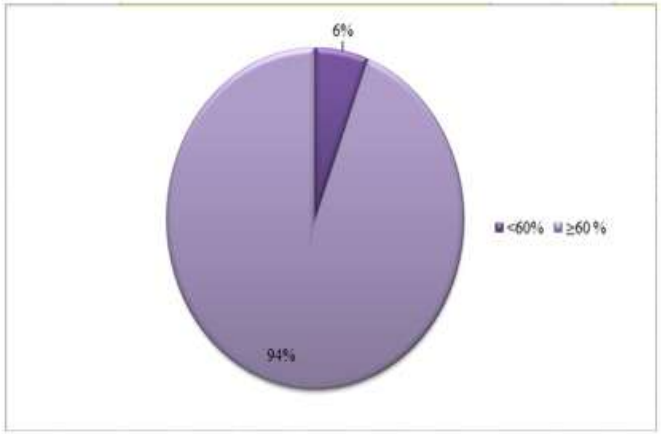
IQAC Coordinator
IQAC Coordinator
JECRC, Jaipur

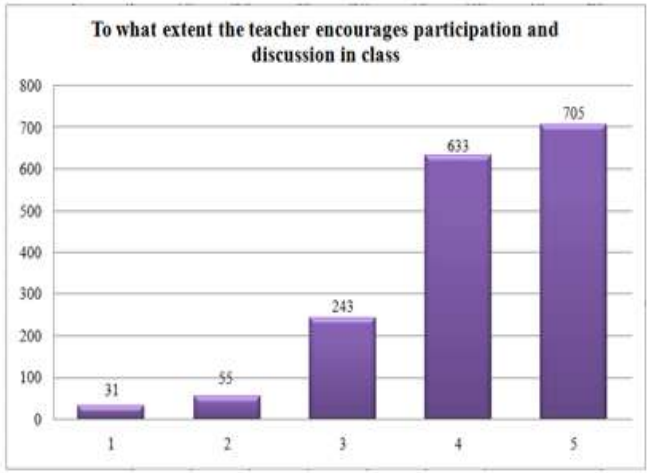
IQAC Chairperson
PRINCIPAL
Jaipur Engineering College &
Research Centre
Tonk Road, Jaipur-302022

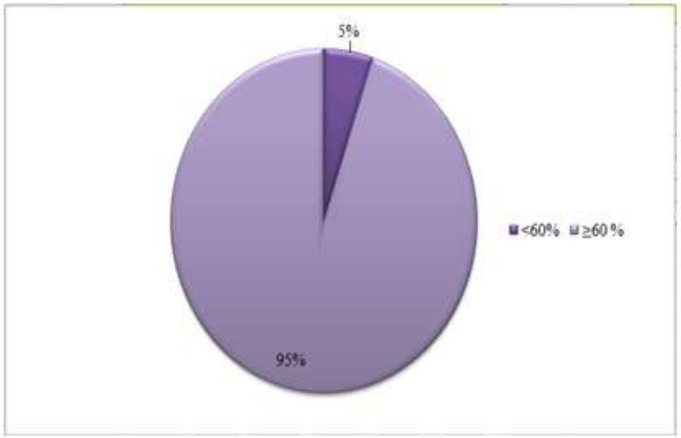
Teaching Learning- feedback

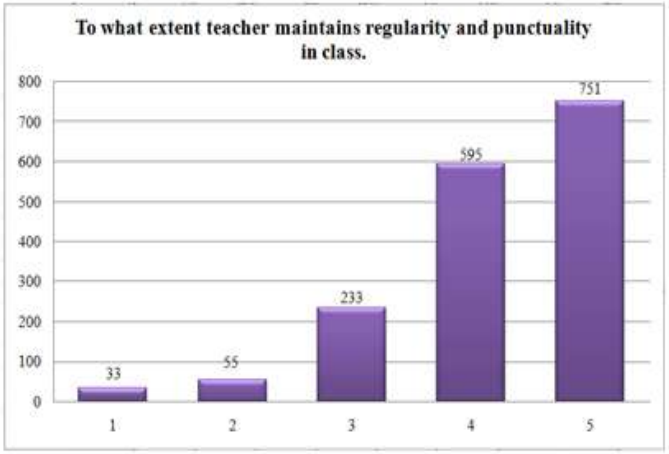
Total responses 1667

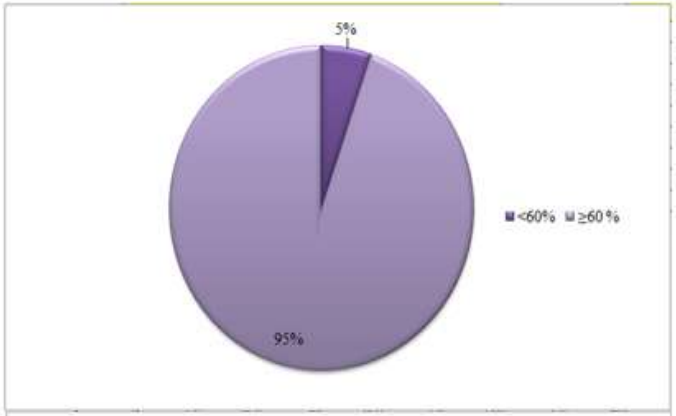


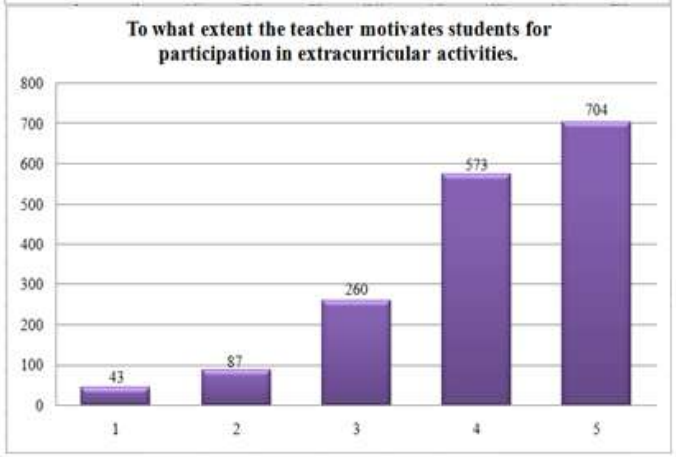


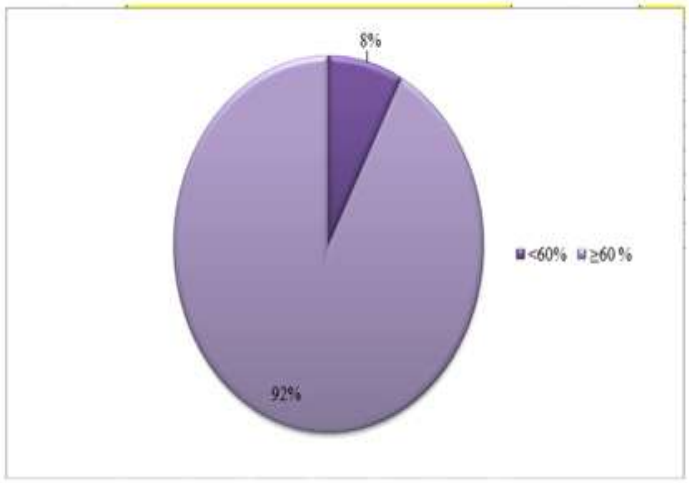


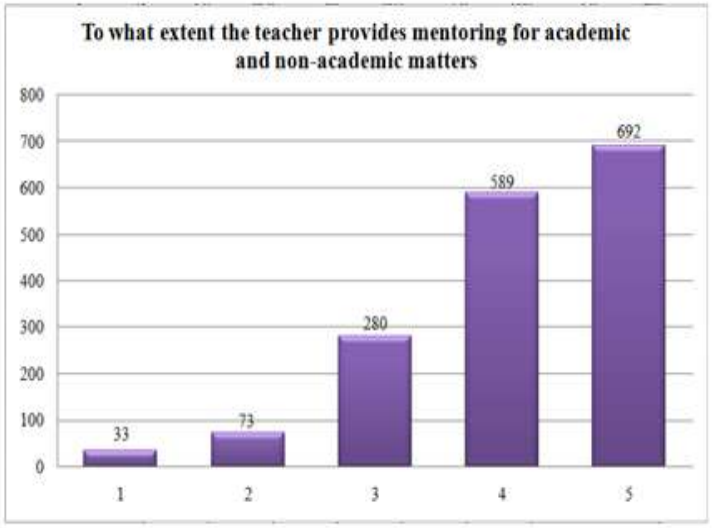

5%
95%
<60%
≥60 %

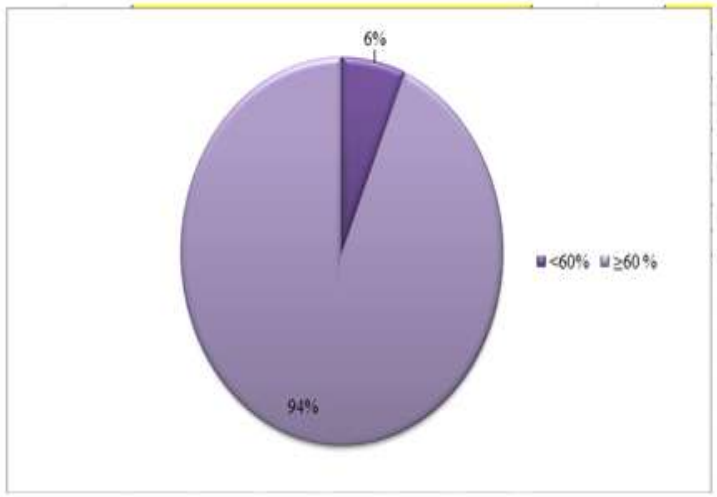

To what extent teacher maintains regularity and punctuality in class.
800
700
600
500
400
300
200
100
0
33
55
233
595
751
1
2
3
4
5

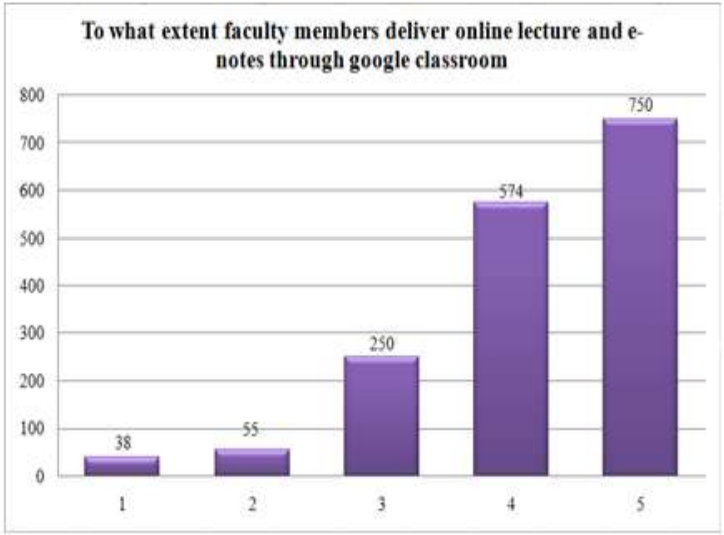

5%
95%
<60%
≥60 %

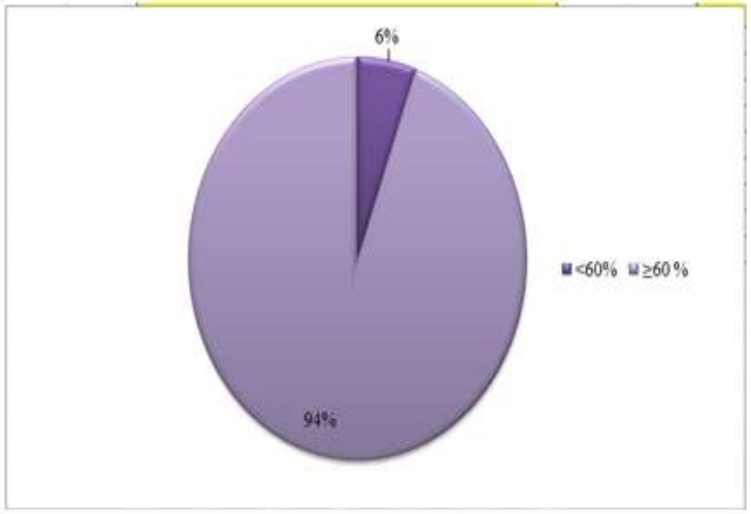

To what extent the teacher motivates students for participation in extracurricular activities.
800
700
600
500
400
300
200
100
0
43
87
260
573
704
1
2
3
4
5

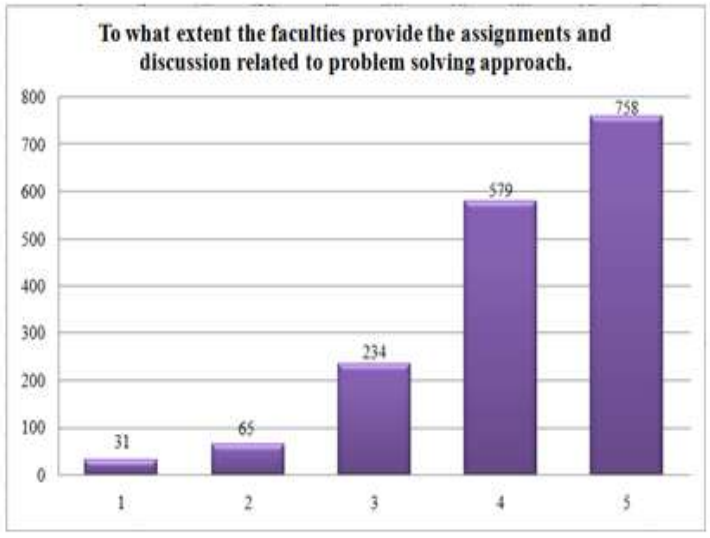

8%
92%
<60%
≥60 %

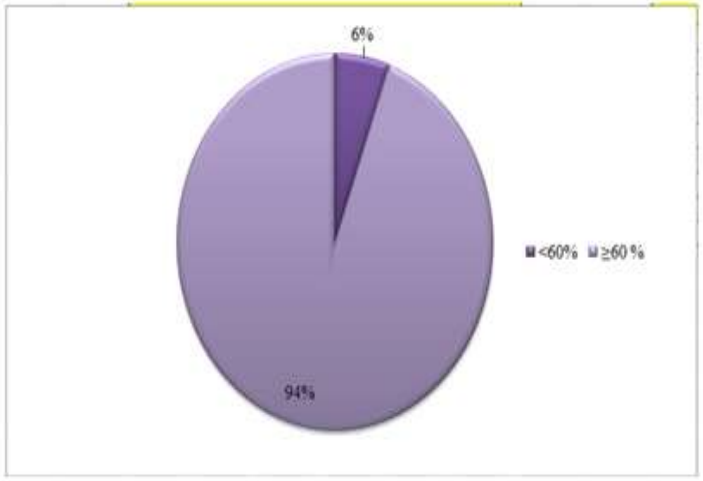

To what extent the teacher provides mentoring for academic and non-academic matters
800
700
600
500
400
300
200
100
0
33
73
280
589
692
1
2
3
4
5

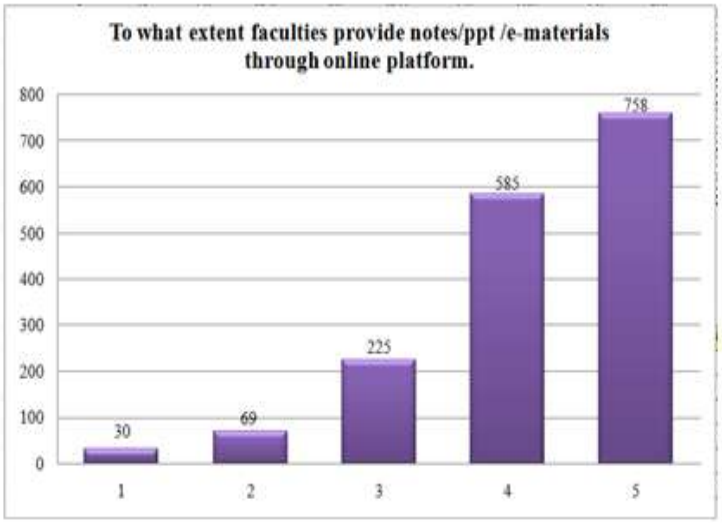

6%
94%
<60%
≥60 %

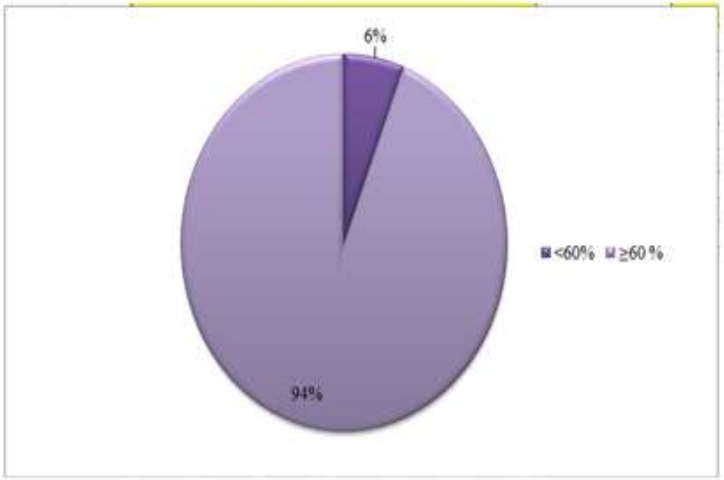

To what extent faculty members deliver online lecture and e-notes through google classroom
800
700
600
500
400
300
200
100
0
38
55
250
574
750
1
2
3
4
5

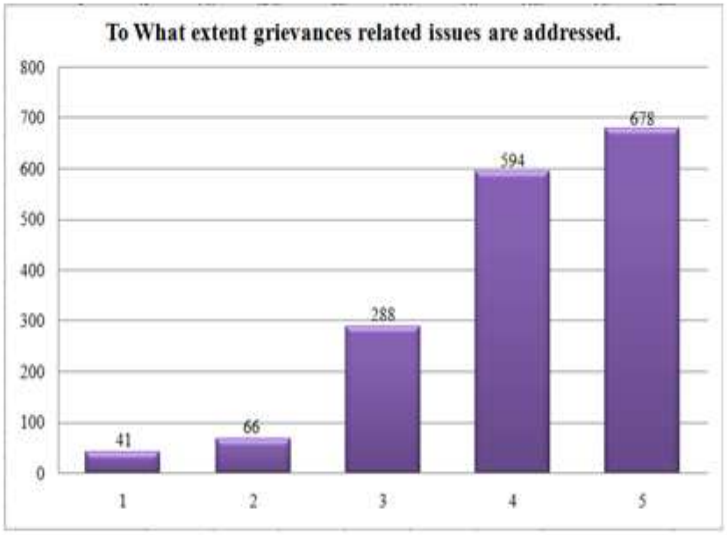

6%
94%
<60%
≥60 %

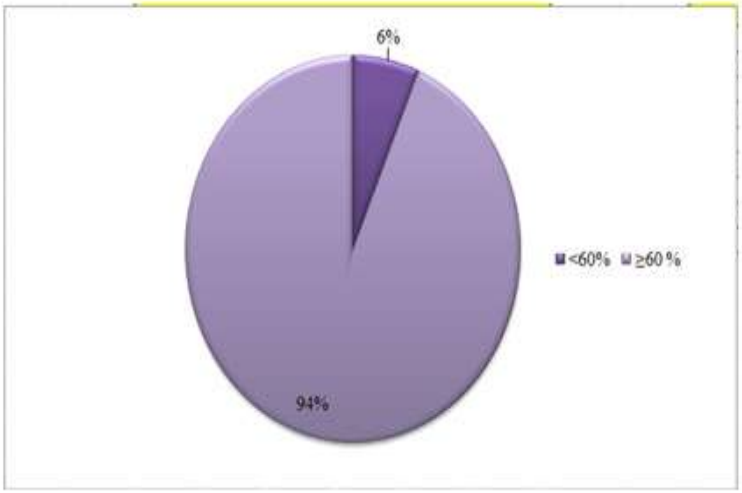

To what extent the faculties provide the assignments and discussion related to problem solving approach.
800
700
600
500
400
300
200
100
0
31
65
234
579
758
1
2
3
4
5


6%
94%
<60%
≥60 %


To what extent faculties provide notes/ppt /e-materials through online platform.
800
700
600
500
400
300
200
100
0
30
69
225
585
758
1
2
3
4
5


6%
94%
<60%
≥60 %


To What extent grievances related issues are addressed.
800
700
600
500
400
300
200
100
0
41
66
288
594
678
1
2
3
4
5


6%
94%
<60%
≥60 %

Student's Teaching learning Feedback forms received from students and summary as follows

Parameters	Responses		Action taken
	<60	≥60	
To what extent the teacher discusses course outcomes and program outcomes in the class.	5.76	94.24	The students appreciate the efforts made by faculty members regarding the discussion of COs & POs. Few students required more discussion regarding the same. IQAC instructed to all HoDs to speak with his faculty members to increase the frequency of discussion of COs &POs in classroom.
To what extent the teacher encourages participation and discussion in class.	5.16	94.84	The faculty members encourage innovative participation of students to make active discussions in classroom teaching. IQAC advised to all faculty members to increase the participation and discussion in class. Also increase the involvement of slow learners in discussion.
To what extent teacher maintains regularity and punctuality in class.	5.28	94.72	The students appreciated the regularity and punctuality of faculty members in classroom. IQAC instructed to all HoDs to insure the regularity and punctuality of faculty members in class.
To what extent the teacher motivates students for participation in extracurricular activities.	7.80	92.20	The students appreciate the efforts made by the faculty members. Also, faculty members are advised to motivate the students to make maximum involvement in extracurricular activities.
To what extent the teacher provides mentoring for academic and non-academic matters	6.36	93.64	The students appreciated the faculty members. Also, it is advised to mentors to increase the frequency of active mentoring sessions, especially for slow learners.
To what extent faculty members deliver online lecture and e-notes through google classroom	5.58	94.42	The students appreciate the efforts made by the faculty members. Also, instructed to all faculty members to provide the advanced study materials like GATE, IES etc materials, lecture videos, lab experiments videos through google classroom.
To what extent the faculties provide the assignments and discussion related to problem solving approach	5.76	94.24	Almost all faculties provide the quality assignment to the students. IQAC advised to faculty members to enhance the difficulty level of assignments by incorporate complex problems. Also provide last year GATE, IES etc questions in assignments for fast learners and provide extra discussion time for slow learners.
To what extent faculties provide notes/ppt /e-materials through online platform.	5.94	94.06	The students appreciate the efforts made by the faculty members. IQAC advised the faculty members to upload advanced study materials, lecture videos, lab experiments videos/ NPTEL/ Swayam/ Swayam Prabha links to students.
To What extent grievances related issues are addressed	6.42	93.58	The students appreciate the efforts made by the department. Almost all the grievances are addressed. IQAC instructed all HoDs to address all grievances related issues of students at time.

