Academic calendar from 2018-19 to 2022-23

CSVTU Bhilai, Academic Caendar & Schedule of Examination for BE/B Arch. Session Jul - Dec 2018

S. No.	Particular of Academic/Exam Activity	BE VIII Sem. (Gen./Ltrg)	BE III Sem. (Reg. Gen./Lrtg)	BE VI Sem. (Gen./Lrtg)	BE V Sem. (Reg./Gen./Lrtg)	BE IV Sem. (Gen./Lrtg)	BE II Sem. (Reg./Back log)	BE II Sem. (Gen./Lrtg)	BE I Sem. (Reg./Gen./Lrtg)
1	Start of Session		09 Jul. 2018		09 Jul. 2018		09 Jul. 2018		16 Jul. 2018
2	Last date for Institutions to send the Subject Wise / Branch Wise List of Teachers with related subjects as per directive of Examination Cell		01 Aug. 2018		01 Aug. 2018		01 Aug. 2018		01 Aug. 2018
3	Last Date for Institutions to send the Data of Regular Students Branch/ Semester wise including Elective Subjects Optec for Question Papers/Requirement as per directive of Examination Cell		01 Aug. 2018		01 Aug. 2018		01 Aug. 2018		01 Aug. 2018
4	1 Commencement date of the submission of online exam form	19 Oct. 2018	19 Oct. 2018	23 Nov. 2018	06 Nov. 2018	06 Dec. 2018	06 Nov. 2018	21 Nov. 2011	24 Nov. 2018
	2 Last date of submission of online Exam form without late fee	26 Oct. 2018	26 Oct. 2018	30 Nov. 2018	13 Nov. 2018	3 Dec. 2018	13 Nov. 2018	01 Dec. 2011	01 Dec. 2018
	3 Last date Of submission of online Exam form with late fee 500/-	31 Oct. 2018	31 Oct. 2018	04 Dec. 2018	18 Nov. 2018	8 Dec. 2018	18 Nov. 2018	06 Dec. 2011	06 Dec. 2018
	4 Last date Of submission of online Exam form with late fee 1200/-	04 Nov. 2018	04 Nov. 2018	09 Dec. 2018	23 Nov. 2018	15 Dec. 2018	23 Nov. 2018	11 Dec. 2011	11 Dec. 2018
	5 Last date of approval of online Examination Form by Institute	05 Nov. 2018	05 Nov. 2018	10 Dec. 2018	24 Nov. 2018	16 Dec. 2018	24 Nov. 2018	11 Dec. 2011	12 Dec. 2018
5	Preparation leave		09 Nov. to 14 Nov. 2018		26 Nov. to 01 Dec. 2018		27 Nov. to 01 Dec. 2018		13 Dec. to 18 Dec. 2018
6	Link Available to the Institute for detention of the candidates		06 Nov. to 07 Nov. 2018		25 Nov. to 26 Nov. 2018		25 Nov. to 26 Nov. 2018		13 Dec. to 14 Dec. 2018
7	Hall Ticket can be downloaded before 7 days of commencement of theory Examination as per schedule	08 Nov. 2018	08 Nov. 2018	13 Dec. 2018	27 Nov. 2018	27 Dec. 2018	27 Nov. 2018	15 Dec. 2011	15 Dec. 2018
8	Submission of online sessional marks		18 Nov. to 19 Nov. 2018		03 Dec. to 07 Dec. 2018		04 Dec. to 09 Dec. 2018		21 Dec. to 24 Dec. 2018
9	Schedule Of Theory Exam	16 Nov. to 28 Nov. 2018	15 Nov. to 29 Nov. 2018	20 Dec. to 31 Jan. 2019	03 Dec. to 14 Dec. 2018	04 Jan. to 17 Jan. 2019	04 Dec. to 15 Dec. 2018	21 Dec. to 14 Jan. 2019	21 Dec. to 14 Jan. 2019
10	Schedule Of Practical Exam	10 Nov. to 24 Dec. 2018	30 Nov. to 04 Dec. 2018	14 Jan. to 29 Jan. 2019	18 Dec. to 22 Dec. 2018	20 Jan. to 26 Jan. 2019	18 Dec. to 22 Dec. 2018	11 Jan. to 24 Jan. 2019	15 Jan. to 23 Jan. 2019
11	Online submission of practical marks	10 Nov. to 10 Dec. 2018	30 Nov. to 10 Dec. 2018	14 Jan. to 14 Jan. 2019	18 Dec. to 26 Dec. 2018	27 Jan. to 30 Jan. 2019	18 Dec. to 26 Dec. 2018	11 Jan. to 21 Jan. 2019	15 Jan. to 25 Jan. 2019
12	Date of Declaration of Result	11 Jan. 2019	11 Jan. 2019	24 Feb. 2019	04 Feb. 2019	18 Feb. 2019	18 Feb. 2019	08 Mar. 2019	08 Mar. 2019

Note 1) Orientation course of 3 weeks from 16th July 2018 to 04 Aug. 2018 is to be conducted at college level for the new entrants taking admission in degree course(BE) in the academic year 2018-2019
2) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)
3) The result declaration dates are liable to be preponed/postponed.
4) It is imperative to follow academic calendar dates strictly for the submission of exam forms, sessional marks and practical marks for the benefit of students.

OSD(Infocell)

Examination Controller

Session 2018-2019 Odd Semester(BE/BTech)

CSVTU Bhilai, Academic Calendar & Schedule of Examination for M Tech Session Jul - Dec 2018

S. No.	Particular of Academic/Exam Activity	ME/MTech III Sem. (Reg./Backlog)	ME/MTech II Sem. (Backlog)	ME/MTech I Sem. (Reg./Backlog)
1	Start of Session	16 Jul. 2018		01 Aug. 2018
2	Last date for Institutions to send the Subject Wise / Branch Wise List of Teachers with related subjects as per directive of Examination Cell	01 Aug. 2018		01 Aug. 2018
3	Last Date for Institutions to send the Data of Regular Students Branch/Semester wise including Elective Subjects Opted for Question Papers Requirement as per directive of Examination Cell	01 Aug. 2018		01 Aug. 2018
4 1)	Commencement date of the submission of online exam form	07 Nov. 2018	14 Nov. 2018	14 Nov. 2018
2)	Last date Of submission of online Exam form without late fee	14 Nov. 2018	21 Nov. 2018	21 Nov. 2018
3)	Last date Of submission of online Exam form with late fee 30/-	19 Nov. 2018	26 Nov. 2018	26 Nov. 2018
4)	Last date Of submission of online Exam form with late fee 120/-	24 Nov. 2018	01 Dec. 2018	01 Dec. 2018
5)	Last date of approval of online Examination Form by Institute	25 Nov. 2018	02 Dec. 2018	01 Dec. 2018
5	Preparation Leave	27 Nov. to 03 Dec. 2018		02 Dec. to 11 Dec. 2018
6	Link Available to the Institute for detention of the candidates	26 Nov. to 27 Nov. 2018		03 Dec. to 04 Dec. 2018
7	Hall ticket can be downloaded before 7 days of commencement of theory Examination as per schedule	28 Nov. 2018	05 Dec. 2018	05 Dec. 2018
8	Submission of online sessional marks	04 Dec. to 09 Dec. 2018		11 Dec. to 17 Dec. 2018
9	Schedule Of Theory Exam	04 Dec. to 08 Dec. 2018	13 Dec. to 24 Dec. 2018	12 Dec. to 22 Dec. 2018
10	Schedule Of Practical Exam	09 Dec. to 14 Dec. 2018	25 Dec. to 29 Dec. 2018	25 Dec. to 29 Dec. 2018
11	Online submission of practical marks	09 Dec. to 19 Dec. 2018	25 Dec. to 04 Jan. 2019	25 Dec. to 04 Jan. 2019
12	Date of Declaration of Result	01 Mar. 2019	01 Mar. 2019	01 Mar. 2019

Note: 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)
2) The result declaration dates are liable to be prepponed/postponed.
3) It is imperative to follow academic calendar dates strictly for the submission of exam forms, sessional marks and practical marks for the benefit of stud

OSD (Infocell)

Examination Controller

Session 2018-2019 Odd Semester (MTech)

CSVTU Bhilai, Academic Calendar & Schedule of Examination for BE/B Arch, Session Jan - June 2019

S.No.	Particular of Academic/Exam Activity	BE VIII Sem. (Reg./Backlog)	BE VII Sem. (Backlog)	BE VI Sem. (Reg./Backlog)	BE V Sem. (Backlog)	BE IV Sem. (Reg./Backlog)	BE III Sem. (Backlog)	BE II Sem. (Reg./Backlog)	BE I (Backlog)
1	Start of Session	15 Jan. 2019		15 Jan. 2019		15 Jan. 2019		04 Feb. 2019	
2 1)	Commencement date of the submission of online exam form	01 Apr. 2019	02 Apr. 2019	20 Apr. 2019	06 May. 2019	21 Apr. 2019	21 May. 2019	05 May. 2019	05 May. 2019
2)	Last date Of submission of online Exam form without late fee	08 Apr. 2019	09 Apr. 2019	27 Apr. 2019	11 May. 2019	28 Apr. 2019	26 May. 2019	10 May. 2019	10 May. 2019
3)	Last date Of submission of online Exam form with late fee 30/-	13 Apr. 2019	14 Apr. 2019	02 May. 2019	16 May. 2019	03 May. 2019	31 May. 2019	15 May. 2019	15 May. 2019
4)	Last date Of submission of online Exam form with late fee 120/-	18 Apr. 2019	19 Apr. 2019	07 May. 2019	21 May. 2019	08 May. 2019	05 Jun. 2019	20 May. 2019	20 May. 2019
5)	Last date Of submission of online Exam form with late fee 200/-	23 Apr. 2019	24 Apr. 2019	12 May. 2019	26 May. 2019	13 May. 2019	10 Jun. 2019	25 May. 2019	25 May. 2019
5)	Last date of approval of online Examination Form by Institute	24 Apr. 2019	25 Apr. 2019	13 May. 2019	27 May. 2019	14 May. 2019	11 Jun. 2019	26 May. 2019	26 May. 2019
3	Link Available to the institute for detention of the candidates	25 Apr. to 26 Apr. 2019		14 May to 15 May. 2019		15 May to 16 May. 2019		27 May to 28 May. 2019	27 May to 28 May. 2019
4	Admit Card and Verification Sheet can be downloaded before 3 days of commencement of Theory/Practical Examination as per schedule								
5	Submission of online sessional marks	03 May to 07 May. 2019		20 May to 25 May. 2019		21 May. to 26 May. 2019		03 Jun. to 08 Jun. 2019	
6	Schedule Of Theory Exam	03 May to 15 May. 2019	04 May to 17 May. 2019	20 May to 31 May. 2019	04 Jun. to 14 Jun. 2019	21 May. to 01 Jun. 2019	18 Jun. to 01 Jul. 2019	03 Jun. to 02 Jul. 2019	03 Jun. to 04 Jul. 2019
7	Schedule Of Practical Exam	19 May to 23 May. 2019	19 May to 23 May. 2019	03 Jun. to 07 Jun. 2019	16 Jun. to 19 Jun. 2019	03 Jun. to 07 Jun. 2019	03 Jul. to 07 Jul. 2019	06 Jul. to 09 Jul. 2019	06 Jul. to 09 Jul. 2019
8	Online submission of practical marks	19 May to 27 May. 2019	19 May to 27 May. 2019	03 Jun. to 12 Jun. 2019	16 Jun. to 23 Jun. 2019	03 Jun. to 10 Jun. 2019	03 Jul. to 11 Jul. 2019	06 Jul. to 14 Jul. 2019	06 Jul. to 14 Jul. 2019
9	Date of Declaration of Result	28 Jun. 2019	28 Jun. 2019	16 Jul. 2019	26 Jul. 2019	19 Jul. 2019	09 Aug. 2019	27 Aug. 2019	27 Aug. 2019

Not 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)
2 The result declaration dates are liable to be preponed/postponed.
3 It is imperative to follow academic calendar dates strictly for the submission of exam forms, sessional marks and practical marks for the benefit of students.

OSD(Infocell)

Examination Controller

Session 2018-2019 Even Semester BE/BTech)

CSVTU Bhilai, Academic Calendar & Schedule of Examination for M Tech Session Jan - June 2019					
S.No.		Particular of Academic/Exam Activity	ME/MTech III Sem. (Backlog)	ME/MTech II Sem. (Reg./Backlog)	ME/MTech I Sem. (Backlog)
1		Start of Session	----------	15 Jan. 2019	----------
2	1)	Commencement date of the submission of online exam form	22 Apr. 2019	28 Apr. 2019	28 Apr. 2019
	2)	Last date Of submission of online Exam form without late fee	29 Apr. 2019	04 May. 2019	04 May. 2019
	3)	Last date Of submission of online Exam form with late fee 30/-	02 May. 2019	09 May. 2019	09 May. 2019
	4)	Last date Of submission of online Exam form with late fee 120/-	07 May. 2019	14 May. 2019	14 May. 2019
	5)	Last date Of submission of online Exam form with late fee 200/-	12 May. 2019	19 May. 2019	19 May. 2019
	5)	Last date of approval of online Examination Form by Institute	13 May. 2019	20 May. 2019	20 May. 2019
3		Link Available to the Institute for detention of the candidates		21 May. To 23 May. 2019	
4		Admit Card and Verification Sheet can be downloaded before 3 days of commencement of Theory/Practical Examination as per schedule			
5		Submission of online sessional marks		27 May. To 31 May. 2019	
6		Schedule Of Theory Exam	20 May. To 25 May. 2019	27 May. To 05 Jun. 2019	28 May. To 06 Jun. 2019
7		Schedule Of Practical Exam	28 May. To 31 May. 2019	09 Jun. To 12 Jun. 2019	09 Jun. To 12 Jun. 2019
8		Online submission of practical marks	28 May. To 02 Jun. 2019	09 Jun. To 14 Jun. 2019	09 Jun. To 14 Jun. 2019
9		Date of Declaration of Result	12 Jul. 2019	12 Jul. 2019	12 Jul. 2019

Note: 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)
2) The result declaration dates are liable to be **preponed/postponed.**
3) It is imperative to follow academic calendar dates strictly for the submission of exam forms, sessional marks and practical marks for the benefit of students.

OSD (Infocell)

Examination Controller

Session 2018-2019 Even Semester M. Tech

CSVTU Bhilai Revised Academic Calendar & Schedule of Examination for BE Session Jul - Dec 2019

S.No.	Particular of Academic/Exam Activity	BE VIII Sem. (Backlog)	BE VII Sem. (Reg./Backlog)	BE VI Sem. (Backlog)	BE V Sem. (Reg./Backlog)	BE IV Sem. (Backlog)	BE III Sem. (Reg./Backlog)	BE II Sem. (Backlog)	BE I (Reg./Backlog)
1	Start of Session		22 Jul. 2019		22 Jul. 2019		29 Jul. 2019		29 Jul. 2019
2*	Last date for registration of students*	14 Aug. 2019							
3	Commencement date of the submission of online exam form	19 Oct. 2019	19 Oct. 2019	19 Nov. 2019	03 Nov. 2019	05 Dec. 2019	05 Nov. 2019	21 Nov. 2019	21 Nov. 2019
3a	Last date Of submission of online Exam form without late fee	26 Oct. 2019	26 Oct. 2019	26 Nov. 2019	09 Nov. 2019	12 Dec. 2019	10 Nov. 2019	28 Nov. 2019	28 Nov. 2019
3b	Last date Of submission of online Exam form with late fee 30/-	31 Oct. 2019	31 Oct. 2019	01 Dec. 2019	14 Nov. 2019	17 Dec. 2019	15 Nov. 2019	03 Dec. 2019	03 Dec. 2019
3c	Last date Of submission of online Exam form with late fee 120/-	05 Nov. 2019	05 Nov. 2019	06 Dec. 2019	19 Nov. 2019	22 Dec. 2019	20 Nov. 2019	08 Dec. 2019	08 Dec. 2019
3d	Last date Of submission of online Exam form with late fee 200/-	10 Nov. 2019	10 Nov. 2019	11 Dec. 2019	24 Nov. 2019	27 Dec. 2019	25 Nov. 2019	13 Dec. 2019	13 Dec. 2019
3e	Last date of approval of online Examination Form by Institute	11 Nov. 2019	11 Nov. 2019	12 Dec. 2019	25 Nov. 2019	28 Dec. 2019	26 Nov. 2019	14 Dec. 2019	14 Dec. 2019
4	Link Available to the Institute for detention of the candidates	16 Nov. to 17 Nov. 2019	16 Nov. to 17 Nov. 2019	17 Dec. to 18 Dec. 2019	30 Nov. to 01 Dec. 2019	02 Jan. to 03 Jan. 2020	01 Dec. to 02 Dec. 2019	19 Dec. to 20 Dec. 2019	19 Dec. to 20 Dec. 2019
5	Admit Card and Verification Sheet can be downloaded before 3 days of commencement of Theory/Practical Examination as per schedule								
6	Submission of online sessional marks		20 Nov. to 24 Nov. 2019		04 Dec. to 08 Dec. 2019		05 Dec. to 09 Dec. 2020		23 Dec. to 27 Dec. 2020
7	Schedule Of Theory Exam**	21 Nov. to 30 Nov. 2019	20 Nov. to 02 Dec. 2019	21 Dec. to 03 Jan. 2020	04 Dec. to 16 Dec. 2019	06 Jan. to 17 Jan. 2020	05 Dec. to 19 Dec. 2020	23 Dec. to 18 Jan. 2020	23 Dec. to 18 Jan. 2020
8	Schedule Of Practical Exam	03 Dec. to 07 Dec. 2019	03 Dec. to 07 Dec. 2019	04 Jan. to 08 Jan. 2020	20 Dec. to 24 Dec. 2019	20 Dec. to 24 Dec. 2019	20 Dec. to 24 Dec. 2019	19 Jan. to 23 Jan. 2020	19 Jan. to 23 Jan. 2020
9	Online submission of practical marks	03 Dec. to 10 Dec. 2019	03 Dec. to 10 Dec. 2019	04 Jan. to 11 Jan. 2020	20 Dec. to 27 Dec. 2019	20 Dec. to 27 Dec. 2019	20 Dec. to 27 Dec. 2019	19 Jan. to 26 Jan. 2020	19 Jan. to 26 Jan. 2020
10	Date of Declaration of Result	10 Jan. 2020	10 Jan. 2020	13 Feb. 2020	27 Jan. 2020	27 Feb. 2020	29 Jan. 2020	28 Feb. 2020	28 Feb. 2020

Note 1 Orientation course of 3 weeks from 29th of July to 17th Aug. 2019 is to be conducted at college level for the new entrants taking admission in degree course (BE) in the academic year 2019-2020

2 Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)

3 The result declaration dates are liable to be preponed/postponed.

4 It is imperative to follow academic calendar dates strictly for the submission of exam forms, sessional marks and practical marks for the benefit of students.

5* Subject to approval of statutory body of university

** Subject to outcome of "Examination Reform Committee"

OSD(Infocell) Examination Controller Registrar 24/7/19

Session 2019-2020 Odd Semester (BE/BTech)

CSVTU Bhilai, Academic Calendar & Schedule of Examination for M Tech Session Jul - Dec 2019

S.No.	Particular of Academic/Exam Activity	ME/MTech III Sem. (Reg./Backlog)	ME/MTech II Sem. (Backlog)	ME/MTech I Sem. (Reg./Backlog)
1	Start of Session	22 Jul. 2019		01 Aug. 2019
2*	Last date for registration of students*	14 Aug. 2019		
3				
1)	Commencement date of the submission of online exam form	04 Nov. 2019	13 Nov. 2019	11 Nov. 2019
2)	Last date Of submission of online Exam form without late fee	11 Nov. 2019	20 Nov. 2019	18 Nov. 2019
3)	Last date Of submission of online Exam form with late fee 30/-	16 Nov. 2019	25 Nov. 2019	23 Nov. 2019
4)	Last date Of submission of online Exam form with late fee 120/-	21 Nov. 2019	30 Nov. 2019	28 Nov. 2019
5)	Last date Of submission of online Exam form with late fee 200/-	26 Nov. 2019	05 Dec. 2019	03 Dec. 2019
6)	Last date of approval of online Examination Form by Institute	27 Nov. 2019	06 Dec. to 07 Dec. 2019	04 Dec. to 05 Dec. 2019
4	Link Available to the Institute for detention of the candidates	02 Dec. to 03 Dec. 2019	11 Dec. to 12 Dec. 2019	09 Dec. to 10 Dec. 2019
5	Admit Card and Verification Sheet can be downloaded before 3 days of commencement of Theory/Practical Examination as per schedule			
6	Submission of online sessional marks	07 Dec. to 11 Dec. 2019	16 Dec. to 21 Dec. 2019	14 Dec. to 19 Dec. 2019
7	Schedule Of Theory Exam**	07 Dec. to 12 Dec. 2019	16 Dec. to 27 Dec. 2019	14 Dec. to 26 Dec. 2019
8	Schedule Of Practical Exam	13 Dec. to 17 Dec. 2019	28 Dec. to 23 Dec. 2019	28 Dec. to 23 Dec. 2019
9	Online submission of practical marks	13 Dec. to 21 Dec. 2019	28 Dec. to 25 Dec. 2019	28 Dec. to 25 Dec. 2019
10	Date of Declaration of Result	22 Jan. 2020	07 Feb. 2020	07 Feb. 2020

Note: 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)
2) The result declaration dates are liable to be preponed/postponed.
3) It is imperative to follow academic calendar dates strictly for the submission of exam forms, sessional marks and practical marks for the benefit of students.
4)* Subjected to approval of statutory body of university
** Subject to outcome of 'Examination Reform Committee'

OSD (Incharge) | Examination Controller | Registrar

Session 2019-2020 Odd semester (MTech)

CSVTU Bhilai, Academic Calendar & Schedule of Examination for BE/B Arch. Session Jan - June 2020								Issue Date: 31-12-2019		
S.No.		Particular of Academic/Exam Activity	BE VIII Sem. (Reg./Backlog)	BE VII Sem. (Backlog)	BE VI Sem. (Reg./Backlog)	BE V Sem. (Backlog)	BE IV Sem. (Reg./Backlog)	BE III Sem. (Backlog)	BE II Sem. (Reg./Backlog)	BE I (Backlog)
1		Start of Session	02 Jan. 2020		02 Jan. 2020		15 Jan. 2020		27 Jan. 2020	
2	1)	Commencement date of the submission of online exam form	28 Mar. 2020	31 Mar. 2020	13 Apr. 2020	26 Apr. 2020	15 Apr. 2020	12 May. 2020	30 Apr. 2020	30 Apr. 2020
	2)	Last date Of submission of online Exam form without late fee	05 Apr. 2020	07 Apr. 2020	21 Apr. 2020	04 May. 2020	22 Apr. 2020	19 May. 2020	07 May. 2020	07 May. 2020
	3)	Last date Of submission of online Exam form with late fee 30/-	10 Apr. 2020	12 Apr. 2020	26 Apr. 2020	09 May. 2020	27 Apr. 2020	24 May. 2020	12 May. 2020	12 May. 2020
	4)	Last date Of submission of online Exam form with late fee 120/-	15 Apr. 2020	17 Apr. 2020	01 May. 2020	14 May. 2020	02 May. 2020	29 May. 2020	17 May. 2020	17 May. 2020
	5)	Last date Of submission of online Exam form with late fee 200/-	20 Apr. 2020	22 Apr. 2020	06 May. 2020	19 May. 2020	07 May. 2020	04 Jun. 2020	22 May. 2020	22 May. 2020
	6)	Last date of Approval/Detention of online Examination Form by institute	21 Apr. 2020	23 Apr. 2020	07 May. 2020	22 May. 2020	08 May. 2020	05 Jun. 2020	23 May. 2020	23 May. 2020
4		Admit Card and Verification Sheet can be downloaded before 3 days of commencement of Theory/Practical Examination as per schedule								
5		Submission of online sessional marks	25 Apr. to 06 May. 2020		11 May. To 22 May. 2020		12 May. To 23 May. 2020		27 May. To 24 Jun. 2020	27 May. To 24 Jun. 2020
6		Schedule Of Theory Exam	25 Apr. to 06 May. 2020	27 Apr. to 09 May. 2020	11 May. To 22 May. 2020	26 May. To 06 Jun. 2020	12 May. To 23 May. 2020	09 Jun. to 22 Jun. 2020	27 May. To 24 Jun. 2020	27 May. To 24 Jun. 2020
7		Schedule Of Practical Exam	07 May. To 17 May. 2020	10 May. To 20 May. 2020	23 May. To 02 Jun. 2020	07 Jun. to 17 Jun. 2020	24 May. To 04 Jun. 2020	23 Jun. to 03 Jul. 2020	25 Jun. to 05 Jun. 2020	25 Jun. to 05 Jul. 2020
8		Online submission of practical marks	07 May. To 17 May. 2020	10 May. To 20 May. 2020	23 May. To 02 Jun. 2020	07 Jun. to 17 Jun. 2020	24 May. To 04 Jun. 2020	23 Jun. to 03 Jul. 2020	25 Jun. to 05 Jun. 2020	25 Jun. to 05 Jul. 2020
9		Date of Declaration of Result	21 Jun. 2020	24 Jun. 2020	06 Jul. 2020	20 Jul. 2020	06 Jul. 2020	05 Aug. 2020	07 Aug. 2020	07 Aug. 2020

Note: 1 Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)
2 The result declaration dates are liable to be prepaned/postponed.
3 It is imperative to follow academic calendar dates strictly for the submission of exam forms, sessional marks and practical marks for the benefit of students.
4* Subject to approval of statutory body of university
** Subject to outcome of "Examination Reform Committee"

Examination Controller

Registrar
31/12/19

2019-2020 Even Semester (BE/BTech)

CSVTU Bhilai, Revised Academic Calendar & Schedule of Examination for M Tech Session Jan - June 2020 Issue Date : 21-01-2020

S.No.		Particular of Academic/Exam Activity	ME/MTech III Sem. (Backlog)	ME/MTech II Sem. (Reg./Backlog)	ME/MTech I Sem. (Backlog)
1		Start of Session	----------	21 Jan. 2020	----------
2	1)	Commencement date of the submission of online exam form	07 Apr. 2020	12 Apr. 2020	14 Apr. 2020
	2)	Last date Of submission of online Exam form without late fee	14 Apr. 2020	19 Apr. 2020	21 Apr. 2020
	3)	Last date Of submission of online Exam form with late fee 30/-	19 Apr. 2020	24 Apr. 2020	26 Apr. 2020
	4)	Last date Of submission of online Exam form with late fee 120/-	24 Apr. 2020	29 Apr. 2020	02 May. 2020
	5)	Last date Of submission of online Exam form with late fee 200/-	29 Apr. 2020	05 May. 2020	07 May. 2020
	6)	Last date of Approval/Detention of online Examination Form by Institute		07 May. 2020	
3		Admit Card and Verification Sheet can be downloaded before 3 days of commencement of Theory/Practical Examination as per schedule			
4		Submission of online sessional marks		11 May. to 20 May. 2020	
5		Schedule Of Theory Exam	04 May. To 09 May. 2020	11 May. to 20 May. 2020	12 May. To 21 May. 2020
6		Schedule Of Practical Exam	10 May. To 20 May. 2020	21 May. To 31 May. 2020	22 May. To 02 Jun. 2020
7		Online submission of practical marks	10 May. To 20 May. 2020	21 May. To 31 May. 2020	22 May. To 02 Jun. 2020
8		Date of Declaration of Result	24 Jun. 2020	05 Jul. 2020	06 Jul. 2020