S. NO	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
9.3	**Feedback on facilities**	Feedback system on facilities exit, but corrective measures taken are not documented	Institute regularly collect and analyse feedback from students and other stakeholders on various issues. After analysing the feedbacks corrective actions are taken. Action taken reports are shared with the stakeholders. Feedback forms, Mechanism and action taken reports are also available on the institute websites. https://jecrcfoundation.com/iqac/feedback-forms **https://www.jecrcfoundation.com/pdf/iqac-feedback/1.4.2-Feedback%20Mechanism.pdf** https://jecrcfoundation.com/iqac/action-taken-report https://jecrcfoundation.com/pdf/iqac-feedback/MOM-2020-21.pdf

List and link of feedback forms

1	Student's Curriculum Feedback Form	https://forms.gle/zf81BNcSCnUtcc2J7
2	Students Feedback On Teaching Learning	https://forms.gle/bmeUV44GyKTkkzay7
3	Students Extra-Curricular Feedback Form	https://forms.gle/FdzxwxoZZEW99usv9
4	Parent's Feedback Form	https://forms.gle/RiwFvop6a5NHqpyG7
5	**Student's Facility Feedback Form**	https://forms.gle/GhxvQUNrRyGSUsBQA
6	**Student's Hostel Facility Feedback Form**	https://forms.gle/xeHNUd4dixmNuF2B9
7	**Student's Feedback(Transport Facility) Form**	https://forms.gle/Y8gAnoQmg9hoTbeJ8
8	General Feedback Form	https://forms.gle/fEwp5T1zbGS2xpvK7
9	Student's Course Outcome Feedback Form	https://forms.gle/GnxSy4NCVzotjtKBA
10	Student's Program Exit Feedback Form	https://forms.gle/kV4f2nXJvFqJEzaPA
11	Employee Feedback Form	https://forms.gle/fHumzaPAYSrkQBds8
12	Industrial Training Feedback Form	https://forms.gle/AhmpicDXssa3QWkr9

Feedback Form (2020-21)

- Student Facility
- Hostel Facility
- Transport Facility

Student Hostel Facility Feedback Form (2020-21)

Jaipur Engineering college and research centre.

Shri Ram ki Nangal, via Sitapura RIICO, Jaipur- 302 022.

Email *

ankitbhatnagar.cse23@jecrc.ac.in

Student's Hostel Facility Feedback Form

Academic Year: 2020-21

Date:27/8/21

Dear Students, We believe that there is always scope for improvement and thus we strive to obtain honest feedback from our most important stake holders i.e. students, hence in this effort we request you to provide your feedback in the form given below.

Feedback rating range:
Excellent.(5)
Very Good.(4)
Good.(3)
Satisfactory.(2)
Needs improvement.(1)

Student Name *

Ankit Bhatnagar

Parents Name *

Pravesh kr. Bhatnagar

Branch: *

CSE

Mobile Number *

7037180773

To what extent you agree that hostel surroundings are secure. *

- (●) 5
- ( ) 4
- ( ) 3
- ( ) 2
- ( ) 1

To what extent the cleanliness of kitchen and dining space are properly taken care of. *

- (●) 5
- ( ) 4
- ( ) 3
- ( ) 2
- ( ) 1

To what extent you agree that food in the mess is served fresh. *

- (●) 5
- ( ) 4
- ( ) 3
- ( ) 2
- ( ) 1

How would you rate the cooperativeness and accessibility of hostel staff? *

- ( ) 5
- (●) 4
- ( ) 3
- ( ) 2
- ( ) 1

To what extent you agree that timings of mess are properly maintained. *

- (●) 5
- ( ) 4
- ( ) 3
- ( ) 2
- ( ) 1

How would you rate the menu is properly displayed? *

- (●) 5
- ( ) 4
- ( ) 3
- ( ) 2
- ( ) 1

To what extent the Wi-Fi facility is available in the hostel campus. *

- ( ) 5
- (●) 4
- ( ) 3
- ( ) 2
- ( ) 1

How would you rate Do's and Don'ts are displayed? *

- (●) 5
- ( ) 4
- ( ) 3
- ( ) 2
- ( ) 1

Any suggestion for above parameters. *

WiFi 24/7

Thanking you for your valuable time

Student Transport Facility Feedback Form (2020-21)

Student's Feedback (Transport Facility) Form-JECRC 2020-21

The respondent's email (dewangagarwal.it22@jecrc.ac.in) was recorded on submission of this form.

Vision of Jaipur Engineering College and Research Centre

To become a renowned centre of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.

Mission of Jaipur Engineering College and Research Centre

M1. Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.
M2. Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions.
M3. Offer opportunities for interaction between academia and industry.
M4. Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

Student's Feedback (Transport Facility) Form

Dear Students,
We believe that there is always scope for improvement and thus we strive to obtain honest feedback from our most important stake holders i.e students, hence in this effort we request you to provide your feedback in the form given below.

Feedback rating range:
Excellent:(5) Very Good:(4) Good:((3) Satisfactory:(2) Needs improvement: (1)

Date: *

MM DD YYYY

09 / 04 / 2021

Academic Year: *

2020-2021

Student's name: *

Dewang Agarwal

Parent's Name: *

Manoj Agarwal

Branch: *

Information Tecchnology

Student's E-mail Id: *

dewangagarwal.it22@jecrc.ac.in

Student's Mobile No.: *

9783966226

To what extent transport facility at JECRC is dependable and punctual. *

1	2	3	4	5
○	○	○	◉	○

To what extent bus drivers demonstrates safe and preventive driving skills. *

1	2	3	4	5
○	○	○	◉	○

To what extent the drivers maintain proper dress code. *

1	2	3	4	5
○	○	○	◉	○

How would you rate the cleanliness of the interior and exterior of the vehicle? *

1	2	3	4	5
○	○	○	◉	○

To what extent the drivers communicates related to schedule. *

1	2	3	4	5
○	○	○	◉	○

Any suggestion for above parameters. *

no

This form was created inside of JECRC.

Google Forms

Student Facility Feedback Form (2020-21)

Students Facility Feedback

Dear Students,
We believe that there is always scope for improvement and thus we strive to obtain honest feedback from our most important stake holders i.e. Students, hence in this effort we request you to provide your feedback in the form given below.

Email *

shivam.cse23@jecrc.ac.in

Jaipur Engineering College and Research Centre,Shri Ram ki Nangal, via Sitapura RIICO Jaipur-302 022.

JECRC
JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Date *

MM DD YYYY

04 / 09 / 2021

Student's Name *

Shivam

Branch *

Computer Science

Parents Name *

Harish Chandra Mahajan

Student Mobile Number *

7297864799

How would you rate the Cleanliness and greenery of college campus? *

1	2	3	4	5
○	○	○	◉	○

How would you rate the infrastructure of laboratory in college? *

1	2	3	4	5
○	○	○	◉	○

How would you rate the infrastructure of Library in college? *

1	2	3	4	5
○	○	○	◉	○

Head of the Department

How would you rate the Wi-Fi internet facility in the college? *

1 2 3 4 5

How would you rate the classroom ambience in the college? *

1 2 3 4 5

How would you rate the canteen facility? *

1 2 3 4 5

How would you rate the spiritual cell facility for counseling? *

1 2 3 4 5

How would you rate the ICT facilities? *

1 2 3 4 5

How would you rate sports facility in the college? *

1 2 3 4 5

How would you rate First Aid facility in college? *

1 2 3 4 5

How would you rate the grievances regarding facility? *

1 2 3 4 5

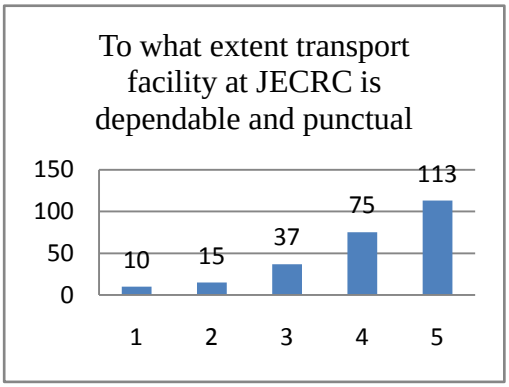
Suggestion, if any?

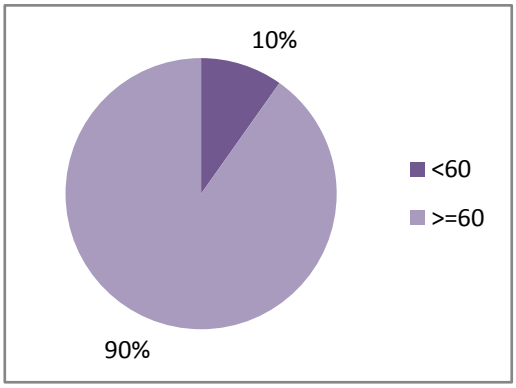
Head of the Department
Computer Science & Enginee
JECRC, Jaipur

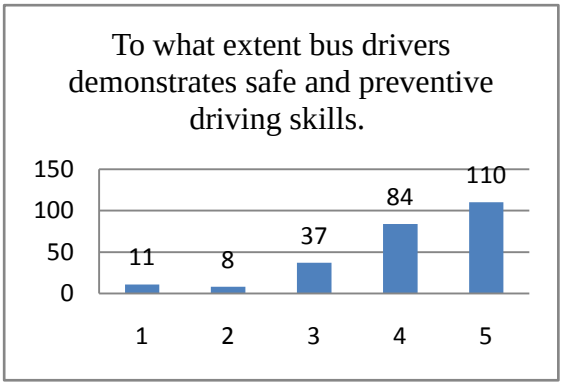
Feedback Analysis (2020-21)

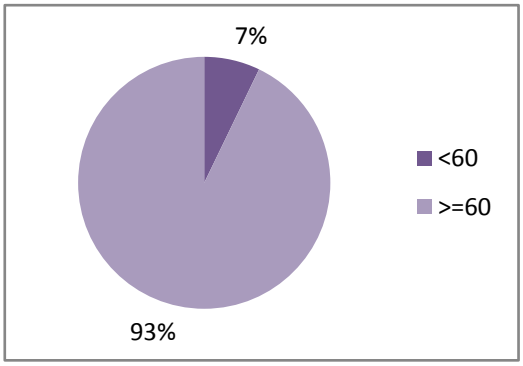
- Student Facility
- Hostel Facility
- Transport Facility

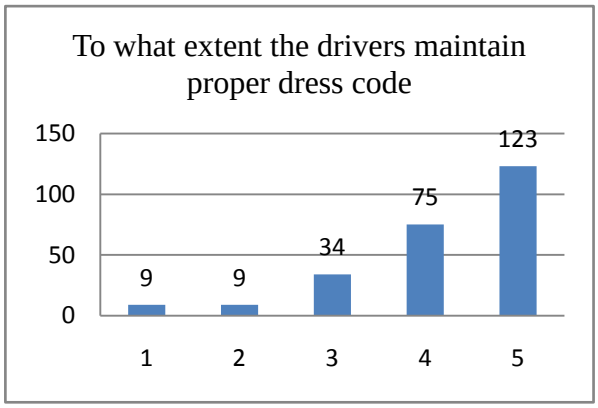
1. Student Transport feedback Analysis

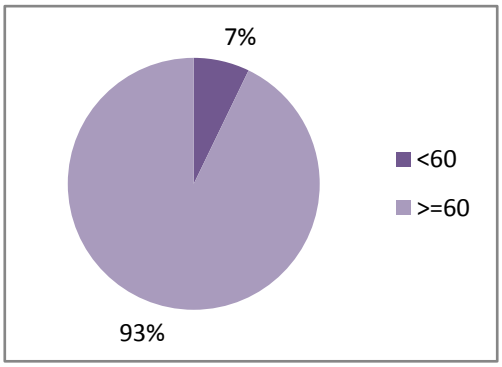


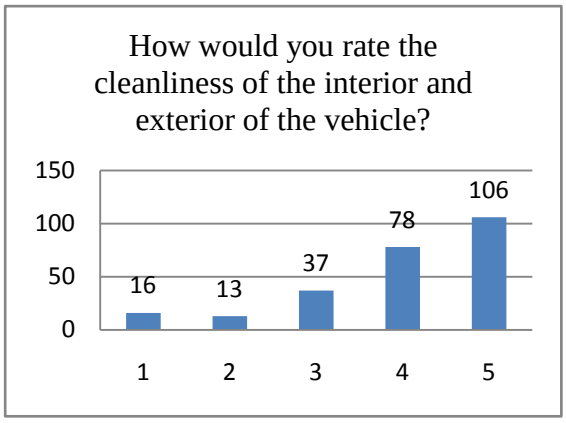


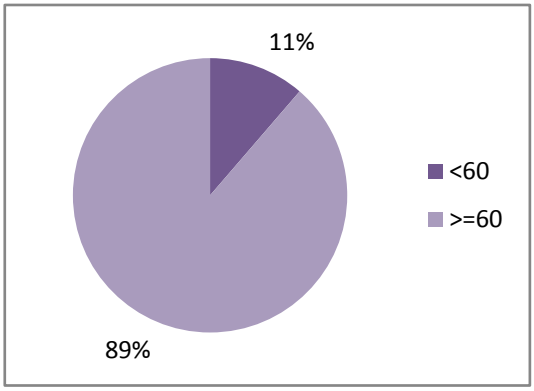


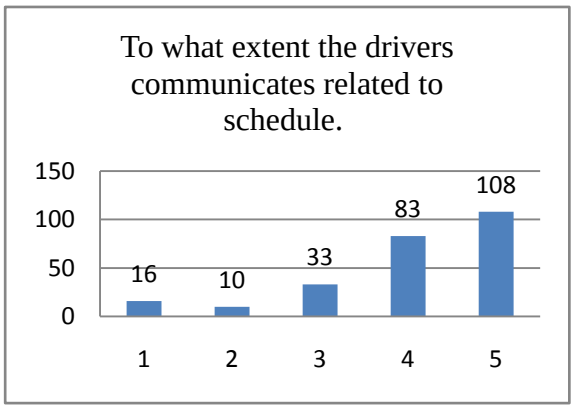


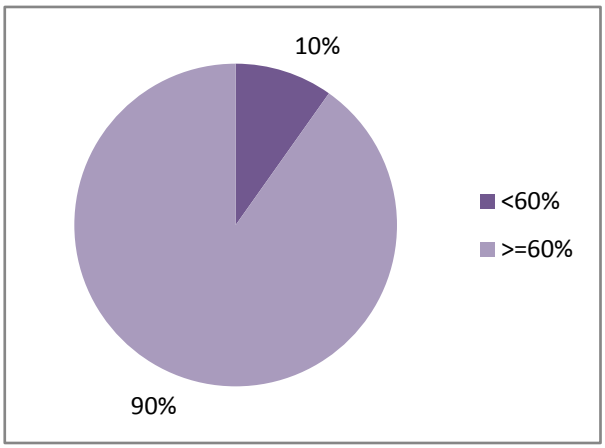




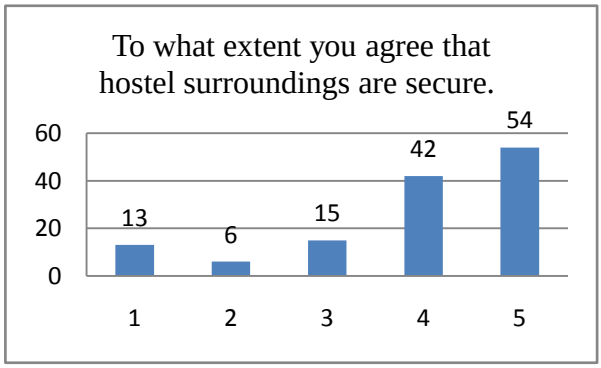


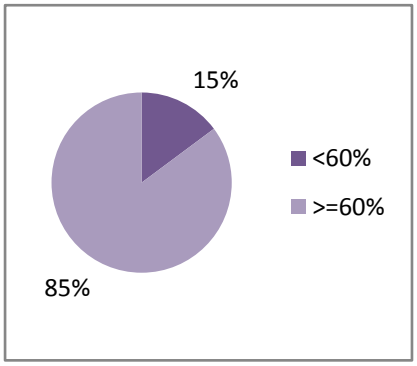


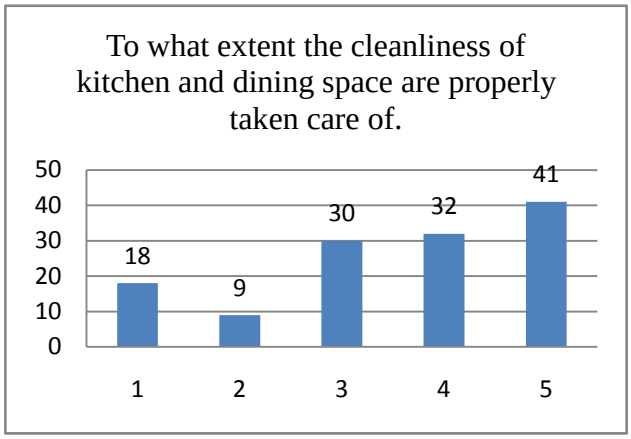


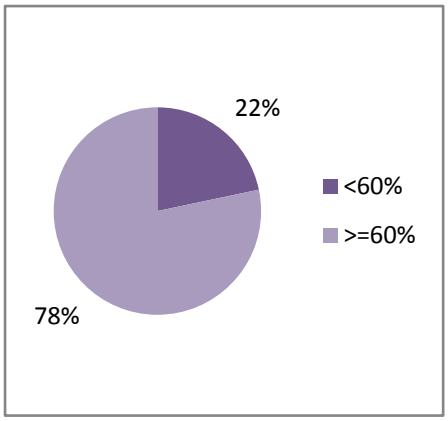


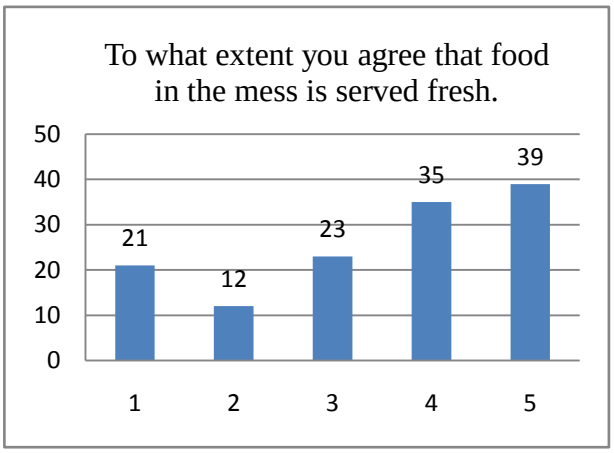
2. Student Hostel feedback analysis

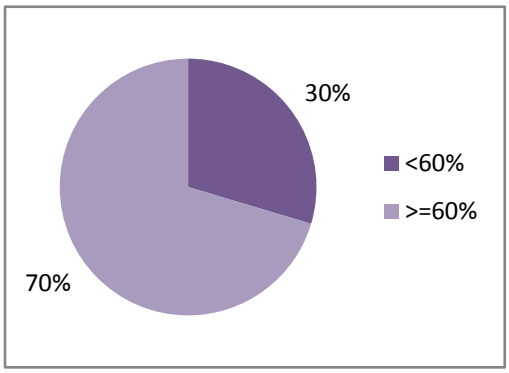


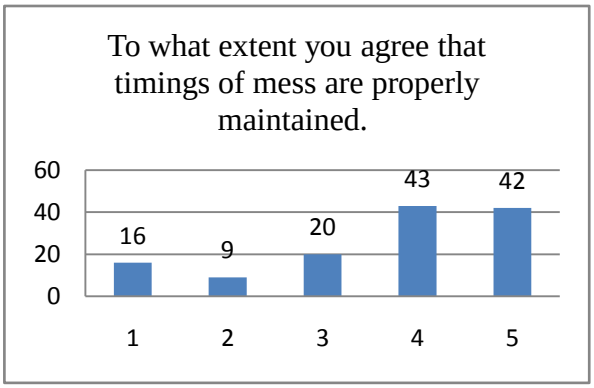


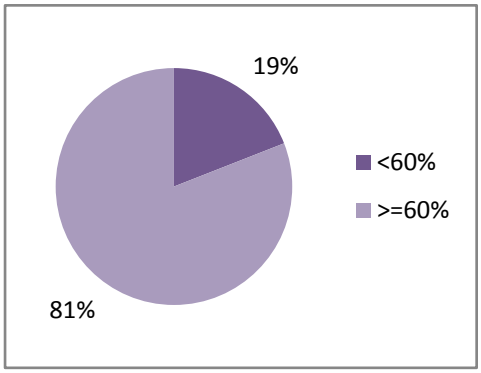

To what extent the cleanliness of kitchen and dining space are properly taken care of.
50
40
30
20
10
0
18
9
30
32
41
1
2
3
4
5