Note: 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)
2) The result declaration dates are liable to be preponed/postponed.
3) It is imperative to follow academic calendar dates strictly for the submission of exam forms, sessional marks and practical marks for the benefit of students.
4)* Subject to approval of statutory body of university
** Subject to outcome of "Examination Reform Committee"

Examination Controller

REGISTRAR

2019-2020 Even Semester (MTech)

CSVTU Bhilai, Academic Calendar & Schedule of Examination for BE Session Jul - Dec 2020

S.NO.	Particular of Academic/Exam Activity	BE VIII Sem. (Reg/Backlog)	BE VII Sem. (Reg./Backlog)	BE VI Sem. (Reg/Backlog)	BE V Sem. (Reg./Backlog)	BE IV Sem. (Reg/Backlog)	BE III Sem. (Backlog)	BE II Sem. (Backlog)	BE I (Backlog)
1	Start of Session		07 Jul. 2020		07 Jul. 2020				
2	1) Commencement date of the submission of online exam form	06 Nov. 2020	05 Nov. 2020	19 Nov. 2020	18 Nov. 2020	05 Dec. 2020	19 Dec. 2020	06 Dec. 2020	06 Dec. 2020
	2) Last date Of submission of online Exam form without late fee	13 Nov. 2020	12 Nov. 2020	26 Nov. 2020	25 Nov. 2020	12 Dec. 2020	26 Dec. 2020	13 Dec. 2020	13 Dec. 2020
	3) Last date Of submission of online Exam form with late fee 30/-	18 Nov. 2020	17 Nov. 2020	01 Dec. 2020	30 Nov. 2020	17 Dec. 2020	01 Jan. 2021	18 Dec. 2020	18 Dec. 2020
	4) Last date Of submission of online Exam form with late fee 120/-	23 Nov. 2020	22 Nov. 2020	06 Dec. 2020	05 Dec. 2020	22 Dec. 2020	06 Jan. 2021	23 Dec. 2020	21 Dec. 2020
	5) Last date Of submission of online Exam form with late fee 200/-	28 Nov. 2020	27 Nov. 2020	11 Dec. 2020	10 Dec. 2020	27 Dec. 2020	11 Jan. 2021	28 Dec. 2020	28 Dec. 2020
	6) Last date of Approval/Detention of online Examination Form by institute	29 Nov. 2020	28 Nov. 2020	12 Dec. 2020	11 Dec. 2020	28 Dec. 2020	12 Jan. 2021	29 Dec. 2020	29 Dec. 2020
3	Admit Card and Verification Sheet can be downloaded before 3 days of commencement of Theory/Practical Examination as per schedule								
4	Submission of online sessional marks	03 Dec. to 08 Dec. 2020	02 Dec. to 07 Dec. 2020	16 Dec. to 21 Dec. 2020	15 Dec. to 20 Dec. 2020	01 Jan. to 06 Jan. 2021	16 Jan. to 29 Jan. 2021	02 Jan. to 07 Jan. 2021	02 Jan. to 07 Jan. 2021
5	Schedule Of Theory Exam**	03 Dec. to 12 Dec. 2020	02 Dec. to 14 Dec. 2020	16 Dec. to 30 Dec. 2020	15 Dec. to 29 Dec. 2020	01 Jan. to 14 Jan. 2021	16 Jan. to 29 Jan. 2021	02 Jan. to 30 Jan. 2021	02 Jan. to 30 Jan. 2021
6	Schedule Of Practical Exam	13 Dec. to 18 Dec. 2020	15 Dec. to 20 Dec. 2020	31 Dec. to 04 Jan. 2021	30 Dec. to 03 Jan. 2021	15 Jan. to 19 Jan. 2021	30 Jan. to 03 Feb. 2021	31 Jan. to 04 Feb. 2021	31 Jan. to 04 Feb. 2021
7	Online submission of practical marks	13 Dec. to 23 Dec. 2020	15 Dec. to 24 Dec. 2020	31 Dec. to 10 Jan. 2021	30 Dec. to 09 Jan. 2021	15 Jan. to 25 Jan. 2021	30 Jan. to 09 Feb. 2021	31 Jan. to 10 Feb. 2021	31 Jan. to 10 Feb. 2021
8	Date of Declaration of Result	23 Jan. 2021	25 Jan. 2021	09 Feb. 2021	08 Feb. 2021	25 Feb. 2021	10 Mar. 2021	11 Mar. 2021	11 Mar. 2021

Note: 1 Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)
2 The result declaration dates are liable to be preponed/postponed.
3 It is imperative to follow academic calendar dates strictly for the submission of exam forms, sessional marks and practical marks for the benefit of students.
4 Subject to approval of statutory body of university
** Subject to 'Govt.,, UGC & AICTE guidelines in view of COVID-19'

Examination Controller

Registrar 5/9/2020

Session 2020-2021 Odd Semester(BTech/BE)

CSVTU Bhilai, Academic Calendar & Schedule of Examination for M Tech Session Jul - Dec 2020

S.No.	Particular of Academic/Exam Activity	ME/MTech II Sem. (Reg./Backlog)	ME/MTech II Sem. (Backlog)	ME/MTech I Sem. (Reg./Backlog)
1	Start of Session	07 Jul. 2020		
2				
1)	Commencement date of the submission of online exam form	06 Nov. 2020	07 Nov. 2020	06 Jan. 2021
2)	Last date Of submission of online Exam form without late fee	13 Nov. 2020	14 Nov. 2020	13 Jan. 2021
3)	Last date Of submission of online Exam form with late fee 500/-	18 Nov. 2020	19 Nov. 2020	18 Jan. 2021
4)	Last date Of submission of online Exam form with late fee 1000/-	23 Nov. 2020	24 Nov. 2020	23 Jan. 2021
5)	Last date Of submission of online Exam form with late fee 2000/-	28 Nov. 2020	29 Nov. 2020	28 Jan. 2021
6)	Last date of Approval/Detention of online Examination Form by Institute	29 Nov. 2020	30 Nov. 2020	29 Jan. 2021
3	Admit Card and Verification Sheet can be downloaded before 3 days of commencement of Theory/Practical Examination as per schedule			
4	Submission of online sessional marks	02 Dec. to 07 Dec. 2020	03 Dec. to 08 Dec. 2020	01 Feb. to 07 Feb. 2021
5	Schedule Of Theory Exam**	02 Dec. to 07 Dec. 2020	03 Dec. to 11 Dec. 2020	02 Feb. to 10 Feb. 2021
6	Schedule Of Practical Exam	08 Dec. to 13 Dec. 2020	13 Dec. to 18 Dec. 2020	11 Feb. to 15 Feb. 2021
7	Online submission of practical marks	08 Dec. to 18 Dec. 2020	13 Dec. to 23 Dec. 2020	11 Feb. to 20 Feb. 2021
8	Date of Declaration of Result	16 Jan. 2021	21 Jan. 2021	22 Mar. 2021

Note: 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)
2) The result declaration dates are liable to be prepoined/postponed.
3) It is imperative to follow academic calendar dates strictly for the submission of exam forms, sessional marks and practical marks for the benefit of students.
4)* Subjected to approval of statutory body of university
** Subject to 'Govt., UGC & AICTE guidelines in view of COVID-19'

Examination Controller

Registrar 5/9/2020

Session 2020-2021 Odd Semester (MTech)

Academic Calendar & Schedule of Examination for B. Tech Session Jul - Dec 2021, CSVTU Bhilai				
S.No.	Particular of Academic/Exam Activity	B.Tech V Sem. (Reg./Backlog)	B.Tech IV Sem. (Backlog)	B.Tech III Sem. (Reg./Backlog)
1	Start of Session	Published Earlier		
2	Commencement date of the submission of online exam form (Tentative)	29 Dec. 2021	12 Jan. 2022	13 Jan. 2022
2i	Last date Of submission of online Exam form without late fee	02 Jan. 2022	16 Jan. 2022	17 Jan. 2022
2ii	Last date Of submission of online Exam form with late fee 30/-	06 Jan. 2022	20 Jan. 2022	21 Jan. 2022
2iii	Last date Of submission of online Exam form with late fee 120/-	10 Jan. 2022	24 Jan. 2022	25 Jan. 2022
2iv	Last date Of submission of online Exam form with late fee 280/-	14 Jan. 2022	28 Jan. 2022	29 Jan. 2022
2v	Last date of Approval/Debarrion of online Examination Form by Institute	15 Jan. 2022	29 Jan. 2022	30 Jan. 2022
3	Admit Card and Verification Sheet can be downloaded before 2 days of commencement of Theory/Practical Examination as per schedule			
5	Schedule Of Theory Exam**	18 Jan. to 31 Jan. 2022	01 Feb. to 12 Feb. 2022	02 Feb. to 14 Feb. 2022
4	Submission of online sessional marks	19 Jan. to 24 Jan. 2022	02 Feb. to 07 Feb. 2022	02 Feb. to 08 Feb. 2022
6	Schedule Of Practical Exam	01 Feb. to 06 Feb. 2022	13 Feb. to 18 Feb. 2022	15 Feb. to 18 Feb. 2022
7	Online submission of practical marks	01 Feb. to 10 Feb. 2022	13 Feb. to 22 Feb. 2022	15 Feb. to 28 Feb. 2022
8	Date of Declaration of Result	17 Mar. 2022	29 Mar. 2022	31 Mar. 2022

Note: 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)

2) Exam form submission dates (without/with late fee) & exam schedule (Theory/Practical) will probably be notified because of prevailing COVID-19 pandemic scenario.

3) The result declaration dates are liable to be preponed/postponed.

4) Subject to approval of statutory body of university.

** Subject to "Govt.,UGC & AICTE guidelines in view of COVID-19"

Examination Controller

Registrar

Session 2021-2022 Odd Semester(BE)

Academic Calendar & Schedule of Examination for BE Session Jul - Dec 2021, CSVTU Bhilai

S.No.	Particular of Academic/Exam Activity	VIII Sem. (Backlog)	VII Sem. (Reg./Backlog)	VI Sem. (Backlog)	V Sem. (Reg./Backlog)	IV Sem. (Backlog)	III Sem. (Reg./Backlog)
1	Start of Session	Published Earlier					
2	1) Commencement date of the submission of online exam form (Tentative)	21 Dec. 2021	21 Dec. 2021	28 Dec. 2021	29 Dec. 2021	12 Jan. 2022	13 Jan. 2022
	2) Last date Of submission of online Exam form without late fee	25 Dec. 2021	25 Dec. 2021	01 Jan. 2022	02 Jan. 2022	16 Jan. 2022	17 Jan. 2022
	3) Last date Of submission of online Exam form with late fee 30/-	29 Dec. 2021	29 Dec. 2021	05 Jan. 2022	06 Jan. 2022	20 Jan. 2022	21 Jan. 2022
	4) Last date Of submission of online Exam form with late fee 120/-	02 Jan. 2022	02 Jan. 2022	09 Jan. 2022	10 Jan. 2022	24 Jan. 2022	25 Jan. 2022
	5) Last date Of submission of online Exam form with late fee 200/-	06 Jan. 2022	06 Jan. 2022	13 Jan. 2022	14 Jan. 2022	28 Jan. 2022	29 Jan. 2022
	6) Last date of Approval/Detention of online Examination Form by Institute	07 Jan. 2022	07 Jan. 2022	14 Jan. 2022	15 Jan. 2022	29 Jan. 2022	30 Jan. 2021
3	Admit Card and Verification Sheet can be downloaded before 2 days of commencement of Theory/Practical Examination as per schedule						
5	Schedule Of Theory Exam**	10 Jan. to 15 Jan. 2022 (Two Shifts)	10 Jan. to 15 Jan. 2022 (Second Shift)	17 Jan. to 29 Jan. 2022	18 Jan. to 31 Jan. 2022	01 Feb. to 12 Feb. 2022	04 Feb. to 14 Feb. 2022
4	Submission of online sessional marks	10 Jan. to 15 Jan. 2022	10 Jan. to 15 Jan. 2022	18 Jan. to 13 Jan. 2022	19 Jan. to 24 Jan. 2022	02 Feb. to 07 Feb. 2022	05 Feb. to 08 Feb. 2022
6	Schedule Of Practical Exam	16 Jan. to 21 Jan. 2022	16 Jan. to 21 Jan. 2022	30 Jan. to 04 Feb. 2022	01 Feb. to 06 Feb. 2022	13 Feb. to 18 Feb. 2022	15 Feb. to 20 Feb. 2022
7	Online submission of practical marks	16 Jan. to 25 Jan. 2022	16 Jan. to 25 Jan. 2022	30 Jan. to 09 Feb. 2022	01 Feb. to 10 Feb. 2022	13 Feb. to 22 Feb. 2022	15 Feb. to 26 Feb. 2022
8	Date of Declaration of Result	01 Mar. 2022	01 Mar. 2022	15 Mar. 2022	17 Mar. 2022	29 Mar. 2022	31 Mar. 2022

Note: 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)

2) Exam form submission dates (without/with late fee) & exam schedule (Theory/Practical) will precisely be notified because of prevailing COVID-19 pandemic scenario.

3) The result declaration dates are liable to be prepared/postponed.

4) Subject to approval of statutory body of university.

** Subject to "Govt., UGC & AICTE guidelines in view of COVID-19"

Examination Controller

Registrar

Session 2021-2022 Odd Semester(BTech)

CSVTU Bhilai, Academic Calendar & Schedule of Examination for M Tech Session Jul - Dec 2021

S.No.		Particular of Academic/Exam Activity	ME/MTech III Sem. (Reg./Backlog)	ME/MTech II Sem. (Backlog)
1		Start of Session		
2				
	1)	Commencement date of the submission of online exam form (Tentative)	11 Jan. 2022	22 Jan. 2022
	2)	Last date Of submission of online Exam form without late fee	16 Jan. 2022	26 Jan. 2022
	3)	Last date Of submission of online Exam form with late fee 30/-	20 Jan. 2022	30 Jan. 2022
	4)	Last date Of submission of online Exam form with late fee 120/-	24 Jan. 2022	03 Feb. 2022
	5)	Last date Of submission of online Exam form with late fee 200/-	28 Jan. 2022	07 Feb. 2022
	6)	Last date of Approval/Detention of online Examination Form by institute	29 Jan. 2022	08 Feb. 2022
3		Admit Card and Verification Sheet can be downloaded before 2 days of commencement of Theory/Practical Examination as per schedule		
4		Schedule Of Theory Exam**	01 Feb. to 03 Feb. 2022	11 Feb. to 21 Feb. 2022
5		Submission of online sessional marks	01 Feb. to 03 Feb. 2022	11 Feb. to 17 Feb. 2022
6		Schedule Of Practical Exam	04 Feb. to 09 Feb. 2022	18 Feb. to 23 Feb. 2022
7		Online submission of practical marks	04 Feb. to 14 Feb. 2022	18 Feb. to 28 Feb. 2022
8		Date of Declaration of Result	20 Mar. 2022	07 Apr. 2022

Note: 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)
2) Exam form submission dates (without/with late fee) & exam schedule (Theory/Practical) will precisely be notified because of prevailing COVID-19 pandemic scenario.
3) The result declaration dates are liable to be preponed/postponed.
4) Subject to approval of statutory body of university.
** Subject to "Govt.,/UGC & AICTE guidelines in view of COVID-19"

Examination Controller

Registrar

Session 2021-2022 Odd Semester(MTech)

CSVTU Bhilai, Academic Calendar & Schedule of Examination for M Tech Session Jan - Jun 2022

S.No.		Particular of Academic/Exam Activity	ME/MTech III Sem. (Backlog)	ME/MTech II Sem. (Reg./Backlog)	ME/MTech I Sem. (Backlog)
1		Start of Session			
2	1)	Commencement date of the submission of online exam form (Tentative)	22 Jun. 2022	10 Jul. 2022	12 Jul. 2022
	2)	Last date Of submission of online Exam form without late fee	26 Jun. 2022	14 Jul. 2022	16 Jul. 2022
	3)	Last date Of submission of online Exam form with late fee 30/-	30 Jun. 2022	18 Jul. 2022	20 Jul. 2022
	4)	Last date Of submission of online Exam form with late fee 120/-	03 Jul. 2022	22 Jul. 2022	24 Jul. 2022
	5)	Last date Of submission of online Exam form with late fee 200/-	07 Jul. 2022	26 Jul. 2022	28 Jul. 2022
	6)	Last date of Approval/Detention of online Examination Form by institute	08 Jul. 2022	27 Jul. 2022	29 Jul. 2022
3		Admit Card and Verification Sheet can be downloaded before 2 days of commencement of Theory/Practical Examination as per schedule			
4		Schedule Of Theory Exam**	11 Jul. to 15 Jul. 2022	30 Jul. to 10 Aug. 2022	1 Aug. to 11 Aug. 2022
5		Submission of online sessional marks	11 Jul. to 18 Jul. 2022	30 Jul to 06 Aug. 2022	01 Aug. to 07 Aug. 2022
6		Schedule Of Practical Exam	23 Jul. to 27 Jul. 2022	07 Aug. to 11 Aug. 2022	09 Aug. to 13 Aug. 2022
7		Online submission of practical marks	23 Jul. to 29 Jul. 2022	07 Aug. to 13 Aug. 2022	09 Aug. to 16 Aug. 2022
8		Date of Declaration of Result	01 Sep. 2022	15 Sep. 2022	17 Sep. 2022

Note: 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)
2) Exam form submission dates (without/with late fee) & exam schedule (Theory/Practical) will precisely be notified because of prevailing COVID-19 pandemic scenario.
3) The result declaration dates are liable to be preponed/postponed.
4) Subject to approval of statutory body of university.
** Subject to "Govt.,UGC & AICTE guidelines in view of COVID-19"

Examination Controller

27/5/22
Registrar

2021-22 (Even Semester)

Academic Calendar & Schedule of Examination for B.TECH Course Session: Jul - Dec 2022, CSVTU Bhilai

S. No.	Particular of Academic/Exam Activity	B.Tech VII Sem. (Regular)	B.Tech VII Sem. (backlog)	B.Tech V Sem. (Reg./Backlog)	B.Tech IV Sem. (Backlog)	B.Tech III Sem. (Reg./Backlog)
1	Start of Session	05 Sep. 2022		22Sep. 2021		05 Oct. 2022
2	Schedule of Class Test - 01	10 Oct. to 17 Oct. 2022		31 Oct. to 06 Nov. 2022		14 Nov. to 20 Nov. 2022
3	Schedule of Class Test - 02	21 Nov. to 27 Nov. 2022		12 Dec. to 19 Dec. 2022		15 Dec. to 22 Dec. 2022
4	1) Commencement date of the submission of online exam form	30 Nov. 2022	21 Dec. 2022	28 Dec. 2022	07 Jan. 2023	05 Jan. 2023
	2) last date Of submission of online Exam form without late fee	03 Dec. 2022	24 Dec. 2022	23 Dec. 2022	10 Jan. 2023	08 Jan. 2023
	3) last date Of submission of online Exam form with late fee 30/-	07 Dec. 2022	28 Dec. 2022	27 Dec. 2022	14 Jan. 2023	12 Jan. 2023
	4) last date Of submission of online Exam form with late fee 100/-	11 Dec. 2022	01 Jan. 2023	31 Dec. 2022	18 Jan. 2023	16 Jan. 2023
	5) last date Of submission of online Exam form with late fee 200/-	15 Dec. 2022	05 Jan. 2023	04 Jan. 2023	22 Jan. 2023	20 Jan. 2023
	6) last date of Approval/ detention of online Examination Form by Institute	16 Dec. 2022	06 Jan. 2023	05 Jan. 2023	23 Jan. 2023	21 Jan. 2023
5	Admit Card and Verification Sheet can be downloaded before 3 days of commencement of Theory/Practical Examination as per schedule					
6	Submission of online sessional marks	20 Dec. to 29 Dec. 2022	10 Jan. to 21 Jan. 2023	09 Jan. to 20 Jan. 2023	27 Jan. to 08 Feb. 2023	25 Jan. to 07 Feb 2023
7	Schedule Of Theory Exam**	20 Dec. to 29 Dec. 2022	10 Jan. to 21 Jan. 2023	09 Jan. to 20 Jan. 2023	27 Jan. to 08 Feb. 2023	25 Jan. to 07 Feb 2023
8	Schedule Of Practical Exam	30 Dec. to 04 Jan. 2023	23 Jan. to 28 Jan. 2023	21 Jan. to 27 Jan. 2023	09 Feb. to 14 Feb. 2023	01 Feb. to 10 Feb 2023
9	Online submission of practical marks	30 Dec. to 08 Jan. 2023	23 Jan. to 31 Jan. 2023	21 Jan. to 31 Jan. 2023	09 Feb. to 18 Feb. 2023	01 Feb. to 12 Feb 2023
10	Date of Declaration of Result	13 Feb. 2023	19 Apr. 2023	11 Mar. 2023	30 Mar. 2023	29 Mar. 2023

Note: 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)
2) The result declaration dates are liable to be preponed/postponed.
** Subject to "Govt. ,UGC & AICTE guidelines in view of COVID-19"

Examination Controller

Registrar

Session 2022-2023 Odd Semester (BTech)

CSVTU Bhilai, Academic Calendar & Schedule of Examination for BE Session Jul - Dec 2022

S.No.	Particular of Academic/Exam Activity	BE VIII Sem. (Backlog)	BE VII Sem. (Backlog)	BE VI Sem. (Backlog)	BE V Sem. (Backlog)	BE IV Sem. (Backlog)	BE III Sem. (Backlog)
1	Start of Session						
2							
2i	Commencement date of the submission of online exam form	01 Dec. 2022	30 Nov. 2022	21 Dec. 2022	20 Dec. 2022	07 Jan. 2023	05 Jan. 2023
2ii	Last date Of submission of online Exam form without late fee	04 Dec. 2022	03 Dec. 2022	24 Dec. 2022	23 Dec. 2022	10 Jan. 2023	08 Jan. 2023
2iii	Last date Of submission of online Exam form with late fee 30/-	08 Dec. 2022	07 Dec. 2022	28 Dec. 2022	27 Dec. 2022	14 Jan. 2023	12 Jan. 2023
2iv	Last date Of submission of online Exam form with late fee 120/-	11 Dec. 2022	11 Dec. 2022	01 Jan. 2023	31 Dec. 2022	18 Jan. 2023	16 Jan. 2023
2v	Last date Of submission of online Exam form with late fee 200/-	15 Dec. 2022	15 Dec. 2022	05 Jan. 2023	04 Jan. 2023	22 Jan. 2023	20 Jan. 2023
2vi	Last date of Approval/Detention of online Examination Form by institute	17 Dec. 2022	16 Dec. 2022	06 Jan. 2023	05 Jan. 2023	23 Jan. 2023	21 Jan. 2023
3	Admit Card and Verification Sheet can be downloaded before 3 days of commencement of Theory/Practical Examination as per schedule						
4	Submission of online sessional marks	21 Dec. to 30 Dec. 2022	20 Dec. to 29 Dec. 2022	10 Jan. to 21 Jan. 2023	09 Jan. to 20 Jan. 2023	27 Jan. to 08 Feb. 2023	25 Jan. to 07 Feb. 2023
5	Schedule Of Theory Exam**	21 Dec. to 30 Dec. 2022	20 Dec. to 29 Dec. 2022	10 Jan. to 21 Jan. 2023	09 Jan. to 20 Jan. 2023	27 Jan. to 08 Feb. 2023	25 Jan. to 07 Feb. 2023
6	Schedule Of Practical Exam	31 Dec. to 05 Jan. 2023	30 Dec. to 04 Jan. 2023	23 Jan. to 28 Jan. 2023	21 Jan. to 27 Jan. 2023	09 Feb. to 14 Feb. 2023	08 Feb. to 13 Feb. 2023
7	Online submission of practical marks	31 Dec. to 09 Jan. 2023	30 Dec. to 08 Jan. 2023	23 Jan. to 31 Jan. 2023	21 Jan. to 31 Jan. 2023	09 Feb. to 18 Feb. 2023	08 Feb. to 17 Feb. 2023
8	Date of Declaration of Result	24 Feb. 2023	23 Feb. 2023	19 Mar. 2023	18 Mar. 2023	05 Apr. 2023	04 Apr. 2023

Note: 1 Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)
2 The result declaration dates are liable to be preponed/postponed.
** Subject to "Govt., UGC & AICTE guidelines in view of COVID-19"

Examination Controller

22/8/22
Registrar

Session 2022-2023 Odd Semester (BE)

CSVTU Bhilai, Academic Calendar & Schedule of Examination for M Tech Session Jul - Dec 2022

S.No.		Particular of Academic/Exam Activity	ME/MTech III Sem. (Reg./Backlog)
1		Start of Session	05 Oct. 2022
2		Schedule of Class Test - 01	14 Nov. to 20 Nov. 2022
3		Schedule of Class Test - 02	15 Dec. to 22 Dec. 2022
4	1)	Commencement date of the submission of online exam form	05 Jan. 2023
	2)	Last date Of submission of online Exam form without late fee	08 Jan. 2023
	3)	Last date Of submission of online Exam form with late fee 30/-	12 Jan. 2023
	4)	Last date Of submission of online Exam form with late fee 120/-	16 Jan. 2023
	5)	Last date Of submission of online Exam form with late fee 200/-	20 Jan. 2023
	6)	Last date of Approval/Detention of online Examination Form by Institute	21 Jan. 2023
5		Admit Card and Verification Sheet can be downloaded before 3 days of commencement of Theory/Practical Examination as per schedule	
6		Submission of online sessional marks	25 Jan. to 30 Jan. 2023
7		Schedule Of Theory Exam**	25 Jan. to 30 Jan. 2023
8		Schedule Of Practical Exam	31 Jan. to 04 Feb. 2023
9		Online submission of practical marks	31 Jan. to 08 Feb. 2023
10		Date of Declaration of Result	26 Mar. 2023

Note: 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam)
2) The result declaration dates are liable to be preponed/postponed.
** Subject to "Govt., UGC & AICTE guidelines in view of COVID-19"

Examination Controller

Registrar

Session 2022-2023 Odd Semester (MTech)

Academic Calendar & Schedule of Examination for B.TECH Course Session Jan - Jun 2023, CSVTU Bhilai Date: 24-01-2023

S.No.	Particular of Academic/Exam Activity	B.Tech VIII Sem. (Regular/Backlog)	B.Tech VII Sem. (Backlog)	B.Tech VI Sem. (Regular/Backlog)	B.Tech V Sem. (Reg./Backlog)
1	Start of Session	25 Jan. 2023		16 Feb. 2023	
2	Schedule of Class Test - 01	06 Mar. to 12 Mar. 2023		27 Mar. to 02 Apr. 2023	
3	Schedule of Class Test - 02	18 Apr. to 24 Apr. 2023		08 May. To 14 May. 2023	
4	1) Commencement date of the submission of online exam form	16 Apr. 2023	17 Apr. 2023	04 May. 2023	05 May. 2023
	2) Last date of submission of online Exam form without late fee	20 Apr. 2023	21 Apr. 2023	08 May. 2023	09 May. 2023
	3) Last date of submission of online Exam form with late fee 30/-	24 Apr. 2023	25 Apr. 2023	12 May. 2023	13 May. 2023
	4) Last date of submission of online Exam form with late fee 120/-	28 Apr. 2023	29 Apr. 2023	16 May. 2023	17 May. 2023
	5) Last date of submission of online Exam form with late fee 200/-	02 May. 2023	03 May. 2023	20 May. 2023	21 May. 2023
	6) Last date of approval/Detention of online Examination Form by Institute	03 May. 2023	04 May. 2023	21 May. 2023	22 May. 2023
5	Admit Card and Verification Sheet can be downloaded before 3 days of commencement of Theory/Practical Examination as per schedule				
6	Submission of online sessional marks	15 May. To 24 May. 2023		02 Jun. to 12 Jun. 2023	
7	Schedule Of Theory Exam	15 May. To 24 May. 2023	16 May. To 25 May. 2023	02 Jun. to 12 Jun. 2023	03 Jun. to 13 Jun. 2023
8	Schedule Of Practical Exam	25 May. To 30 May. 2023	26 May. To 31 May. 2023	13 Jun. to 18 Jun. 2023	14 Jun. to 19 Jun. 2023
9	Online submission of practical marks	25 May. To 05 Jun. 2023	26 May. To 06 Jun. 2023	13 Jun. to 23 Jun. 2023	14 Jun. to 24 Jun. 2023
10	Date of Declaration of Result	10 Jun. 2023	10 Jun. 2023	12 Aug. 2023	12 Aug. 2023

Note: 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam).Exact dates will be notified by university before commencement of online exam form.