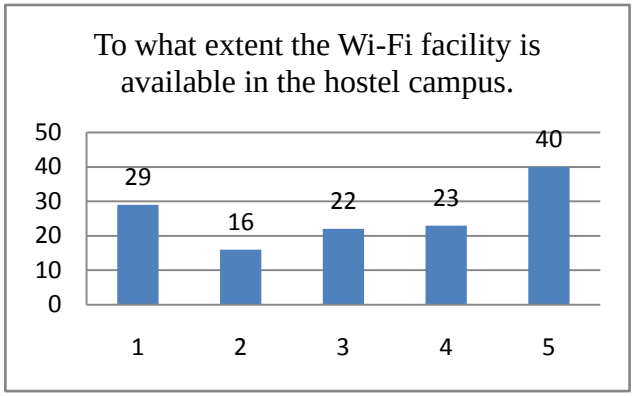

22%
78%
<60%
>=60%

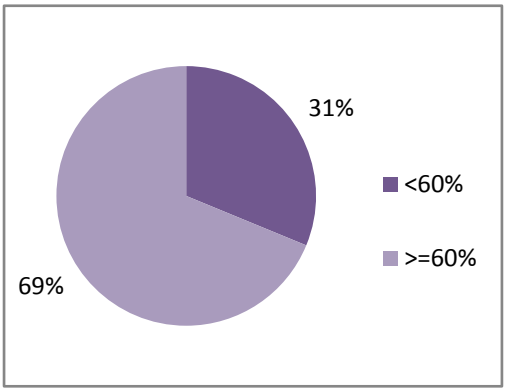

To what extent you agree that food in the mess is served fresh.
50
40
30
20
10
0
21
12
23
35
39
1
2
3
4
5

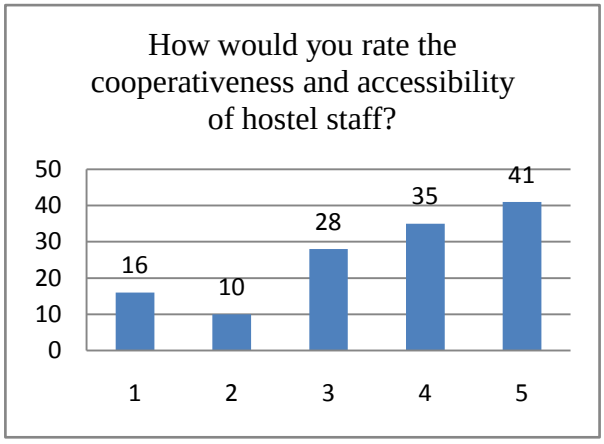

30%
70%
<60%
>=60%

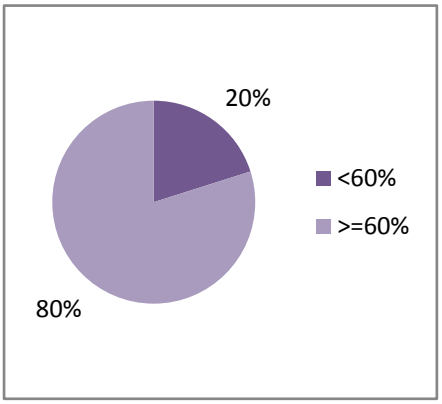

To what extent you agree that timings of mess are properly maintained.
60
40
20
0
16
9
20
43
42
1
2
3
4
5

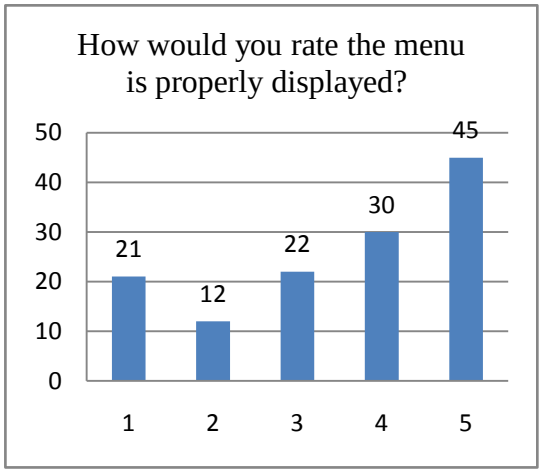

19%
81%
<60%
>=60%

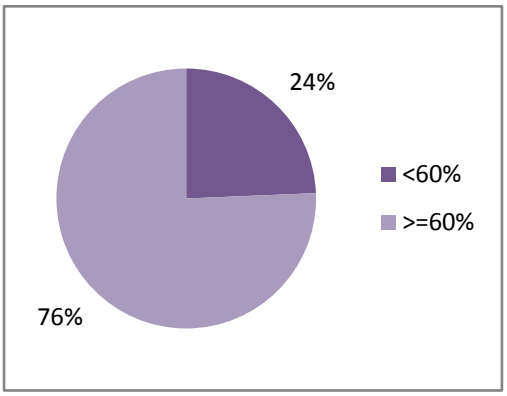




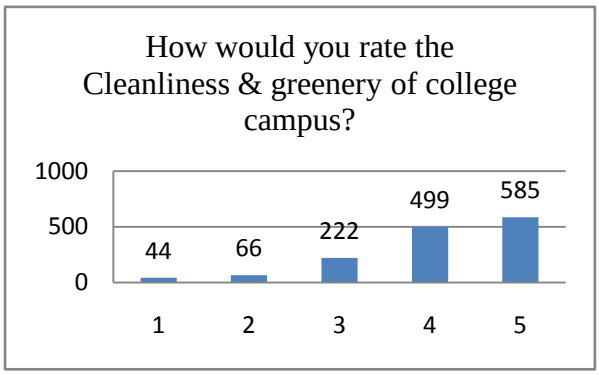


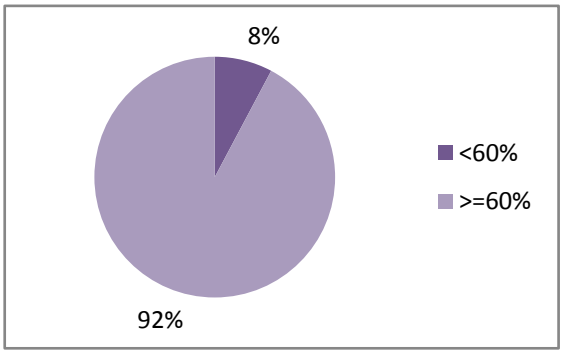


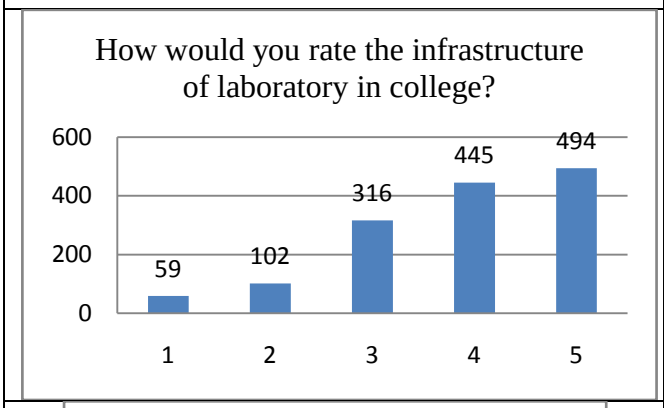


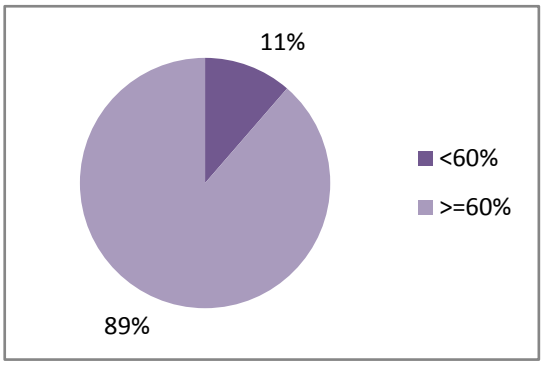


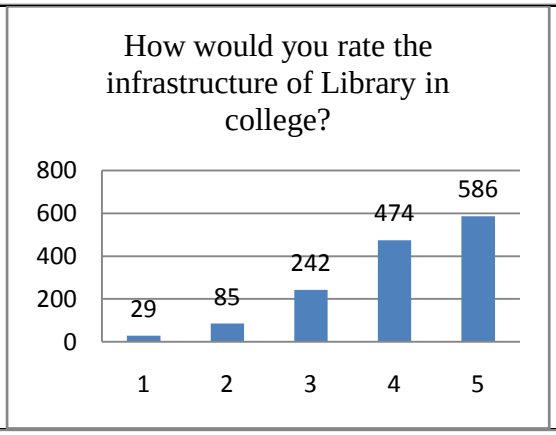
3. Student's Facilities Feedback

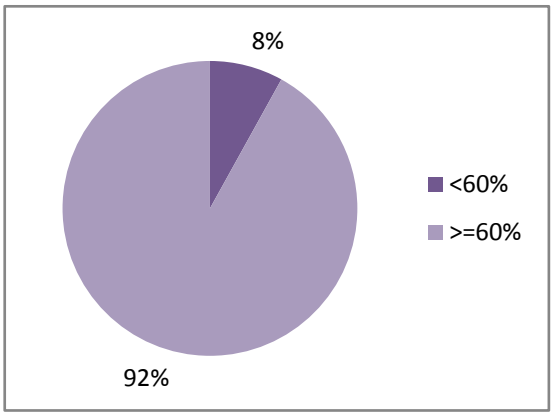

How would you rate the Cleanliness & greenery of college campus?
1000
500
0
44
66
222
499
585
1
2
3
4
5

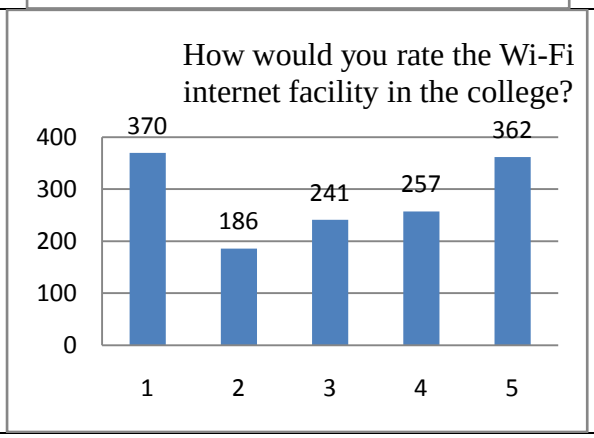

8%
92%
<60%
>=60%

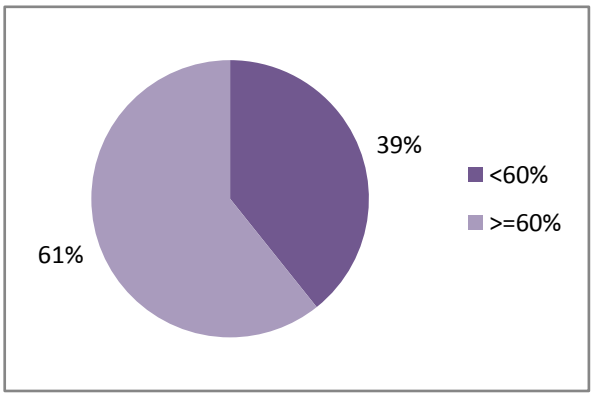

How would you rate the infrastructure of laboratory in college?
600
400
200
0
59
102
316
445
494
1
2
3
4
5

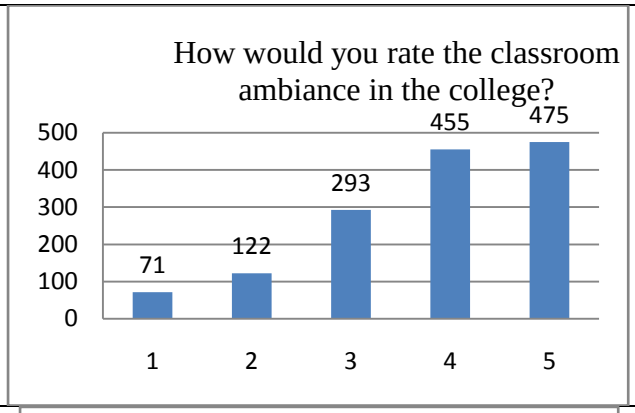

11%
89%
<60%
>=60%

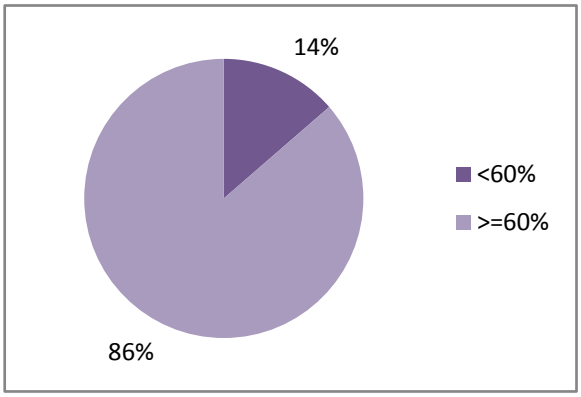

How would you rate the infrastructure of Library in college?
800
600
400
200
0
29
85
242
474
586
1
2
3
4
5

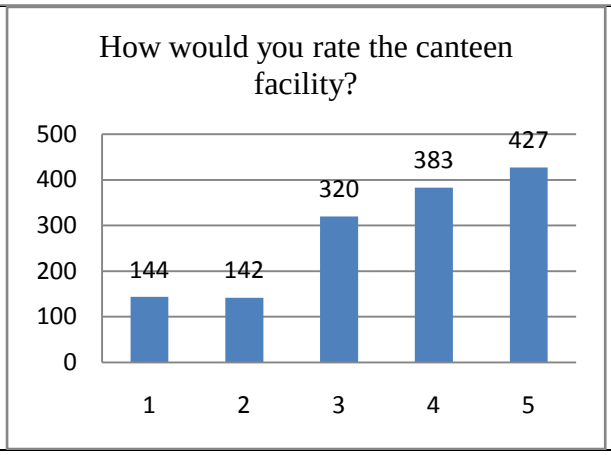

8%
92%
<60%
>=60%

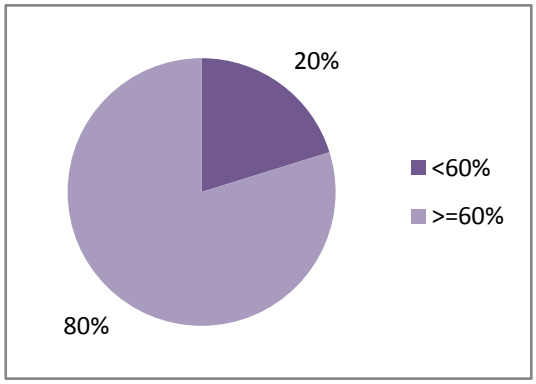

How would you rate the Wi-Fi internet facility in the college?
400
300
200
100
0
370
186
241
257
362
1
2
3
4
5

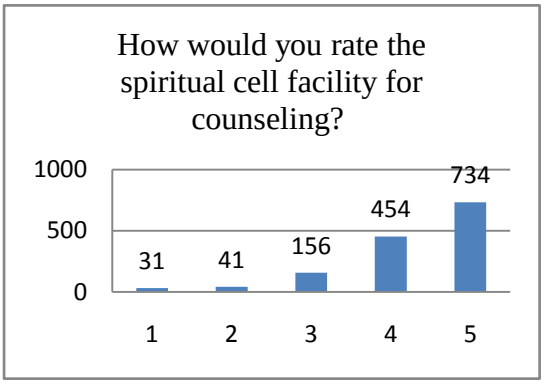

39%
61%
<60%
>=60%

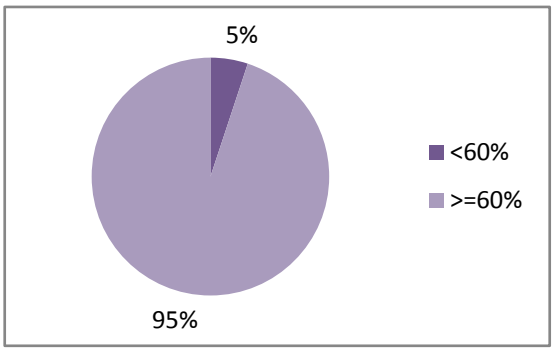

How would you rate the classroom ambiance in the college?
500
400
300
200
100
0
71
122
293
455
475
1
2
3
4
5

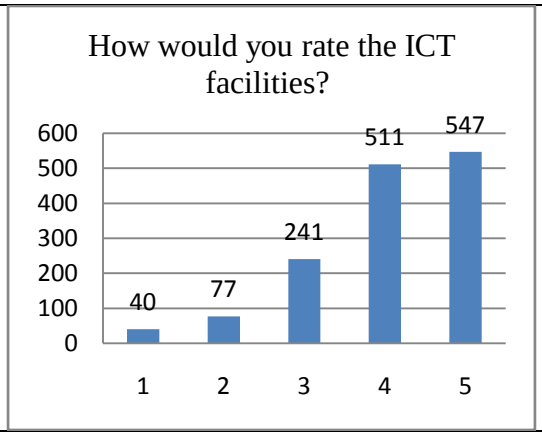

14%
86%
<60%
>=60%

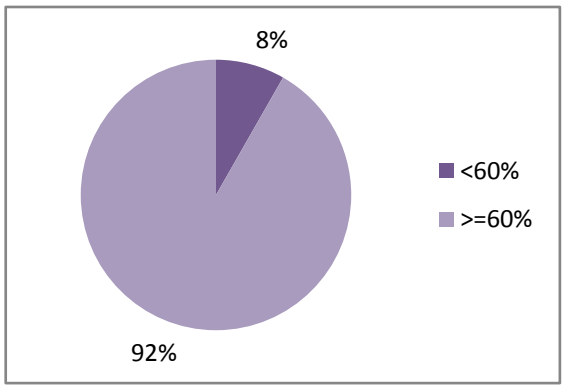

How would you rate the canteen facility?
500
400
300
200
100
0
144
142
320
383
427
1
2
3
4
5

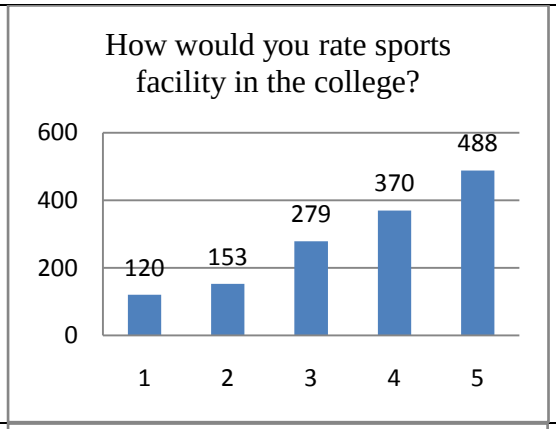

20%
80%
<60%
>=60%

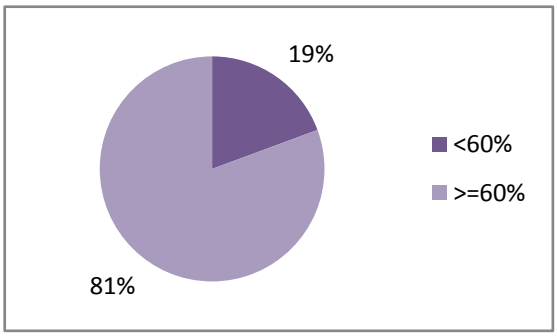

How would you rate the spiritual cell facility for counseling?
1000
500
0
31
41
156
454
734
1
2
3
4
5

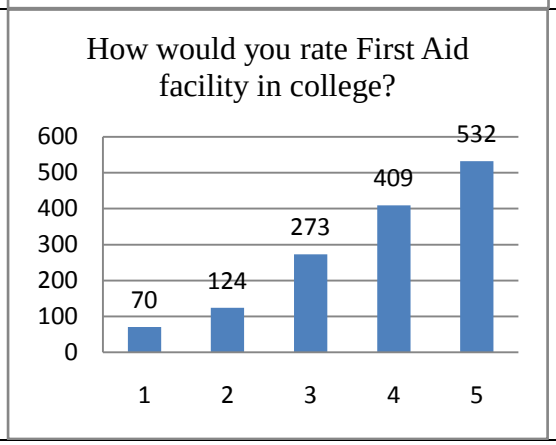

5%
95%
<60%
>=60%

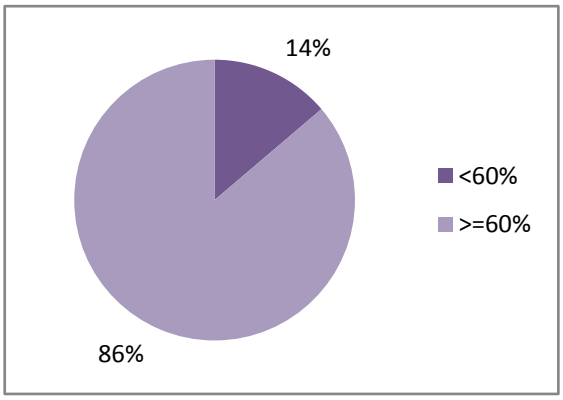

How would you rate the ICT facilities?
600
500
400
300
200
100
0
40
77
241
511
547
1
2
3
4
5

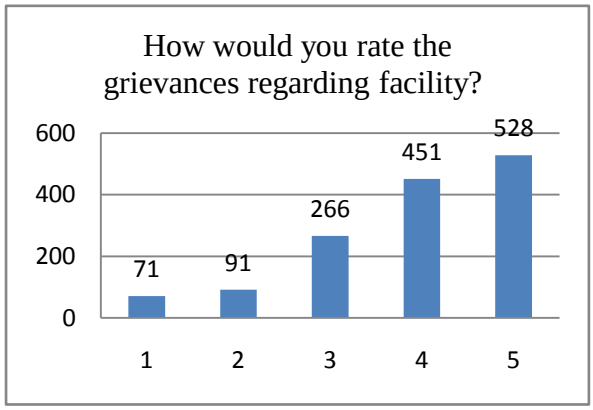

8%
92%
<60%
>=60%

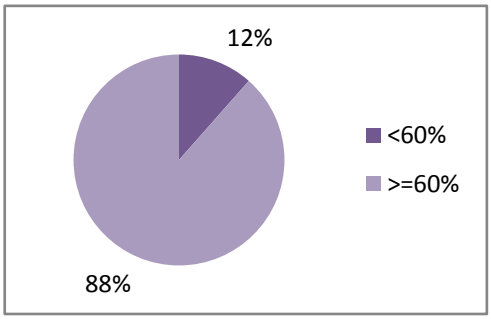

How would you rate sports facility in the college?
600
400
200
0
120
153
279
370
488
1
2
3
4
5


19%
81%
<60%
>=60%


How would you rate First Aid facility in college?
600
500
400
300
200
100
0
70
124
273
409
532
1
2
3
4
5


14%
86%
<60%
>=60%


How would you rate the grievances regarding facility?
600
400
200
0
71
91
266
451
528
1
2
3
4
5


12%
88%
<60%
>=60%

JECRC	Jaipur Engineering college and research centre, Shri Ram ki Nangal, via Sitapura RIICO Jaipur-302 022.	Academic year-2020-21

Internal Quality Assurance committee

Circular

No: JECRC/2020-21/Meeting/

Date: 14.09.2021

This is to inform all members of IQAC that there is a meeting on "Feedback analysis and action taken report from different stake holders" scheduled from 2 pm on 15.09.2021 at the A-Block Auditorium. The program coordinator is requested to bring the feedback analysis of their department for the discussion on the following agenda points.

1. Feedback analysis for different stakeholders.
2. Discussion on the action taken report on student's curriculum, co-curricular, facilities, hostel and transport.
3. Discussion on action taken report on parent's feedback.
4. Discussion on action taken report on alumni feedback.
5. Discussion on action taken report on Employer feedback.
6. Any other

IQAC Coordinator
IQAC Coordinator
JECRC, Jaipur

CC to

- Principal
- Registrar
- All program coordinator
- All IQAC members
- On the notice board

JECRC JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE	Jaipur Engineering college and research centre, Shri Ram ki Nangal, via Sitapura RIICO Jaipur-302 022.	Academic year-2020-21

Minutes of Meeting

Meeting Venue: Auditorium, A-Block

Date: 16/09/2021

The meeting held on 15.09.2021 regarding feedback taken by different departments which department collects from the different stakeholders and later analysis is done at department level and submitted to IQAC. Later the analysis is done and IQAC prepares the collective feedback analysis and shared to the stakeholders. The various stake holders are mainly the students, faculty members, alumni, parents, and employer. Based on the analysis, an action taken report is prepared for the further improvement.

IQAC coordinator shared the action taken report with the program coordinator and also with all the faculty members about the feedback and the analysis of the stakeholders. The following agenda points were discussed.

1. **Students Curriculum**: Student curriculum feedback forms received from students and summary as follows.

Parameters	Responses		Action taken
	<60%	≥60%	
Vision of JECRC	4.39	95.61	Majority of the students agreed with the Vision statement of JECRC
Mission of JECRC.	4.33	95.67	Majority of the students agreed with the Mission statement of JECRC
Curriculum provided by university is satisfactory.	5.81	94.19	Curriculum is provided by RTU. IQAC advised all HODs to find out gaps in curriculum and fill the gaps by various means like guest lecture, webinar, seminar and Add-on program.

Jaipur Engineering College And Research Centre

Action Taken (2020-21)

- Student Facility
- Hostel Facility
- Transport Facility

8. Student's Facilities feedback action taken: feedback forms received from students and summary as follows.

Parameters	Responses		Action taken
	<60%	≥60%	

Jaipur Engineering college and research centre, Shri Ram ki Nangal, via Sitapura RIICO Jaipur-302 022.		Academic year-2020-21

How would you rate the Cleanliness & greenery of college campus?	7.77	92.23	92.23% students were satisfied with the Cleanliness & greenery of college campus. For improvements cleaning frequency is increased and plantation program organized to introduce more greenery.
How would you rate the infrastructure of laboratory in college?	11.37	88.63	88.63% students were satisfied with the infrastructure of laboratory in college. For improvements cleaning, maintenance and developments proposal are planned by the lab in charges and submitted by HODs to principal office.
How would you rate the infrastructure of Library in college?	8.05	91.95	91.95% students were satisfied with the infrastructure of library in college.
How would you rate the Wi-Fi internet facility in the college?	39.27	60.73	For this issue more Wi-fi are planned to introduce at various portion in college campus and in hostel area.
How would you rate the classroom ambiance in the college?	13.63	86.37	86.37 % students were satisfied with the classroom ambiance in the college. For improvements cleaning frequency is increased and maintenance is also planned time to time.
How would you rate the canteen facility?	20.20	79.80	For this issue renovation of canteen is planned and maintenance is done timely.
How would you rate the spiritual cell facility for counseling?	5.08	94.92	94.92 % students were satisfied with the spiritual cell facility for counseling. For further improvements more persons from outside asked to take seminar on it.
How would you rate the ICT facilities?	8.26	91.74	91.74% students were satisfied with the ICT facilities. For further improvements new and modern facilities are planned to introduce.
How would you rate sports facility in the college?	19.36	80.64	This issue has been discussed with the sports in-charge. The sports in-charge has been instructed to maintain and enhance the sports facility.

How would you rate First Aid facility in college?	13.78	86.22	86.22% students were satisfied with the first aid facility in college. For further improvements first aid facilities are introduced in each laboratory and staff rooms.
How would you rate the grievances regarding facility?	11.51	88.49	88.49% students were satisfied with the grievances regarding facility. For improvement more feedback is collected and proper action taken according to analysis.

9. Student's Transport facilities feedback action taken: Feedback forms received from the students and summary as follows.

Parameters	Responses		Action taken
	<60%	≥60%	
To what extent transport facility at JECRC is dependable and punctual	10.6	89.4	89.4 % students are satisfied with the transport facility at JECRC is dependable and punctual. For more improvements transport in charge advised to modify timing and asked bus drivers to be punctual.
To what extent bus drivers demonstrates safe and preventive driving skills.	7.7	92.3	92.3% students were satisfied with the bus drivers demonstrates safe and preventive driving skills. For improvements IQAC advised transportation in charge to asked bus drivers to take extra precautions in driving.
To what extent the drivers maintain proper dress code	7.7	92.3	92.3% students were satisfied with the drivers maintain proper dress code. Transportation in charge are advised to instruct bus staff to maintain proper dress code.
How would you rate the cleanliness of the interior and exterior of the vehicle?	12.0	88.0	88% students were satisfied with the cleanliness of the interior and exterior of the vehicle. IQAC advised bus staff to maintain proper cleaning and frequency of cleaning is also increased.

Jaipur Engineering College And Research Centre

To what extent the drivers communicate related to schedule.	10.2	89.8	89.8 % students were satisfied with the drivers communicates related to schedule. For improvements drivers are advised to share their live location via whatsapp group.

10. Student's Hostel facilities action taken: Feedback forms received from the students and summary as follows.

Parameters	Responses		Action taken
	<60%	≥60%	
To what extent you agree that hostel surroundings are secure.	14.81	85.19	85.19% students are satisfied with the hostel surroundings are secured. For improvements guards are appointed in night time in college campus and at main gate. CCTV cameras also increased.
To what extent the cleanliness of kitchen and dining space are properly taken care of.	21.69	78.31	Most of the students are satisfied with the cleanliness of kitchen and dining space is properly taken care of. For improvement extra efforts and cleaning materials are introduced. Frequency of cleaning also increased.
To what extent you agree that food in the mess is served fresh	29.63	70.37	Hostel staffs are advised to maintain the food quality to solve this issue. IQAC advised to check food quality regularity by hostel warden and suggest changes. More discussion is done with students and feedback is taken to improvement.
To what extent you agree that timings of mess are properly maintained.	19.05	80.95	Hostel staffs were advised to modify the timing of mess to solve this issue and timing of mess will be displayed on the notice board and in kitchen.
To what extent the Wi-Fi facility is available in the hostel campus.	31.22	68.78	For this issue more Wi-fi are planned to introduce in the campus at various portion.

JECRC	Jaipur Engineering college and research centre, Shri Ram ki Nangal, via Sitapura RIICO Jaipur-302 022.	Academic year-2020-21

How would you rate the cooperativeness and accessibility of hostel staff?	20.11	79.89	Hostel staffs are advised to maintain the food quality to solve this issue. IQAC advised to check food quality regularity by hostel warden and suggest changes. More discussion is done with students and feedback is taken for improvement.
How would you rate the menu is properly displayed?	24.34	75.66	Hostel warden were advised to display menu list of food on notice board in hostel and in kitchen area.

(IQAC Coordinator)

IQAC Coordinator
JECRC, Jaipur

(IQAC Chairperson)

PRINCIPAL
Jaipur Engineering College & Research Centre
Tonk Road, Jaipur-302022

JECRC	Jaipur Engineering college and research Centre, Shri Ram Ki Nangal, via Sitapura RIICO Jaipur-302 022.	**Academic year-2019-2020**

Internal Quality Assurance Committee

Circular

No: JECRC/2019/Meeting/

Date: 04.12.2019

This is to inform all members of IQAC that there is a meeting on "Feedback analysis and action taken report from different stake holders" scheduled from 2 to 4 pm on 07.12.2019 at the A-Block Conference hall. The Program coordinator are requested to bring the feedback analysis of their department for discussion on the following agenda points:

1. Feedback analysis for different stakeholders.
2. Discussion on action taken report on student's curriculum, co-curricular, facilities, hostel and transport.
3. Discussion on action taken report on parent's feedback.
4. Discussion on action taken report on alumni feedback.
5. Discussion on action taken report on Employer feedback.
6. Any other

IQAC Coordinator

Head of the Department
Mechanical Engineering
JECRC, Jaipur

CC to

	Jaipur Engineering college and research Centre, Shri Ram Ki Nangal, via Sitapura RIICO Jaipur-302 022.	**Academic year-2019-2020**

Minutes of Meeting

Meeting Venue: Conference Hall, A-Block

Date: 08/12/2019

The meeting held on 7.12.2019 regarding feedback taken by different departments which department collects from the different stakeholders and later analysis is done at department level and submitted to IQAC. Later the analysis is done and IQAC prepares the collective feedback analysis and shared to the stakeholders. The various stake holders are mainly the students, faculty members, alumni, parents and employer. Based on the analysis, an action taken report is prepared for further improvement.

IQAC coordinator shared the action taken report with the program coordinator and also with all the faculty members about the feedback and the analysis of the stakeholders. The following agenda points were discussed.

1. **Students Curriculum:** Student's Curriculum feedback forms received from students and summary as follows

Parameters	**Responses**		**Action taken**
	<60%	**≥60%**	
Vision of JECRC	4.90	95.10	Majority of the students agreed with the Vision statement of JECRC
Mission of JECRC	5.15	94.85	Majority of the students agreed with the Mission statement of JECRC
Curriculum provided by university is satisfactory	8.96	91.04	Curriculum is as per RTU. IQAC advised the all-faculty members to identify more content beyond the syllabus and introduce more add on courses.

7. **Student's Facilities Feedback: Student's Facilities** Feedback forms received from students and summary as follows

Parameters	Responses		Action taken
	<60	≥60	
How would you rate the Cleanliness & greenery of college campus?	10.86	89.14	The students appreciated the cleanliness and greenery of college campus. The campus in-charge has been instructed to proper maintain the cleanliness and horticulture, also advised to organize plantation activity regularly.
How would you rate the infrastructure of laboratory in college?	13.44	86.56	The students appreciated the academic related laboratory. IQAC advised the HoDs to establish few industries supported labs. Also, it is proposed to equip the laboratory with latest sophisticated instruments.
How would you rate the infrastructure of Library in college?	7.59	92.41	The students appreciated the infrastructure of library. For further improvement, it is proposed to enhancement of e- library related facility.
How would you rate the Wi-Fi internet facility in the college?	37.66	62.34	Wi-Fi issue is raised and communicated for necessary action. It is proposed to install more routers in the campus.
How would you rate the classroom ambience in the college?	12.74	87.26	The students appreciated the classroom ambiences. Campus in-charge was asked to arrange the curtain for few remaining curtainless windows. Also, maintain the classroom properly.
How would you rate the canteen facility?	17.62	82.38	The issue has been discussed with the canteen contractor and advised him to provide proper facilities.
How would you rate the spiritual cell facility for counseling?	4.71	95.29	The students appreciated the spiritual cell facility for counseling. IQAC inform about the feedback received from students to spiritual cell in charge for further improvement and to organize more activities.
How would you rate the ICT facilities?	8.05	91.95	The students appreciate the ICT based facilities in the campus. Also, it is proposed to increase the number of ICT based classroom in the campus.

How would you rate sports facility in the college?	20.05	79.95	This issue has been discussed with the sports in-charge. The sports in-charge has been instructed to maintain and enhance the sports facility.
How would you rate First Aid facility in college?	13.36	86.64	The students appreciate the first aid facilities in the campus. Campus in-charge was asked to maintain the first aid facility in the college.
How would you rate the grievances regarding facility?	10.25	89.75	Mostly students are satisfied with the grievances regarding facilities. IQAC advised the grievances cell to resolve the grievances of student's within given time frame.

8.Student's Transport Facility Feedback: Student's Transport Feedback forms received from students and summary as follows

Parameters	**Responses (%)**		**Action taken**
	<60%	≥60 %	
To what extent transport facility at JECRC is dependable and punctual.	8.02	91.98	Most of the students appreciate the punctuality of transport. Also, transportation in-charge has been instructed to enhance the transportation facility according to requirement.
To what extent bus drivers demonstrates safe and preventive driving skills.	7.89	92.11	Safety of the students/staff is the prime concern for the College. The majority of students appreciated the safety maintained by the drivers while driving. Also, transportation in-charge has been instructed to talk with the drivers and give instructions for safe driving.
To what extent the drivers maintain proper dress code.	5.14	94.86	Mostly students appreciate this. Transportation in-charge has been instructed to talk with the drivers and give instructions to wear proper dress code while on duty.
How would you rate the cleanliness of the interior and exterior of	7.14	92.86	The students are satisfied with the cleanliness of the interior and exterior of the vehicle. Also, transportation in-charge has been

driving skills.	7.89	92.11	the drivers while driving. Also, transportation in-charge has been instructed to talk with the drivers and give instructions for safe driving.
To what extent the drivers maintain proper dress code.	5.14	94.86	Mostly students appreciate this. Transportation in-charge has been instructed to talk with the drivers and give instructions to wear proper dress code while on duty.
How would you rate the cleanliness of the interior and exterior of the vehicle?	7.14	92.86	The students are satisfied with the cleanliness of the interior and exterior of the vehicle. Also, transportation in-charge has been instructed to proper maintain interior and exterior cleanliness of vehicle.
To what extent the drivers communicate related to schedule.	8.02	91.98	The majority of the students feel that drivers adhere to the schedule. Transportation in-charge has been instructed to inform the students/staff before 3-4 day from effective implementation of new schedule.

9. Student's hostel facility feedback: Student's Hostels Feedback forms received from students and summary as follows

Parameters	**Responses (in %)**		**Action taken**
	<60	**≥60**	
To what extent you agree that hostel surroundings are secure.	11.31	88.69	The majority of the students agree with this statement as they find a safe and secure environment in the hostel. Also, this issue has been discussed with campus security in-charge.

63/NOV/19.
[signature] 26/11/19.

Reminder
old form No. 49
Dated - 19/9/19.

Jaipur Engineering College and Research centre

Grievance Form

Nature of Grievance:

Grievance: Regarding change of window Glass in Chemistry Lab-2

Complainment Name	Department	Date	Sign
Dr. Barkha Shrivastava	Chem.	26/11/2019.	[signature]

Submitted to	Department	Date	Signature	Action Taken*	Signature
Registrar Sir	Adm.	26/11/19.	[signature]	Sh. Sukaram pathak ji N.A	[signature] 28/11/19
Sh. Sukaram Pathak	Adm.	28/11/19.		complained Resolved	Yogendra 30/11/19

*Separate sheet may be attached as annexure if the space provided is insufficient

Complainment Name	Department	Date	Remarks

above said complained resolved & Bill of Rs 700/- paid to lal carpenter
Bill No 280.
Date 30/11/19.
Yogendra
30/11/19

Report Submitted to Principal /Registrar for remarks:

Jaipur Engineering College and Research Centre

Mess Grievance

Nature of Grievance : Sabzi and dall balance test less and kheer was not boiled properly in milk.