2) The result declaration dates are liable to be Changed.

3) All institutes are instructed to follow the provided schedule for CLASS TEST

4) Classes, Test and Exams are to be conducted on offline mode

Exam Cell Coordinator

27/1/23
Registrar

Session 2022-2023 Even semester (BTech)

Academic Calendar & Schedule of Examination for B.TECH 1st Sem Session Jul - Dec 2022, CSVTU Bhilai Date 03-01-2023

S.No	Particular of Academic/Exam Activity	B. Tech II Sem. (Backlog	B. Tech I Sem. (Reg./Backlog)
1	Start of Session		25 Oct. 2022 (Already commenced as per AICTE Acad. calendar)
2	a) Commencement date of the submission of online exam form	1 Mar. 2023	1 Mar 2023
	b) Last date Of submission of online Exam form without late fee	5 Mar. 2023	5 Mar 2023
	c) Last date Of submission of online Exam form with late fee 30/-	9 Mar. 2023	9 Mar 2023
	d) Last date Of submission of online Exam form with late fee 100/-	13 Mar. 2023	13 Mar. 2023
	e) Last date Of submission of online Exam form with late fee 200/-	17 Mar. 2023	17 Mar. 2023
	f) Last date of approval/Detention of online Examination Form by Institute	19 Mar. 2023	19 Mar. 2023
3	Admit Card and Verification Sheet can be downloaded before 3 days of commencement of Theory/Practical Examination as per schedule		
4	Submission of online sessional marks	20 March to 06 April 2023	20 March to 06 April 2023
5	Schedule Of Theory Exam**	31 March to 06 April 2023	31 March to 06 April 2023
6	Schedule Of Practical Exam	07 April. To 13 Apr. 2023	07 April. To 13 Apr. 2023
7	Online submission of practical marks	07 April. To 15 Apr. 2023	07 April. To 15 Apr. 2023
8	Date of Declaration of Result	31 May. 2023	31 May. 2023

Note: 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam).Exact dates will be notified by university before commencement of online exam forms.
2) The result declaration dates are liable to be Changed.
3) Classes, Test and Exams are to be conducted on offline mode
4) Institutes are informed to complete class tests (01 and 02) before 14th March 2023.

Examination Controller

Registrar 3/2/23

Session 2022-2023 Even semester (BTech)

CHRISTIAN COLLEGE OF ENGINEERING AND TECHNOLOGY, BHILAI

ACADEMIC CALENDAR - EVEN SEMESTER(JAN-JUNE. 2023')

Particulars of Academic / Exam. Activity	BE VIII SEM	BE VITH SEM	Responsible1	Responsible 2
Class Start Date	01 Feb.' 2023	17 Feb.' 2023	IQAC	PRINCIPAL
Class End Date	24 April' 2023	12 May' 2023	IQAC	PRINCIPAL
No. of working Days	66	71	IQAC	PRINCIPAL
Date of the submission of online exam form without late fee	20 April' 2023	08 May' 2023	-	1yr (I/C) / Dept. HOD
Last date of submission of online Exam form with late fee Rs. 30/120/200	24 April./28 April./2 May.' 23	12 May./16 May/20 May' 23	-	1yr (I/C) / Dept. HOD
Submission of Online Sessional Marks	15 - 24 May'23	02 - 12 Jun'23	1st yr (I/C)HOD- IQAC	PRINCIPAL
Preparation Of Leave	25 April-14 May'23	12 May - 01 Jun'23	IQAC	PRINCIPAL
Theory Exam. Date By CSVTU	15-24 May'23	02-12 Jun'23	EXAM.	PRINCIPAL
Practical Exam. Date By CSVTU	25-30 May'23	13 Jun- 18 Jun'23	EXAM.	PRINCIPAL
Online Submission of Practical Marks To CSVTU	25 May-05 Jun'23	13 Jun- 23 Jun'23	EXAM.	PRINCIPAL
Submission of attendance to university	5th of Every Month		IQAC	PRINCIPAL
Schedule of CT1	06- 12 March '23	27 Mrach-02 April '23	IQAC	1st yr (I/C),HOD
Schedule of CT2	18 - 24 April '23	08 - 14 May '23	IQAC	1st yr (I/C),HOD
Schedule of DT1 (1st Year)	-	-	1yr (I/C)	IQAC
Schedule of DT2 (1st Year)	-	-	1yr (I/C)	IQAC
Schedule of CT (1st Year)	-	-	1yr (I/C)	IQAC
Schedule of PUE (1st Year)	-	-	1yr (I/C)	IQAC
Submission Of Evaluated Copies	With in 01 Week		1st yr (I/C),HOD	IQAC
Submission of A1,LR1,V1 marks	12 March' 2023	29 March' 2023	1yr (I/C) / Dept. HOD	PRINCIPAL
Submission of A2,LR2,V2 marks	21 April' 2023	10 May' 2023	1yr (I/C) / Dept. HOD	PRINCIPAL
Course Coverage Report 1	24 Feb' 2023	15 March' 2023	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 2	17 March' 2023	05 April' 2023	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 3	24 April' 2023	25 April' 2023	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 4		12 May' 2023	1yr (I/C) / Dept. HOD	IQAC
Course monitoring meeting 1	27 Feb' 2023	16 March' 2023	1yr (I/C) /	PRINCIPAL
Course monitoring meeting 2	20 March' 2023	17 April' 2023	1yr (I/C) / Dept. HOD	PRINCIPAL
Course monitoring meeting 3	23 April' 2023	10 May' 2023	1yr (I/C) / Dept. HOD	PRINCIPAL
TG Students meeting 1	24 Feb' 2023	15 March' 2023	1yr (I/C) / Dept. HOD	PRINCIPAL
TG Students meeting 2	21 March' 2023	16 April' 2023	1yr (I/C) / Dept. HOD	PRINCIPAL
TG Students meeting 3	20 April' 2023	10 May' 2023	1yr (I/C) / Dept. HOD	PRINCIPAL

IQAC (I/C) 9/2/2023

PRINCIPAL 9/02/2023

Sd-
Executive Vice Chairman

DIPALI SOREN TUDU
Digitally signed by DIPALI SOREN TUDU
Date: 2023.11.08 03:40:01 -08'00'

CHRISTIAN COLLEGE OF ENGINEERING AND TECHNOLOGY

ACADEMIC CALENDAR ODD SEMESTER 2018-19

BE 1st Semester (2018-19)	97-Days
(Information to parents about start of class on 28/07/2018)	Tentative Dates
Class Start Date	30/07/2018
Class End Date	12/12/2018
PL Start Date	13/12/2018
PL End Date	20/12/2018
Theory Exam Start Date	21/12/2018
Theory Exam End Date	14/01/2019
Practical Exam Start Date	15/01/2019
Practical Exam End Date	20/01/2019
Commencement date of the submission of online exam Form	14/11/2018
Last date of submission of online Exam form without late fee	01/12/2018
Last date of submission of online Exam form with late fee 300/-	06/12/2018
Last date of submission of online Exam form with late fee 120/-	11/12/2018
Last date of approval of online Examination Forms by Institute	12/12/2018
Submission of Attendance to University 1	05/09/2018
Submission of Attendance to University 2	03/10/2018
Submission of Attendance to University 3	05/11/2018
Submission of Attendance to University 4	07/12/2018

CHRISTIAN COLLEGE OF ENGINEERING AND TECHNOLOGY,BHILAI

ACADEMIC CALENDAR-EVEN SEMESTER(JAN-JUNE, 2019')

Particulars of Academic / Exam. Activity	DE VIII SEM	DE VI SEM	DE IV SEM	DE II SEM	Responsible1	Responsible
Class Start Date	15 Jan. 19'	15 Jan. 19'	15 Jan. 19'	4 Feb. 19'	IQAC	PRINCIP
Class End Date	13 Apr. 19'	02 May. 19'	03 May. 19'	25 May. 19'	IQAC	PRINCIP
No. of working Days	73	85	86	80	IQAC	PRINCIP
Last date for Provisional	31 Jan. 19'	31 Jan. 19'	31 Jan. 19'	-	IQAC-EXAM	PRINCIP
Intimation to University Prov Adm	14 Feb. 19'			-	-	-
Date of the submission of online exam form without late fee	08 Apr. 19'	27 Apr. 19'	28 Apr. 19'	10 May. 19'	EXAM	HOD
Last date of submission of online Exam form with late fee Rs.	13/18/23 Apr. 19'	02/07/12 May 19'	03/08/13 May 19'	15/20/25 May. 19'	EXAM	HOD
Submission of Online Sessional Marks	03 - 07 May 19'	20 - 25 May 19'	21 - 26 May 19'	03 - 08 June.19'	HOD-IQAC	PRINCIP
Preparation Of Leave	14 Apr.- 02 May. 19' (12 days)	03 - 19 May 19' (17 days)	4 - 20 May 19' (17 days)	26 May - 02 June 19' (08 days)	IQAC	PRINCIP
Theory Exam. Date By CSVTU	03 - 15 May 19'	20 - 31 May 19'	21 May - 01 June 19'	03 June - 02 July 19'	EXAM.	PRINCIP
Practical Exam. Date By CSVTU	19 - 23 May 19'	03 - 07 June 19'	03 - 07 June 19'	08 - 09 July 19'	EXAM.	PRINCIP
Online Submission of Practical Marks To CSVTU	19 - 27 May 19'	03 - 12 June 19'	03 - 10 June 19'	09 - 14 July 19'	EXAM.	PRINCIP
Submission of attendance to university	05th Of Every Month				IQAC	PRINCIP
Schedule of CT1	05 - 07 Mar. 19'	-	-	-	IQAC	HOD
Schedule of CT2	08 - 10 Apr. 19'	-	-	-	IQAC	HOD
Schedule of CT1(Dept. level)	-	01 - 07 Feb.19'	01 - 07 Feb.19'	25 Feb.- 01 Mar. 19'	1yr (I/C) / Dept. HOD	IQAC
Schedule of CT(centrally)	-	25 - 27 Feb. 19'	25 - 27 Feb. 19'	22- 26 Apr. 19'	1yr (I/C) / Dept. HOD	IQAC
Schedule of CT1(Dept. level)	-	13 - 15 Mar. 19'	13 - 15 Mar. 19'	01 - 05 Apr. 19'	1yr (I/C) / Dept. HOD	IQAC
Schedule of CT 2/PUE(centrally)	-	22 - 27 Apr. 19'	22 - 27 Apr. 19'	20 - 24 May 19'	1yr (I/C) / Dept. HOD	IQAC
Submission Of Evaluated Copies	With In 01 Week				Deptt-IQAC	HOD
CR Meet 1	18 Feb. 19'	18 Feb. 19'	18 Feb. 19'	-	HOD,	PRINCIPAL
CR Meet 2	18 Mar. 19'	18 Mar. 19'	18 Mar. 19'	-	HOD,	PRINCIPAL
CR Meet 3	-	18 Apr. 19'	18 Apr. 19'	-	HOD,	PRINCIPAL
[illegible]ission of A1,LR1,V1 marks	08 Mar. 19'	08 Mar. 19'	08 Mar. 19'	01 Mar. /15 Apr. 19'	Deptt-IQAC	PRINCIPAL
Submission of A2,LR2,V2 marks	05 Apr. 19'	15 Apr. 19'	15 Apr. 19'	29 Mar. /13 May 19'	Deptt-IQAC	PRINCIPAL
Course Coverage Report 1	31 Jan. 19'	31 Jan. 19'	31 Jan. 19'	05 Mar. 19'	HOD,	IQAC
Course Coverage Report 2	22 Feb. 19'	22 Feb. 19'	22 Feb. 19'	05 Apr. 19'	HOD,	IQAC
Course Coverage Report 3	22 Mar. 19'	22 Mar. 19'	22 Mar. 19'	06 May. 19'	HOD,	IQAC
Course Coverage Report 4	13 Apr. 19'	30 Apr. 19'	30 Apr. 19'	-	HOD,	IQAC
Course monitoring meeting 1	06 Feb. 19'	06 Feb. 19'	06 Feb. 19'	-	HOD,	IQAC
Course monitoring meeting 2	07 Mar. 19'	07 Mar. 19'	07 Mar. 19'	-	HOD,	IQAC
Course monitoring meeting 3	08 Apr. 19'	08 Apr. 19'	08 Apr. 19'	-	HOD,	IQAC
TG Students meeting 1	15 Feb. 19'	15 Feb. 19'	15 Feb. 19'	-	HOD	
TG Students meeting 2	15 Mar. 19'	15 Mar. 19'	15 Mar. 19'	-	HOD	
TG Students meeting 3	10 Apr. 19'	12 Apr. 19'	12 Apr. 19'	-	HOD	

ACTIVITIES :-
6th Feb 2019': Internet works for school students
08th & 09th Feb 2019' : TEQIP III Workshop by EE Dept
[illegible] Feb 2019 : National Science day Celebration
08th & 09th Mar. 2019': Technologia
15th Mar. 2019': Science Exhibition
29th Mar. 2019' : College Day "Symphonia" (Tentative)

Ic IQAC 23/1/19

PRINCIPAL 23/01/19

CHRISTIAN COLLEGE OF ENGINEERING AND TECHNOLOGY, BHILAI

ACADEMIC CALENDAR - ODD SEMESTER(JULY-DEC. 2019)

Particulars of Academic / Exam. Activity	BE VII SEM	BE VTH SEM	BE IIRD SEM	BE IST SEM	Responsible ?	Responsible ?
Class Start Date	22 July' 19	22 July' 19	29 July' 19	29 July' 19	IQAC	PRINCIPAL
Class End Date	31 Oct.'19	14 Nov.'19	15 Nov.'19	03 Dec.'19	IQAC	PRINCIPAL
No. of working Days	75	87	88	100	IQAC	PRINCIPAL
Last date for Provisional	20 Aug.'19	20 Aug.'19	-	-	IQAC-EXAM	PRINCIPAL
Information to University Prov Adm	27 Aug.'19	27 Aug.'19	-	-	-	-
Date of the submission of online exam	26 Oct.'19	09 Nov.'19	10 Nov.'19	28 Nov.'19	-	1yr (I/C) / Dept. HOD
forms without late fee						
Last date of submission of online Exam forms with late fee Rs. 50/-100/200	28 Oct.-06 Nov.'19	04 Nov.'19 - Nov.'19	15 Nov.'19 - Nov.'19	03 Dec.'19 - Dec.'19	-	1yr (I/C) / Dept. HOD
Submission of Online Sessional Marks	20-24 Nov.'19	04-08 Nov.'19	05-09 Dec.'19	23-27 Dec.'19	1st yr (I/C)HOD-IQAC	PRINCIPAL
Preparation Of Leave	1-13 Nov.'19	05 Nov. - 25 Dec.'19	16 Nov. - 04 Dec.'19	28-22 Dec.'19	IQAC	PRINCIPAL
Theory Exam. Date By CSVTU	20 Nov.-02 Dec.'19	06-16 Dec.'19	05-19 Dec.'19	23 Dec.'19-18 Jan.'20	EXAM.	PRINCIPAL
Practical Exam. Date By CSVTU	03-07 Dec.'19	20-24 Dec.'19	20-24 Dec.'19	19-23 Jan.'20	EXAM.	PRINCIPAL
Online Submission of Practical Marks To CSVTU	03-10 Dec.'19	23-27 Dec.'19	23-27 Dec.'19	19-30 Jan.'20	EXAM.	PRINCIPAL
Submission of attendance to University	Site of Every Classes				IQAC	PRINCIPAL
Schedule of CT1	03-05 Sept.'19	16-18 Sept.'19	16-18 Sept.'19	-	IQAC	1st yr (I/C),HOD
Schedule of CT2	14-16 Oct.'19	06-08 Nov.'19	04-06 Nov.'19	-	IQAC	1st yr (I/C),HOD
Schedule of CT1 (1st Year)	-	-	-	03-05 Sept.'19	1yr (I/C)	IQAC
Schedule of CT2 (1st Year)	-	-	-	14-16 Oct.'19	1yr (I/C)	IQAC
Schedule of CT (1st Year)	-	-	-	04-06 Nov.'19	1yr (I/C)	IQAC
Schedule of PUE (1st Year)	-	-	-	03-13 Dec.'19	1yr (I/C)	IQAC
Submission Of Evaluated Copies	-	Week is 01 Week			1st yr (I/C),HOD	IQAC
CA Week 1	26 Aug.'19	26 Aug.'19	26 Aug.'19	-	1yr (I/C) / Dept. HOD	PRINCIPAL
CA Week 2	30 Sept.'19	30 Sept.'19	30 Sept.'19	-	1yr (I/C) / Dept. HOD	PRINCIPAL
CA Week 3	-	04 Nov.'19	04 Nov.'19	-	1yr (I/C) / Dept. HOD	PRINCIPAL
Submission of A1,L#1,W1 marks	26 Sept.'19	06 Sept.'19	06 Sept.'19	30 Aug.'19	1yr (I/C) / Dept. HOD	PRINCIPAL
Submission of A2,L#2,W2 marks	10 Oct.'19	14 Oct.'19	14 Oct.'19	11 Oct.'19	1yr (I/C) / Dept. HOD	PRINCIPAL
Course Coverage Report 1	16 Aug.'19	16 Aug.'19	22 Aug.'19	31 Aug.'19	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 2	04 Sept.'19	13 Sept.'19	13 Sept.'19	28 Sept.'19	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 3	30 Sept.'19	14 Oct.'19	14 Oct.'19	31 Oct.'19	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 4	31 Oct.'19	13 Nov.'19	13 Nov.'19	01 Dec.'19	1yr (I/C) / Dept. HOD	IQAC
Course monitoring meeting 1	16 Aug.'19	22 Aug.'19	22 Aug.'19	31 Aug.'19	1yr (I/C) / Dept. HOD	PRINCIPAL
Course monitoring meeting 2	16 Sept.'19	23 Sept.'19	23 Sept.'19	30 Sept.'19	1yr (I/C) / Dept. HOD	PRINCIPAL
Course monitoring meeting 3	14 Oct.'19	04 Nov.'19	04 Nov.'19	02 Nov.'19	1yr (I/C) / Dept. HOD	PRINCIPAL
TG Students meeting 1	22 Aug.'19	28 Aug.'19	28 Aug.'19	30 Aug.'19	1yr (I/C) / Dept. HOD	PRINCIPAL
TG Students meeting 2	23 Sept.'19	30 Sept.'19	30 Sept.'19	11 Oct.'19	1yr (I/C) / Dept. HOD	PRINCIPAL
TG Students meeting 3	21 Oct.'19	04 Nov.'19	04 Nov.'19	04 Nov.'19	1yr (I/C) / Dept. HOD	PRINCIPAL

IQAC 31/10/19 PRINCIPAL 31/10/19 Executive Vice Chairman

...CALENDAR-EVEN SEMESTER(JAN-JUNE, 2019')

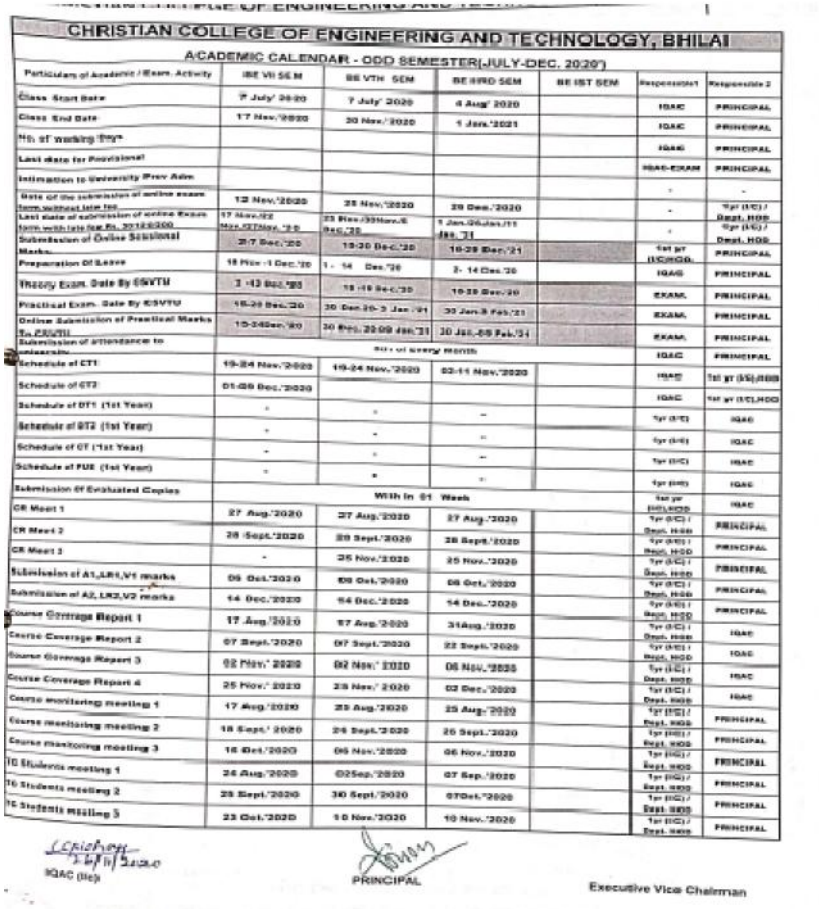
CHRISTIAN COLLEGE OF ENGINEERING AND TECHNOLOGY, BHILAI

ACADEMIC CALENDAR - EVEN SEMESTER(JAN-JUNE, 2020')

Particulars of Academic / Exam. Activity	BE VII SEM	BE VIth SEM	BE IV/SEM	BE IInd SEM	Responsible1	Responsible 2
Class Start Date	02 Jan.' 20	02 Jan.' 20	15 Jan.' 20	27 Jan.' 20	IQAC	PRINCIPAL
Class End Date	10 Apr.' 20	20 Apr.' 20	27 Apr.' 20	12 May' 20	IQAC	PRINCIPAL
No. of working Days	75	84	85	98	IQAC	PRINCIPAL
Last date for Provisional	31 Jan.' 20	31 Jan.' 20	-	-	IQAC-EXAM	PRINCIPAL
Intimation to University Prov Adm.	12 Feb.' 20	12 Feb.' 20	-	-	-	-
Date of the submission of online exam form without late fee	5 Apr.' 20	21 Apr.' 20	22 Apr.' 20	7 May' 20	-	Tyr (I/C) / Dept. HOD
Last date of submission of online Exam form with late fee Rs. 30/120/250	10 Apr./16 Apr./20 Apr.' 20	26 Apr./1 May/5 May' 20	27 Apr./3 May/7 May' 20	12 May/17 May/22 May' 20	-	Tyr (I/C) / Dept. HOD
Submission of Online Sessional Marks	25Apr-5May'19	11-22 May'20	12-23 May'20	27May-04 June'20	1st yr (I/C)HOD-IQAC	PRINCIPAL
Preparation Of Leave	11-24 Apr.'20	27 Apr. - 10 May'20	28 Apr. - 11 May'20	12-26 May'20	IQAC	PRINCIPAL
Theory Exam. Date By CSVTU	25Apr-5May'19	11-22 May'20	12-23 May'20	27May-04 June'20	EXAM.	PRINCIPAL
Practical Exam. Date By CSVTU	7-17 May'20	23May-3June'20	24May-4June'20	25June-5July'20	EXAM.	PRINCIPAL
Online Submission of Practical Marks To CSVTU	7-17 May'20	23May-3June'20	24May-4June'20	25June-5July'20	EXAM.	PRINCIPAL
Submission of attendance to university	5th of Every Month				IQAC	PRINCIPAL
Schedule of CT1	24-26 Feb.'20	24-26 Feb.'20	24-26 Feb.'20	-	IQAC	1st yr (I/C),HOD
Schedule of CT2	26-28 Mar.'20	20-22 Apr.'20	20-22 Apr.'20	-	IQAC	1st yr (I/C),HOD
Schedule of DT1 (1st Year)	-	-	-	25-29 Feb.'20	1yr (I/C)	IQAC
Schedule of DT2 (1st Year)	-	-	-	16-20 Mar.'20	1yr (I/C)	IQAC
Schedule of CT (1st Year)	-	-	-	3-8 April.'20	1yr (I/C)	IQAC
Schedule of PUE (1st Year)	-	-	-	1-6 May.'20	1yr (I/C)	IQAC
Submission Of Evaluated Copies	With in 01 Week				1st yr (I/C),HOD	IQAC
CR Meet 1	17 Feb.'20	17 Feb.'20	20 Feb.'20	-	1yr (I/C) / Dept. HOD	PRINCIPAL
CR Meet 2	16 Mar.'20	16 Mar.'20	20 Mar.'20	-	1yr (I/C) / Dept. HOD	PRINCIPAL
CR Meet 3	-	17 Apr.'20	17 Apr.'20	-	1yr (I/C) / Dept. HOD	PRINCIPAL
Submission of A1,UR1,V1 marks	24 Feb.'20	24 Feb.'20	24 Feb.'20	16 Mar.'20	1yr (I/C) / Dept. HOD	PRINCIPAL
Submission of A2,UR2,V2 marks	27 Mar.'20	21 Apr.'20	21 Apr.'20	5 May'20	1yr (I/C) / Dept. HOD	PRINCIPAL
Course Coverage Report 1	31 Jan.' 20	31 Jan.' 20	31 Jan.' 20	5 Mar.'20	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 2	26 Feb.'20	24 Feb.'20	24 Feb.'20	6 Apr.'20	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 3	20 Mar.'20	31 Mar.'20	31 Mar.'20	8 May'20	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 4	10 Apr.'20	20 Apr.'20	27 Apr.'20	-	1yr (I/C) / Dept. HOD	IQAC
Course monitoring meeting 1	7 Feb.'20	7 Feb.'20	7 Feb.'20	-	1yr (I/C) / Dept. HOD	PRINCIPAL
Course monitoring meeting 2	11 Mar.'20	11 Mar.'20	11 Mar.'20	-	1yr (I/C) / Dept. HOD	PRINCIPAL
Course monitoring meeting 3	8 Apr.'20	8 Apr.'20	8 Apr.'20	-	1yr (I/C) / Dept. HOD	PRINCIPAL
TG Students meeting 1	14 Feb.'20	14 Feb.'20	14 Feb.'20	-	1yr (I/C) / Dept. HOD	PRINCIPAL
TG Students meeting 2	16 Mar.'20	16 Mar.'20	16 Mar.'20	-	1yr (I/C) / Dept. HOD	PRINCIPAL
TG Students meeting 3	9 Apr.'20	9 Apr.'20	9 Apr.'20	-	1yr (I/C) / Dept. HOD	PRINCIPAL