Name of Hostel: GH2

Date: 18/3/21

Name of the student LAVESH GARG

Room Number 313

Signature [signature]

Action taken by Warden

छात्र की खाने से सम्बन्धित समस्या को कुक को समझा दिया है। [illegible] इस प्रकार की पुनरावृत्ति न हो [illegible] कर दिया है।

[signature]
Signature of warden

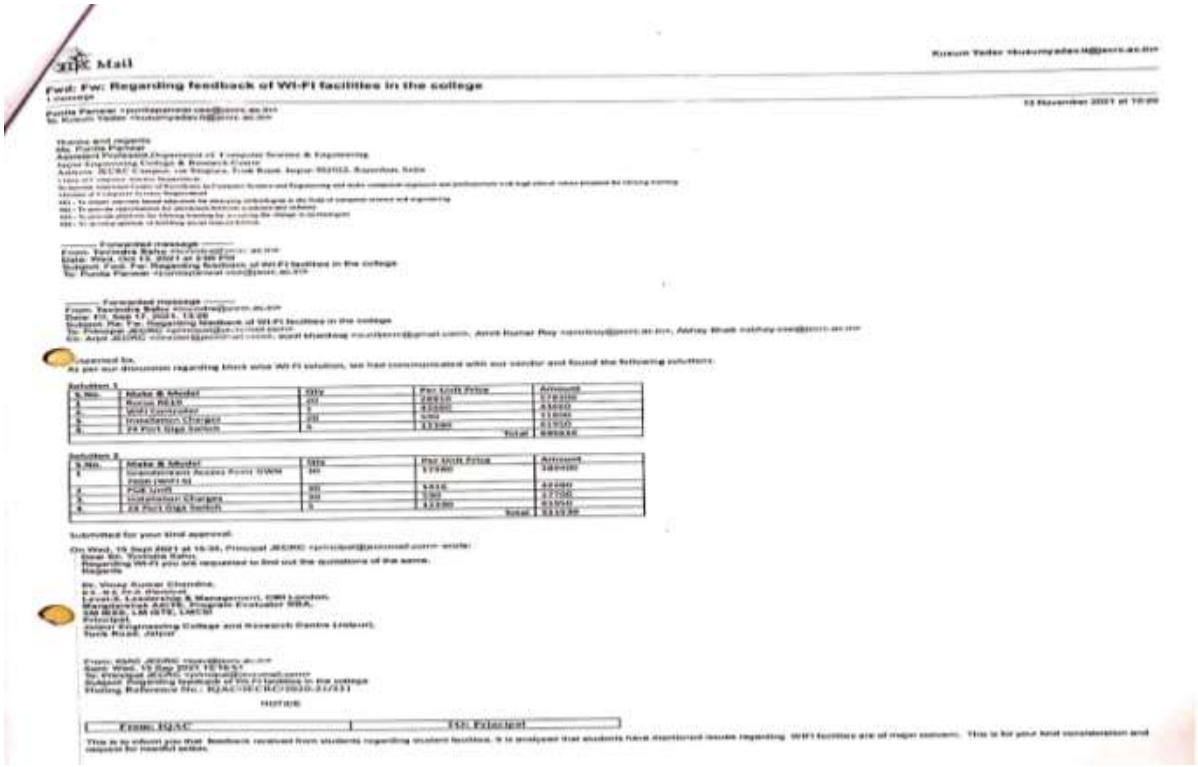
Information to the concerned student

Comment of student

ok, Noted

Signature of student [signature]

[signature] 299



Mail

Fwd: Fw: Regarding feedback of Wi-Fi facilities in the college

From: IQAC	To: Principal

S. No	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
10.1.2	**10.1.2 Governing body, administrative setup, functions of various bodies, service rules procedures, recruitment and promotional policies**	Administrative bodies are in place but all are not actively functioning; frequency of meeting is limited. Minutes of the meetings are not properly documented and action-taken reports are not available.	The institute governing body (NSERD) regularly meets to discuss various decisions and actions taken are analyzed. All the administrative bodies regularly conduct meetings related to the smooth functioning of various sections and review the process and procedure from time to time. Administrative bodies — Frequency of Meeting National Society for Engineering Research and Development NSERD(Governing body) — Three /Year Board of Governors (As per AICTE) — One/Year Grievance Redressal Committee — Two/Year Anti Ragging Committee — One/Year

			<table><tr><td>Women Cell Committee</td><td>Two/Year</td></tr><tr><td>SC/ ST Cell Committee</td><td>Two/Year</td></tr><tr><td>Discipline committee/ Security committee</td><td>Two /Year</td></tr></table> Link of Minutes of meetings are attached for you kind consideration.

Administrative Bodies	Link of Minutes of Meetings
National Society for Engineering Research and Development NSERD(Governing body)	
	https://www.jecrcfoundation.com/pdf/nserd/NSERD%202019-20%20Final.pdf
	https://www.jecrcfoundation.com/pdf/nserd/NSERD%202018-19%20Final.pdf
	https://www.jecrcfoundation.com/pdf/nserd/NSERD%202016-17%20Final.pdf
	https://www.jecrcfoundation.com/pdf/nserd/NSERD%202015-16%20Final.pdf
Board of Governors (As per AICTE)	https://jecrcfoundation.com/pdf/bog/BOG%20MOM%2021-22.pdf
	https://jecrcfoundation.com/pdf/bog/BOG%20MOM%2020-21.pdf
	https://www.jecrcfoundation.com/pdf/bog/Governing%20Body%20AICTE%202019-20.pdf
	https://www.jecrcfoundation.com/pdf/bog/Governing%20Body%20AICTE%202018-19.pdf
Grievance Redressal Committee	https://jecrcfoundation.com/jf-data/NBA/Grievance-and-Redressal-committee-Proceedings-2020-21.pdf https://jecrcfoundation.com/jf-data/NBA/Monitiring-committee_proceedings2019_20.pdf
Anti Ragging Committee	https://jecrcfoundation.com/pdf/institutional-committee/2020-21/Anti%20Ragging%20Committee.pdf https://jecrcfoundation.com/jf-data/NBA/Monitiring-Anti_Ragging_committee.pdf
SC/ ST Cell Committee	https://jecrcfoundation.com/pdf/institutional-committee/2020-21/SC-ST%20committee.pdf https://jecrcfoundation.com/jf-data/NBA/Monitiring-SC_ST_committee.pdf

Discipline committee	https://jecrcfoundation.com/pdf/institutional-committee/2020-21/Student%20Disciplinary%20council.pdf https://jecrcfoundation.com/jf-data/NBA/Monitiring-Discipline_committee.pdf
Women Cell Committee	https://jecrcfoundation.com/pdf/institutional-committee/2020-21/Women%20cell.pdf https://jecrcfoundation.com/jf-data/NBA/Monitiring-Women_Cell_committee.pdf

ITEM NO.	CRITERIA	OBSERVATIONS OF THE VISITING TEAM/ MODERATION COMMITTEE	COMMENT OF THE INSTITUTE
10.1.3	**10.1.3 Decentralisation in working and grievance redressal mechanism**	Grievance redressal cell exits, but adequate evidences of action taken are not shown and it is still in the process of development.	Grievance form is available on the website www.jecrcfoundation.com .The grievance form is forwarded to concerned section to take action and action taken report thus submitted within stipulated time for the closure of grievance and finally information about the action taken is communicated to the individual who has put up the grievance.

Academic Year	Link of Minutes of meeting
2020-21	https://jecrcfoundation.com/jf-data/NBA/Grievance-and-Redressal-committee-Proceedings-2020-21.pdf
2019-20	https://jecrcfoundation.com/jf-data/NBA/Grievance-2019-20.pdf
2019-20	https://jecrcfoundation.com/jf-data/NBA/Grievance-and-Redressal-committee-Proceedings-2019-20.pdf
2018-19	https://jecrcfoundation.com/jf-data/NBA/Grievance-and-Redressal-committee-Proceedings-2018-19.pdf
2017-18	https://jecrcfoundation.com/jf-data/NBA/Grievance-and-Redressal-committee-Proceedings-2017-18.pdf

Jaipur Engineering College & Research Centre

From : Grievance Committee	To : All Members

Noting Reference No. JECRC/GRC/2021/22 09/07/21

Meeting Notice

There is a meeting of Grievance and Redressal committee on July 23, 2021 in the Conference Room Block A at 10:30 AM to discuss the issues related to Grievances in the last six months. Following members are requested to kindly make it convenient to attend and present the information and data related to their sections –

1. Shri Manish Jain – Chair
2. Dr. M.P. Singh – Member
3. Dr. Ruchi Mathur – Member
4. Dr. Sandeep Vyas – Member
5. Shri P.K. Gupta – Member
6. Dr. Rajesh Sharma – Member
7. Shri Yogendra Sharma - Member
8. Dr. Vinay Kumar Chandna – I/c Anti-Ragging Committee and Ragging Squad Committee
9. Dr. Barkha Srivastava – I/c Women Cell Committee
10. Dr. Sanjay Gaur – I/c Student Disciplinary Council Committee
11. Dr. Nilam Choudhary – I/c Schedule Cast & Schedule Tribes Committee

Agenda

1. Chair will share all the details related to complaint or grievances received in the last six months.
2. Invited incharge of Anti-Ragging Committee and Ragging Squad Committee will share all the details related to complaint or grievances received in the last six months.
3. Invited incharge of Women Cell Committee will share all the details related to complaint or grievances received in the last six months.
4. Invited incharge of Student Disciplinary Council Committee will share all the details related to complaint or grievances received in the last six months.
5. Invited incharge of Schedule Cast & Schedule Tribes Committee will share all the details related to complaint or grievances received in the last six months.
6. Grievances and redressal committee incharge will submit the report of complaint received in last six months.
7. Any other issues

PRINCIPAL

Copy to-
1. Vice Chairman
2. Director
3. All concerned
4. Shri Tej Inder Sahoo – for necessary arrangements in the conference room

PRINCIPAL
Jaipur Engineering College &
Research Centre
Tonk Road, Jaipur-302022

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Noting Reference No. JECRC/GRC/2021/23 23/07/21

Meeting

Date of Meeting : July 23, 2021 at 10:30 AM
Venue : Conference Room Block A

Following were present in the meeting of Grievance and Redressal committee –

S. No.	Name	Designation	Signature
1	Shri Manish Jain	Chair	
2	Shri P.K. Gupta	Member	
3	Dr. M.P. Singh	Member	
4	Dr. Ruchi Mathur	Member	
5	Dr. Sandeep Vyas	Member	
6	Dr. Rajesh Sharma	Member	
7	Shri Yogendra Sharma	Member	
8	Dr. Vinay Kumar Chandna	I/c Anti-Ragging Committee and Ragging Squad Committee	
9	Dr. Barkha Srivastava	I/c Women Cell Committee	
10	Dr. Sanjay Gaur	I/c Student Disciplinary Council Committee	
11	Dr. Nilam Choudhary	I/c Schedule Cast & Schedule Tribes Committee	

38/JECRC/2020
02/03/2020

Jaipur Engineering College and Research centre

Grievance Form

Nature of Grievance: Defective Cilling Fans in Boys' Hostel I

Grievance:

Complainanent Name	Department	Date	Sign
Defective cilling Fan ROOM NO. 2, 31, 47, 64, 71, 75	BH-1	29-02-20	29/02/20

6 Rooms

Submitted to	Department	Date	Signature	Action Taken*	Signature
C.M.O Sir	BH-1	29/02/20	29/02/20	Priority action recommended	28.2.2020
Estate Engineer					

*Separate sheet may be attached as annexure if the space provided is insufficient

Complainanent Name	Department	Date	Remarks

Sh. Yogendra PL. get it checked and maintain. 02/03/20

Report Submitted to Principal /Registrar for remarks:

6 Fans Repaired
Yogendra
13/3/2020

Principal / Registrar

SESSION -2020-21

JECRC

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Ref/ng Reference No. JECRC/GRC/2021/24 24/07/21

Minutes of Meeting

Venue : Conference Room, Block A
Date & Time : Friday July 23, 2021 at 10:30 AM

Agenda :

1. Chair will share all the details related to complaint received or grievance received in the last six months.
2. Invited incharge of Anti-Ragging Committee and Ragging Squad Committee will share all the details related to complaint received or grievance received in the last six months.
3. Invited incharge of Women Cell Committee will share all the details related to complaint received or grievance received in the last six months.
4. Invited incharge of Student Disciplinary Council Committee will share all the details related to complaint received or grievance received in the last six months.
5. Invited incharge of Schedule Cast & Schedule Tribes Committee will share all the details related to complaint or grievances received in the last six months.
6. Grievances and redressal committee incharge will submit the report of complaint received in last six months.
7. Any other issues

Members Present :

1. Shri Manish Jain – Chair
2. Dr. M.P. Singh – Member
3. Dr. Ruchi Mathur – Member
4. Dr. Sandeep Vyas – Member
5. Dr. Rajesh Sharma – Member
6. Shri P.K. Gupta – Member
7. Shri Yogendra Sharma – Member
8. Dr. Vinay Kumar Chandna – I/c Anti-Ragging Committee and Ragging Squad Committee
9. Dr. Barkha Srivastava – I/c Women Cell Committee
10. Dr. Sanjay Gaur – I/c Student Disciplinary Council Committee
11. Dr. Nilam Choudhary – I/c Schedule Cast & Schedule Tribes Committee

Following items were discussed and decided that –

1. Chair of Student Grievance / Redressal Committee welcome all the members from the committee and invited members of Anti-Ragging Committee and Ragging Squad Committee, Women Cell Committee, Student Disciplinary Council Committee, Schedule cast & Schedule Tribes Committee.
2. Minutes of meeting of last meeting were read and confirmed.
3. Discussion was held with all the incharges of the respective committees related to measures taken in the last six months to curve ragging, harassment or any other related issues with respect to the students and the faculty members. Respective incharges informed that there is no such particular grievance with respect to the Ragging, Gender harassment redressal or category based redressal.
4. It was also discussed some grievances reported in the last six months and the disposal are taken care of.

S. No.	Activity	Total forms received	Previous Pending	Resolved	Total pending
1	Student Grievances	62	0	62	0
2	Maintenance	129	17	96	50

5. It was also discussed that the pending grievances may be address at early possible to take necessary action in this regard.
6. Meeting ended with a vote of thanks to the Chair.

Xxx

(Mr. Manish Jain)

S. NO	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
10.1.4	**10.1.4 Delegation of financial powers**	The financial powers in respect of HoDs are limited in terms of imprest amount only. .	Imprest amount of Rs. 10000/- on consumption basis provided to HOD and after submission of accounts of expenditure another imprest amount is provided to HOD.

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

JECRC/REG/2017/366

17/03/2017

Subject: Delegation of financial powers to the Program Coordinators/HODs/Dean/Section Incharges

As per the resolution of the National Society for Engineering Research and Development, Jaipur (NSERD), Program Coordinators/HODs/Dean/Section Incharges be delegated with the financial power for the expenditure up to Rs. 10,000/- (Rupees Ten Thousand only).

Prof. V.K. Chandna
PRINCIPAL

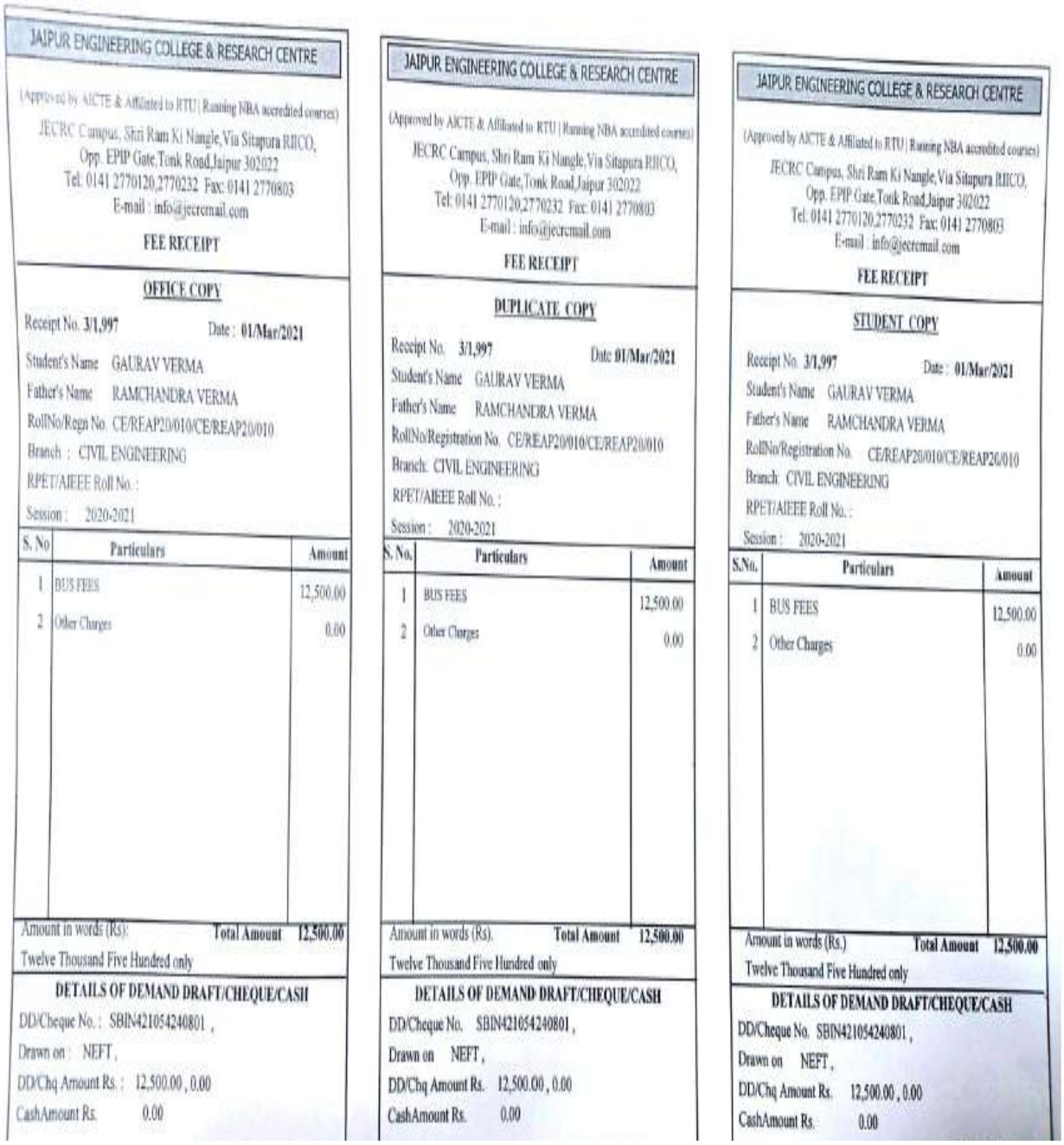
PRINCIPAL
Jaipur Engineering College &
Research Centre
Tonk Road, Jaipur-302022

S. NO	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
10.1.5	**10.1.5 Transparency and availability of correct/unambiguous information in public domain**	Faculty & student information not available on the college website. .	List of faculty members and students are available on website. Links are provided for your kind consideration.

Academic Year	Link of Faculty and students
Faculty list 2020-21 (All Department)	https://jecrcfoundation.com/student-notice/faculty-notices/2.%20Session%202020-21/Faculty-list-2020-21.pdf
Student list 2018-20 (All Department)	https://jecrcfoundation.com/student-notice/Student%20Notices/2.SESSION%202020-21/Student%20List%20(2018-2021).pdf

S. NO	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
10.2	**Budget Allocation, Utilisation, and Public Accounting at Institute level**	Apart from fees, the receipts include hostel and transport facilities	Separate hostel and transport facilities fees receipts are given to students.

Bus Fees Receipt



JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE

(Approved by AICTE & Affiliated to RTU | Running NBA accredited courses)

JECRC Campus, Shri Ram Ki Nangle, Via Sitapura RIICO,
Opp. EPIP Gate, Tonk Road, Jaipur 302022
Tel: 0141 2770120,2770232 Fax: 0141 2770803
E-mail : info@jecrcmail.com

FEE RECEIPT

OFFICE COPY

Receipt No. **3/1,997** Date : **01/Mar/2021**

Student's Name GAURAV VERMA
Father's Name RAMCHANDRA VERMA
RollNo/Regn No. CE/REAP20/010/CE/REAP20/010
Branch : CIVIL ENGINEERING
RPET/AIEEE Roll No. :
Session : 2020-2021

S. No	Particulars	Amount
1	BUS FEES	12,500.00
2	Other Charges	0.00

Amount in words (Rs): **Total Amount 12,500.00**
Twelve Thousand Five Hundred only

DETAILS OF DEMAND DRAFT/CHEQUE/CASH

DD/Cheque No. : SBIN421054240801 ,
Drawn on : NEFT ,
DD/Chq Amount Rs. : 12,500.00 , 0.00
CashAmount Rs. 0.00

JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE

(Approved by AICTE & Affiliated to RTU | Running NBA accredited courses)

JECRC Campus, Shri Ram Ki Nangle, Via Sitapura RIICO,
Opp. EPIP Gate, Tonk Road, Jaipur 302022
Tel: 0141 2770120,2770232 Fax: 0141 2770803
E-mail : info@jecrcmail.com

FEE RECEIPT

DUPLICATE COPY

Receipt No. **3/1,997** Date **01/Mar/2021**

Student's Name GAURAV VERMA
Father's Name RAMCHANDRA VERMA
RollNo/Registration No. CE/REAP20/010/CE/REAP20/010
Branch: CIVIL ENGINEERING
RPET/AIEEE Roll No. :
Session : 2020-2021

S. No.	Particulars	Amount
1	BUS FEES	12,500.00
2	Other Charges	0.00

Amount in words (Rs). **Total Amount 12,500.00**
Twelve Thousand Five Hundred only

DETAILS OF DEMAND DRAFT/CHEQUE/CASH

DD/Cheque No. SBIN421054240801 ,
Drawn on NEFT ,
DD/Chq Amount Rs. 12,500.00 , 0.00
CashAmount Rs. 0.00

JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE

(Approved by AICTE & Affiliated to RTU | Running NBA accredited courses)

JECRC Campus, Shri Ram Ki Nangle, Via Sitapura RIICO,
Opp. EPIP Gate, Tonk Road, Jaipur 302022
Tel: 0141 2770120,2770232 Fax: 0141 2770803
E-mail : info@jecrcmail.com

FEE RECEIPT

STUDENT COPY

Receipt No. **3/1,997** Date : **01/Mar/2021**

Student's Name GAURAV VERMA
Father's Name RAMCHANDRA VERMA
RollNo/Registration No. CE/REAP20/010/CE/REAP20/010
Branch: CIVIL ENGINEERING
RPET/AIEEE Roll No. :
Session : 2020-2021

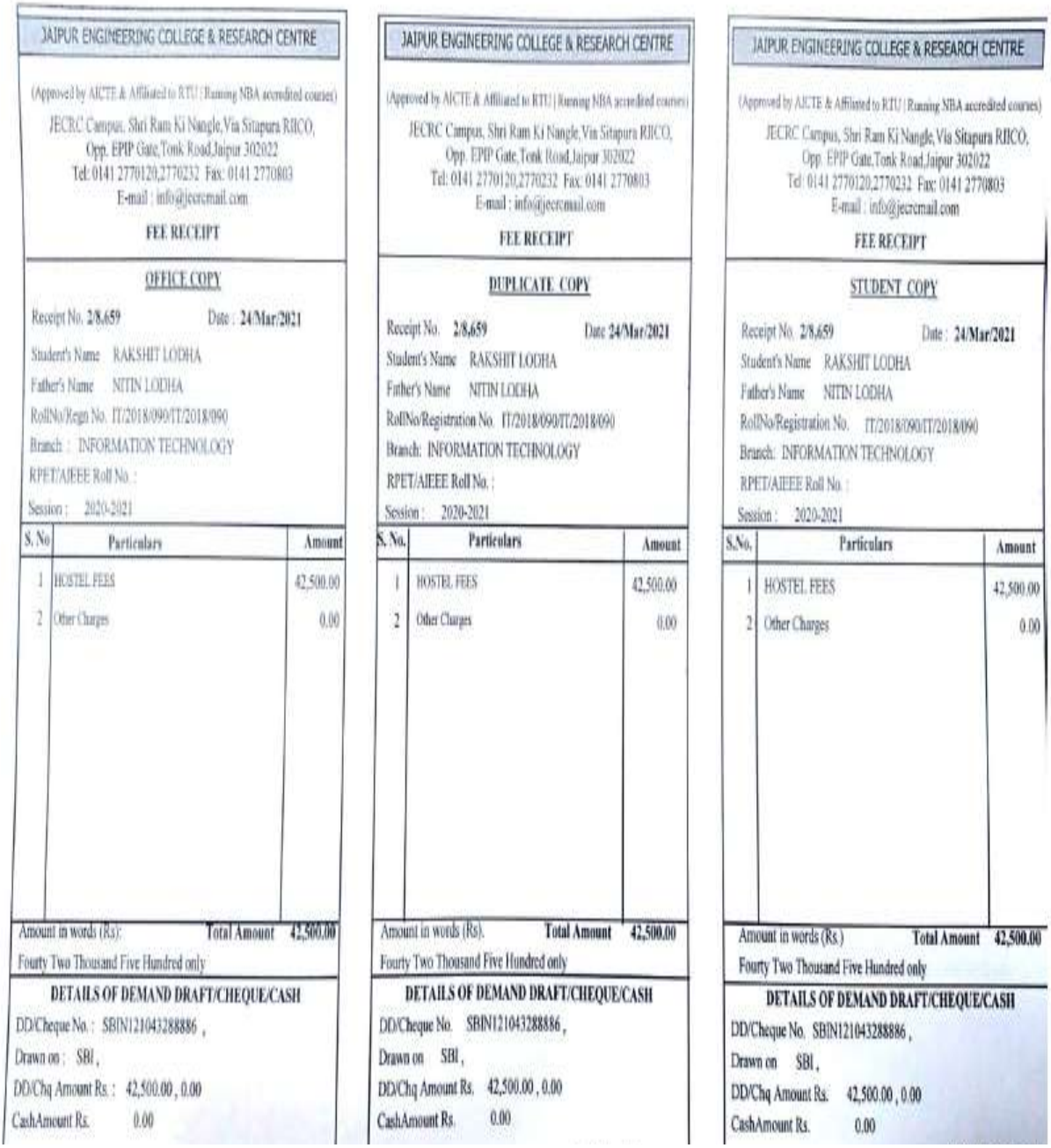
S.No.	Particulars	Amount
1	BUS FEES	12,500.00
2	Other Charges	0.00

Amount in words (Rs.) **Total Amount 12,500.00**
Twelve Thousand Five Hundred only

DETAILS OF DEMAND DRAFT/CHEQUE/CASH

DD/Cheque No. SBIN421054240801 ,
Drawn on NEFT ,
DD/Chq Amount Rs. 12,500.00 , 0.00
CashAmount Rs. 0.00

Hostel Fees Receipt



JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE

(Approved by AICTE & Affiliated to RTU | Running NBA accredited courses)

JECRC Campus, Shri Ram Ki Nangle, Via Sitapura RIICO,
Opp. EPIP Gate, Tonk Road, Jaipur 302022
Tel: 0141 2770120,2770232 Fax: 0141 2770803
E-mail : info@jecrcmail.com

FEE RECEIPT

OFFICE COPY

Receipt No. **2/8,659** Date : **24/Mar/2021**

Student's Name RAKSHIT LODHA
Father's Name NITIN LODHA
RollNo/Regn No. IT/2018/090/IT/2018/090
Branch : INFORMATION TECHNOLOGY
RPET/AIEEE Roll No. :
Session : 2020-2021

S. No	Particulars	Amount
1	HOSTEL FEES	42,500.00
2	Other Charges	0.00

Amount in words (Rs): **Total Amount 42,500.00**
Fourty Two Thousand Five Hundred only

DETAILS OF DEMAND DRAFT/CHEQUE/CASH

DD/Cheque No. : SBIN121043288886 ,
Drawn on : SBI ,
DD/Chq Amount Rs. : 42,500.00 , 0.00
CashAmount Rs. 0.00

JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE

(Approved by AICTE & Affiliated to RTU | Running NBA accredited courses)

JECRC Campus, Shri Ram Ki Nangle, Via Sitapura RIICO,
Opp. EPIP Gate, Tonk Road, Jaipur 302022
Tel: 0141 2770120,2770232 Fax: 0141 2770803
E-mail : info@jecrcmail.com

FEE RECEIPT

DUPLICATE COPY

Receipt No. **2/8,659** Date **24/Mar/2021**

Student's Name RAKSHIT LODHA
Father's Name NITIN LODHA
RollNo/Registration No. IT/2018/090/IT/2018/090
Branch: INFORMATION TECHNOLOGY
RPET/AIEEE Roll No. :
Session : 2020-2021

S. No.	Particulars	Amount
1	HOSTEL FEES	42,500.00
2	Other Charges	0.00

Amount in words (Rs). **Total Amount 42,500.00**
Fourty Two Thousand Five Hundred only

DETAILS OF DEMAND DRAFT/CHEQUE/CASH

DD/Cheque No. SBIN121043288886 ,
Drawn on SBI ,
DD/Chq Amount Rs. 42,500.00 , 0.00
CashAmount Rs. 0.00

JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE

(Approved by AICTE & Affiliated to RTU | Running NBA accredited courses)

JECRC Campus, Shri Ram Ki Nangle, Via Sitapura RIICO,
Opp. EPIP Gate, Tonk Road, Jaipur 302022
Tel: 0141 2770120,2770232 Fax: 0141 2770803
E-mail : info@jecrcmail.com

FEE RECEIPT

STUDENT COPY

Receipt No. **2/8,659** Date : **24/Mar/2021**

Student's Name RAKSHIT LODHA
Father's Name NITIN LODHA
RollNo/Registration No. IT/2018/090/IT/2018/090
Branch: INFORMATION TECHNOLOGY
RPET/AIEEE Roll No. :
Session : 2020-2021

S.No.	Particulars	Amount
1	HOSTEL FEES	42,500.00
2	Other Charges	0.00

Amount in words (Rs.) **Total Amount 42,500.00**
Fourty Two Thousand Five Hundred only

DETAILS OF DEMAND DRAFT/CHEQUE/CASH

DD/Cheque No. SBIN121043288886 ,
Drawn on SBI ,
DD/Chq Amount Rs. 42,500.00 , 0.00
CashAmount Rs. 0.00

S. NO	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
10.2.1	**10.2.1 Adequacy of Budget allocation**	In adequate budget allocation; arbitrary allocations and no proper justifications was made	Funds are generally characterized as planned and unplanned. Plan funds include salary and providing facilities in various sections which were visible in the past based on policies defined in the past. As far as unplanned funds are concerned they are made available to NSERD as the budget for the coming year. It is thus approved by the committees to improve the quality of teaching and learning, there is a need to organize various technical and non-technical events at the institute and these activities are again subdivided into various categories for which fund generation is required from in-house/ sponsored/ government grants / endorsement activities. Faculty members, section in-charges are well informed about various schemes available through Government and non-government agencies from where funds are mobilized. There are various events for faculty members and students where participation by means of the registration fee is also one of the means by which funds are generated and efficiently utilized for creating facilities in various departments. An audited statement of account reflects the mobilization of funds for various sections shows the utilization of resources to its maximum extent

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Date: 14/10/2021

Subject: Budget details of academic year 2020-21

The Proposed & Expenditure Budget Details of Session 2020-21 are as follows:

The Proposed Budget & Expenditure of (2020-21)

S. N.	Year	Department/Infrastructure	Proposed Budget (in Rupees)	Expenditure (in Rupees)
1	2020-2021	CSE	8,05,000/-	2,34,044/-
2	2020-2021	IT	4,29,000/-	4,600/-
3	2020-2021	ECE	23,11,410/-	3,48,827/-
4	2020-2021	ME	12,60,000/-	27,627/-
5	2020-2021	CE	16,95,000/-	13,000/-
6	2020-2021	EE	10,50,000/-	2000/-
7	2020-2021	1ST Year	3,42,000/-	31,193/-
8	2020-2021	CC TV System	70,000/-	39,206/-
9	2020-2021	Security	25,00,000/-	23,65,301/-
10	2020-2021	Hostels	32,05,000/-	27,04,494/-
11	2020-2021	Library	10,00,000/-	2,54,354/-
12	2020-2021	Spiritual Research Cell	40,000/-	42,564/-
13	2020-2021	Placement Cell	2,85,000/-	24,000/-
14	2020-2021	RTBI	6,60,000/-	9,99,112/-
15	2020-2021	Training budget	16,66,000/-	12,31,590/-
16	2020-2021	Alumni	2,00,000/-	73,000/-
17	2020-2021	SDO	9,00,000/-	321768/-
18	2020-2021	ZARURAT	3,08,000/-	13,000/-
19	2020-2021	SUHASINI	6,000/-	4,501/-
20	2020-2021	SOCH	8,000/-	7,200/-
21	2020-2021	IT Infrastructure	1,24,70,000/-	11,71,483/-
22	2020-2021	Sports	1,00,000/-	50,000/-
		TOTAL	**3,13,10,410/-**	**99,62,864/-**

The above all departments are submitted after verifying all the information, the same is forwarded to account officer for verification.

Accounts officer

Prof. (Dr.) V. K. Chandna

Principal

JECRC Foundation
www.jecrcfoundation.com

Jaipur Engineering College and Research Centre
Approved by AICTE & Affiliated to RTU
JECRC Campus, Shri Ram Ki Nangal,
Via Sitapura RIICO, Opp. EPIP Gate, Tonk Road, Jaipur 302 022
t: 0141 2770120, 2770232 f: 0141 2770803 e: info@jecrcmail.com

JECRC

The Proposed Budget & Expenditure of (2021-22)

S.N.	Year	Department/Infrastructure	Proposed Budget (in Rupees)	Expenditure (in Rupees)
1	2021-22	CSE	9,20,000/-	NIL
2	2021-22	IT	16,51,000/-	NIL
3	2021-22	AI & DS	11,50,000/-	NIL
4	2021-22	ECE	23,95,200/-	NIL
5	2021-22	ME	12,45,599/-	NIL
6	2021-22	CE	15,50,000/-	NIL
7	2021-22	EE	11,30,000/-	1,000/-
8	2021-22	1ST YEAR	4,64,800/-	NIL
9	2021-22	CC TV SYSTEM	70,000/-	NIL
10	2021-22	SECURITY	25,00,000/-	NIL
11	2021-22	HOSTELS	1,51,10,000/-	NIL
12	2021-22	Library	10,00,000/-	NIL
13	2021-22	Spiritual Research Cell	60,000/-	12,497/-
14	2021-22	Placement Cell	2,44,000/-	NIL
15	2021-22	JIC	15,00,000/-	NIL
16	2021-22	Training budget	15,88,000/-	9,56,925/-
17	2021-22	Alumni	2,00,000/-	NIL
18	2021-22	SDO	9,00,000/-	NIL
19	2021-22	ZARURAT	3,10,000/-	NIL

PRINCIPAL
JaipurEngineering College &
Research Centre
Tonk Road, Jaipur-302022

JECRC

20	2021-22	SOCH	65,000/-	NIL
21	2021-22	SUHASINI	77,000/-	NIL
22	2021-22	IT Infrastructure	1,58,00,000/-	13,14,644
23	2021-22	Sports	1,00,000/-	40,000/-
		TOTAL	6,58,29,799/-	36,39,710/-

PRINCIPAL
JaipurEngineering College &
Research Centre
Tonk Road, Jaipur-302022

S. No	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
10.2.2	**10.2.2 Utilization of allocated funds**	Poor budget utilization	An external financial audit is carried out by the Chartered Accountant (CA) firm M/s Vimal Agarwal & Associates for transparency and proper utilization of funds. Institute is not carrying any internal financial audit. Department Heads / Section-in-charges are intimated of the extent of funds allocated against their budget proposals. Actions for procurement of lab equipment, up-gradation of existing lab facilities, purchase of consumables etc. are initiated from the respective departments. Audited budget is attached for your kind consideration.

Items	Link of audited Budget statement
Infrastructure	https://jecrcfoundation.com/jf-data/NBA/infrastructure-budget.pdf
Maintenance	https://jecrcfoundation.com/jf-data/NBA/maintenance-Budget.pdf
library	https://jecrcfoundation.com/jf-data/NBA/library%20expenses.pdf

SESSION-2020-21:

4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years (INR in Lakhs) (10) & 4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years (INR in lakhs) (10)

Year	Budget allocated for infrastructure augmentation	Expenditure for infrastructure augmentation	Total expenditure excluding Salary	Expenditure on maintenance of academic facilities (excluding salary for human resources)	Expenditure on maintenance of physical facilities (excluding salary for human resources)
2020-2021 *	3,00,00,000.00	3,37,34,653.00	16,41,27,613.57	12,52,770.00	34,34,971.54
2019-2020	20,00,000.00	12,55,074.00	25,50,88,527.82	14,57,094.00	31,44,757.00
2018-2019	2,00,00,000.00	1,96,54,805.00	26,78,06,984.63	13,38,938.00	46,82,137.00
2017-2018	3,00,00,000.00	3,04,40,473.00	27,49,26,915.79	13,56,535.00	32,98,661.00
2016-2017	10,50,00,000.00	10,43,67,912.00	23,36,91,762.43	11,26,487.00	50,87,369.00
2015-2016	1,50,00,000.00	1,40,84,773.00	19,03,65,299.15	10,14,006.00	38,28,578.00
2014-2015	50,00,000.00	65,32,079.00	16,01,03,616.30	11,86,962.00	60,10,724.00

* The figures for 2020-2021 are provisional

For Jaipur Engineering College And Research Centre
Accounts Officer

PRINCIPAL
Jaipur Engineering College & Research Centre
Tonk Road, Jaipur-302022

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years

S.No.	YEAR →	2020-2021 *	2019-2020	2018-2019	2017-2018	2016-2017	2015-2016	2014-2015
1	BUILDING	2,35,74,678.00	1,65,364.00	64,50,135.00	2,41,17,746.00	10,05,73,836.00	59,78,324.00	-
2	COMPUTER	77,328.00	-	15,75,508.00	6,39,463.00	4,23,444.00	16,34,375.00	3,85,749.00
3	FURNITURE	2,73,915.00	3,07,238.00	27,13,569.00	37,92,593.00	13,65,130.00	35,70,231.00	10,16,092.00
4	OTHER ASSETS	98,08,732.00	7,82,472.00	89,15,593.00	18,90,671.00	20,05,502.00	29,01,843.00	51,30,238.00
	Total	3,37,34,653.00	12,55,074.00	1,96,54,805.00	3,04,40,473.00	10,43,67,912.00	1,40,84,773.00	65,32,079.00
	Total Expenditure Excluding Salary	16,41,27,613.57	25,50,88,527.82	26,78,06,984.63	27,49,26,915.79	23,36,91,762.43	19,03,65,299.15	16,01,03,616.30
	Percentage		0.49%	7.34%	11.07%	44.66%	7.40%	4.08%
	Average Percentage			12.51%				

* The figures for 2020-2021 are provisional.

For Jaipur Engineering College And Research Centre
Accounts Officer

PRINCIPAL
Jaipur Engineering College & Research Centre
Tonk Road, Jaipur-302022

SESSION-2020-21:

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years

S.No.	YEAR->	2020-2021 *	2019-2020	2018-2019	2017-2018	2016-2017	2015-2016	2014-2015
1	Affiliation Fee	11,70,000.00	11,82,000.00	17,12,000.00	6,50,000.00	6,50,000.00	6,00,000.00	5,08,000.00
2	Internet Expenses	9,75,484.00	9,75,121.00	9,73,342.00	9,84,387.00	7,92,170.00	8,69,989.00	6,23,009.00
3	Laboratory Expenses	33,307.00	2,01,182.00	1,58,652.00	2,40,233.00	1,54,970.00	1,09,078.00	4,63,736.00
4	Library Expenses	2,43,979.00	2,80,791.00	2,06,944.00	1,31,915.00	1,79,347.00	34,939.00	1,00,217.00
5	Repair & Maintenance	34,34,971.54	31,44,757.00	46,82,137.00	32,98,661.00	50,87,369.00	38,28,578.00	60,10,724.00
6	Scholarship	6,74,280.00	4,85,00,155.00	70,24,886.00	-	-	11,000.00	-
7	Student Expenses	35,639.20	1,04,630.00	1,88,000.00	-	1,10,822.00	1,67,968.00	4,600.00
8	Student Project	-	-	85,000.00	-	-	-	10,000.00
9	Hostel & Mess Expenses	28,73,931.00	2,15,49,875.00	1,96,05,886.38	1,72,71,651.00	1,53,55,839.00	1,08,41,233.00	1,06,50,390.00
10	Electricity Expenses	40,56,794.00	50,89,153.06	74,13,365.94	59,80,802.53	73,92,445.00	58,41,517.00	42,68,708.00
	Total (A)	**1,34,98,385.74**	**8,10,27,664.06**	**4,20,50,213.32**	**2,85,57,649.53**	**2,97,22,962.00**	**2,23,04,302.00**	**2,26,39,474.00**
	Total Expenditure Excluding Salary	**16,41,27,613.57**	**25,50,88,527.82**	**26,78,06,984.63**	**27,49,26,915.79**	**23,36,91,762.43**	**19,03,65,299.15**	**16,01,03,616.30**
	Percentage	8.22%	31.76%	15.70%	10.39%	12.72%	11.72%	14.14%
	Average Percentage			14.95%				
	Total Expenditure	29,46,32,263.57	41,44,20,526.82	40,83,07,083.64	41,25,73,198.79	40,83,71,358.58	36,89,07,367.15	37,10,64,374.20
	Less: Profits	-	-	1,56,94,424.01	-	4,09,52,683.15	6,66,74,688.00	11,09,43,821.90
	Less: Salary	13,05,04,650.00	15,93,31,999.00	12,48,05,675.00	13,76,46,283.00	13,37,26,913.00	11,18,67,380.00	10,00,16,936.00
	Total Expenditure Excluding Salary	**16,41,27,613.57**	**25,50,88,527.82**	**26,78,06,984.63**	**27,49,26,915.79**	**23,36,91,762.43**	**19,03,65,299.15**	**16,01,03,616.30**

* The figures for 2020-2021 are Provisionals.