ACTIVITIES :-
24th Jan. 2020: Bright India Competition
11th Feb 2020: Expert lecturer Sponsored by CCOST
12th Feb 2020: Guest Lecturer by III Cell
20th Feb, 2020 College Day "Symphonia" (Tentative)

IQAC (I/c) 13/01/2020 | PRINCIPAL 13/01/2020 | Executive Vice Chairman 13/1/2020



CHRISTIAN COLLEGE OF ENGINEERING AND TECHNOLOGY, BHILAI

ACADEMIC CALENDAR - ODD SEMESTER(JULY-DEC. 2020')

Particulars of Academic / Exam. Activity	BE VII SEM	BE VTH SEM	BE IIIRD SEM	BE IST SEM	Responsible1	Responsible 2
Class Start Date	7 July' 2020	7 July' 2020	4 Aug' 2020		IQAC	PRINCIPAL
Class End Date	17 Nov.'2020	20 Nov.'2020	1 Jan.'2021		IQAC	PRINCIPAL
No. of working Day*					IQAC	PRINCIPAL
Last date for Provisional					IQAC-EXAM	PRINCIPAL
Intimation to University Prev Adm					-	-
Date of the submission of online exam form without late fee	12 Nov.'2020	25 Nov.'2020	29 Dec.'2020		-	Tpr (I/C) / Dept. HOD
Last date of submission of online Exam form with late fee Rs. 2012/2000	17 Nov.'20 Nov.'20	23 Nov./30Nov.'20 Dec.'20	1 Jan.'20/Jan.'21 Jan.'21		-	Tpr (I/C) / Dept. HOD
Submission of Online Sessional Marks	2-7 Dec.'20	15-20 Dec.'20	18-23 Dec.'21		Tpr (I/C)/HOD	PRINCIPAL
Preparation Of Leave	18 Nov.-1 Dec.'20	1 - 14 Dec.'20	2- 14 Dec.'20		IQAC	PRINCIPAL
Theory Exam. Date By CSVTU	2 -12 Dec.'20	15 -19 Dec.'20	18-23 Dec.'20		EXAM.	PRINCIPAL
Practical Exam. Date By CSVTU	15-23 Dec.'20	30 Dec.20- 3 Jan.'21	30 Jan-3 Feb.'21		EXAM.	PRINCIPAL
Online Submission of Practical Marks To CSVTU	15-24Dec.'20	30 Dec. 22-09 Jan.'21	30 Jan.-05 Feb.'21		EXAM.	PRINCIPAL
Submission of attendance to university	5th of every month				IQAC	PRINCIPAL
Schedule of CT1	19-24 Nov.'2020	19-24 Nov.'2020	02-11 Nov.'2020		IQAC	1st yr (I/C)/HOD
Schedule of CT2	01-06 Dec.'2020				IQAC	1st yr (I/C)/HOD
Schedule of DT1 (1st Year)	-	-	-		1yr (I/C)	IQAC
Schedule of DT2 (1st Year)	-	-	-		1yr (I/C)	IQAC
Schedule of GT (1st Year)	-	-	-		1yr (I/C)	IQAC
Schedule of FUE (1st Year)	-	-	-		1yr (I/C)	IQAC
Submission Of Evaluated Copies	With in 01 Week				1st yr (I/C)/HOD	IQAC
CR Meet 1	27 Aug.'2020	27 Aug.'2020	27 Aug.'2020		Tpr (I/C) / Dept. HOD	PRINCIPAL
CR Meet 2	28 Sept.'2020	28 Sept.'2020	28 Sept.'2020		Tpr (I/C) / Dept. HOD	PRINCIPAL
CR Meet 3	-	25 Nov.'2020	25 Nov.'2020		Tpr (I/C) / Dept. HOD	PRINCIPAL
Submission of A1,LR1,V1 marks	09 Oct.'2020	09 Oct.'2020	08 Oct.'2020		Tpr (I/C) / Dept. HOD	PRINCIPAL
Submission of A2, LR2,V2 marks	14 Dec.'2020	14 Dec.'2020	14 Dec.'2020		Tpr (I/C) / Dept. HOD	PRINCIPAL
Course Coverage Report 1	17 Aug.'2020	17 Aug.'2020	31Aug.'2020		Tpr (I/C) / Dept. HOD	IQAC
Course Coverage Report 2	07 Sept.'2020	07 Sept.'2020	22 Sept.'2020		Tpr (I/C) / Dept. HOD	IQAC
Course Coverage Report 3	02 Nov.' 2020	02 Nov.' 2020	06 Nov.'2020		Tpr (I/C) / Dept. HOD	IQAC
Course Coverage Report 4	25 Nov.' 2020	25 Nov.' 2020	02 Dec.'2020		Tpr (I/C) / Dept. HOD	IQAC
Course monitoring meeting 1	17 Aug.'2020	25 Aug.'2020	25 Aug.'2020		Tpr (I/C) / Dept. HOD	PRINCIPAL
Course monitoring meeting 2	18 Sept.' 2020	24 Sept.'2020	26 Sept.'2020		Tpr (I/C) / Dept. HOD	PRINCIPAL
Course monitoring meeting 3	16 Oct.'2020	06 Nov.'2020	06 Nov.'2020		Tpr (I/C) / Dept. HOD	PRINCIPAL
TC Students meeting 1	24 Aug.'2020	02Sep.'2020	07 Sep.'2020		Tpr (I/C) / Dept. HOD	PRINCIPAL
TC Students meeting 2	23 Sept.'2020	30 Sept.'2020	07Oct.'2020		Tpr (I/C) / Dept. HOD	PRINCIPAL
TC Students Meeting 3	23 Oct.'2020	10 Nov.'2020	10 Nov.'2020		Tpr (I/C) / Dept. HOD	PRINCIPAL

IQAC (Hod) PRINCIPAL Executive Vice Chairman

CHRISTIAN COLLEGE OF ENGINEERING AND TECHNOLOGY, BHILAI

ACADEMIC CALENDAR - ODD SEMESTER(JULY-DEC. 2021')

Particulars of Academic / Exam. Activity	BE VII SEM	BE VIII SEM	BE III SEM	BE IST SEM	Responsible 1	Responsible 2
Class Start Date	1 Sept' 2021	1 Sept' 2021	27 Sept' 2021	30 Nov' 2021	IQAC	PRINCIPAL
Class End Date	25 Dec.'2021	08 Jan.'2022	21 Jan.'2022	3 Feb.'2022	IQAC	PRINCIPAL
No. of working Days	77	80	84	53	IQAC	PRINCIPAL
Date of the submission of online exam form without late fee	25 Dec.'2021	02 Jan.'2022	17 Jan.'2022	25 Jan.'2022	-	1yr (I/C) / Dept. HOD
Last date of submission of online Exam form with late fee Rs. 30/120/200	26 Dec 31./02 Jan.,06 Jan.,'2022	06 Jan./10 Jan./14 Jan.,'2022	21 Jan./25 Jan./29 Jan.,'2022	26 Jan./02 Feb./06 Feb.,'22	-	1yr (I/C) / Dept. HOD
Submission of Online Sessional Marks	10-15 Jan.'2022	19-24 Jan.'2022	03-08 Feb.'2022	10-20 Feb.'2022	1st yr (I/C)/HOD	PRINCIPAL
Preparation Of Leave	26 Dec.,21- 5 Jan.,'22	8 - 18 Jan.'2022	24 Jan.-1 Feb.'2022	4 Feb.2022 -9 Feb.2022	IQAC	PRINCIPAL
Theory Exam. Date By CSVTU	10-15 Jan.'2022	18-31 Jan.'2022	02-14 Feb.'2022	10-26 Feb.'2022	EXAM.	PRINCIPAL
Practical Exam. Date By CSVTU	18-21 Jan.'2022	01-08 Feb.'2022	15-20 Feb.'2022	28 Feb-04 March.2022	EXAM.	PRINCIPAL
Online Submission of Practical Marks To CSVTU	18-25 Jan.'2022	01-08 Feb.'2022	15-20 Feb.'2022	28 Feb-08 March.2022	EXAM.	PRINCIPAL
Submission of attendance to university	5th of Every Month				IQAC	PRINCIPAL
Schedule of CT1	30 Nov-3 Dec.'2021	30 Nov-3 Dec.'2021	30 Nov-3 Dec.'2021		IQAC	1st yr (I/C),HOD
Schedule of CT2	28-30 Dec.'2021	04-06 Jan.2022	11-13 Jan.2022		IQAC	1st yr (I/C),HOD
Schedule of DT1 (1st Year)	-	-	-	29 Dec.2021 to 4 Jan 2022	1yr (I/C)	IQAC
Schedule of DT2 (1st Year)	-	-	-		1yr (I/C)	IQAC
Schedule of CT (1st Year)	-	-	-		1yr (I/C)	IQAC
Schedule of PUE (1st Year)	-	-	-		1yr (I/C)	IQAC
Submission Of Evaluated Copies	With In 01 Week				1st yr (I/C),HOD	IQAC
Submission of A1,LR1,V1 marks	07 Oct.'2021	07 Oct.'2021	07 Nov.'2021	07 Dec.'2021	1yr (I/C) / Dept. HOD	PRINCIPAL
Submission of A2,LR2,V2 marks	28 Dec.'2021	10 Jan.'2022	10 Jan.'2022	10 Jan.'2022	1yr (I/C) / Dept. HOD	PRINCIPAL
Course Coverage Report 1	27 Oct.'2021	27 Oct.'2021	27 Oct.'2021	20 Dec.' 2021	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 2	26 Nov.'2021	26 Nov.'2021	26 Nov.'2021	10 Jan.' 2022	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 3	21 Dec.' 2021	21 Dec.' 2021	27 Dec.' 2021	31 Jan.' 2022	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 4		10 Jan.' 2022	20 Jan.' 2022	10 Feb.' 2022	1yr (I/C) / Dept. HOD	IQAC

10/8/2021
IQAC (I/c)

PRINCIPAL

Executive Vice Chairman

All classes are in Blended mode (Offline/Online)

CHRISTIAN COLLEGE OF ENGINEERING AND TECHNOLOGY, BHILAI
ACADEMIC CALENDAR-EVEN SEMESTER(JAN-JUNE, 2019')

CHRISTIAN COLLEGE OF ENGINEERING AND TECHNOLOGY, BHILAI

ACADEMIC CALENDAR - EVEN SEMESTER(JAN-JUNE, 2022')

Particulars of Academic / Exam. Activity	BE VII SEM	BE VIth SEM	BE IV SEM	BE II SEM	Responsible 1	Responsible 2
Class Start Date	07 Feb.' 2022	07 Mar.' 2022	11 April.' 2022	10 May.' 2022	IQAC	PRINCIPAL
Class End Date	21 May.' 22	11 July.' 22	24 July.' 22	07 Aug' 22	IQAC	PRINCIPAL
No. of working Days	82	85	84	72	IQAC	PRINCIPAL
Date of the submission of online exam form without late fee	17 May.' 22	01 June.' 22	28 Jun'22	14 July' 22	-	Tyr (I/C) / Dept. HOD
Last date of submission of online Exam Form with late fee Rs. 30/120/200	21 May/25 May/29 May.' 22	05 Jun/09 Jun/13 Jun' 22	30 Jun/03 July/7 July' 22	16 July/22 July/26 July' 22	-	Tyr (I/C) / Dept. HOD
Submission of Online Sessional Marks	02-09 Jun'22	17-24 Jun'22	11-18 July'22	03-July-08 Aug'22	Tyr yr (I/C)HOD-IQAC	PRINCIPAL
Preparation Of Leave	23May-01 Jun.'22	06 - 16 Jun'22	01 - 13 July'22	18 - 29 July'22	IQAC	PRINCIPAL
Theory Exam. Date By CSVTU	02Jun - 11Jun'22	20- July'22	17- Aug.'22	29- Aug.'22	EXAM.	PRINCIPAL
Practical Exam. Date By CSVTU	12-18 Jun'22	30 Jun- 04 July'22	23 - 27 July'22	13 - 17Aug'22	EXAM.	PRINCIPAL
Online Submission of Practical Marks To CSVTU	12-20 Jun'22	30 Jun- 08 July'22	23 - 29 July'22	13 - 19Aug'22	EXAM.	PRINCIPAL
Submission of attendance to university	5th of Every Month				IQAC	PRINCIPAL
Schedule of CT1	05- 11April.'22	09-13 May.'22	15-17 Jun'22	-	IQAC	Tyr yr (I/C),HOD
Schedule of CT2	23-25 May.'22	12-14 July'22	25-27 July'22	-	IQAC	Tyr yr (I/C),HOD
Schedule of DT1 (1st Year)	-	-	-	27June-1st July'22	Tyr (I/C)	IQAC
Schedule of DT2 (1st Year)	-	-	-		Tyr (I/C)	IQAC
Schedule of CT (1st Year)	-	-		12-18 July'22	Tyr (I/C)	IQAC
Schedule of PUE (1st Year)	-	-		8-17 Aug.'22	Tyr (I/C)	IQAC
Submission Of Evaluated Copies	With in 01 Week				Tyr yr (I/C),HOD	IQAC
Submission of A1,LR1,V1 marks	11 April.'22	11 May.'22	24 Jun'22	8 July'22	Tyr (I/C) / Dept. HOD	PRINCIPAL
Submission of A2,LR2,V2 marks	20 May.'22	14 July'22	27 July'22	22 July'22	Tyr (I/C) / Dept. HOD	PRINCIPAL
Course Coverage Report 1	28 Feb.' 22	31 March.' 22	29 April.' 22	10 Jun.'22	Tyr (I/C) / Dept. HOD	IQAC
Course Coverage Report 2	25 March.'22	28 April.'22	25 May.'22	30 June.'22	Tyr (I/C) / Dept. HOD	IQAC
Course Coverage Report 3	22 April.'22	20 May.'22	17 Jun.'22	22 July'22	Tyr (I/C) / Dept. HOD	IQAC
Course Coverage Report 4	23 May.'22	15 June.'22	03 July.'22	23 Aug'22	Tyr (I/C) / Dept. HOD	IQAC
Course Coverage Report 5		11 July.'22	24 July.'22	-	Tyr (I/C) /	IQAC

CChichoyi 23/06/2022
IQAC (I/c)

PRINCIPAL 23/06/2022

Executive Vice Chairman

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CHRISTIAN COLLEGE OF ENGINEERING AND TECHNOLOGY, BHILAI

ACADEMIC CALENDAR -ODD SEMESTER (JULY-DEC. 2022)

Particulars of Academic / Exam. Activity	B.Tech VII SEM	B.Tech V SEM	B.Tech III SEM	B.Tech I SEM	Responsible I	Responsible II
Class Start Date	12 Sept.' 2022	10 Oct.' 2022	17 Nov.' 2022	10 Oct.' 2022	IQAC	PRINCIPAL
Class End Date	03 Dec.' 2022	23 Dec.' 2022	20 Jan.' 2023		IQAC	PRINCIPAL
No. of working Days	72	75	74		IQAC	PRINCIPAL
Date of the submission of online exam form without late fee	03 Dec.' 2022	23 Dec.'2022	20 Jan.' 2023		-	1yr (UC) / Dept. HOD
Last date of submission of online Exam form with late fee Rs. 200/200/200	07 Dec./11 Dec./05 Dec.' 22	27 Dec./31 Dec.2022/4 Jan' 23	24 Jan/28 Jan./01 Feb.' 23		-	1yr (UC) / Dept. HOD
Submission of Online Sessional Marks	26-29 Dec'2022	09-23 Jan'2022	06-17 Feb'2023		1st yr (UC)/HOD-IQAC	PRINCIPAL
Preparation Of Leave	05-10 Dec.'2022	26 Dec 22 - 06 Jan'23	20 Jan'23 - 03 Feb'2023		IQAC	PRINCIPAL
Theory Exam. Date By CSVTU	120 - 29 Dec'2022	09 - 20 Jan'2023	06-17 Feb'2023		EXAM.	PRINCIPAL
Practical Exams. Date By CSVTU	30 Dec - 04 Jan'2023	23- 27 Jan'2023	18 - 22 Feb'2023		EXAM.	PRINCIPAL
Online Submission of Practical Marks To CSVTU	2-3 Dec-05 Jan'2023	23- 31 Jan'2023	20 - 17 Feb'2023		EXAM.	PRINCIPAL
Submission of attendance to university	5th of Every Month				IQAC	PRINCIPAL
Schedule of CT1	21- 25 Nov.'2022	05-09 Dec.'2022	04-10 Jan'2023	-	IQAC	1st yr (UC)/HOD
Schedule of CT2	14-19 Dec.'2022	04 - 06 Jan'2023	30,31Jan -1 Feb'2023	-	IQAC	1st yr (UC)/HOD
Schedule of ST1 (1st Year)		-	-	28-30Nov&1, 2 Dec'22	1yr (UC)	IQAC
Schedule of ST2 (1st Year)	-	-	-		1yr (UC)	IQAC
Schedule of CT (1st Year)		-		4 - 10 Jan'23	1yr (UC)	IQAC
Schedule of PAE (1st Year)	-	-		Before ESE	1yr (UC)	IQAC
Submission Of Evaluated Copies	Within in 01 Week				1st yr (UC)/HOD	IQAC
Submission of A1,LR1,V1 marks	24 Nov'22	8 Dec'22	9 Jan'23	6 Dec'22	1yr (UC) / Dept. HOD	PRINCIPAL
Submission of A2,LR2,V2 marks	14 Dec'22	5 Jan'23	6 Feb'23	23 Jan'23	1yr (UC) / Dept. HOD	PRINCIPAL
Course Coverage Report 1	26 Sep'2022	07 Nov'22	07 Dec'22	30 Nov'22	1yr (UC) / Dept. HOD	IQAC
Course Coverage Report 2	28 Oct'22	30 Nov'22	28 Dec'22	28 Dec'22	1yr (UC) / Dept. HOD	IQAC
Course Coverage Report 3	03 Dec'22	23 Dec'22	20 Jan'23	25 Jan'23	1yr (UC) / Dept. HOD	IQAC
Course Monitoring Meeting 1	13 Oct'2022	10 Nov'2022	5 Dec'2022	28 Nov'22	1yr (UC) / Dept. HOD	IQAC
Course Monitoring Meeting 2	11 Nov'2022	1 Dec'2022	29 Dec'2022	30 Dec'22	1yr (UC) / Dept. HOD	IQAC
Course Monitoring Meeting 3	2 Dec'2022	20 Dec'2022	18 Jan'2023	24Jan'23	1yr (UC) / Dept. HOD	IQAC
TG-Students Meeting 1	11 Oct'2022	08 Nov'2022	12 Dec'2022	27 Nov'22	1yr (UC) / Dept. HOD	IQAC
TG-Students Meeting 2	14 Nov'2022	1 Dec'2022	30 Dec'2022	25 Dec'22	1yr (UC) / Dept. HOD	IQAC
TG-Students Meeting 3	1 Dec'2022	21 Dec'2022	17 Jan'2023	25Jan'23	1yr (UC) / Dept. HOD	IQAC

IQAC (Vc) 6/12/2022 PRINCIPAL 6/12/2022 Executive Vice Chairman

In this semester the Events to be conducted:
IIC Activities
Technologia
College Day 'Symphonia'
MDLI Activities
Any Other

ACADEMIC CALENDAR-EVEN SEMESTER(JAN-JUNE, 2019')

CHRISTIAN COLLEGE OF ENGINEERING AND TECHNOLOGY, BHILAI

ACADEMIC CALENDAR -FIRST SEMESTER(JULY-DEC. 2022')

Particulars of Academic / Exam. Activity	B.Tech I SEM	Responsible1	Responsible 2
Class Start Date	18 Oct.' 2022	IQAC	PRINCIPAL
Class End Date	09 March'23	IQAC	PRINCIPAL
No. of working Days	72	IQAC	PRINCIPAL
Date of the submission of online exam form without late fee	05 March.' 2023	-	1yr (I/C) / Dept. HOD
Last date of submission of online Exam form with late fee Rs. 30/120/200	09 March./13 March./17 March.' 23	-	1yr (I/C) / Dept. HOD
Last date of Approval/Detention of online Exam form by Institute	19 March.' 2023	-	
Submission of Online Sessional Marks	22 March - 08 April'2023	1st yr (I/C)/HOD-IQAC	PRINCIPAL
Preparation Of Leave	09 -21 March.'2023	IQAC	PRINCIPAL
Theory Exam. Date By CSVTU	22 March - 06 April'2023	EXAM.	PRINCIPAL
Practical Exam. Date By CSVTU	07 April - 13 April'2023	EXAM.	PRINCIPAL
Online Submission of Practical Marks To CSVTU	07 April - 15 April'2023	EXAM.	PRINCIPAL
Submission of attendance to university	5th of Every Month	IQAC	PRINCIPAL
Schedule of CT1		IQAC	1st yr (I/C),HOD
Schedule of CT2		IQAC	1st yr (I/C),HOD
Schedule of DT1 (1st Year)	[illegible]	1yr (I/C)	IQAC
Schedule of DT2 (1st Year)	4 - 10 Jan'23	1yr (I/C)	IQAC
Schedule of CT (1st Year)	30 Jan-03 Feb'23	1yr (I/C)	IQAC
Schedule of PUE (1st Year)	Before ESE	1yr (I/C)	IQAC
Submission Of Evaluated Copies	With in 01 Week	1st yr (I/C),HOD	IQAC
Submission of A1,LR1,V1 marks	6 Dec'22	1yr (I/C) / Dept. HOD	PRINCIPAL
Submission of A2,LR2,V2 marks	23 Jan'23	1yr (I/C) / Dept. HOD	PRINCIPAL
Course Coverage Report 1	30 Nov'22	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 2	29 Dec'22	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 3	25 Jan'23	1yr (I/C) / Dept. HOD	IQAC
Course Monitoring Meeting 1	28 Nov'22	1yr (I/C) / Dept. HOD	IQAC
Course Monitoring Meeting 2	30 Dec'22	1yr (I/C) / Dept. HOD	IQAC
Course Monitoring Meeting 3	24-Jan'23	1yr (I/C) / Dept. HOD	IQAC
TG Students Meeting 1	27 Nov'22	1yr (I/C) / Dept. HOD	IQAC
TG Students Meeting 2	28 Dec'22	1yr (I/C) / Dept. HOD	IQAC
TG Students Meeting 3	25-Jan'23	1yr (I/C) / Dept. HOD	IQAC

IQAC (I/c)

Principal 8/10/2023

In this semester the Events to be condutucted:
IIC Activities
Technologia
College Day "Symphonia"
NDLI Activities
Any Other

Christian College of Engineering and Technology, Bhilai

Department of Electrical Engineering

TIME TABLE 7th, 5th & 3rd Sem July - Dec. 2022

Head of Department : **W.E.F. 12.09.2022**

TIME		1	2	3	4	Recess	5	6	7
DAY	SEM	09.30-10.20	10.20-11.10	11.10-12.00	12:00-:12:50	12.50-01.30	01.30-2.20	2.20-3.10	3.10-4.00
MON	7th	ED	EAM	PAS	ED	LUNCH	HVE Lab		
		Mr. Akash Dewangan	Mr. Prashant Bawaney	Ms. Richa Sahu	Mr. Akash Dewangan		Mr. Ashish Dewangan		
	5th	CSE	PPE	PSA	PE		Environment Studies		Lib
		Mr. Ashish Dewangan	Mr. Akash Dewangan	Mr. Prashant Bawney	Ms. Richa Sahu		Mr. Akash Dewangan		-
	3rd	ECA	EM - I	DE	Lib		APPL in numerical methods lab		
		Dr. Shailendra Verma	Mr. Ashish Dewangan	Mr. Akash Dewangan	-		Maths Teacher		
TUE	7th	EAM	HVE	ED	PSA		NCES	Project Phase - I	

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		Mr. Prashant Bawaney	Mr. Ashish Dewangan	Mr. Akash Dewangan	Ms. Richa Sahu		Dr. Shailenra Verma	Dr. Shailenra Verma
	5th	PE	PPE	CSE	PSA		Project - I	
		Ms. Richa Sahu	Mr. Akash Dewangan	Mr. Ashish Dewangan	Mr. Prashant Bawney		Mr. Ashish Dewangan	
	3rd	EM - I	NM	M - III	DE		Circuit Lab	
		Mr. Ashish Dewangan	Maths Teacher	Maths Teacher	Mr. Akash Dewangan		Dr. Shailenra Verma	
WED	7th	PAS	HVE	NCES	EAM		Electrical Drives Lab	
		Ms. Richa Sahu	Mr. Ashish Dewangan	Dr. Shailenra Verma	Mr. Prashant Bawaney		Mr. Akash Dewangan	
	5th	EMMI	PPE	CSE	PE		EMMI Lab	
		Dr. Shailenra Verma	Mr. Akash Dewangan	Mr. Ashish Dewangan	Ms. Richa Sahu		Dr. Shailenra Verma	
	3rd	DE	NM	M - III	ECA		Electrical Machines - I Lab	

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		Mr. Akash Dewangan	Maths Teacher	Maths Teacher	Dr. Shailendra Verma		Mr. Ashish Dewangan	
THU	7th	EAM	HVE	ED	HVE		NCES	IT
		Mr. Prashant Bawaney	Mr. Ashish Dewangan	Mr. Akash Dewangan	Mr. Ashish Dewangan		Dr. Shailenra Verma	Mr. Ashish Dewangan
	5th	CSE	PPE	EMMI	PSA		PE Lab	
		Mr. Ashish Dewangan	Mr. Akash Dewangan	Dr. Shailenra Verma	Mr. Prashant Bawney		Ms. Richa Sahu	
	3rd	ECA	NM	M - III	DE		EM - I	PD
		Dr. Shailendra Verma	Maths Teacher	Maths Teacher	Mr. Akash Dewangan		Mr. Ashish Dewangan	Dr. Shailendra Verma
FRI	7th	Project Phase - I					PAS	Humanities
		Dr. Shailenra Verma					Ms. Richa Sahu	Ms. Richa Sahu
	5th	PE	PSA	EMMI	Lib		CSE Lab	

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		Ms. Richa Sahu	Mr. Prashant Bawney	Dr. Shailendra Verma	-		Mr. Ashish Dewangan
	3rd	EM - I	NM	M - III	ECA		Digital Electronics Lab
		Mr. Ashish Dewangan	Maths Teacher	Maths Teacher	Dr. Shailendra Verma		Mr. Akash Dewangan

7th		5th		3rd	
Subject	Name of the Faculty	Subject	Name of the Faculty	Subject	Name of the Faculty
High Voltage Engineering	Mr. Ashish Dewangan	Control System Engg	Mr. Ashish Dewangan	Electrical Circuit Analaysis	Dr. Shailendra Verma
Electrical Drives	Mr. Akash Dewangan	Power System Analysis	Mr. Prashant Bawney	Mathematics – III	Maths Teacher
Energy Auditing and Management	Mr. Prashant Bawaney	Power Electronics	Ms. Richa Sahu	Electrical Machines - I	Mr. Ashish Dewangan
Power Apparatus System	Ms. Richa Sahu	Electrical Measurement	Dr. Shailenra Verma	Digital Electronics	Mr. Akash Dewangan
Non Conventional Energy Source	Dr. Shailenra Verma	Power Plant Engg	Mr. Akash Dewangan	Numerical Methods	Maths Teacher
High Voltage Engineering Lab	Mr. Ashish Dewangan	Control System Engineering Laboratory	Mr. Ashish Dewangan	Electrical Cicuit Lab	Dr. Shailendra Verma
Electrical Drives Lab	Mr. Akash Dewangan	Power Electronics Lab	Ms. Richa Sahu	Electrical Machines - I Lab	Mr. Ashish Dewangan

Project (Phase 1)	**Dr. Shailenra Verma**	**Electrical Measurement Lab**	**Dr. Shailenra Verma**	**Digital Electronics Lab**	**Mr. Akash Dewangan**
Industrial Training	**Mr. Ashish Dewangan**	**Summer Internship**	**Mr. Prashant Bawney**	**APPL in numerical methods lab**	**Maths Teacher**
Humanities	**Ms. Richa Sahu**	**Environmental Studies**	**Mr. Akash Dewangan**	**Humanities**	**Dr. Shailendra Verma**

PROJECT BATCHES AND PROJECT EVALUATION SHEET

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PROJECT BATCHES

YEAR	DEPARTMENT	COURSE	SEMESTER	PROJECT TITLE	NAME OF STUDENTS	NAME OF GUIDE
2018-19	MECHANICAL	BE	8TH	ENHANCEMENT IN MECHANICAL AND CHEMICAL PROPERTIES OF FLY ASH GREEN BRICKS	ALI HASSAN ANSARI	DR. MRINAL KANTI MANIK
2018-19	MECHANICAL	BE	8TH		AMARJEET BANJARE	
2018-19	MECHANICAL	BE	8TH		DEEPAK LAL VERMA	
2018-19	MECHANICAL	BE	8TH		MD ATEEK KHAN	
2018-19	MECHANICAL	BE	8TH		NIHAL KUMAR SINGH	
2018-19	MECHANICAL	BE	8TH	DESIGN OF QUICK LIFTING JACK MACHINE	ANUPAM JAISWAL	MR. GANPAT RAKESH
2018-19	MECHANICAL	BE	8TH		ASHISH DEWANGAN	
2018-19	MECHANICAL	BE	8TH		CHANDAN KOUMARYA	
2018-19	MECHANICAL	BE	8TH		GAURAV K. DILLIWAR	
2018-19	MECHANICAL	BE	8TH		KISHOR KUMAR	
2018-19	MECHANICAL	BE	8TH	STUDY AND DESIGN OF AUTOMATED DOUBLE HACKSAW	ABHISHEK TARA	MS. PALLAVI CHANDRAKAR
2018-19	MECHANICAL	BE	8TH		AMIT SINGH	
2018-19	MECHANICAL	BE	8TH		ANOOP G KOSHY	
2018-19	MECHANICAL	BE	8TH		CHIRANJEEV AGRAWAL	
2018-19	MECHANICAL	BE	8TH		MANISH KUMAR	
2018-19	MECHANICAL	BE	8TH		DEV SAGAR SAO	
2018-19	MECHANICAL	BE	8TH	RESTORATION AND MODIFICATION OF PASSENGER VEHICLE	AVINASH DEWANGAN	MR. AMIT SINGH DHAKAD
2018-19	MECHANICAL	BE	8TH		DAYANAND SAHU	
2018-19	MECHANICAL	BE	8TH		MUKESH K. DEWANGAN	
2018-19	MECHANICAL	BE	8TH		NARESH K. NAMDEV	
2018-19	MECHANICAL	BE	8TH		NIKET VERMA	
2018-19	MECHANICAL	BE	8TH		NEHAL VERMA	
2018-19	MECHANICAL	BE	8TH	DESIGN OF OBSTACLE AVOIDING ROBOT	A ASHISH	MR. CHANDAN SAHU
2018-19	MECHANICAL	BE	8TH		DEEPAK K. (G.S.PANDIT)	
2018-19	MECHANICAL	BE	8TH		MRIDUL K. SHRIVASTAVA	
2018-19	MECHANICAL	BE	8TH		LOKESH GAIKWAD	
2018-19	MECHANICAL	BE	8TH		NAVNEET PAL	
2018-19	MECHANICAL	BE	8TH	STUDY OF VERTICAL AXIS WIND TURBINE	ABDUL RASHID ALIM	MR. JITENDRA KUMAR SAHU
2018-19	MECHANICAL	BE	8TH		ABDUL WASHIFF	

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2018-19	MECHANICAL	BE	8TH		ABHISHEK GIRI	
2018-19	MECHANICAL	BE	8TH		BHARAT KUMAR	
2018-19	MECHANICAL	BE	8TH		HARSHIT SINGH THAKUR	
2018-19	MECHANICAL	BE	8TH	FISH LIKE PROPOLSION	AMAN KUMAR MAHTO	**MR. JOJI THOMAS**
2018-19	MECHANICAL	BE	8TH		AMIT LAKRA	
2018-19	MECHANICAL	BE	8TH		ROJAN V PHILIP	
2018-19	MECHANICAL	BE	8TH		ANKIT PATEL	
2018-19	MECHANICAL	BE	8TH	DESIGN AND MANUFACTURING OF ELECTRIC PVC GO-CART	HIMANSHU SINGH	**MS. PALLAVI CHANDRAKAR**
2018-19	MECHANICAL	BE	8TH		JATINDRA MAHAJAN	
2018-19	MECHANICAL	BE	8TH		KHILESH KUMAR	
2018-19	MECHANICAL	BE	8TH		RAHUL KUMAR VERMA	
2018-19	MECHANICAL	BE	8TH		MAYANK CHANDRAKAR	
2018-19	MECHANICAL	BE	8TH	REGENERATIVE BRAKING SYSTEM	SACHIN CHAUHAN	**DR. MRINAL KANTI MANIK**
2018-19	MECHANICAL	BE	8TH		SEBRON ASHAWAN	
2018-19	MECHANICAL	BE	8TH		SHUBHAM SAHU	
2018-19	MECHANICAL	BE	8TH		SHUBHAM TIRKEY	
2018-19	MECHANICAL	BE	8TH	DESIGN AND FABRICATION OF PEDAL POWERED WATER PURIFIER	PARIKSHIT TRIVEDI	**MR. R. H. GAJGHAT**
2018-19	MECHANICAL	BE	8TH		PRATIK SHAH	
2018-19	MECHANICAL	BE	8TH		SAPAN SAHU	
2018-19	MECHANICAL	BE	8TH		SHIVA KUMAR	
2018-19	MECHANICAL	BE	8TH		SHIVAM SINGH GAHARWAR	
2018-19	MECHANICAL	BE	8TH	STUDY AND FABRICATION OF STIRLING ENGINE AND ITS APPLICATION FOR WATER PUMP	RAGHAV SHARMA	**MR. AMIT SINGH DHAKAD**
2018-19	MECHANICAL	BE	8TH		RAVI KUMAR BARNWAL	
2018-19	MECHANICAL	BE	8TH		SONU K SAMUEL	
2018-19	MECHANICAL	BE	8TH		PANKAJ MAURYA(ASHOK KUMAR)	
2018-19	MECHANICAL	BE	8TH	WORKING OF LOW COST WINNOWING EQUIPMENT	PANKAJ MAURYA (R.P.MAURYA)	**MR. PRADEEP NAHAK**
2018-19	MECHANICAL	BE	8TH		ROHIT SHRIVASTAVA	
2018-19	MECHANICAL	BE	8TH		SIDDHANT SEVY SCOTT	
2018-19	MECHANICAL	BE	8TH		SUMEET YADAV	
2018-19	MECHANICAL	BE	8TH		TOMESHWAR SAHU	
2018-19	MECHANICAL	BE	8TH	PERFORMANCE ENHANCEMENT OF	SOURABH SINGH	**MR. CHANDAN SAHU**
2018-19	MECHANICAL	BE	8TH		TUFAIL AHMED	

Project Batches and Project Evaluation sheet

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2018-19	MECHANICAL	BE	8TH	VERTICAL AXIS WIND TURBINE INTEGRATED WITH 4-AERODYNAMIC BLADES	SHYAMBAR KUMAR KANSHI	
2018-19	MECHANICAL	BE	8TH		VIKRANT KUMAR	
2018-19	MECHANICAL	BE	8TH		VIVEK PRATAP SINGH	
2018-19	MECHANICAL	BE	8TH		VAIBHAV CHAUHAN	
2018-19	MECHANICAL	BE	8TH		SHASHIKANT	
2018-19	MECHANICAL	BE	8TH	ENHANCEMENT IN MECHANICAL AND CHEMICAL PROPERTIES OF ALUMINIUM ALLOY	RAJNEESH KUMAR VERMA	**DR. ABHISHEK JHA**
2018-19	MECHANICAL	BE	8TH		RAKESH KUMAR	
2018-19	MECHANICAL	BE	8TH		RAM KRISHNA VISHWAKARMA	
2018-19	MECHANICAL	BE	8TH		ROVINS KUJUR	
2018-19	MECHANICAL	BE	8TH		S GIRDHAR RAO	
2018-19	MECHANICAL	BE	8TH	FOOTSTEP POWER GENERATION SYSTEM	SALEEL KUMAR SWAIN	**MR. P. S. RAO**
2018-19	MECHANICAL	BE	8TH		SANDEEP KUMAR SINGH	
2018-19	MECHANICAL	BE	8TH		PRASHANT SAO	
2018-19	MECHANICAL	BE	8TH		SHOBHIT YADAV	
2018-19	MECHANICAL	BE	8TH		VIKRANT GUPTA	
2019-20	MECHANICAL	BE	8TH	DESIGN OF AIR POLLUSION CONTROL DEVICE TO REMOVE NOX	RAJ KUMAR SEN	**MR. R. H. GAJGHAT**
2019-20	MECHANICAL	BE	8TH		SANJU MANNA	
2019-20	MECHANICAL	BE	8TH		VIKAS SHARMA	
2019-20	MECHANICAL	BE	8TH		SHUBHAM SAO	
2019-20	MECHANICAL	BE	8TH	DESIGN OF ELECTRICAL BICYCLE USING REGENARATIVE ENERGY	ACHSAH GRACE SAMUEL	**DR. P. S. RAO**
2019-20	MECHANICAL	BE	8TH		DENIS PRATIK TOPPO	
2019-20	MECHANICAL	BE	8TH		JASPREET KAUR RANDHAWA	
2019-20	MECHANICAL	BE	8TH		SAMUEL MOSES	
2019-20	MECHANICAL	BE	8TH		VINAY KUMAR PATEL	
2019-20	MECHANICAL	BE	8TH	MODIFICATION OF PERSONAL HUMAN TRANSPORTATION	AKASH GEDAM	**MR. AMIT SARDA**
2019-20	MECHANICAL	BE	8TH		AMAN RANA	
2019-20	MECHANICAL	BE	8TH		AMIT KUMAR UMARVAISHYA	
2019-20	MECHANICAL	BE	8TH		PIYUSH KUMAR	
2019-20	MECHANICAL	BE	8TH	STUDY OF THE MECHANICAL PROPERTIES OF ALUMINIUM ALLOYS	AMIR HASSAN ANSARI	**MR. GANPAT RAKESH**
2019-20	MECHANICAL	BE	8TH		SD MUSTAKIM HASHMI	
2019-20	MECHANICAL	BE	8TH		VINITH YACOB	

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2019-20	MECHANICAL	BE	8TH		VIKAS KUMAR MAURYA	
2019-20	MECHANICAL	BE	8TH	IMPLEMENTATION AND ADVANCEMENT OF VOICE CONTROLLED WHEELCHAIR	ANURAG EKKA	**MR. SUMIT AGRAWAL**
2019-20	MECHANICAL	BE	8TH		MALVANT SINGH	
2019-20	MECHANICAL	BE	8TH		MANI ALFRED SABU	
2019-20	MECHANICAL	BE	8TH		PRASHANT PANDEY	
2019-20	MECHANICAL	BE	8TH		SHINE ABRAHAM JOHN	
2019-20	MECHANICAL	BE	8TH	MODIFICATION OF BARSHA HYDROPOWERED PUMP	ASHISH KUMAR DEWANGAN	**MRS. ROSHITA**
2019-20	MECHANICAL	BE	8TH		CHANDAN PASWAN	
2019-20	MECHANICAL	BE	8TH		SHUBHAM YADAV	
2019-20	MECHANICAL	BE	8TH		AMIT KUSHWAHA	
2019-20	MECHANICAL	BE	8TH		DEEPAK KUMAR SINGH	
2019-20	MECHANICAL	BE	8TH		NISHANT PHILIP	
2020-21	MECHANICAL	BE	8TH	DESIGN AND DEVELOPMENT OF MULTIDIRECTIONAL UNLOADING SYSTEM FOR DUMPER	AJAY KUMAR NAVRANG	**DR. R. H. GAJGHAT**
2020-21	MECHANICAL	BE	8TH		BRAHMANAND JHA	
2020-21	MECHANICAL	BE	8TH		RISHIKESH YADAV	
2020-21	MECHANICAL	BE	8TH		TAMENDRA SINGH PARMAR	
2020-21	MECHANICAL	BE	8TH	SOLENOID ENGINES FOR APPLYING MECHANICAL FORCE TO THE VALVE	ABHAY SEN	**DR. P. S. RAO**
2020-21	MECHANICAL	BE	8TH		KRISHNA KUMAR JHARIA	
2020-21	MECHANICAL	BE	8TH		NIKHIL DEWANGAN	
2020-21	MECHANICAL	BE	8TH		SIDDHARTH SAHU	
2020-21	MECHANICAL	BE	8TH	DESIGN AND FABRICATION OF AIR COOLING SYSTEM BY VAPOUR COMPRESSION REFRIGERATION SYSTEM	KUNDAN SINGH BARMAN	**MR. AMIT SARDA**
2020-21	MECHANICAL	BE	8TH		PAWAN KUMAR SAHU	
2020-21	MECHANICAL	BE	8TH		RAHUL SONI	
2020-21	MECHANICAL	BE	8TH		KAJAL MAURYA	
2020-21	MECHANICAL	BE	8TH	DESIGN AND ANALYSIS OF DISK BRAKE	ABHAY KUMAR YADAV	**MR. GANPAT RAKESH**
2020-21	MECHANICAL	BE	8TH		PREETAM TIRKEY	
2020-21	MECHANICAL	BE	8TH		DEEPESH JOHNSON TIRKEY	
2020-21	MECHANICAL	BE	8TH		NELSON KUJUR	
2020-21	MECHANICAL	BE	8TH	STUDY OF HEAT TRANSFER FROM FIN PIN TECHNOLOGY	GAURAV KUMAR VERMA	**DR. MANMOHAN SONI**
2020-21	MECHANICAL	BE	8TH		DILIP KUMAR	
2021-22	MECHANICAL	BE	8TH	GESTURE	NIRAJ THAKUR	**MR AMIT**

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2021-22	MECHANICAL	BE	8TH	CONTROLLED ROBOT	JOZIL JACOB	**SARDA**
2021-22	MECHANICAL	BE	8TH		ANMOL FERNANDIES	
2021-22	MECHANICAL	BE	8TH		ISHAN FRANCIS	
2021-22	MECHANICAL	BE	8TH		SAMEER RANA	
2021-22	MECHANICAL	BE	8TH		AMIT YADAV	
2021-22	MECHANICAL	BE	8TH	SOLAR PANELS VEHICLE	PREMRAJ SINHA	**DR. P. S. RAO**
2021-22	MECHANICAL	BE	8TH		HULESH DEWANGAN	
2021-22	MECHANICAL	BE	8TH		TANU SEN	
2021-22	MECHANICAL	BE	8TH		RAMCHANDRA	
2021-22	MECHANICAL	BE	8TH		SHIVDUTT	
2021-22	MECHANICAL	BE	8TH		WILLIAM WADKAR	
2021-22	MECHANICAL	BE	8TH	SOLAR PANEL CLEANING MACHINE	ARJUN DUBEY	**MR. ROSHAN DATT KASHYAP**
2021-22	MECHANICAL	BE	8TH		VIPIN KUMAR	
2021-22	MECHANICAL	BE	8TH		ADNAN KHAN	
2021-22	MECHANICAL	BE	8TH		YASHAB RANGA	
2021-22	MECHANICAL	BE	8TH		KAUSHAL KUMAR	
2021-22	MECHANICAL	BE	8TH		ANJALI RAWAT	
2021-22	MECHANICAL	BE	8TH	ARDUINO BASED HUMAN FOLLOWING ROBOTE	GAURAV	**MR C.S. CAHU**
2021-22	MECHANICAL	BE	8TH		DEEPAK	
2021-22	MECHANICAL	BE	8TH		SAKET	
2021-22	MECHANICAL	BE	8TH		ABHISHEK	
2021-22	MECHANICAL	BE	8TH		ASHUTOSH	
2021-22	MECHANICAL	BE	8TH		AJAY KUMAR	
2021-22	MECHANICAL	BE	8TH		SHOAIB HANSARI	
2021-22	MECHANICAL	BE	8TH	REMOTE CONTROL MINI FORKLIFT ROBOT	SUMEET PRASAD	**DR. R. H. GAJGHAT**
2021-22	MECHANICAL	BE	8TH		BIKKU KUMAR	
2021-22	MECHANICAL	BE	8TH		DEEPAK NISHAD	
2021-22	MECHANICAL	BE	8TH		FAIZAN	
2021-22	MECHANICAL	BE	8TH		JITENDRA	
2021-22	MECHANICAL	BE	8TH		AMAN KUMAR	
2022-23	MECHANICAL	BTECH	8TH	DESIGN & FABRICATION OF PORTABLE PEDAL OPERATED PNEUMATIC LIFTING JACK FOR LMV	SHREYANSH LAL	**DR. R. H. GAJGHAT**
2022-23	MECHANICAL	BTECH	8TH		RAHUL KUMAR BRAMHANKAR	
2022-23	MECHANICAL	BTECH	8TH		SAHIL HUSSAIN	
2022-23	MECHANICAL	BTECH	8TH	DESIGN & FABRICATION OF GROUNDNUT SHELLING MACHINE	DEEPAK KUMAR	**MR. AMIT SARDA**
2022-23	MECHANICAL	BTECH	8TH		HIMANSHU TAMRAKAR	

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2022-23	MECHANICAL	BTECH	8TH		SEEYON KUMAR	
2022-23	MECHANICAL	BTECH	8TH	DESIGN OF MULTIFUCTIONAL LADDER CHAIR	SHIVNATH GOTA	**MR C.S. SAHU**
2022-23	MECHANICAL	BTECH	8TH		ROBINS JACOB JOHN	
2022-23	MECHANICAL	BTECH	8TH	DESIGN & FABRICATION OF BELT-TYPE OIL SKIMMER	ROSHAN ROY	**DR. P. S. RAO**
2022-23	MECHANICAL	BTECH	8TH		SHARON SURYAVANSHI	
2022-23	MECHANICAL	BTECH	8TH		AKHIL ANU ABRAHAM	
2018-19	CSE	BE	8TH	**ONLINE JOB PORTAL**	D LILY SUSANNA	MR. REVATI RAMAN DEWANGAN
2018-19	CSE	BE	8TH		MAYA AJECT KUMAR	
2018-19	CSE	BE	8TH		RAJAT KUMAR GUPTA	
2018-19	CSE	BE	8TH	**ANDROID APP : CONNECT BODDY**	ARSHI IMTIYAZ	MR. YOGESH TAMRAKAR
2018-19	CSE	BE	8TH		K. SHILPA	
2018-19	CSE	BE	8TH		PALLAVEE VAIDYA	
2018-19	CSE	BE	8TH	**AUTOMATED STREET LIGHT**	LENIENT TIRKEY	MR. INDRANIL SARKAR
2018-19	CSE	BE	8TH		SHREYA TRIPATHI	
2018-19	CSE	BE	8TH		SMRITI KUMARI	
2018-19	CSE	BE	8TH		RAJAT SINGH	
2018-19	CSE	BE	8TH	**FACIAL EXPRESSION RECOGNITION**	SWATI PATRA	MR. ASHISH MISHAL
2018-19	CSE	BE	8TH		SAMTA SINGH	
2018-19	CSE	BE	8TH		JYOTI YADAV	
2018-19	CSE	BE	8TH	**FINGERPRINT BASED AUDROID AIM SYSTEM**	STEFF STEPHEN	MR. YOGESH TAMARKAR
2018-19	CSE	BE	8TH		SHIFY ANI ABRAHAM	
2018-19	CSE	BE	8TH	**IOT BASED HART BEAT MONITORING**	JOYS ROHIT KISOTTIA	DR. SITENDRA TAMARKAR
2018-19	CSE	BE	8TH		SHUBHAM DIXENA	
2018-19	CSE	BE	8TH		GAURAW REKHWAR	
2018-19	CSE	BE	8TH	**ARDUINO BASED HOME SECUITY SYSTEM**	GIRISH PATEL	DR. ARCHANA CHOUDHARY
2018-19	CSE	BE	8TH		JAY KUMAR	
2018-19	CSE	BE	8TH	**MATLAB BASED BRAIN TUMOR SEGMENTATION & DETECTION**	S. JOYDEB	MR. REVATI RAMAN DEWANGAN
2018-19	CSE	BE	8TH		SHWETA SINGH	

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2018-19	CSE	BE	8TH		RAMESH CHAND GUPTA	
2019-20	CSE	BE	8TH	**BARCODE BASED ATTENDANCE MANAGEMENT SYSTEM**	ANMOL SHRIVASTAV	MR. REVATI RAMAN DEWANGAN
2019-20	CSE	BE	8TH		FALGUNI VERMA	
2019-20	CSE	BE	8TH		RAVINA	
2019-20	CSE	BE	8TH	**E MAIL SPAM DETECTION USING MACHINE LEARNING ALGORITHM**	KAVITA SINGH	MRS. KAJAL VERMA
2019-20	CSE	BE	8TH		SUJATA SINGH	
2019-20	CSE	BE	8TH		NEHA SINGH	
2019-20	CSE	BE	8TH		SURUCHI SHARMA	
2019-20	CSE	BE	8TH	**STOCKMART: INVENTORY MANAGEMENT APP (ANDROID)**	UDIT KUMAR SAHU	MRS. SNEHLATA MANDAL
2019-20	CSE	BE	8TH		MOUSAMI SANYAL	
2019-20	CSE	BE	8TH	**VOICE BASED E-MAIL FOR THE BLIND***	PRIYA YADAV	MR. ASHISH MISAL
2019-20	CSE	BE	8TH		MADHUSUDAN PATHAK	
2019-20	CSE	BE	8TH		SHEETAL RAO	
2019-20	CSE	BE	8TH	**CREDIT CARD READER WITH FACE RECOGNITION BASED ON WEBCAM***	ARVIND VASAVAN	MR. YOGESH TAMRAKAR
2019-20	CSE	BE	8TH		NITU NAGWANI	
2019-20	CSE	BE	8TH	**SENTIMENTAL ANALYSIS AND BENCHMARKING ON MOVIE RECOMMENDATION SYSTEM**	NIDA NAAZ	DR. SITENDRA TAMRAKAR
2019-20	CSE	BE	8TH		SHALAJ	
2019-20	CSE	BE	8TH		SHUBHANGI BARVEKAR	
2019-20	CSE	BE	8TH	**IMAGE ENCRYPTION APP (ANDROID)**	AASHI JAWADE	MR. REVATI RAMAN DEWANGAN
2019-20	CSE	BE	8TH		MANENDRA JANGHEL	
2019-20	CSE	BE	8TH		M RAJ SHEKHAR	
2019-20	CSE	BE	8TH	**CCET APP (ANDROID)**	ADITYA KUMAR KANOJE	MRS. NEHA SONI

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2019-20	CSE	BE	8TH		SARANSH SHARMA	
2019-20	CSE	BE	8TH		EDWARD MASIH	
2019-20	CSE	BE	8TH		HONEY CHAUDHARY	
2019-20	CSE	BE	8TH	**DIGITALIZED CERTIFICATE GENERATOR***	FALESH KUMAR	MS. D JANET
2019-20	CSE	BE	8TH		RANJANA	
2019-20	CSE	BE	8TH		VEDPRAKASH	
2019-20	CSE	BE	8TH		VIMAL KUMAR TANDAN	
2019-20	CSE	BE	8TH	**UPDATED CENTRAL DATABASE (DIGI-LOCKER) (JAVA)**	JEFFIN A THOMAS	MRS. SNEHLATA MANDAL
2019-20	CSE	BE	8TH		AKASH ROY	
2019-20	CSE	BE	8TH		FRANCIS NARANGE	
2019-20	CSE	BE	8TH	**VPN TUNNELING (NETWORKING)**	RAVI KUMAR MUDLIYAR	MR. YOGESH TAMRAKAR
2019-20	CSE	BE	8TH		SUNAINA SHARMA	
2019-20	CSE	BE	8TH	**PATIENT RECORD MANAGEMENT**	RAVI KUMAR MUDLIYAR	MR. YOGESH TAMRAKAR
2019-20	CSE	BE	8TH		SUNAINA SHARMA	
2020-21	CSE	BE	8TH	**PARKING MANAGEMENT SYSTEM USING AUTOMATIC NUMBER PLATE RECOGNITION.**	HARSH BIJUR	DR ARCHANA CHOWDHURY
2020-21	CSE	BE	8TH		ARJOO	
2020-21	CSE	BE	8TH		UPASANA SARAF	
2020-21	CSE	BE	8TH		SHWETA SHARMA	
2020-21	CSE	BE	8TH	**HOSPITAL MANAGEMENT SYSTEM WEBSITE**	DEEPALI POKLEY	MR YOGESH TAMRAKAR
2020-21	CSE	BE	8TH		SHUBHANGI POKLEY	
2020-21	CSE	BE	8TH			
2020-21	CSE	BE	8TH	**VEHICLE INSURANCE MANAGEMENT SYSTEM WEBSITE**	P.MANISHA	MRS SHIKHA AGARWAL
2020-21	CSE	BE	8TH		NITESH SHARMA	
2020-21	CSE	BE	8TH	**VOICE ASSISTANT**	LAKSHMI KANTH SAHU	MR YOGESH TAMRAKAR
2020-21	CSE	BE	8TH		HARSHA THAPA	
2020-21	CSE	BE	8TH		PRAGYA SHAH	