For Jaipur Engineering College
And Research Centre

Accounts Officer

PRINCIPAL
Jaipur Engineering College &
Research Centre
Tonk Road, Jaipur-302022

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Schedule 6

DEPRECIATION CHART AS ON 31.03.2019

ASSETS	Gross Block						Depreciation				Net Block	
	As on 01.04.2018	Additions		Deductions	As on 31.03.2019	Rate of Dep.	Upto 31.03.2018	Dep for the year	Written Back	Depreciation upto 31.03.2019	As on 31.03.2019	As on 31.03.2018
		More than 180 Days	Less than 180 Days									
Building	58,64,94,073.49	2,19,799.00	62,30,336.00		59,49,44,208.49	3.34%	7,45,32,830.31	1,97,67,090.00		9,42,99,920.31	50,06,44,288.18	51,39,61,243.18
Land	16,86,34,611.62				16,86,34,611.62	0.00%	-	-		-	16,86,34,611.62	16,86,34,611.62
Land Consolidation	21,00,77,336.00				21,00,77,336.00	0.00%					21,00,77,336.00	21,00,77,336.00
Computer	2,84,96,005.83	7,49,583.00	8,25,925.00		3,00,71,513.83	16.21%	2,84,96,005.83	15,75,508.00		3,00,71,513.83	-	-
Furniture	3,67,48,036.12	12,66,683.00	14,26,888.00		3,94,61,607.12	6.33%	1,35,49,179.73	24,52,759.00		1,60,01,938.73	2,34,59,668.39	2,31,98,856.39
Other Assets	6,04,11,972.36	84,31,000.00	4,84,593.00		6,93,27,565.36	4.75%	1,91,88,002.53	32,61,550.00		2,24,69,552.53	4,68,58,012.83	4,12,23,969.83
Vehicle	2,02,33,053.57				2,02,33,053.57	9.50%	1,18,90,233.22	19,22,140.00		1,38,12,373.22	64,20,680.35	83,42,820.35
Bus	1,52,97,862.06				1,52,97,862.06	9.50%	1,13,08,125.40	14,53,297.00		1,27,61,422.40	25,36,439.66	39,89,736.66
TOTAL	1,12,83,92,953.05	1,06,87,065.00	89,67,740.00	-	1,14,80,47,758.05		15,89,64,377.02	3,04,52,344.00	-	18,94,16,721.02	95,86,31,037.03	96,94,28,576.03

For Jaipur Engineering College & Research Centre

President

For Jaipur Engineering College
And Research Centre

Accounts Officer

Agrawal & Associates
JAIPUR

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Income and Expenditure A/c as on 31.03.2020

Particulars	Amount	Particulars	Amount
To Affiliation Fee	11,82,000.00	By Annual Fee	28,60,76,961.49
To Conference Expenses	3,14,414.00	By Bus Fee	1,31,32,900.00
To Consultancy Expenses	46,800.00	By Hostel Fee	9,72,05,166.00
To Cultural & Placement Expenses	22,41,573.00	By Donation Received	1,00,00,000.00
To Electricity Expenses	50,89,153.06	By Misc Income	45,41,479.50
To Financial Charges	12,40,23,082.01	By Interest Received	1,80,324.00
To Hostel Expenses	2,15,49,875.00	By Excess of Expenditure over Income	32,84,695.83
To Office Expenses	16,74,845.00		
To Other Administrative Expenses	9,92,651.03		
To Repair & Maintenance	31,44,757.00		
To Repair & Maintenance Expenses (Vehicle)	18,79,644.00		
To Salary Expenses	15,93,31,999.00		
To Bus Running Expenses	46,97,586.78		
To Conveyance Exp	11,56,013.44		
To Depreciation	2,99,89,191.00		
To Diesel For Generator	4,41,146.50		
To Insurance Exp	10,29,542.00		
To Interest on TDS	18,10,672.00		
To Internet Exp	9,75,121.00		
To Laboratory Expenses	2,01,182.00		
To Library Expenses	2,60,791.00		
To PF Demand	2,69,840.00		
To Scholarship	4,85,00,155.00		
To Security Expenses	24,58,365.00		
To Sports Expenses	30,836.00		
To Staffwelfare	6,30,920.00		
To Student Expenses	1,04,630.00		
To Travelling Exp	5,98,944.00		
To Uniform Expenses	18,000.00		
To Website Development Exp	56,328.00		
	41,44,20,526.82		41,44,20,526.82

For Jaipur Engineering College and Research Centre

For Jaipur Engineering College & Research Centre

Chairman

O. P. AGRAWAL
(Chairman)

As per our audit report of even date
For Vimal Agarwal & Associates
(Chartered Accountants)
FRN: 004187C

(Vimal Agarwal)
Partner
M. No.: 071627

Place: Jaipur
Date: 30.12.2020

For Jaipur Engineering College And Research Centre

Accounts Officer

Photocopy attested

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Profit & Loss A/c as on 31.03.2019

Particulars	Amount	Particulars	Amount
To Affiliation Fee	17,12,000.00	By Annual Fee	29,19,68,746.77
To Conference Expenses	5,93,128.80	By Bus Fee	1,30,46,700.00
To Consultancy Expenses	6,43,700.00	By Hostel Fee	9,69,66,670.00
To Cultural & Placement Expenses	31,78,098.12	By Insurance Claim Received	84,057.50
To Financial Charges	17,50,48,344.45	By Interest Received	3,79,413.87
To Hostel Expenses	1,96,05,886.38	By Misc Income	28,81,495.50
To Office Expenses	15,94,158.27		
To Other Administrative Expenses	8,04,515.00		
To Repair & Maintenance Expenses (Vehicle)	15,48,819.00		
To Salary Expenses	12,48,95,675.00		
To Bus Running Expenses	39,31,000.26		
To Conveyance Exp	8,08,572.41		
To Depreciation	3,04,52,344.00		
To Diesel For Generator	4,01,000.00		
To Electricity Expenses	74,13,355.94		
To Insurance Exp	9,25,004.00		
To Interest on TDS	18,79,874.00		
To Internet Exp	9,73,342.00		
To Lab Expenses	1,58,552.00		
To Library Expenses	2,06,944.00		
To PF Demand	9,01,573.00		
To Repair & Maintenance	46,82,137.00		
To Scholarship	70,24,888.00		
To Security Expenses	22,97,035.00		
To Sports Expenses	17,010.00		
To Staffwelfare	2,58,427.00		
To Student Expenses	1,88,000.00		
To Students Project	85,000.00		
To Travelling Exp	2,58,509.00		
To UD Tax	62,843.00		
To Uniform Expenses	2,06,800.00		
To Website Development Exp	45,056.00		
To Excess Of Income Over Expenditure	1,58,94,424.01		
	40,83,07,063.64		40,83,07,063.64

For Jaipur Engineering College and Research Centre

For Jaipur Engineering College & Research Centre

Director

O. P. AGRAWAL
(Chairman)

As per our audit report of even date
For Vimal Agarwal & Associates
(Chartered Accountants)
FRN: 004187C

(Vimal Agarwal)
Partner
M. No.: 071627

Place: Jaipur
Date: 23.10.2019

For Jaipur Engineering College And Research Centre

Accounts Officer

Photocopy attested

S. NO	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
10.3.1	**Program Specific Budget Allocation, Utilization** **10.3.1 Adequacy of budget allocation**	Inadequate budget allocation; arbitrary allocations and no proper justifications was made	Department head prepare the proposed budget on different sections such as Hardware and software, Consumable, raw material, Additional Facilities and R&D, Curricular & Co curricular activities. As per new facility is concern separate budget is provided for research facility at the department and budget allocation for attending conferences, budget for start-up and incubation centre are allocated according to financial assistance. Department Head is intimated of the extent of funds allocated against the budget proposals to the head of Institution and same is approved by NSERD. Proposed budget is enclosed .

JECRC

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Jaipur Engineering College and Research Centre, Jaipur

Department of Mechanical Engineering

Subject: Budget & Expenditure of last five year

The Proposed Budget and Expenditure Budget of Mechanical Engineering Department is as follows (Five Year)

S.NO.	YEAR	PROPOSED BUDGET(in Rs/-)	EXPENDITURE(in RS/-)
1	2021-22	1245599/-	
2	2020-2021	1260000/-	27627/-
3	2019-2020	1530000/-	664939/-
4	2018-2019	1372000/-	1059998/-
5	2017-2018	1502770/-	1338669/-
6	2016-2017	407300/-	313961/-

Submitted for your kind approval

app

HOD

Head of the Department
Mechanical Engineering
JECRC, Jaipur

SESSION-2021-22 PROPOSED BUDGET

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Department of Mechanical Engineering

Subject: Budget for Session 2020-21

The Proposed Budget for the session July2020-June2021 of Mechanical Engineering Department is as follows:

S. No.	Category	Items	Proposed Budget (in Rs)
1	Consumable	Raw Material For Workshop & Labs	160000/-
2	Hardware &Software	Machines and Equipments 1.Creep testing machine 2. Thermocouple for chip measurement 3 Cantilever beam with electric dynamometer	500000/-
3	R& D & Additional Facilities	6. Centre of excellence 7. International conference/ 8. National conference 9. FDP /Workshop/ 10. Guest lecture/Industry visit	500000/-
4	Curricular & Co Curricular Activities	Technical Events (MECHTECH Activities)	100000/-
		TOTAL	1260000/-

Submitted for your kind Approval

HOD

Head of the Department
Mechanical Engineering
JECRC, Jaipur

S. NO	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
10.3.2	**Program Specific Budget Allocation, Utilization** **10.3.2 Utilization of allocated funds**	Poor budget utilization as it not decided by the departmental authorities	Department head prepare the proposed budget on different sections such as Hardware and software, Consumable , raw material, Additional Facilities and R&D, Curricular & Co curricular activities. Department Head is intimated of the extent of funds utilization against the budget proposals. Actions for procurement of lab equipment, up-gradation of existing lab facilities, purchase of consumables etc. are informed to Head of the institution. Then It is approved by NSERD .

Jaipur Engineering College and Research Centre, Jaipur
Department of Mechanical Engineering

Subject: Budget & Expenditure for session 2019-20

The Budget & expenditure for the session July2019-June2020 of Mechanical Engineering Department is as follows:

S. No.	Category	Items	Budget Sanctioned(in Rs)	Total Expenditure (in Rs)	Expenditure by Institute (in Rs)	Expenditure other than Institute
1	Consumable	Raw Material For Workshop & Labs	160000	118225	120000	NIL
2	Hardware &Software	Machines and Equipments 1.Creep testing machine 2. Thermocouple for chip measurement 3. Cantilever beam with electric dynamometer	500000	nil	nil	NIL
3	Additional Facilities R& D	1. Centre of Excellence (BABA automobile) 2. Tchnical club (Moonrider) activities 3. 3 D printing 4. International conference 5. National conference 6. FDP /Workshop 7. Guest lecture/Industry visit	700000	500000 50000 23550+ 3390	550000 3390	23550 national conference (Generate 102500) International conference
4	Curricular & Co curricular Activities	Technical Events	120000	nil	nil	101500 (Generate)
			1530000	695165	673390	227550

Submitted for your kind Approval

HOD ME

Head of the Department
Mechanical Engineering
JECRC, Jaipur

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Department of Mechanical Engineering

Subject: Budget for session 2020-21

The Expenditure Budget for the session July2020-June2021 of Mechanical Engineering Department is as follows:

S. No.	Category	Items	Budget proposed (in Rs)	Total Expenditure (in Rs)	Expenditure by Institute (in Rs)	Expenditure other than Institute
1	Consumable	Raw Material For Workshop & Labs	160000/-	27627/-	27627/-	
2	Hardware &Software	Machines and Equipments 1.Creep testing machine 2. Thermocouple for chip measurement 3 Cantilever beam with electric dynamometer	500000/-	NIL	NIL	NIL
3	R& D & Additional Facilities	1. Centre of excellence 2. International conference/ 3. National conference 4. FDP /Workshop/ 5. Guest lecture/Industry visit	500000/-	NIL	NIL	NIL
4	Curricular & Co Curricular Activities	Technical Events (MECHTECH Activities)	100000/-	NIL	NIL	NIL
		TOTAL	1260000/-	27627/-	27627/-	NIL

Submitted for your kind Approval

Head of the Department
Mechanical Engineering
JECRC, Jaipur

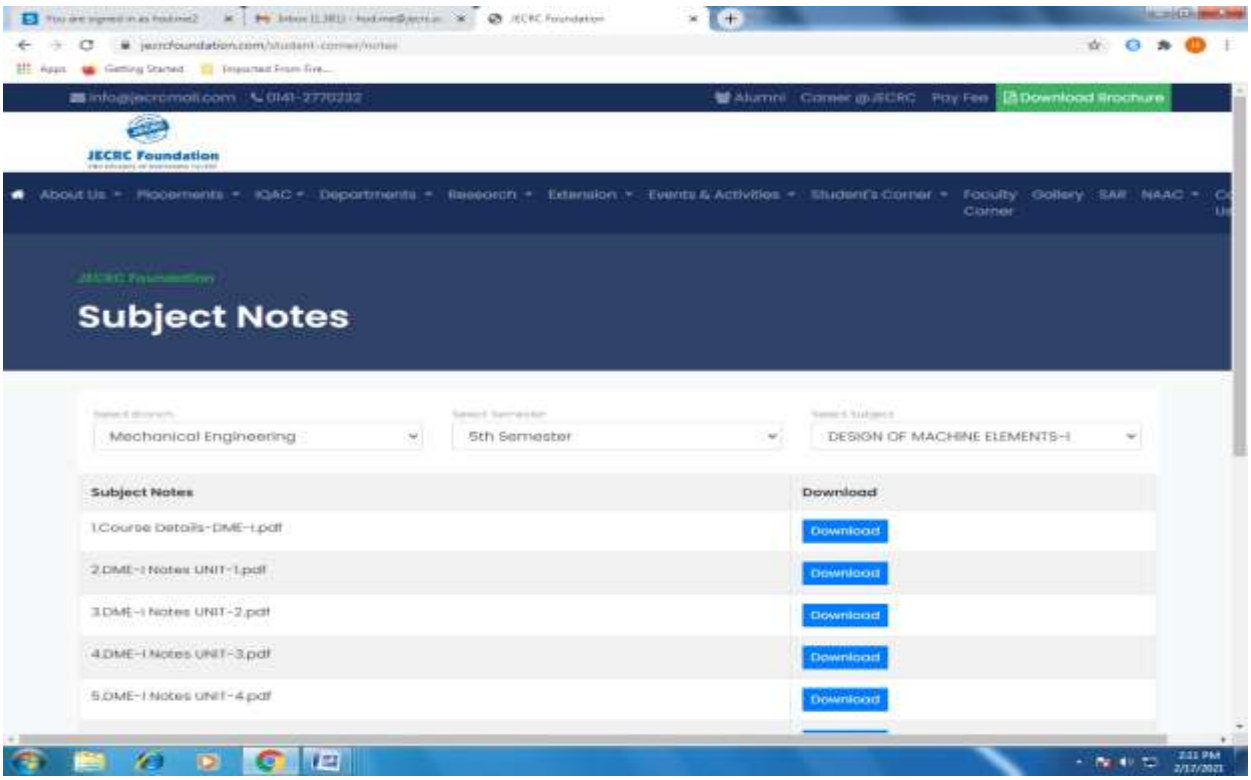
<table>
<tr><th>S. NO</th><th>CRITERIA</th><th>OBSERVATION MADE BY NBA</th><th>COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)</th></tr>
<tr><td>10.4.1</td><td>Library and Internet

10.4.1 Quality of learning resources (hard/soft)</td><td>10.4.1 Quality of learning resources (hard/soft)

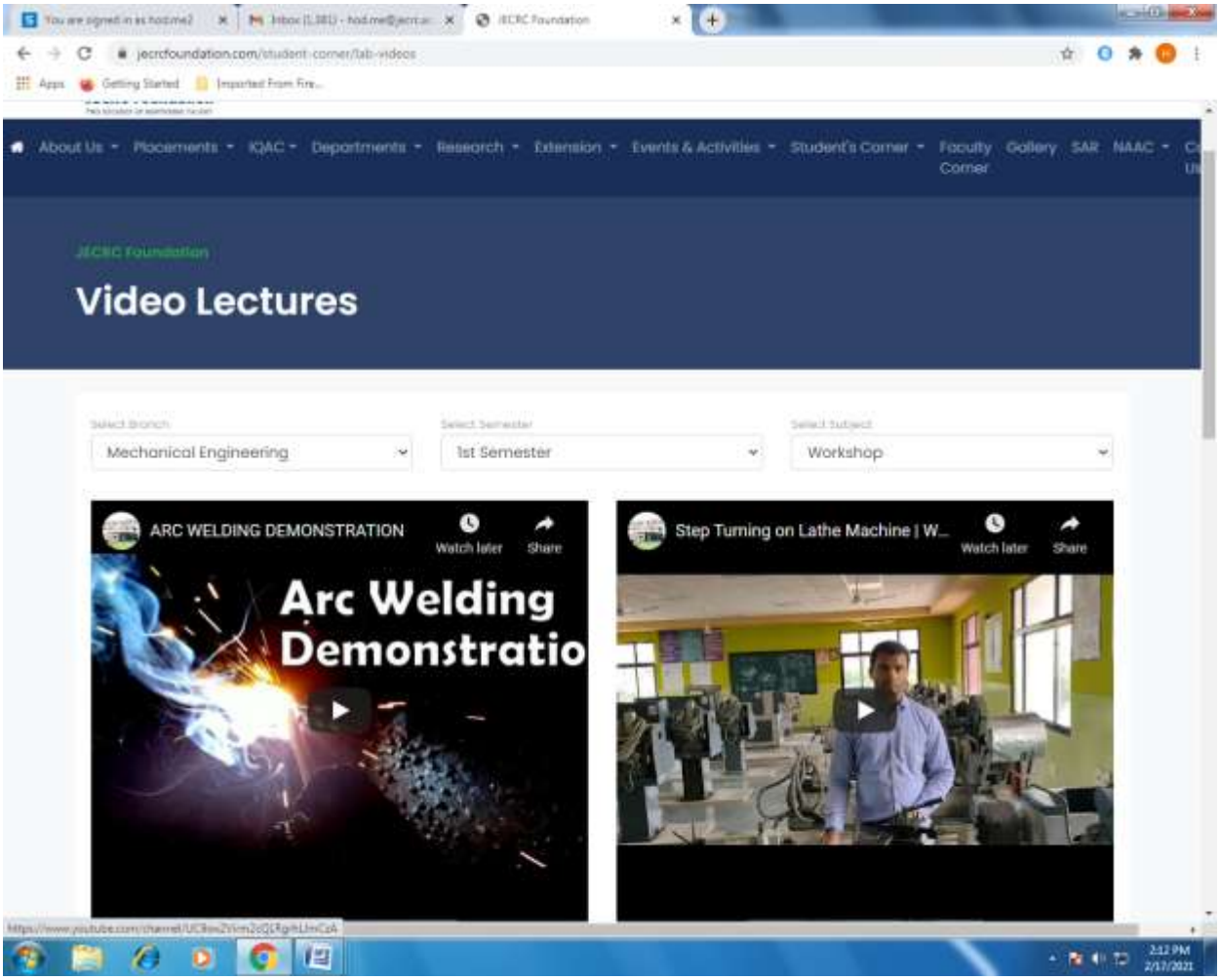
Limited number of e-resource facilities</td><td>The institute has well organised library with computerized integrated library management software (ILMS) for issuing the books, cataloguing and classification and keeping the details of the book issued. The library is using ALICE an integrated Library Management software package for issuing the books and keeping the details of the books issued.
The modules of software support all the activities of the circulation section including the issue and return of books, book reservations, reminders and recall of books, and overdue charges.
There are dedicated terminals (OPAC System) for searching the library collection and Rack index. Circulation, Cataloguing.
Further, study material provided by faculty members, Video on laboratory experiments made by faculty members. Swayam and Swayam Prabha portals, NPTEL intranet facility, Virtual Laboratory facility, latest research publications / journals, (e.g. IEEE, Research GATE) etc. are provided to students through separate intranet link through library.
Institute continuously enrich e-resource facilities. All the information related to e-resource facilities is available on website.
Wi-Fi facility across the campus with a bandwidth of 1 Gbps is available.