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2020-21	CSE	BE	8TH	**DIGITAL EDUCATION**	RASHMI SAHU	DR ARCHANA CHOWDHURY
2020-21	CSE	BE	8TH		SURAJ SONI	
2020-21	CSE	BE	8TH		MANOVITA MANDAL	
2020-21	CSE	BE	8TH		JYOTIRMAY	
2020-21	CSE	BE	8TH	**AUTOMATED TEACHER EVALUATION SYSTEM**	SHAMA PARVEEN	DR ARCHANA CHOWDHURY
2020-21	CSE	BE	8TH		NIKITA VISHWAKARMA	
2020-21	CSE	BE	8TH		DISHA BHATTACHARYA	
2020-21	CSE	BE	8TH		REEBA ANNA RAJAN	
2020-21	CSE	BE	8TH	**AUTOMATED ATTENDANCE USING FACE DETECTION & RECOGNITION**	KARAN VERMA	MRS AMRITA BANJARE
2020-21	CSE	BE	8TH		PRACHI TOPPO	
2020-21	CSE	BE	8TH		PITAMBAR	
2020-21	CSE	BE	8TH		SOLOMON FRANKLIN	
2020-21	CSE	BE	8TH	**VOICE BASED MAIL SYSTEM**	JYOTI BHARTI	MRS AMRITA BANJARE
2020-21	CSE	BE	8TH		B.NAGSWAPANA	
2020-21	CSE	BE	8TH		K.AMRUTHA	
2020-21	CSE	BE	8TH	**ONLINE BLOOD BANK**	P.A.ABHISHEK	MRS RUPALI CHANDRAKAR
2020-21	CSE	BE	8TH		J.SHIBIN	
2020-21	CSE	BE	8TH		JUSTIN KOSHY	
2020-21	CSE	BE	8TH	**PATHFINDING ROBOT**	PRIYANSHU SMITLAL	DR ARCHANA CHOWDHURY
2020-21	CSE	BE	8TH		ADITYA VERMA	
2020-21	CSE	BE	8TH		JHANVI SHARMA	
2020-21	CSE	BE	8TH		PARMANAND MAHATO	
2020-21	CSE	BE	8TH	**ONLINE FOOD ORDERING SYSTEM**	SHILPA DATTA	DR ARCHANA CHOWDHURY
2020-21	CSE	BE	8TH		SHILPI DEWANGAN	
2020-21	CSE	BE	8TH	**LIBRARY MANAGEMENT SYSTEM**	ANKITA TIWARI	MRS SHIKHA AGARWAL
2020-21	CSE	BE	8TH		MADHU HARVANSH	
2020-21	CSE	BE	8TH	**OPPORTUNITY FOR YOUTH ONLINE PLATFORM**	SAGAR MAHOBIA	MRS SHIKHA AGARWAL

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2020-21	CSE	BE	8TH	**GAMMING APPLICATION-HELICOPTER 3D**	TAMANNA JAIN	MRS SHIKHA AGARWAL
2020-21	CSE	BE	8TH		BHAGYANSH	
2020-21	CSE	BE	8TH		OMPRAKASH	
2020-21	CSE	BE	8TH	**E-BOOK SALES APP**	RAJKUMAR	MR YOGESH TAMRAKAR
2020-21	CSE	BE	8TH		PARAS	
2020-21	CSE	BE	8TH		HEMANT	
2020-21	CSE	BE	8TH	**GENDER AND AGE DETECTION IN PYTHON**	RAVI KUMAR MUDLIYAR	MR YOGESH TAMRAKAR
2021-22	CSE	BE	8TH	LIBRARY MANAGEMENT SYSTEM	JYOTI MANDAL	MRS AMRITA BANJARE
2021-22	CSE	BE	8TH		YASMIN PARWEEN	
2021-22	CSE	BE	8TH		DOLLY VERMA	
2021-22	CSE	BE	8TH		SUSHMITA SONA	
2021-22	CSE	BE	8TH	TIME TABLE GENERATOR	NEHA JHA	MRS SHIKHA AGARWAL
2021-22	CSE	BE	8TH		GOPI KUMAR	
2021-22	CSE	BE	8TH		JEETU KUMAR DEWANGAN	
2021-22	CSE	BE	8TH		RANJAN KUMAR PASWAN	
2021-22	CSE	BE	8TH	COLLEGE MANAGEMENT SYSTEM	M ABHILASH	MR RUPESH MUDE
2021-22	CSE	BE	8TH		YOGESH KAMDE	
2021-22	CSE	BE	8TH		NAMAN KUMAR SHRIVAS	
2021-22	CSE	BE	8TH		MANSI	
2021-22	CSE	BE	8TH			
2021-22	CSE	BE	8TH	IMAGE STEGANOGRAPHY	S NISHI	MRS. LINCY RODRIGUEZ
2021-22	CSE	BE	8TH		M.BINDIYA RAO	
2021-22	CSE	BE	8TH		KAJAL SAHU	
2021-22	CSE	BE	8TH	FACE MASK DETECTOR	MUKESH	MRS SHIKHA AGARWAL
2021-22	CSE	BE	8TH		SAHIL AGRAWAL	
2021-22	CSE	BE	8TH		PRIYA	
2021-22	CSE	BE	8TH		NEHA VERMA	

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2021-22	CSE	BE	8TH	COLLEGE MANAGEMENT SYSTEM	SHARON GARDIAA	MRS RUPALI CHANDRAKAR
2021-22	CSE	BE	8TH		SHASVAT PATEL	
2021-22	CSE	BE	8TH		ANJALI SINGH	
2021-22	CSE	BE	8TH	AN APPLICATION FOR TRAINING & PLACEMENT CELL	HUSNA BASRI	DR ARCHANA CHOWDHURY
2021-22	CSE	BE	8TH			
2021-22	CSE	BE	8TH		GARIMA JAIN	
2021-22	CSE	BE	8TH			
2021-22	CSE	BE	8TH		HARI KRISHNAN	
2021-22	CSE	BE	8TH			
2021-22	CSE	BE	8TH		SHRADDHA CHOUDHARY	
2021-22	CSE	BE	8TH	FOOD ORDERING APP	VANDANA VERMA	MRS RUPALI CHANDRAKAR
2021-22	CSE	BE	8TH			
2021-22	CSE	BE	8TH		NISHA DEWANGAN	
2021-22	CSE	BE	8TH	E COMMERCE WEBSITE	ROCKSON DEPTY	DR ARCHANA CHOWDHURY
2021-22	CSE	BE	8TH			
2021-22	CSE	BE	8TH		TULANSH CHAUHAN	
2021-22	CSE	BE	8TH			
2021-22	CSE	BE	8TH		VIKAS SINGH	
2021-22	CSE	BE	8TH			
2021-22	CSE	BE	8TH		SUHEL BAIG	
2021-22	CSE	BE	8TH			
2021-22	CSE	BE	8TH	ONLINE SHOPPING APP	RUPALI NIRMAL	MR RUPESH MUDE
2021-22	CSE	BE	8TH			
2021-22	CSE	BE	8TH		BIMMI SINGH	
2021-22	CSE	BE	8TH		PARMANAND SAHU	
2021-22	CSE	BE	8TH			
2021-22	CSE	BE	8TH		PARAS NIRMALKAR	
2021-22	CSE	BE	8TH			
2021-22	CSE	BE	8TH	CV MAKER	TOMESHWARI	MRS AMRITA BANJARE
2021-22	CSE	BE	8TH		SUSHAMA	

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2021-22	CSE	BE	8TH		TRILOK KUMAR HARMUKH	
2021-22	CSE	BE	8TH		RAHUL CHATURVEDI	
2022-23	CSE	BE	8TH	GALAXY GAME DEVELOPMENT IN PYTHON	DAVIS S CHERIAN	MRS SHIKHA AGARWAL
2022-23	CSE	BE	8TH	CRM FOR INTERNET SERVICE PROVIDER	ANJALI MISHRA	MRS AMRITA BANJARE
2022-23	CSE	BE	8TH			
2022-23	CSE	BE	8TH		MANJU SHARMA	
2022-23	CSE	BE	8TH			
2022-23	CSE	BE	8TH		MANISHA SINGH	
2022-23	CSE	BE	8TH	ONLINE SHOPPING WEBSITE	PRADEEP KUMAR	MRS LINCY MENDONZA
2022-23	CSE	BE	8TH	BLOOD BANK MANAGEMENT SYSTEM	SWATI RAO	MR RUPESH MUDE
2022-23	CSE	BE	8TH		SHREYA CHOUDHARY	
2022-23	CSE	BE	8TH		DAMINI SAHU	
2022-23	CSE	BE	8TH	SMART ATM PIN RECOVERY BY EYE DETECTION	CHANAKAYA DEWANGAN	MR RUPESH MUDE
2022-23	CSE	BE	8TH		HARISHANKAR BANJARE	
2022-23	CSE	BE	8TH	PLANT DISEASE PREDICTION	PRACHI RAMTEKE	MRS AMRITA BANJARE
2022-23	CSE	BE	8TH		PRITY BAXLA	
2022-23	CSE	BE	8TH		J.JYOTSNA	
2022-23	CSE	BE	8TH	VEHICLE BREAKDOWN ASSISTANCE	SOBIT TOPPO	MRS SHIKHA AGARWAL
2022-23	CSE	BE	8TH		ABHISHEK MINJ	
2022-23	CSE	BE	8TH		BHEESM SENDRA	
2022-23	CSE	BE	8TH		ANAND MOHAN YADAV	
2022-23	CSE	BE	8TH	HAND TRACKING	PANKAJ DEWANGAN	DR ARCHANA CHOWDHURY
2022-23	CSE	BE	8TH		RATAN KUMAR	

Project Batches and Project Evaluation sheet

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2022-23	CSE	BE	8TH	BIRD SCANNER	SHASHANK JACOB	DR ARCHANA CHOWDHURY
2022-23	CSE	BE	8TH		JITHIN V. ANIL	
2022-23	CSE	BE	8TH		MUDASSAR HASHMI	
2022-23	CSE	BE	8TH		NAMAN PANDEY	
2022-23	CSE	BE	8TH	FACE DETECTION AND ATTENDANCE SYSTEM	KAIFIYA KHAN	MRS LINCY MENDONZA
2022-23	CSE	BE	8TH		AANCHAL PANDEY,	
2022-23	CSE	BE	8TH		KAVITAYADAW,	
2022-23	CSE	BE	8TH		CHANDRAMUKHI VERMA	
2022-23	CSE	BE	8TH	PYTHON ASSISTANT	CHANDRAMUKHI VERMA	MR RUPESH MUDE
2022-23	CSE	BE	8TH		SAIF ALI	
2022-23	CSE	B.TECH	8TH	FACE RECOGNITION E- ATTENDENCE SYSTEM	VINAY MINJ	MR. RUPESH MUDE
2022-23	CSE	B.TECH	8TH		JEEVAN BARA	
2022-23	CSE	B.TECH	8TH		ROSHAN SAHU	
2022-23	CSE	B.TECH	8TH		SHIVAM PANDEY	
2022-23	CSE	B.TECH	8TH	ONLINE FOOD ORDERING SYSTEM	VAISHALI BANJARE	MRS AMRITA BANJARE
2022-23	CSE	B.TECH	8TH		VANDANA YADAV	
2022-23	CSE	B.TECH	8TH		TIKESHWARI CHOUHAN	
2022-23	CSE	B.TECH	8TH		CHANCHALA YADAV	
2022-23	CSE	B.TECH	8TH	FACE EMOTION DETECTION	VIBHA VISHWAKARMA	MRS. SHIKHA AGRAWAL
2022-23	CSE	B.TECH	8TH		GULNAJ ANSARI	
2022-23	CSE	B.TECH	8TH		DEVIKA THAKRE	
2022-23	CSE	B.TECH	8TH		SHILANATH PRATAP	
2022-23	CSE	B.TECH	8TH	GHUMKETU (LIKE ROVER)	SHILANATH PRATAP	DR. ARCHANA CHOUDHARY
2022-23	CSE	B.TECH	8TH		VIJAY RELWANI	
2022-23	CSE	B.TECH	8TH		RAHUL ANISH	
2022-23	CSE	B.TECH	8TH	VIRTUAL MOUSE USING GESTURE RECOGNITION	ARTI XALXO	MS. DIVYANI
2022-23	CSE	B.TECH	8TH		POONAM LAKRA	

Project Batches and Project Evaluation sheet

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2022-23	CSE	B.TECH	8TH	COLLEGE EQUIRY CHATBOT	ARIMA TOPPO	LINCY MENDONZA
2022-23	CSE	B.TECH	8TH		LAXMI NILAMARKAR	
2018-19	ELECTRICAL ENGG	BE	8TH	AUTO-POWER SUPPLY CONTROL FROM FOUR DIFFERENT SOURCES	AMIT GABHEL	MR. SALIKRAM DEWANGAN
2018-19	ELECTRICAL ENGG	BE	8TH		ASHISH KUMAR SHARMA	
2018-19	ELECTRICAL ENGG	BE	8TH		PRAKASH CHANDRA SAYTONDAY	
2018-19	ELECTRICAL ENGG	BE	8TH		PRAMOD KUMAR SONI	
2018-19	ELECTRICAL ENGG	BE	8TH		SHARON NAG	
2018-19	ELECTRICAL ENGG	BE	8TH		SURENDRA KUMAR	
2018-19	ELECTRICAL ENGG	BE	8TH		MD. SHABBIR HUSSAIN	
2018-19	ELECTRICAL ENGG	BE	8TH	PI CONTROLLED CONSTANT SPEED DRIVE FOR DC MOTOR	AASIFA RUKHSAR	MR. DEVENDRA SAHU
2018-19	ELECTRICAL ENGG	BE	8TH		G TEKESHWAR SUBHAM	
2018-19	ELECTRICAL ENGG	BE	8TH		HIMANSHU VERMA	
2018-19	ELECTRICAL ENGG	BE	8TH		JESTIN E.JOSEPH	
2018-19	ELECTRICAL ENGG	BE	8TH		SOURAV DAS	
2018-19	ELECTRICAL ENGG	BE	8TH	FIR AND GAS ACCIDENT AVOIDER SYSTEM	AJAY KUMAR DHRITLAHARE	MRS. SAUMYA SINGH
2018-19	ELECTRICAL ENGG	BE	8TH		KUSUM SAHU	
2018-19	ELECTRICAL ENGG	BE	8TH		NITESH KUMAR SINGH	
2018-19	ELECTRICAL ENGG	BE	8TH		NITISH KUMAR DEWANGAN	
2018-19	ELECTRICAL ENGG	BE	8TH		PRAKHAR SAHU	
2018-19	ELECTRICAL ENGG	BE	8TH	BIDIRECTINAL SPEED CONTROL OF DC MOTOR	SAMRIDDHI KASHYAP	MR. PRAMOD BAGHMAR
2018-19	ELECTRICAL ENGG	BE	8TH		SANGAM PATRA	
2018-19	ELECTRICAL ENGG	BE	8TH		SHUBHAM CHOURASIYA	
2018-19	ELECTRICAL ENGG	BE	8TH		VIKAS KUMAR SAHU	
2018-19	ELECTRICAL ENGG	BE	8TH		VIVEK KUMAR SINGH	
2018-19	ELECTRICAL ENGG	BE	8TH	OBSTACLE AVOIDANCE	ANJALI DUBEY	DR. RITESH DASH

Project Batches and Project Evaluation sheet

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2018-19	ELECTRICAL ENGG	BE	8TH	ROBOTIC VEHICLE USING ULTRASONIC SENSOR, ARDUINO CONTROLLED	BHUMIKA SAHU	
2018-19	ELECTRICAL ENGG	BE	8TH		CHIRAG SAHU	
2018-19	ELECTRICAL ENGG	BE	8TH		NISHI DEWANGAN	
2018-19	ELECTRICAL ENGG	BE	8TH		SAMARTH SHARMA	
2018-19	ELECTRICAL ENGG	BE	8TH		VINITA GARHVALIYA	
2018-19	ELECTRICAL ENGG	BE	8TH	GOOGLE ASSISTANT BASED HOME AUTOMATION AND SECURITY SYSTEM	ANJALI SAO	MRS. PAYAL ROY
2018-19	ELECTRICAL ENGG	BE	8TH		KANCHAN YADAV	
2018-19	ELECTRICAL ENGG	BE	8TH		REVATI	
2018-19	ELECTRICAL ENGG	BE	8TH		SHREYA YADAV	
2018-19	ELECTRICAL ENGG	BE	8TH		AABHAKIRAN EKKA	
2018-19	ELECTRICAL ENGG	BE	8TH	DC EMERGENCY CIRCUIT	DHANANJAY DAS MANIKPURI	MR. MUNA BISWAL
2018-19	ELECTRICAL ENGG	BE	8TH		KAUSHAL PRASAD	
2018-19	ELECTRICAL ENGG	BE	8TH		RAHUL KUMAR CHOUHAN	
2018-19	ELECTRICAL ENGG	BE	8TH		SHIVANGI SONI	
2018-19	ELECTRICAL ENGG	BE	8TH		SUBHADARA	
2018-19	ELECTRICAL ENGG	BE	8TH		ARAKKANDATHIC THEKETHIL JOHN KOSHY	
2018-19	ELECTRICAL ENGG	BE	8TH	REACTIVE POWER COMPENSATOR OF A TRANSMISSION LINE USING STATCOM	ANIL KUMAR KUSHWAHA	MR. B. SRIDHAR
2018-19	ELECTRICAL ENGG	BE	8TH		BHESH KUMAR	
2018-19	ELECTRICAL ENGG	BE	8TH		LEKHENDRA DHIWAR	
2018-19	ELECTRICAL ENGG	BE	8TH		NEHA KUSHWAHA	
2018-19	ELECTRICAL ENGG	BE	8TH		PRASHANT PANCHIYA	
2018-19	ELECTRICAL ENGG	BE	8TH	AUTOMATIC ROOM LIGHT CONTROL BY VISITOR COUNTER SYSTEM	JAGESHWER SAHU	MR. PRASHANT BAWANEY
2018-19	ELECTRICAL ENGG	BE	8TH		TIK SAURAB	
2019-20	ELECTRICAL ENGG	BE	8TH	SOLAR POWER BASED STREET LIGHT	AWNIT KUJUR	MR. PRAMOD KUMAR BAGHMAR
2019-20	ELECTRICAL ENGG	BE	8TH		DEEPALI SAHU	
2019-20	ELECTRICAL	BE	8TH		DIVYA SUNA	

Project Batches and Project Evaluation sheet

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	ENGG					
2019-20	ELECTRICAL ENGG	BE	8TH		SANDHYA SAH	
2019-20	ELECTRICAL ENGG	BE	8TH		PRAVRITI VIVEK PANDEY	
2019-20	ELECTRICAL ENGG	BE	8TH	DESIGN AND DEVELOPMENT OF CLUSTER BASED SMART AGRICULTURAL SYSTEMS USING MACHINE LEARNING AND INTERNET OF THINGS	AATIFA FATIMA	DR. RITESH DASH
2019-20	ELECTRICAL ENGG	BE	8TH		NIKITA TIGGA	
2019-20	ELECTRICAL ENGG	BE	8TH		KRITESH KUMAR DHURIA	
2019-20	ELECTRICAL ENGG	BE	8TH		RITESH KUMAR	
2019-20	ELECTRICAL ENGG	BE	8TH		VARGHESE EKKA	
2019-20	ELECTRICAL ENGG	BE	8TH	A NOVEL APPROACH ON RENEWABLE ENERGY RESOURCES BASED 3 PHASE MICRO GRID MODELING	M SWARNMERRY	MR. B SRIDHAR
2019-20	ELECTRICAL ENGG	BE	8TH		NIKHIL KUMAR RAO	
2019-20	ELECTRICAL ENGG	BE	8TH		RAHUL KUMAR CHOUDHARY	
2019-20	ELECTRICAL ENGG	BE	8TH		VINAY KUMAR SINGH	
2019-20	ELECTRICAL ENGG	BE	8TH		SANJAY KUMAR GURUPANCH	
2019-20	ELECTRICAL ENGG	BE	8TH	SOLAR POWERED AUTOMATIC STREET LIGHT	PUSHPENDRA KUMAR SAHU	MR. MUNA BISWAL
2019-20	ELECTRICAL ENGG	BE	8TH		LEENA MADHARIYA	
2019-20	ELECTRICAL ENGG	BE	8TH		VIVEK DESHMUKH	
2019-20	ELECTRICAL ENGG	BE	8TH		YOGESH KUMAR PATEL	
2019-20	ELECTRICAL ENGG	BE	8TH	AUTOMATIC STREET LIGHT USING SOLAR PANEL	BHARTI	MR. SALIKRAM DEWANGAN
2019-20	ELECTRICAL ENGG	BE	8TH		GUMAN	
2019-20	ELECTRICAL ENGG	BE	8TH		SUMAN MADHARIYA	
2020-21	ELECTRICAL ENGG	BE	8TH	DIGITAL CONTROLLER FOR PHOTOVOLTAIC CONVERTER	ADITYA GUPTA	MR. B SRIDHAR
2020-21	ELECTRICAL ENGG	BE	8TH		DEEPALI YADAV	
2020-21	ELECTRICAL ENGG	BE	8TH		SHIVANI TIWARI	
2020-21	ELECTRICAL ENGG	BE	8TH		MOHIT MAHESHWARI	
2020-21	ELECTRICAL ENGG	BE	8TH		RISHABH KUMAR RATHORE	
2020-21	ELECTRICAL ENGG	BE	8TH		SHUBHAM SAHU	

Project Batches and Project Evaluation sheet

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2020-21	ELECTRICAL ENGG	BE	8TH	GENERATION OF ELECTRICITY BY NON CONVENTIONAL SOURCE FOR OPERATING STREET LIGHT	ASHWANI KUMAR SHARMA	MR. B SRIDHAR
2020-21	ELECTRICAL ENGG	BE	8TH		SAKSHAM SHARMA	
2020-21	ELECTRICAL ENGG	BE	8TH		JHANAK LAL SAHU	
2020-21	ELECTRICAL ENGG	BE	8TH		SUKHVIR SINGH TAK	
2020-21	ELECTRICAL ENGG	BE	8TH		VIKAS KUMAR BHUNDELA	
2020-21	ELECTRICAL ENGG	BE	8TH	AUTOMATIC ROOM LIGHT CONTROLLER WITH BI-DIRECTIONAL VISITOR COUNTER	ARUNA EKKA	MR. PRAMOD KUMAR BAGHMAR
2020-21	ELECTRICAL ENGG	BE	8TH		RAVINA EKKA	
2020-21	ELECTRICAL ENGG	BE	8TH		SONAM KUJUR	
2020-21	ELECTRICAL ENGG	BE	8TH		ANJELICA LAKRA	
2020-21	ELECTRICAL ENGG	BE	8TH		VEERBHADUR	
2020-21	ELECTRICAL ENGG	BE	8TH		PRAVEEN SAHU	
2020-21	ELECTRICAL ENGG	BE	8TH	THREE PHASE INDUCTION MOTOR OVER VOLTAGE-UNDER VOLTAGE PROTECTION SYSTEM	GAURAV SAHU	MR. ABHIMANYU MANDAL
2020-21	ELECTRICAL ENGG	BE	8TH		SAJJAD AHAMAD	
2020-21	ELECTRICAL ENGG	BE	8TH		AKASH RANJAN LAL	
2020-21	ELECTRICAL ENGG	BE	8TH		DEVENDRA KUMAR	
2020-21	ELECTRICAL ENGG	BE	8TH	DESIGN OF A CLAP ACTIVATED SWITCH	AKASH CHANDRA SAYTONDAY	MR. ASHISH DEWANGAN
2020-21	ELECTRICAL ENGG	BE	8TH		ARPIT RAJ DAVID	
2020-21	ELECTRICAL ENGG	BE	8TH		BHOOPENDRA KUMAR	
2020-21	ELECTRICAL ENGG	BE	8TH		LOKESH KUMAR PANDEY	
2020-21	ELECTRICAL ENGG	BE	8TH		PITAMBAR PATAIL	
2020-21	ELECTRICAL ENGG	BE	8TH		AASHISH KUMAR SAHU	
2021-22	ELECTRICAL ENGG	BE	8TH	ENERGY STORAGE SYSTEM (PUMPED HYDROELECTRIC ENERGY STORAGE)	ABHIJEET CHAKRABORTY	DR. AVINASH KUMAR
2021-22	ELECTRICAL ENGG	BE	8TH		DEEPAK BAGHEL	
2021-22	ELECTRICAL ENGG	BE	8TH		NAGRAJ SONWANI	
2021-22	ELECTRICAL ENGG	BE	8TH	HOME SECURITY SYSTEM	ANUPAMA KUJUR	MR. ASHISH DEWANGAN
2021-22	ELECTRICAL ENGG	BE	8TH		MD AYAN KHAN	

Project Batches and Project Evaluation sheet

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2021-22	ELECTRICAL ENGG	BE	8TH		SONALI PAUL	
2021-22	ELECTRICAL ENGG	BE	8TH	IOT BASED ELECTRICITY CONTROLLED PREPAID ENERGY MONITORING AND BILL PAYMENT SYSTEM	AAKASH VERMA	MR. PRASHANT BAWANEY
2021-22	ELECTRICAL ENGG	BE	8TH		ANITOSH KUMAR	
2021-22	ELECTRICAL ENGG	BE	8TH		DIVYANK SURYAWANSHI	
2022-23	ELECTRICAL ENGG	BTECH	8TH	ELECTRIC VEHICLE BATTERY PROTECTION SYSTEM	LEO KOSHY VARGHESE	DR. PRASHANT BAWANEY
2022-23	ELECTRICAL ENGG	BTECH	8TH		ROVINS XESS	
2022-23	ELECTRICAL ENGG	BTECH	8TH		VEDINA XAXA	
2022-23	ELECTRICAL ENGG	BTECH	8TH		SUGAN BAKSHI	
2022-23	ELECTRICAL ENGG	BTECH	8TH	PLOTTING THE SPEED TORQUE CHARACTERISTICS OF 3 PHASE INDUCTION MOTOR USING MATLAB SIMULINK	DEEPAK CHAUDHARY	MS. RICHA SAHU
2022-23	ELECTRICAL ENGG	BTECH	8TH		DUJENDRA KUMAR SAHU	
2022-23	ELECTRICAL ENGG	BTECH	8TH		KAMLESH DAMAHE	
2022-23	ELECTRICAL ENGG	BTECH	8TH		SHIVENDRA PANIGRAHI	
2022-23	ELECTRICAL ENGG	BTECH	8TH	SUNLIGHT TRACKING SOLAR PANEL USING ARDUINO	JAYANT KUMAR	MR. AKASH DEWANGAN
2022-23	ELECTRICAL ENGG	BTECH	8TH		DEEPAK KUMAR	
2022-23	ELECTRICAL ENGG	BTECH	8TH		TEJENDRA KUMAR	
2022-23	ELECTRICAL ENGG	BTECH	8TH	IOT BASED HOME AUTOMATION SYSTEM	PAWAN KUMAR VISHWAKARMA	MR. ASHISH DEWANGAN
2022-23	ELECTRICAL ENGG	BTECH	8TH		KRISHNAKANT SAHU	
2022-23	ELECTRICAL ENGG	BTECH	8TH		MITHLESH	
2022-23	ELECTRICAL ENGG	BTECH	8TH		RAJ KUMAR	

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Sample Project evaluation sheet

Electrical department

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DEPARTMENT OF ELECTRICAL ENGINERING

BTech Project Work Evaluation Sheet

Academic Year: 2018-19

University Roll No.	Name Of The Student	Title Of The Project	Project Report (10)	Development Of Prototype/ Model (15)	Power Point Presentation (10)	Viva-Voce (10)	Usage Of Modern Tool/ Technology (15)	Innovative Ness (5)	Individual Contribution(15)	Total(80)
3112415003	Amit Gabhel	Auto-Power Supply Control From Four Different Sources	10	15	10	10	15	4	15	79
3112415007	Ashish Kumar Sharma		9	15	10	10	15	4	15	78
3112415026	Prakash Chandra Saytonday		9	15	10	10	15	4	15	78
3112415028	Pramod Kumar Soni		9	15	10	10	15	4	15	78
3112415034	Sharon Nag		9	14	10	10	15	4	15	77
3112415041	Surendra Kumar		9	14	10	10	15	4	15	77
3112413049	Md. Shabbir Hussain		8	14	9	9	14	4	14	72
3112415001	Aasifa Rukhsar	Pi Controlled Constant Speed Drive For Dc Motor	10	15	10	10	15	4	15	79
3112415012	G Tekeshwar Subham		10	15	10	10	15	4	15	79
3112415013	Himanshu Verma		10	15	10	10	15	4	15	79

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DEPARTMENT OF ELECTRICAL ENGINERING

3112415014	Jestin E.Joseph		10	15	10	10	15	4	15	79
3112415039	Sourav Das		10	15	10	10	15	4	15	79
3112415002	Ajay Kumar Dhritlahare	Fir And Gas Accident Avoider System	10	15	10	10	15	4	15	79
3112415018	Kusum Sahu		10	15	10	10	15	4	15	79
3112415024	Nitesh Kumar Singh		10	14	10	10	15	4	15	78
3112415025	Nitish Kumar Dewangan		10	14	10	10	14	4	15	77
3112415027	Prakhar Sahu		9	14	10	10	15	4	15	77
3112415032	Samriddhi Kashyap	Bidirectinal Speed Control Of Dc Motor	10	15	10	10	15	4	15	79
3112415033	Sangam Patra		10	15	10	10	15	4	15	79
3112415037	Shubham Chourasiya		10	15	10	10	15	4	15	79
3112415043	Vikas Kumar Sahu		10	15	10	10	15	4	15	79
3112415045	Vivek Kumar Singh		10	15	10	10	15	4	15	79
3112415005	Anjali Dubey	Obstacle Avoidance Robotic Vehicle Using Ultrasonic Sensor, Arduino Controlled	10	15	10	10	15	4	15	79
3112415009	Bhumika Sahu		10	15	10	10	15	4	15	79
3112415010	Chirag Sahu		10	15	10	10	15	4	15	79

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DEPARTMENT OF ELECTRICAL ENGINERING

3112415023	Nishi Dewangan		10	14	10	10	15	4	15	78
3112415031	Samarth Sharma		10	15	10	10	15	4	15	79
3112415044	Vinita Garhvaliya		10	15	10	10	15	4	15	79
3112415006	Anjali Sao	Google Assistant Based Home Automation And Security System	10	15	10	10	15	4	15	79
3112415015	Kanchan Yadav		10	15	10	10	15	4	15	79
3112415030	Revati		10	15	10	10	15	4	15	79
3112415036	Shreya Yadav		10	15	10	10	15	4	15	79
3112414055	Aabhakiran Ekka		9	14	10	9	15	4	15	76
3112415011	Dhananjay Das Manikpuri	De Emergency Circuit	9	15	10	10	15	4	15	78
3112415016	Kaushal Prasad		10	15	10	10	15	4	15	79
3112415029	Rahul Kumar Chouhan		10	15	10	10	14	4	15	78
3112415035	Shivangi Soni		10	15	10	10	15	4	15	79
3112415040	Subhadara		10	14	10	10	15	4	15	78
30110241630 1	Arakkandathic Thekethil John Koshy		10	15	10	10	15	4	15	79
3112415004	Anil Kumar Kushwaha	Reactive Power Compensator Of A	10	15	10	10	15	4	15	79

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DEPARTMENT OF ELECTRICAL ENGINERING

3112415008	Bhesh Kumar	Transmission Line Using Statcom	10	15	10	10	15	4	15	79
3112415019	Lekhendra Dhiwar		10	15	10	10	15	4	14	78
3112415022	Neha Kushwaha		10	15	10	10	15	4	15	79
3112415046	Prashant Panchiya		10	15	10	10	15	4	15	79
3112414018	Jageshwer Sahu	Automatic Room Light Control By Visitor Counter System	9	14	9	9	14	4	15	74
3112414050	Tik Saurab		8	14	9	9	14	4	14	72

(Signature of the Project Coordinator)

(Signature of the HoD)
Head of Department
Department of Electrical Engineering
Christian College of Engg & Tech,
Kailash Nagar, Industrial Estate,

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DEPARTMENT OF ELECTRICAL ENGINERING

BTech Project Work Evaluation Sheet

Academic Year: 2019-20

University Roll No.	Name Of The Student	Title Of The Project	Project Report(10)	Development Of Prototype/ Model(15)	Power Point Presentation (10)	Viva - Voce(10)	Usage Of Modern Tool/ Technology (15)	Innovative Ness(5)	Individual Contribution(15)	Total(80)
301102416002	Awnit Kujur	Solar Power Based Street Light	8	12	8	7	13	4	13	65
301102416004	Deepali Sahu		9	14	9	9	14	4	15	74
301102416005	Divya Suna		9	14	9	8	14	4	14	72
301102416011	Sandhya Sah		9	14	9	9	15	4	15	75
301102417302	Pravriti Vivek Pandey		9	14	9	8	14	4	14	72
301102416001	Aatifa Fatima	Design And Development Of Cluster Based Smart Agricultural Systems Using Machine Learning And Internet Of Things	9	13	9	8	14	4	14	71
301102416008	Nikita Tigga		9	14	9	8	14	4	14	71
301102416014	Kritesh Kumar Dhuria		8	14	8	8	13	4	14	68
301102416015	Ritesh Kumar		10	14	9	9	15	4	15	76
301102416012	Varghese Ekka		8	14	8	8	13	4	14	68
301102416006	M Swarnmerry	A Novel Approach On	8	13	8	8	13	4	14	67

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Project Batches and Project Evaluation sheet

DEPARTMENT OF ELECTRICAL ENGINERING

301102416007	Nikhil Kumar Rao	Renewable Energy Resources Based 3 Phase Micro Grid Modeling	9	14	9	8	14	4	14	72
301102416010	Rahul Kumar Choudhary		9	14	9	8	14	4	14	72
301102416013	Vinay Kumar Singh		8	12	8	7	13	4	13	65
301102417304	Sanjay Kumar Gurupanch		9	14	9	8	14	4	14	72
301102416009	Pushpendra Kumar Sahu	Solar Powered Automatic Street Light	8	12	8	7	13	4	13	65
301102417301	Leena Madhariya		9	14	8	8	13	4	14	72
301102417306	Vivek Deshmukh		9	12	9	8	13	4	13	68
301102417307	Yogesh Kumar Patel		9	14	9	8	13	4	14	72
301102416016	Bharti	Automatic Street Light Using Solar Panel	9	14	9	8	14	4	14	72
301102417308	Guman		9	14	8	8	13	4	14	69
301102417310	Suman Madhariya		9	14	9	8	14	4	14	72

(Signature of the Project Coordinator)

Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech,
Kohka Nagar, Industrial Estate,
(Signature of the HoD)

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DEPARTMENT OF ELECTRICAL ENGINERING

BTech Project Work Evaluation Sheet

Academic Year: 2020-21

University Roll No.	Name Of The Student	Title Of The Project	Project Report(10)	Development Of Prototype/ Model(15)	Power Point Presentation (10)	Viva - Voce(10)	Usage Of Modern Tool/ Technology (15)	Innovative Ness (5)	Individual Contribution(15)	Total(80)
30110241700 1	Aditya Gupta	Digital Controller For Photovoltaic Converter	9	14	9	8	14	4	14	72
30110241700 7	Deepali Yadav		10	14	10	10	14	4	15	77
30110241701 2	Shivani Tiwari		10	14	10	10	14	4	15	77
30110241701 5	Mohit Maheshwari		9	14	10	10	14	4	15	76
3112414039	Rishabh Kumar Rathore		8	12	8	7	13	4	13	65
3112414043	Shubham Sahu		8	12	8	7	13	4	13	65
30110241700 5	Ashwani Kumar Sharma	Generation Of Electricity By Non Conventional Source For Operating Street Light	9	14	9	10	14	4	15	75
30110241701 1	Saksham Sharma		9	14	10	9	14	4	15	75
30990241630 3	Jhanak Lal Sahu		8	12	8	7	13	4	13	65
3112409060	Sukhvir Singh Tak		8	12	8	7	13	4	13	65

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Project Batches and Project Evaluation sheet

DEPARTMENT OF ELECTRICAL ENGINERING

301102417013	Vikas Kumar Bhandela		9	14	10	10	14	4	14	75
301102417004	Aruna Ekka	Automatic Room Light Controller With Bi-Directional Visitor Counter	9	14	9	9	14	4	15	74
301102417010	Ravina Ekka		9	14	9	9	14	4	15	74
301102417016	Sonam Kujur		10	14	9	9	14	4	15	75
301102417017	Anjelica Lakra		9	14	10	9	14	4	15	75
301102418310	Veerbhadur		9	14	9	9	14	4	14	73
301102418316	Praveen Sahu		9	14	10	9	14	4	15	75
301102418308	Gaurav Sahu	Three Phase Induction Motor Over Voltage-Under Voltage Protection System	9	12	9	8	13	4	13	68
301102418309	Sajjad Ahamad		10	13	9	8	13	4	13	70
301102418315	Akash Ranjan Lal		8	12	8	7	13	4	13	65
301102418317	Devendra Kumar		10	13	9	8	13	4	13	70
301102417002	Akash Chandra Saytonday	Design Of A Clap Activated Switch	10	13	9	8	13	4	13	70
301102417003	Arpit Raj David		9	12	9	8	13	4	13	68
301102417006	Bhoopendra Kumar		9	12	9	8	13	4	13	68
301102417...	Lokesh Kumar		9	14	9	9	14	4	15	74

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DEPARTMENT OF ELECTRICAL ENGINERING

301102417009	Pitambar Patail		9	14	9	9	14	4	15	74
301102417014	Aashish Kumar Sahu		10	13	9	8	13	4	13	70

(Signature of the Project Coordinator)

(Signature of the HoD)
Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech,
Kailash Nagar, Industrial Estate,

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DEPARTMENT OF ELECTRICAL ENGINERING

BTech Project Work Evaluation Sheet

Academic Year: 2021-22

University Roll No.	Name Of The Student	Title Of The Project	Project Report(10)	Development Of Prototype/ Model(15)	Power Point Presentation (10)	Viva - Voce(10)	Usage Of Modern Tool/ Technology (15)	Innovative Ness(5)	Individual Contribution(15)	Total(80)
301102418001	Abhijeet Chakraborty	Energy Storage System (Pumped Hydroelectric Energy Storage)	10	15	10	10	15	4	14	78
301102418005	Deepak Baghel		10	15	10	10	15	4	15	79
301102418002	Nagraj Sonwani		10	14	10	10	15	4	14	77
301102418006	Anupama Kujur	Home Security System	10	15	10	10	15	4	15	79
301102418003	Md Ayan Khan		10	15	10	10	15	4	14	78
301102418009	Sonali Paul		10	15	10	10	15	4	14	78
301102418008	Aakash Verma	Iot Based Electricity	10	15	10	10	15	4	14	78

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Project Batches and Project Evaluation sheet

DEPARTMENT OF ELECTRICAL ENGINERING

301102418007	Anitosh Kumar	Controlled Prepaid Energy Monitoring And Bill Payment System	9	14	9	10	15	4	14	75
301102418012	Divyank Suryawanshi		9	15	10	10	15	4	14	77

(Signature of the Project Coordinator)

((Signature of the HoD)

Department of Electrical Engineering
Christian College of Engg & Tech.
Kailash Nagar, Industrial Estate,

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DEPARTMENT OF ELECTRICAL ENGINERING

BTech Project Work Evaluation Sheet

Academic Year: 2022-23

University Roll No.	Name Of The Student	Title Of The Project	Project Report (10)	Development Of Prototype/ Model (15)	Power Point Presentation (10)	Viva-Voce (10)	Usage Of Modern Tool/ Technology (15)	Innovative Ness(5)	Individual Contribution(15)	Total(80)
301102419002	Leo Koshy Varghee	Electric Vehicle Battery Protection System	9	15	10	10	15	4	14	77
301102419004	Rovinsxess		9	15	10	10	15	4	14	77
301102419005	Vedinaxaxa		9	14	10	10	15	4	14	76
301102420310	Sugan Bakshi		9	14	10	10	15	4	14	76
301102420302	Deepak Chaudhary	Plotting The Speed Torque Characteristics Of 3 Phase Induction Motor Using Matlab Simulink	9	14	10	10	14	4	14	75
301102420303	Dujendra Kumar Sahu		9	14	10	10	14	4	14	75
301102420305	Kamlesh Damahe		9	14	10	10	14	4	14	75
301102420309	Shivendra Panigrahi		9	14	10	10	14	4	14	75
301102420304	Jayant Kumar	Sunlight Tracking Solar Panel Using Arduino	9	14	10	10	14	4	15	76
301102420311	Deepak Kumar		9	14	9	9	14	4	15	74

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Project Batches and Project Evaluation sheet

DEPARTMENT OF ELECTRICAL ENGINERING

301102420312	Tejendra Kumar		9	14	9	9	14	4	14	73
301102419003	Pawan Kumarvishwakarma	Iot Based Home Automation System	9	14	10	10	14	4	14	75
301102420306	Krishnakant Sahu		9	14	10	10	14	4	15	76
301102420307	Mithlesh		9	14	10	10	14	4	15	76
301102420308	Raj Kumar		9	14	9	9	14	4	15	74

(Signature of the Project Coordinator)

Head of Department
Department of Electrical Engineering
Christian College of Engg & Tech,
Kailash Nagar, Industrial Estate,
((Signature of the HoD)

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Project Batches and Project Evaluation sheet

COURSE FILE (THEORY/PRACTICAL)

THEORY COURSE FILE

Christian College of Engineering & Technology, Bhilai **(**Affiliated to Chhattisgarh Swami Vivekanand Technical University, Bhilai)	
Program: BTech - Mechanical Engineering	Semester: IV
Course: Manufacturing Process	**Course Code: B037414(037)**
Lecture Periods/Week: 02	Tutorial Periods/Week: 01
Class Tests: Two (Minimum)	Assignments: Two (Minimum)
Academic Year: 2022-23	Credit: 3

Faculty Name: Dr Radheshyam H Gajghat	Designation: Professor
Contact No.: 9229486034	Email ID: radhegaj@gmail.com

HOD

MECHANICAL ENGINEERING

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COURSE FILE CONTENT (THEORY)

1	Vision and Mission of the Institute
2	Vision and Mission of the Department
3	Program Outcomes, Program Educational Objectives and Program Specific Outcomes (POs, PEOs & PSOs)
4	Class Time Table (Highlighting the Course Periods – Theory/Tutorial/ Practical)
5	Students Roll List
6	Course Syllabus
7	Course Educational Objectives (CEOs) and Course Outcomes (COs)
8	Academic Calendars: University & Institute
9	Lesson Plan and Execution: Theory and Tutorial
10	Mapping Course Units with Course Outcomes (COs)
11	Mapping COs with POs/PSOs
12	University Question Papers
13	Internal Examination (Class Test) Question Papers (CT1 & CT2) mapped with COs, POs and BL
14	Assignment Question Papers (A1 & A2) mapped with COs, POs and BL
15	Scheme of Evaluation (Theory)
16	Continuous Evaluation: Class Tests and Assignments Marks
17	End Semester Result Analysis
18	Attendance Register: Theory/Tutorial/Remedial
19	Teaching Aids: PPT, NPTEL Videos, Seminars, Group Discussions and Quiz etc.
20	Lecture notes: Hand Written/Typed Notes

COURSE FILE CONTENT (PRACTICAL)

1	Course Educational Objectives (CEOs) and Course Outcomes (COs)
2	Scheme of Evaluation (Practical)
3	List of Experiments
4	Practical Schedule
5	Practical Attendance Sheet
6	Evaluation Sheet (Practical)

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Vision and Mission of the Institute

VISION

CCET will be the center of excellence by providing quality technical education inculcating high moral and social values with a human face thereby providing world class competent engineers for the progress and transformation of society.

MISSION

- Run accredited Graduate and Post-Graduate programmes.
- Have state-of-the-art infrastructure facilities.
- Develop effective partnerships with industries.
- Transfer appropriate technology to society.
- Ensure placement of all students through campus interviews.
- Offer quality teaching and learning environment.
- Help in the upliftment of society by offering need based technical education facilities.
- Ensure quality services for all aspects of the campus.
- Create an ambience for the total development of staff and students.
- Become a deemed university.

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Vision and Mission of the Department

VISION

To produce proficient engineers, through innovative-teaching-learning environment that will cater to the needs of rapidly changing technical diversity of Mechanical Engineering

MISSION

The mission of the Mechanical Engineering Department is

M1. To produce proficient industry-ready professionals through educational programs incorporating outcome based teaching-learning process.

M2. To encourage the students towards higher education through research and development activities.

M3. To educate students about professional & ethical responsibilities by imparting leadership and entrepreneurship qualities for their career development and placement.

M4. To impart knowledge in the areas of engineering technological development that may leads to welfare of society.

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Programme Outcomes (POs)

For all these areas the desired qualities which the Mechanical Engineering graduates should have are listed below:-

a. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization for the solution of complex engineering problems.

b. Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

c. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and cultural, societal, and environmental considerations.

d. Conduct investigations of complex problems: User research based knowledge and research methods including design of experiments, analysis and Interpretation of data, and synthesis of the information to provide valid conclusions.

e. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities, with an understanding of the limitations.

f. 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 engineering practice.

g. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

h. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

i. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

j. Communication: Communicate effectively on complex engineering activities with the engineering community and with t h e 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.

k. Project management and finance: 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 and in multidisciplinary environments.

l. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

Programme Education Objectives (PEOs)

PEO1. To pursue technical education, research and development, and other creative and innovative efforts in science, engineering as well as other professional careers.(Employment/Higher studies)

PEO2. To analyze engineering problems with industrial visits, vocational trainings and guest lectures covering different practical aspects of mechanical engineering. (Discipline knowledge)

PEO3. To organize various technical events and exhibitions to provide the students to get expertise in designing and analyzing various mechanical engineering systems.(Breadth – 'T' Shaped Engineer)

PEO4. To enhance capability to function ethically in professional mechanical engineering roles and exhibit good competency in their work culture.(Professionalism – 3 Ps – Professional value-knowledge-development)

PEO5. To motivate students for continuous adoption of various methods of engineering to carry out real life problems, which will uplift the society in large.(Lifelong learning/Social)

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Program Specific Outcomes (PSOs)

PSO1. The student will be able to apply the knowledge of Mathematics, Sciences and engineering fundamentals to formulate, analyze and provide solutions to the problems related to Mechanical engineering and communicate them effectively to the concerned.

PSO2. Design mechanical systems in various fields such as machine elements, thermal, manufacturing, industrial and interdisciplinary fields by using various engineering/technological tools to meet the volatile needs of the industry and society at large.

Class Time Table: BTech 4th Semester (Mech Engg)

Room No: B-114

Class Teacher:- Mr. Sumit Shrivastava w.e.f. 16-03-2023

DAY	9:30-10:20	10:20-11:10	11:10-12:00	12:00-12:50	12:50-1:40	1:40-2:30	2:30-3:20	3:20-4:00
MON	KOM	KOM (T)	MP (T)	SOM (T)	Break	ATD (T)	FM Lab	FM Lab
TUE	FM (T)	FM	MP	ATD		SOM	MP Lab	MP Lab
WED	ATD	FM	FM	LIB		KOM	MT Lab	MT Lab
THU	KOM	KOM	MP	SOM		FM	Virtual Lab	Virtual Lab
FRI	ATD	ATD	SOM	SOM		MP	IC & CI	IC & CI

Students Roll List: BTech 4th Semester (Mech Engg)

S. No.	University Roll No.	Name of Students	Enrolment No.
1	301103721001	Dinesh Kumar Yadav	CA7685
2	301103721003	Shreyansh Ekka	CA7681
3	301103721004	Shivam	CA7682
4	301103721006	Atul Hirwani	CA7684
5	301103721007	Bhupendra Kumar Sen	CA7686
6	301103722301	Prashant Yadav	AS1109
7	301103722302	Aman Uikey	CB5575
8	301103722303	Alakh Niranjan	CB5576
9	301103722304	Ankush Kumar	AI5115
10	301103722305	Amit Sahu	BF8691
11	301103722306	Poonam	BF8692
12	301103722307	Sneha Motwani	BI0587
13	301103722308	Dheeraj Kumar Sori	BE1777

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Course Syllabus

UNIT- I: **Introduction to Manufacturing Processes:** Importance of Manufacturing Processes, classification, technological definitions.
Metal Casting (Foundry): Introduction: Basic Principle, Advantages and Limitations, Applications. **Pattern Making:** Pattern materials, allowances, types of pattern, color code scheme **Mould Making:** Green and dry sand casting process, types of sand, molding sand and its properties, molding sand composition and applications. **Elements of mould:** Cores; Use, core material, types of cores, advantages and limitations, core prints, chaplets, Gating and Risering System, Sand casting defects: appearance, causes & remedies.
Special Molding Processes: Carbon dioxide molding process, investment casting process, Die casting process, shell molding process, continuous casting process, centrifugal casting processes.

UNIT-II: **Welding – I:** Introduction: Principle, classification based on application of filler material & without filler material, source of energy, fusing and pressure welding processes, application of welding processes. **Arc welding:** Principle, power source and equipments, welding electrodes- types' composition & specification, Metal Arc welding (MAW), flux Shielded Metal Arc Welding (FSMAW), Inert Gas Welding (TIG & MIG) Submerged Arc Welding (SAW) and Atomic Hydrogen Welding processes. (AHW).
Gas Welding: Principle, Oxy-Acetylene welding, Reaction in Gas welding, Flame characteristics, Gas torch construction & working, forward and backward welding.

UNIT- III Welding – II: Resistance Welding: General, principle of heat generation in resistance welding, application of resistance welding processes. Process details and working principle of spot, seam and projection welding, electrode materials, shapes of electrodes, electrode cooling, selection of welding currents, voltages. **Special type of welding:** Friction welding, Explosive welding, Thermit welding, Laser welding, Electron beam welding, Electroslag welding, Ultrasonic welding; principle, equipments, operations.
Soldering, Brazing & Braze welding, Welding Defects

UNIT- IV Machine Tools: Lathe: Principle of operation, basic parts of a lathe, types – speed lathe, engine, bench, tool room, capstan, turret, automatic, specification, construction, operations-facing, turning, knurling, taper turning, thread cutting, drilling, boring, reaming, work holding devices & tools, mechanism and attachments for various operations. **Shaper:** Principle of operation, parts, types horizontal, vertical, universal, Operations – horizontal cutting, vertical cutting, angular cutting, irregular cutting, specification, Quick return Mechanisms. Table feed mechanism, work holding devices. **Planner:** Principle of operation, parts, types – double housing, open side, pit type, plate type, divided table. Specification, types of drives.
UNIT-V Milling: Principle of operation, parts, specification, types- horizontal, vertical, universal, milling operations – plain, face, slotting, gear cutting mechanisms and attachments for milling, indexing-simple, compound and differential.

Broaching: Principle of operation, parts, types of broaches- horizontal, vertical, pull, surface-internal and external broaching machines, nomenclature, of broach.
Drilling: Principle of operation, parts, drill nomenclature, types of drilling machines, other operations like counter boring, counter sinking, spot facing etc.
Reaming: Principle of operation, parts, description of reamers, and type of reaming operations
Boring: Principle of operation, parts, types of boring machines, boring operations, boring tools

Name of Text Books

1. Manufacturing Technology (Vol. – I & II) – P.N. Rao – Tata McGraw Hill Pub. Company, New Delhi

2. A Text Book of Production Technology (Manufacturing Processes) – **P.C. Sharma – S. Chand and Company Ltd.**, New Delhi

Name of Reference Books

1. Manufacturing Science – A. Ghosh & A.K. Mallik – East West Press Pvt. Ltd., New Delhi

2. Manufacturing Engineering and Technology – S. Kalpakjian & S.R. Schmid – Addision Wesley Longman, New Delhi

3. Production Technology – R. K. Jain – Khanna Publishers, New Delhi

4. A Text Book of Production Technology (Vol. I & II) – O.P. Khanna – Dhanpat Rai & Sons, New Delhi

Course Educational Objectives (CEOs)

This course is designed to provide students with an overview of a wide variety of manufacturing processes for processing of engineering materials. Student will learn principles, operations and capabilities of various moulding, metal casting, metal joining and metal cutting processes.

Course Outcomes (COs)

After successful completion of this course, the student will able to:

CO1. Describe various metal casting and allied processes.

CO2. Describe various arc and gas welding processes.