<table><tr><td>e-resources</td><td>Link of e-resources</td></tr><tr><td>Lectures notes</td><td>https://jecrcfoundation.com/student-corner/notes</td></tr><tr><td>Lab Videos</td><td>https://jecrcfoundation.com/student-corner/lab-videos</td></tr></table></td></tr>
</table>

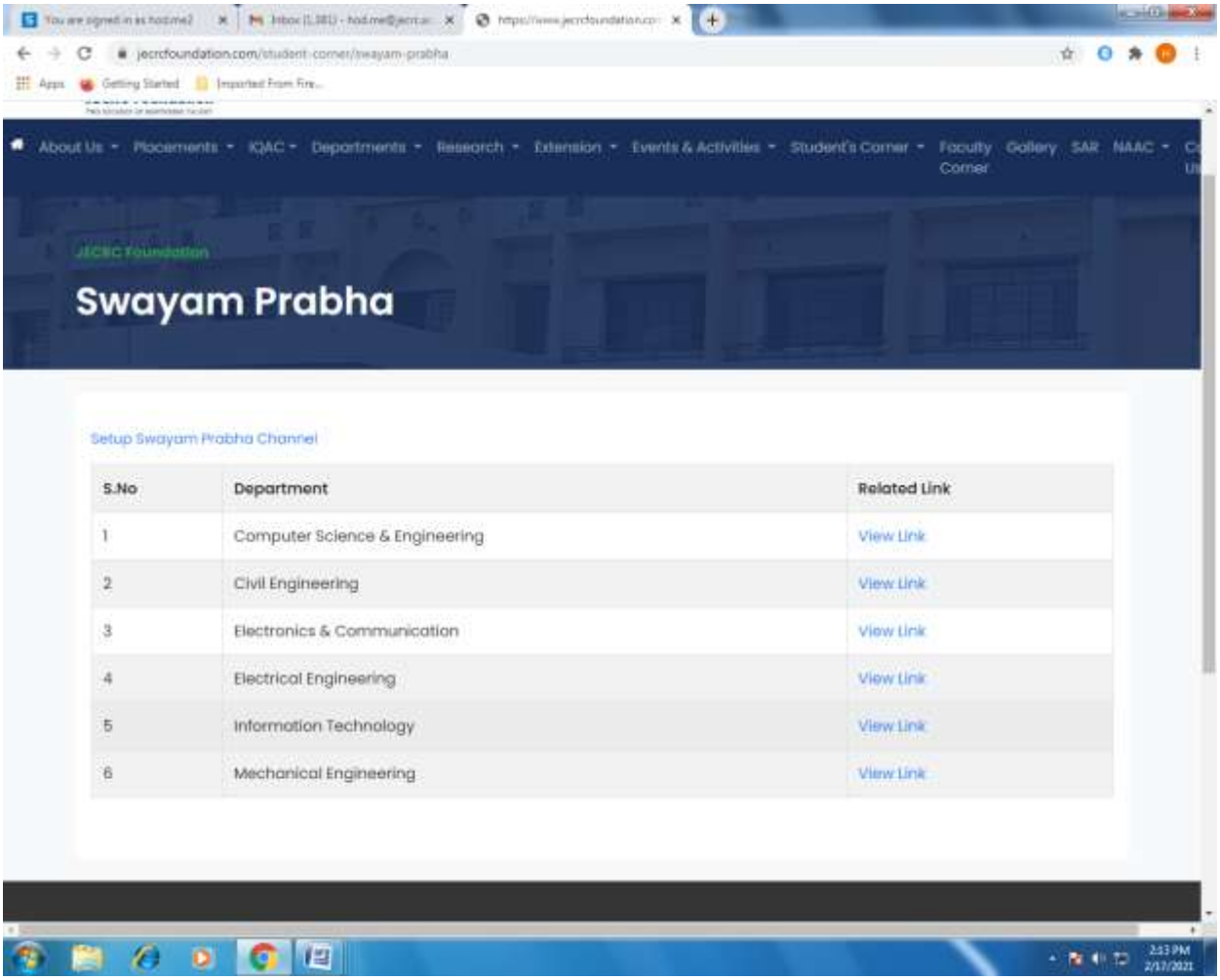
			Swayam link	https://jecrcfoundation.com/student-corner/swayam-prabha
			NPTEL	https://jecrcfoundation.com/student-corner/nptel
			Virtual lab	https://jecrcfoundation.com/pdf/virtual%20lab%20expression%20of%20interest.pdf

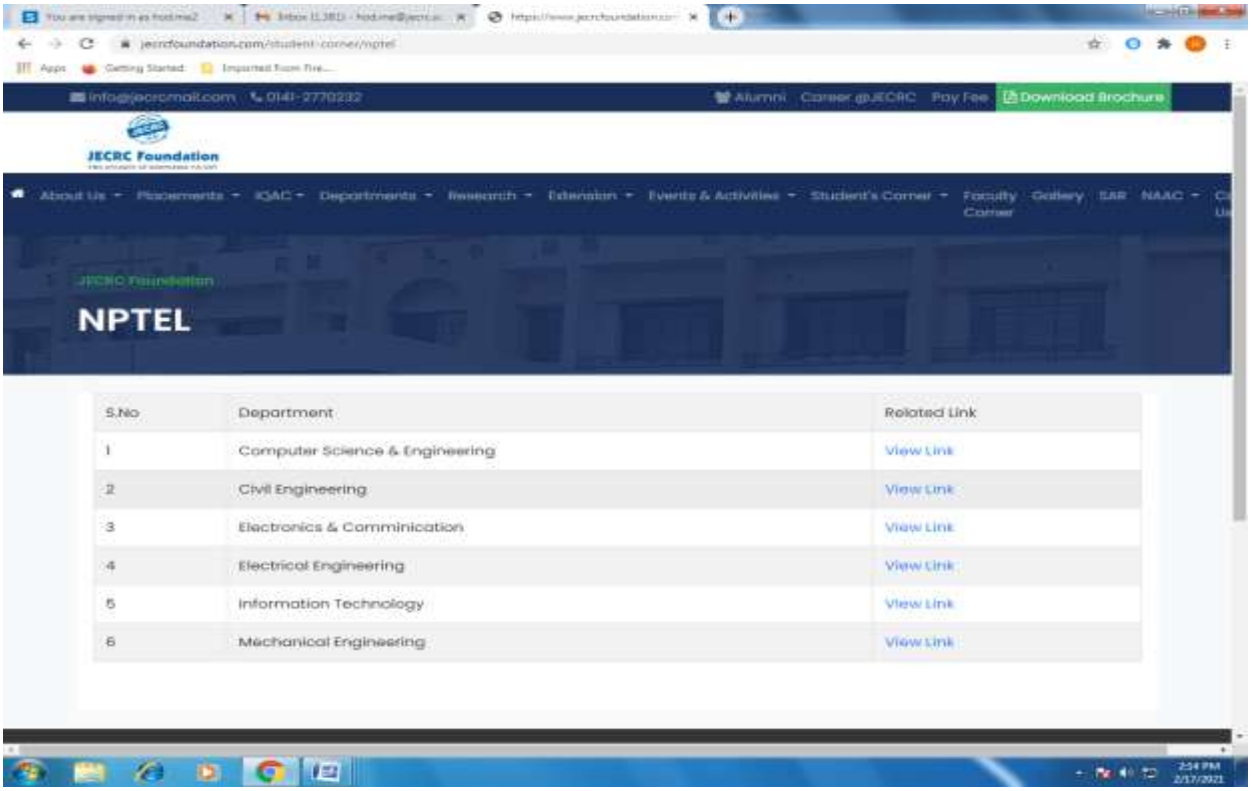


https://jecrcfoundation.com/jf-data/NBA/4.1.1.pdf



https://jecrcfoundation.com/jf-data/NBA/4.1.1.pdf


jecrcfoundation.com/student-corner/swayam-prabha
About Us
Placements
IQAC
Departments
Research
Extension
Events & Activities
Student's Corner
Faculty Corner
Gallery
SAR
NAAC
JECRC Foundation
Swayam Prabha
Setup Swayam Prabha Channel
S.No
Department
Related Link
1
Computer Science & Engineering
View Link
2
Civil Engineering
View Link
3
Electronics & Communication
View Link
4
Electrical Engineering
View Link
5
Information Technology
View Link
6
Mechanical Engineering
View Link


jecrcfoundation.com/student-corner/nptel
info@jecrcmail.com
0141-2770232
Alumni
Career @JECRC
Pay Fee
Download Brochure
JECRC Foundation
About Us
Placements
IQAC
Departments
Research
Extension
Events & Activities
Student's Corner
Faculty Corner
Gallery
SAR
NAAC
JECRC Foundation
NPTEL
S.No
Department
Related Link
1
Computer Science & Engineering
View Link
2
Civil Engineering
View Link
3
Electronics & Comminication
View Link
4
Electrical Engineering
View Link
5
Information Technology
View Link
6
Mechanical Engineering
View Link

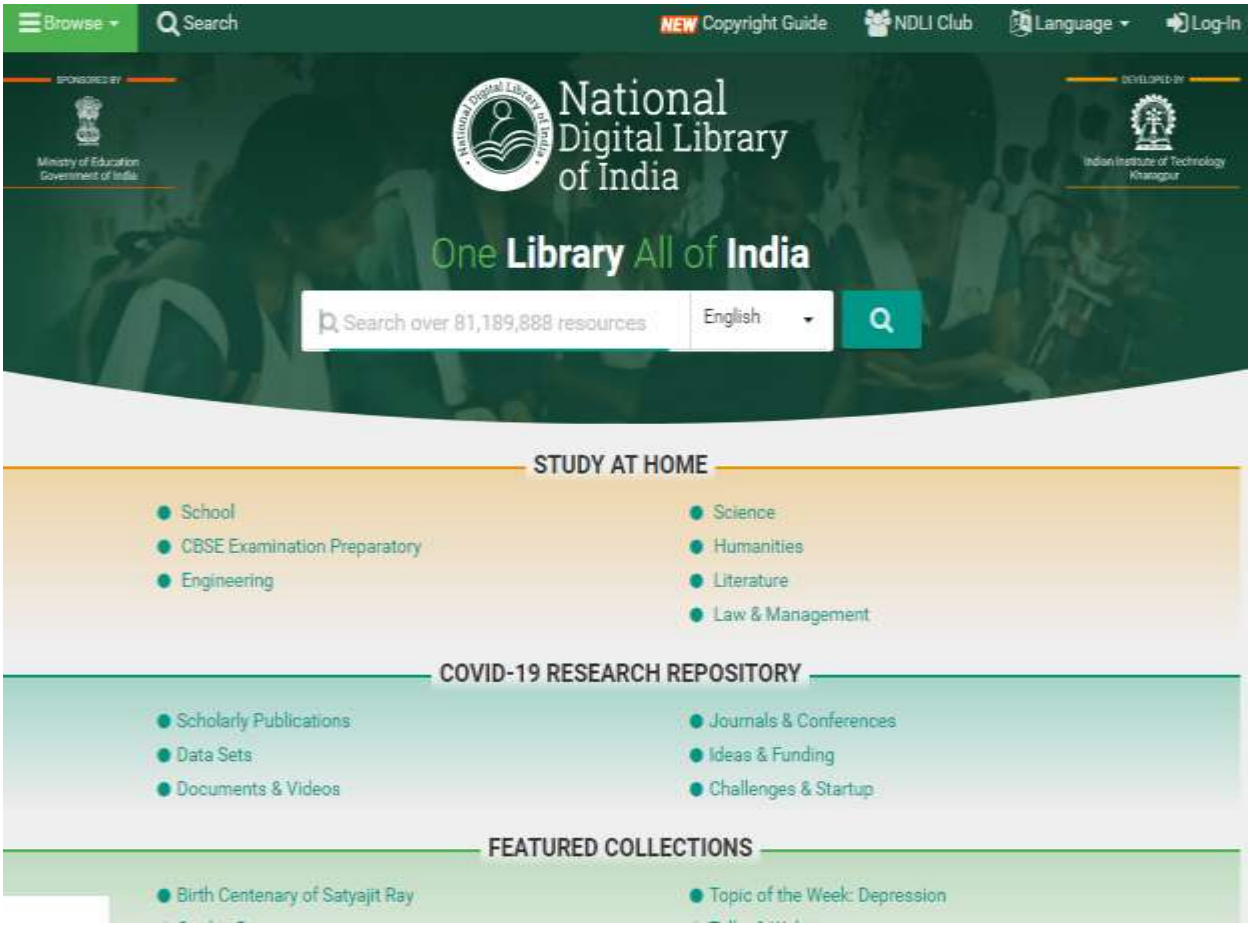
JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE, JAIPUR

Virtual Lab Record

S.No.	Department	Related Link
1	Computer Science & Engineering	https://jecrcfoundation.com/pdf/Virtual-Lab/CS.pdf
2	Civil Engineering	https://jecrcfoundation.com/pdf/Virtual-Lab/CIVIL.pdf
3	Electronics & Communication	https://jecrcfoundation.com/pdf/Virtual-Lab/ECE.pdf
4	Electrical Engineering	https://jecrcfoundation.com/pdf/Virtual-Lab/EE.pdf
5	Information Technology	https://jecrcfoundation.com/pdf/Virtual-Lab/IT.pdf
6	Mechanical Engineering	https://jecrcfoundation.com/pdf/Virtual-Lab/ME.pdf

7	AI&DS	https://jecrcfoundation.com/pdf/Virtual-Lab/AI-DS.pdf

S.No.	Department	Related Link
1	Computer Science & Engineering	Link
2	Civil Engineering	Link
3	Electronics & Communication	Link
4	Electrical Engineering	Link
5	Information Technology	Link
6	Mechanical Engineering	Link
7	AI&DS	Link



Library Automation Software	https://jecrcfoundation.com/jf-data/NBA/library-software.pdf

S. No	CRITERIA	OBSERVATION MADE BY NBA	COMPLIANCE STATUS (ACTION TAKEN BY INSTITUTION)
10.4.2	**Library and Internet** **10.4.2 Internet**	Limited Wi-Fi facilities, internet access in labs, classrooms, library and offices.	The institute time to time upgrades its IT facilities viz. Wi-Fi facility across the campus with a bandwidth of 1 Gbps. LCD projectors approx 45 included for the teaching-learning process. Intranet facility for teaching-learning process. At present, the institute has 868 work stations and out of which 762 workstations are utilized in various laboratories to meet the requirements teaching - learning. To provide security from unauthorized users, the institution is using the Sophos firewall to prevent illegal access to the internet. Hardware and software updating take place in line with

			the demand of the latest syllabus as well as student's feedback. Further, study material provided by faculty members, Video on laboratory experiments made by faculty members. Swayam and Swayam Prabha portals, NPTEL intranet facility, Virtual Laboratory facility, latest research publications / journals, (e.g. IEEE, Research GATE) etc. are provided to students through separate intranet link through library. https://jecrcfoundation.com/library-facilities Library Automation Software (Screenshot) — https://jecrcfoundation.com/jf-data/NBA/library-software.pdf

Tax Invoice

BlazeNet Limited
602, The Landmark,
D'38A, "C" Scheme, Ahinsa Circle,
Subhash Marg, Jaipur
GSTIN/UIN: 08AAACB8732B1Z0
State Name : Rajasthan, Code : 08
CIN: U30009GJ1998PLC035037
Buyer (Bill to)

National Society For Engineering Research And Developement (JECRC)
JECRC Campus Opp. EPIP Gate,
Tonk Road, Jaipur - 302022
State Name : Rajasthan, Code : 08
Place of Supply : Rajasthan

Invoice No.	Dated
BLJP/2122/09/001	**1-Sep-21**
Delivery Note	Mode/Terms of Payment
	16-Sep-21
Reference No. & Date.	Other References
Buyer's Order No.	Dated
Dispatch Doc No	Delivery Note Date
Dispatched through	Destination
Terms of Delivery	

Sl No	Description of Services	HSN/SAC	Quantity	Rate	per	Amount
1	**IP Lease Line** *Billing Period - 01/09/2021 to 31/08/2022* *RG BW 750 Mbps*					1,50,000.00
	CGST 9%				*9 %*	13,500.00
	SGST 9%				*9 %*	13,500.00
	Total					₹ 1,77,000.00

E. & O.E

Amount Chargeable (in words)
INR One Lakh Seventy Seven Thousand Only

HSN/SAC	Taxable Value	Central Tax Rate	Central Tax Amount	State Tax Rate	State Tax Amount	Total Tax Amount
	1,50,000.00	9%	13,500.00	9%	13,500.00	27,000.00
Total	1,50,000.00		13,500.00		13,500.00	27,000.00

Tax Amount (in words) : **INR Twenty Seven Thousand Only**
Company's Service Tax No. : **AAACB8732BST001**
Company's PAN : **AAACB8732B**

Declaration
1. To Avoid disconnection of service you are requested to pay the full amount by the due date mentioned in the invoice. 2. It will be deemed that you have accepted this invoices in full in the event you have not lodged any written objection with us within 30 days of receipt of this invoice.

for BlazeNet Limited

BLAZENET LIMITED

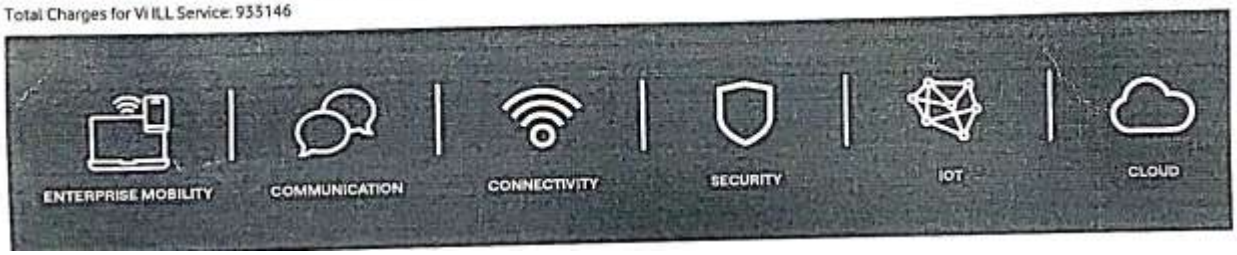
Authorised Signatory

This is a Computer Generated Invoice

Your usage details

Company Name	: CO. NATIONAL SOCIETY FOR ENGINEERING RESEARC	Invoice Date	: 01.12.20
		Invoice Number	: EIRJ112000134707
PO Number	: PO	Relationship Number	: 30279140
PO Date	: 30.09.19	Circuit ID	: ENT32GRGJPR017845
Control Number	: 933146	Port Bandwidth	: NA
Plan Name	: ILL_QRC_A2A_Service Charges_INR	CIR Bandwidth	: 250 Mbps
Product Flavor	:	Annual Charges Service Rental (INR)	: 823,620.00
Billing Periodicity	: Quarterly	Installation Address	: JECRC EPIP GATE TONKROAD SITAPURA JAIPUR ...

Billing Details for Vi ILL Service: 933146		Amount (INR)
Recurring Charges	Charges for the period	
Service Rental Charges	01.01.21 to 31.03.21	205,905.00
Sub total		205,905.00
Total Rental Charges		205,905.00
		(INR)
Tax		
State GST @ 9.00%		18,531.45
Central GST @ 9.00%		18,531.45
Total taxes		37,062.90
Total Charges for Vi ILL Service: 935146		242,967.90



4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc.		
Room number or Name of classrooms/Seminar Hall with LCD /wifi/LAN	**Type of ICT facility**	**Link to geo tagged photos and master time table**
DF-3Classroom)	WI-FI+DESKTOP+PROJECTOR	link for geotag photos
DS-1(Classroom)	WI-FI+DESKTOP+PROJECTOR	
DS-3(Classroom)	WI-FI+DESKTOP+PROJECTOR	
DS-5(Classroom)	WI-FI+DESKTOP+PROJECTOR	
DF-04(Seminar Hall)	LAN+WI-FI+ROOFTOP PROJECTOR	
CLG-02 (Classroom)	WI-FI+DESKTOP+PROJECTOR	
CLG-06 (Classroom)	WI-FI+DESKTOP+PROJECTOR	
CLG-05 (Classroom)	WI-FI+DESKTOP+PROJECTOR	
CG-05(Seminar Hall)	WI-FI+DESKTOP+PROJECTOR	
CG-06 (Classroom)	WI-FI+DESKTOP+PROJECTOR	
CG-08 (Classroom)	WI-FI+DESKTOP+PROJECTOR	
CG-09 (Classroom)	WI-FI+DESKTOP+PROJECTOR	
CS-01 (Seminar Hall)	LAN+WI-FI+ROOFTOP PROJECTOR	
CF-03 (Classroom)	WI-FI+DESKTOP+PROJECTOR	
CF-06 (Classroom)	WI-FI+DESKTOP+PROJECTOR	
CF-07 (Classroom)	WI-FI+DESKTOP+PROJECTOR	

CF-13 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CS-03 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CS-04 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CS-05 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CS-08 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CS-09 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CS-18 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CT-1 (Seminar Hall)	LAN+WI-FI+ROOFTOP PROJECTOR
CT-04 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CT-05 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CT-07 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CT-11 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CT-12 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CT-13 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CT-19 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CT-20 (Classroom)	WI-FI+DESKTOP+PROJECTOR
CF-12 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BLG-13 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BLG-19 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BG-07 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BG-14 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BG-19 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BF-01 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BF-06 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BF-13 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BF-18 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BS-01 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BS-06 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BS-08 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BS-12 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BT-01(Classroom)	WI-FI+DESKTOP+PROJECTOR
BT-04(Classroom)	WI-FI+DESKTOP+PROJECTOR
BT-06(Classroom)	WI-FI+DESKTOP+PROJECTOR
BT-07 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BT-14 (Classroom)	WI-FI+DESKTOP+PROJECTOR
BT-19 (Classroom)	WI-FI+DESKTOP+PROJECTOR
AG-05 (Classroom)	WI-FI+DESKTOP+PROJECTOR
AG-06 (Classroom)	WI-FI+DESKTOP+PROJECTOR
AF-01 (Seminar Hall)	LAN+WI-FI+ROOFTOP PROJECTOR
AF-07 (Classroom)	WI-FI+DESKTOP+PROJECTOR
AF-09 (Classroom)	WI-FI+DESKTOP+PROJECTOR
AS13 (Classroom)	WI-FI+DESKTOP+PROJECTOR
AS14 (Classroom)	WI-FI+DESKTOP+PROJECTOR
AS15 (Classroom)	WI-FI+DESKTOP+PROJECTOR
AS16 (Classroom)	WI-FI+DESKTOP+PROJECTOR

JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Declaration

It is hereby declared that information provided in this Compliance Report is factually correct. I understand and agree that an appropriate action against the institute will be initiated by the NBA (which may include debarring the institution for three years), in case any false statement/information is observed during the assessment of the compliance report.

Date: 15/02/2022

Prof. Vinay Kumar Chandna
PRINCIPAL

PRINCIPAL
Jaipur Engineering College &
Research Centre
Tonk Road, Jaipur-302022

Place: Jaipur