CO3. Describe resistance welding, other special type of welding, soldering, brazing and braze welding

CO4. Describe construction, working and various machining operations of lathe, shaper and planer

CO5. Describe construction, working and various machining operations of milling, broaching, drilling rimming and boring machine

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Academic Calendar: University

Academic Calendar & Schedule of Examination for B.TECH Course Session Jan - Jun 2023, CSVTU Bhilai (4th sem Reg. Revised)

Date: 15-03-2023

S.No.	Particular of Academic/Exam Activity	B.Tech VIII Sem. (Regular/Backlog)	B.Tech VII Sem. (Backlog)	B.Tech VI Sem. (Regular/Backlog)	B.Tech V Sem. (Backlog)	B.Tech IV Sem. (Regular/Backlog)	B.Tech III Sem. (Backlog)
1	Start of Session	25 Jan. 2023		16 Feb. 2023		16 Mar. 2023	
2	Syllabus coverage to be sent to university via email	20 Mar. to 22 Mar. 2023		24 Mar. to 26 Mar. 2023		24 Apr. to 26 Apr. 2023	
3	Schedule of Class Test - 01	06 Mar. to 12 Mar. 2023		27 Mar. to 02 Apr. 2023		27 Apr. to 03 May. 2023	
4	Schedule of Class Test - 02	18 Apr. to 24 Apr. 2023		08 May. To 14 May. 2023		08 Jun. to 14 Jun. 2023	
5	Syllabus coverage to be sent to university via email	25 Apr. to 27 Apr. 2023		15 May. To 17 May. 2023		15 Jun. to 17 Jun. 2023	
6	1) Commencement date of the submission of online exam form	16 Apr. 2023	17 Apr. 2023	04 May. 2023	05 May. 2023	06 Jun. 2023	07 Jun. 2023
	2) Last date Of submission of online Exam form without late fee	20 Apr. 2023	21 Apr. 2023	08 May. 2023	09 May. 2023	10 Jun. 2023	11 Jun. 2023
	3) Last date Of submission of online Exam form with late fee 30/-	24 Apr. 2023	25 Apr. 2023	12 May. 2023	13 May. 2023	14 Jun. 2023	15 Jun. 2023
	4) Last date Of submission of online Exam form with late fee 120/-	28 Apr. 2023	29 Apr. 2023	16 May. 2023	17 May. 2023	18 Jun. 2023	19 Jun. 2023
	5) Last date Of submission of online Exam form with late fee 200/-	02 May. 2023	03 May. 2023	20 May. 2023	21 May. 2023	22 Jun. 2023	23 Jun. 2023
	6) Last date of Approval/Detention of online Examination Form by institute	03 May. 2023	04 May. 2023	21 May. 2023	22 May. 2023	23 Jun. 2023	24 Jun. 2023
7	Admit Card and Verification Sheet can be downloaded before 3 days of commencement of Theory/Practical Examination as per schedule						
8	Submission of online sessional marks	15 May. To 24 May. 2023		02 Jun. to 12 Jun. 2023		01 Jul. to 11 Jul. 2023	03 Jul. to 12 Jul. 2023
9	Schedule Of Theory Exam	15 May. To 24 May. 2023	16 May. To 25 May. 2023	02 Jun. to 12 Jun. 2023	03 Jun. to 13 Jun. 2023	01 Jul. to 11 Jul. 2023	03 Jul. to 12 Jul. 2023
10	Schedule Of Practical Exam	25 May. To 30 May. 2023	26 May. To 31 May. 2023	13 Jun. to 18 Jun. 2023	14 Jun. to 19 Jun. 2023	12 Jul. to 16 Jul. 2023	13 Jul. to 17 Jul. 2023
11	Online submission of practical marks	25 May. To 05 Jun. 2023	26 May. To 06 Jun. 2023	13 Jun. to 23 Jun. 2023	14 Jun. to 24 Jun. 2023	12 Jul. to 22 Jul. 2023	13 Jul. to 23 Jul. 2023
12	Date of Declaration of Result	30 Jun. 2023	30 Jun. 2023	12 Aug. 2023	12 Aug. 2023	10 Sep. 2023	11 Sep. 2023

** 4th sem students must complete their vocational training on or before 20-08-2023
** 6th sem students must complete their vocational training on or before 20-07-2023

Note: 1) Student will have to fill up Examination Form for Regular & Backlog/supplementary Exams separately (separate Exam Form for each semester of Exam). Exact dates will be notified by university before commencement of online exam form.
2) The result declaration dates are liable to be Changed.
3) Classes, Test and Exams are to be conducted on offline mode
4) All institutes are instructed to follow the provided schedule for C.T. / Syllabus coverage information
5) E - Mail for providing syllabus coverage : exam@csvtu.ac.in

Examination Controller

15/3/23
Registrar

DIPALI SOREN TUDU
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Academic Calendar: Institute

CHRISTIAN COLLEGE OF ENGINEERING AND TECHNOLOGY, BHILAI					
ACADEMIC CALENDAR - EVEN SEMESTER(JAN-JUNE. 2023')					
Particulars of Academic / Exam. Activity	B.TECH VIII SEM	B.TECH VI SEM	B.TECH IV SEM	Responsible1	Responsible 2
Class Start Date	01 Feb.' 2023	17 Feb.' 2023	16 March'23	IQAC	PRINCIPAL
Class End Date	24 April' 2023	12 May' 2023	14 Jun'23	IQAC	PRINCIPAL
No. of working Days	66	71	65	IQAC	PRINCIPAL
Date of the submission of online exam form without late fee	20 April' 2023	08 May' 2023	10 Jun'23	-	1yr (I/C) / Dept. HOD
Last date of submission of online Exam form with late fee Rs. 30/120/200	24 April./28 April./2 May.' 23	12 May./16 May/20 May' 23	14 Jun/18Jun/22 Jun'23	-	1yr (I/C) / Dept. HOD
Submission of Online Sessional Marks	15 - 24 May'23	02 - 12 Jun'23	01 July-11 July'23	1st yr (I/C)HOD- IQAC	PRINCIPAL
Preparation Of Leave	25 April-14 May'23	12 May - 01 Jun'23	15 Jun - 30 Jun'23	IQAC	PRINCIPAL
Theory Exam. Date By CSVTU	15-24 May'23	02-12 Jun'23	1 July- 11 July'23	EXAM.	PRINCIPAL
Practical Exam. Date By CSVTU	25-30 May'23	13 Jun- 18 Jun'23	12 July-16 July'23	EXAM.	PRINCIPAL
Online Submission of Practical Marks To CSVTU	25 May-05 Jun'23	13 Jun- 23 Jun'23	12 - 22 July'23	EXAM.	PRINCIPAL
Submission of attendance to university	5th of Every Month			IQAC	PRINCIPAL
Submission of Syllabus Coverage to University by email	25-27th April'23	15-17th May'23	15-17 Jun'23		
Schedule of CT1	06- 12 March '23	27 Mrach-02 April '23	27 April-3rd May'23	IQAC	1st yr (I/C),HOD
Schedule of CT2	18 - 24 April '23	08 - 14 May '23	8 Jun -14 Jun'23	IQAC	1st yr (I/C),HOD
Schedule of DT1 (1st Year)	-	-		1yr (I/C)	IQAC
Schedule of DT2 (1st Year)	-	-		1yr (I/C)	IQAC
Schedule of CT (1st Year)	-	-		1yr (I/C)	IQAC
Schedule of PUE (1st Year)	-	-		1yr (I/C)	IQAC
Submission Of Evaluated Copies	With in 01 Week			1st yr (I/C),HOD	IQAC
Submission of A1,LR1,V1 marks	12 March' 2023	29 March' 2023	24 April '23	1yr (I/C) / Dept. HOD	PRINCIPAL
Submission of A2,LR2,V2 marks	21 April' 2023	10 May' 2023	22 May'23	1yr (I/C) / Dept. HOD	PRINCIPAL
Course Coverage Report 1	24 Feb' 2023	15 March' 2023	17 April'23	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 2	17 March' 2023	05 April' 2023	10 May'23	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 3	24 April' 2023	25 April' 2023	5 Jun'23	1yr (I/C) / Dept. HOD	IQAC
Course Coverage Report 4	-	12 May' 2023	-	1yr (I/C) / Dept. HOD	IQAC
Course monitoring meeting 1	27 Feb' 2023	16 March' 2023	31 March'23	1yr (I/C) /	PRINCIPAL
Course monitoring meeting 2	20 March' 2023	17 April' 2023	20 April'23	1yr (I/C) / Dept. HOD	PRINCIPAL
Course monitoring meeting 3	23 April' 2023	10 May' 2023	25 May '23	1yr (I/C) / Dept. HOD	PRINCIPAL
TG Students meeting 1	24 Feb' 2023	15 March' 2023	28 March'23	1yr (I/C) / Dept. HOD	PRINCIPAL
TG Students meeting 2	21 March' 2023	16 April' 2023	18 April'23	1yr (I/C) / Dept. HOD	PRINCIPAL
TG Students meeting 3	20 April' 2023	10 May' 2023	19 May'23	1yr (I/C) / Dept. HOD	PRINCIPAL

IQAC (I/c) PRINCIPAL Executive Vice Chairman

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Lesson Plan and Execution (Theory and Tutorial)

Lesson Plan and Execution				
Subject: Manufacturing Process				**Code: B037414(037)**
Semester: 4TH				**Branch:** Mechanical
Planned Lecture	**Actual Lecture**	**Syllabus Covered**	**Date of Lecture**	**Remarks**
		Unit-1		
1	1	**Introduction to Manufacturing Processes:** Importance of Manufacturing Processes, Classification, technological definitions.	17/3/23	
2	2	**Metal Casting (Foundry):** Introduction: Basic Principle, Advantages and Limitations, Applications.	20/3/23	
3	3	**Pattern Making:** Pattern materials, allowances	21/3/23	
4	4,5	Types of pattern, color code scheme	23&24/3/23	
5	6	**Mould Making:** Green and dry sand casting process, types of sand	27/3/23	
6	7	Molding sand and its properties, molding sand	28/3/23	
7	8	**Elements of mould:** Cores; Use, core material, types of cores, advantages and limitations	31/3/23	
8	9	Core prints, chaplets, Gating and Risering	3/4/23	
9	10	**Sand casting defects:** appearance, causes & remedies.	6/4/23	
10	11	**Special Molding Processes:** Carbon dioxide molding process, investment casting process, Die casting	10/4/23	
11	12	Shell molding process, continuous casting process, centrifugal casting processes.	11/4/23	
		Unit-2		
12	13	**Welding – I:** Introduction: Principle, classification based on application of filler material & without filler material	13/4/23	
13	14	Source of energy, fusing and pressure welding processes, application of welding processes	18/4/23	
14	15	**Arc welding:** Principle, power source and equipments, welding electrodes- types' composition & specification	20/4/23	
15	16	Metal Arc welding (MAW), flux Shielded Metal Arc Welding (FSMAW)	21/4/23	
16	17	Inert Gas Welding (TIG & MIG) Submerged Arc Welding (SAW)	2/5/23	
17	18,19	Atomic Hydrogen Welding processes. (AHW). **Gas Welding:** Principle, Oxy-Acetylene welding, Reaction in Gas welding	4&9/5/23	

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Lesson Plan and Execution

Subject: Manufacturing Process **Code: B037414(037)**

Semester: 4TH **Branch:** Mechanical

Planned Lecture	Actual Lecture	Syllabus Covered	Date of Lecture	Remarks
18	20	Flame characteristics, Gas torch construction & working, forward and backward welding.	11/5/23	
		Unit-3		
19	21	**Welding – II:** Resistance Welding: General, principle of heat generation in resistance welding, application of resistance welding processes.	12/5/23	
20	22	Process details and working principle of spot, seam and projection welding	16/5/23	
21	23	Electrode materials, shapes of electrodes, electrode cooling, selection of welding currents, voltages.	18/5/23	
22	24	**Special type of welding:** Friction welding, Explosive welding	19/5/23	
23	25,26	Thermit welding, Laser welding, Electron beam welding	23&25/5/23	
24	27	Electroslag welding, Ultrasonic welding; principle, equipments, operations	26/5/23	
25	28	**Soldering, Brazing & Braze welding**	30/5/23	
26	29	**Welding Defects**	1/6/23	
		Unit-4		
27	30	**Machine Tools: Lathe:** Principle of operation, basic parts of a lathe, types – speed lathe, engine	2/6/23	
28	31	Bench, tool room, capstan, turret, automatic, specification, construction	6/6/23	CT1: 8-10/6/23
29	32	Operations-facing, turning, knurling, taper turning, thread cutting, drilling, boring, reaming	13/6/23	
30	33	Work holding devices & tools, mechanism and attachments for various operations	15/6/23	
31	34	**Shaper:** Principle of operation, parts, types horizontal, vertical, universal	16/6/23	
32	35	Operations – horizontal cutting, vertical cutting, angular cutting, irregular cutting	20/6/23	CT2: 22-28/6/23
33	36	Specification, Quick return Mechanisms. Table feed mechanism, work holding devices	30/6/23	
34	37	**Planner:** Principle of operation, parts, types – double housing, open side	4/7/23	
35	38	Pit type, plate type, divided table. Specification, types of drives	6/7/23	

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Lesson Plan and Execution

Subject: Manufacturing Process **Code: B037414(037)**

Semester: 4TH **Branch:** Mechanical

Planned Lecture	Actual Lecture	Syllabus Covered	Date of Lecture	Remarks
		Unit-5		
36	39	**Milling:** Principle of operation, parts, specification, types- horizontal, vertical, universal	7/7/23	
37	39	Milling operations – plain, face, slotting, gear cutting mechanisms and attachments for milling	7/7/23	
38	40	Indexing- simple, compound and differential	10/7/23	
39	41	**Broaching:** Principle of operation, parts, types of broaches- horizontal, vertical, pull	11/7/23	
40	42	Surface- internal and external broaching machines, nomenclature, of broach	12/7/23	Engaged Lecture
41	43	**Drilling:** Principle of operation, parts, drill nomenclature	13/7/23	
42	44	Types of drilling machines, other operations like counter boring, counter sinking, spot facing etc	14/7/23	Preparation Leave 15-31/7/23
43	45	**Reaming:** Principle of operation, parts, description of reamers, and type of reaming operations	18/7/23	Extra Class
44	46	**Boring:** Principle of operation, parts, types of boring machines, boring operations, boring tools	20/7/23	Extra Class

Tutorial Classes

Planned Lecture	Actual Lecture	Syllabus Covered	Date of Lecture	Remarks
1	1	Visited to Foundry Shop and asked students to identify the equipments	17/4/23	
2	2	Asked students to make the list of equipments used in foundry shop and also write the functions of those equipments.	24/4/23	
3	3	Visited to Welding Shop and asked students to identify the equipments of Arc Welding	1/5/23	
4	4	Asked students to make the list of equipments used in Arc Welding and also write the functions of those equipments.	15/5/23	
5	5	Doubt Clearing Class	22/5/23	
6	6	Asked students to make the list of equipments used in Spot Welding and also write the functions of those equipments.	29/5/23	
7	7	Visited to Machine Shop and asked students to identify the main parts of Lathe Machine	5/6/23	
8	8	Asked students to make the list of operations performed on the lathe and explain those operations	12/6/23	
9	9	Visited to Machine Shop and asked students to identify the main parts of Shaper, Planner and Milling Machine.	19/6/23	

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Mapping Course Units with Course Outcomes (COs)

Unit No.	CO1	CO2	CO3	CO4	CO5
Unit 1	X				
Unit 2		X			
Unit 3			X		
Unit 4				X	
Unit 5					X

Mapping COs with POs/PSOs

CO	PO												PSO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	X	X	X										X	
CO2	X	X	X										X	
CO3	X	X	X										X	
CO4	X	X	X										X	
CO5	X	X	X										X	

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University Question Papers

Printed Pages – 4 Roll No. .....

B037414(037)

B. Tech. (Fourth Semester) Examination,
April-May 2022

(AICTE Scheme)
(Mechanical Branch)
MANUFACTURING PROCESS

Time Allowed : Three hours

Maximum Marks : 100

Minimum Pass Marks : 35

Note : *Attempt all questions. Part (a) of each question is compulsory and carries 4 marks. Solve any* ***two*** *parts from part (b), (c) & (d) and carries 8 marks each.*

Unit-I

1. (a) Broadly classify manufacturing process.

(b) Define pattern. Explain types of pattern with neat sketch.

(c) Define allowancy and discuss the various types of allowances.

(d) What is core? What are the characteristics of a good core? Illustrate different types of core with their application.

Unit-II

2. (a) Define weldability and explain principle of welding.

(b) Briefly explain type of flames. Also explain flame characrateristics.

(c) Write short notes on :

(i) Atomic Hydrogen welding

(ii) Submerged arc welding

(d) Write short notes on :

(i) Differentiate forward and backward gas welding techniques

(ii) Types of welding electrodes

Unit-III

3. (a) What are various types of welding defects?

(b) Explain any two reistance welding process.

(c) Write short notes on :

(i) Ultrasonic welding

(ii) Thermit welding

(d) Briefly explain spot and seam welding process with their advantages disadvantages and application.

Unit-IV

4. (a) Name various parts of carriage in Lathe with diagram.

(b) Calculate the suitable gear train for cutting 10 mm pitch three start thread on lathe with a lead screw having 6·25 mm pitch.

(c) Explain the principle of operation of shaper with neat sketch.

(d) Explain the principle of operation of planner with neat sketch.

[4]

Unit-V

5. (a) Classify milling process. Differentiate broaching reaming and drilling.

(b) What is milling machine? Explain up milling and down milling with neat diagram and also write application of each.

(c) Explain different types of reamers with neat sketch.

(d) Determine the cutting time for cutting a 125 mm long keyway using HSS end-mill of 20 mm diameter having four cutting teeth. The depth of keyway is 4·5 mm. Feed per tooth is 0·1 mm and the cutting speed is 40 m/min. Assume approach and over travel distances half of the diameter of the cutter and a depth of 4·5 mm can be cut in one pass.

Internal Examination Question Papers (CT1 & CT2) mapped with COs, POs and BL

CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY, BHILAI

Course: Manufacturing Process **Course Code: B037414(037)**

Program: BTech (Mech. Engg.) **Semester: Fourth**

Even Semester (Jan. - June 2023)

Class Test - 1

Time Allowed: 1 ½ Hours **Maximum Marks: 20**

Note: Part [A] is compulsory. Attempt any two parts from [B], [C] & [D] of each unit.

UNIT – I

[A] Write the technological definition of manufacturing process. [CO1,PO1,L1] [2]

[B] What are the types of pattern allowances? Explain anyone allowance in detail. [CO1,PO2,L2] [4]

[C] Explain sand casting defects briefly. [CO1,PO2,L2] [4]

[D] Describe investment casting process with its advantages, disadvantages and applications. [CO1,PO3,L3] [4]

UNIT - II

[A] Write down the classification of welding process. [CO2,PO1,L1] [2]

[B] Explain Flux Shielded Metal Arc Welding (FSMAW) Process with neat sketch. [CO2,PO2,L2] [4]

[C] Differentiate between TIG & MIG Welding processes. Also draw the sketch diagram of both welding processes. [CO2,PO3,L3] [4]

[D] Explain Oxy-Acetylene Welding process with the help chemical reaction & neat sketch. [CO2,PO2,L2] [4]

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CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY, BHILAI

Course: Manufacturing Process **Course Code: B037414(037)**

Program: BTech (Mech. Engg.) **Semester: Fourth**

Even Semester (Jan. - June 2023)

Class Test – 2

Time Allowed: 1:30 Hours **Maximum Marks: 20**

Note: Part [A] is compulsory. Attempt any one part from [B] & [C] of each unit.

UNIT – III

[A] Explain the principle of heat generation in resistance welding? [CO3,PO1,L2] [2]

[B] Describe projection welding method with the help of neat sketch and write the applications. [CO3,PO2,L3] [5]

[C] Describe Electron Beam Welding Process with neat sketch. [CO3,PO2,L3] [5]

UNIT - IV

[A] Give the classification of lathe machines? [CO4,PO1,L1] [2]

[B] With the help of sketch, explain the basic parts of Lathe machine and various operations performed on it. [CO4,PO3,L2] [5]

[C] Write down the working principle of Shaper. Describe the main parts of a Shaper with neat sketch. [CO4,PO2,L2] [5]

UNIT - V

[A] What are the types of indexing in milling? Explain any one of them in brief. [CO5,PO1,L2] [2]

[B] What is the principle of Broaching operation? Describe the various types of broaches. [CO5,PO3,L3] [4]

[C] What is difference between drilling and boring? Describe the main parts of a boring machine. [CO5,PO2,L3] [4]

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Assignment Question Papers (A1 & A2) mapped with COs, POs and BL

Managed By St Thomas Misssion, Bhilai
CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY

Program: BTech	Faculty Name: Dr. R. H. Gajghat	Sem.: IV
Course Name: Manufacturing Process	Course Code: B037414(037)	Max Marks: 20

Assignment- 1

QN	Question	CO	PO	Level	Marks
1	What are the types of pattern allowances? Explain anyone allowance in detail.	1	1	2	4
2	Describe investment casting process with its advantages, disadvantages and applications.	1	3	3	4
3	Explain Flux Shielded Metal Arc Welding (FSMAW) Process with neat sketch.	2	2	2	4
4	Differentiate between TIG & MIG Welding processes. Also draw the sketch diagram of both welding processes.	2	3	3	4
5	Explain Oxy-Acetylene Welding process with the help chemical reaction & neat sketch.	2	2	2	4

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CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY

Program: BTech	Faculty Name: Dr. R. H. Gajghat	Sem.: IV
Course Name: Manufacturing Process	Course Code: B037414(037)	Max Marks: 20

Assignment- 2

QN	Question	CO	PO	Level	Marks
1	Explain projection welding method with the help of neat sketch and give the applications.	3	2	2	4
2	Name the different welding defects and explain each briefly.	3	3	3	4
3	With the help of sketch, explain the basic components of Lathe machine and various operations performed on it.	4	3	2	4
4	Explain the working principle of a shaper machine tool. Describe its principal parts with neat sketches.	4	3	2	4
5	What are the types of drilling machines? Explain the other operations performed on drilling machine.	5	3	3	4

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Scheme of Evaluation (Theory)

Component	Max Marks	Min Marks	Duration
End Semester Examination	100	35	3 Hrs
Class Test	20	NA	1.5 Hrs
Teachers Assessment	30	18	NA
Total	150		

Continuous Evaluation: Class Tests Result

S. No.	Uni. Roll No.	Name of Students	Enrolment No.	Best of Two (20)	Class Test I (20)	Class Test II (20)
1	301103721001	Dinesh Kumar Yadav	CA7685	11	11	3
2	301103721003	Shreyansh Ekka	CA7681	14	14	11
3	301103721004	Shivam	CA7682	AB	AB	AB
4	301103721006	Atul Hirwani	CA7684	15	15	11
5	301103721007	Bhupendra Kumar Sen	CA7686	15	11	15
6	301103722301	Prashant Yadav	AS1109	15	AB	15
7	301103722302	Aman Uikey	CB5575	AB	AB	AB
8	301103722303	Alakh Niranjan	CB5576	10	10	AB
9	301103722304	Ankush Kumar	AI5115	AB	AB	16
10	301103722305	Amit Sahu	BF8691	11	AB	11
11	301103722306	Poonam	BF8692	12	AB	12
12	301103722307	Sneha Motwani	BI0587	9	9	AB
13	301103722308	Dheeraj Kumar Sori	BE1777	AB	AB	AB

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Continuous Evaluation: Teachers Assessment Marks

S. No.	Uni. Roll No.	Name of Students	Enrolment No.	TA (30)	Attend (24)	Assign (6)	Best of Two	Assign I (20)	Assign II (20)	Attend %
1	301103721001	Dinesh Kumar Yadav	CA7685	28	23	5	18	18	11	95
2	301103721003	Shreyansh Ekka	CA7681	28	24	4	15	15	14	98
3	301103721004	Shivam	CA7682	NS	NS	NS	NS	NS	NS	NS
4	301103721006	Atul Hirwani	CA7684	27	23	4	14	14	14	95
5	301103721007	Bhupendra Kumar Sen	CA7686	28	23	5	16	15	16	95
6	301103722301	Prashant Yadav	AS1109	26	22	4	15	15	14	90
7	301103722302	Aman Uikey	CB5575	NS	NS	NS	NS	NS	NS	NS
8	301103722303	Alakh Niranjan	CB5576	27	23	4	13	12	13	95
9	301103722304	Ankush Kumar	AI5115	NS	NS	NS	NS	NS	NS	NS
10	301103722305	Amit Sahu	BF8691	27	21	6	19	19	19	88
11	301103722306	Poonam	BF8692	27	21	6	19	19	18	88
12	301103722307	Sneha Motwani	BI0587	25	21	4	14	13	14	88
13	301103722308	Dheeraj Kumar Sori	BE1777	NS	NS	NS	NS	NS	NS	NS

Assignment Marks <= 10 ------- 3

11 – 15 ----- 4

16 – 18 ----- 5

19 – 20 ----- 6

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End Semester Examination Result: Manufacturing Process

S. No.	Uni. Roll No.	Name of Students	Enrolment No.	Marks Obtained (Out of 100)
1	301103721001	Dinesh Kumar Yadav	CA7685	Result Awaited
2	301103721003	Shreyansh Ekka	CA7681	Result Awaited
3	301103721004	Shivam	CA7682	Result Awaited
4	301103721006	Atul Hirwani	CA7684	Result Awaited
5	301103721007	Bhupendra Kumar Sen	CA7686	Result Awaited
6	301103722301	Prashant Yadav	AS1109	Result Awaited
7	301103722302	Aman Uikey	CB5575	Result Awaited
8	301103722303	Alakh Niranjan	CB5576	Result Awaited
9	301103722304	Ankush Kumar	AI5115	Result Awaited
10	301103722305	Amit Sahu	BF8691	Result Awaited
11	301103722306	Poonam	BF8692	Result Awaited
12	301103722307	Sneha Motwani	BI0587	Result Awaited
13	301103722308	Dheeraj Kumar Sori	BE1777	Result Awaited

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Attendance Register: Theory/Remedial Classes

CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY , BHILAI

ATTENDANCE SHEET

For the Session of Jan-June 2023

Year/Sem: 2nd/4th

Branch: Mechanical Engineering

Subject: Manufacturing Process

Sub. Teacher: Dr. R. H. Gajghat

Class Roll No.	University Roll No.	Name of Student	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	Total
1	301103721001	Dinesh Kumar Yadav	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		46
2	301103721003	Shreyansh Ekka	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		44
3	301103721004	Shivam	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		45
4	301103721006	Atul Hirwani	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		44
5	301103721007	Bhupendra Kumar Sen	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P		44
6	301103722301	Prashant Yadav	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	A	P	P	P		41
7	301103722302	Aman Uikey	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		NIL
8	301103722303	Alakh Niranjan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		44
9	301103722304	Ankush Kumar	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		NIL
10	301103722305	Amit Sahu	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		40
11	301103722306	Poonam	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		40
12	301103722307	Sneha Motwani	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	A	P	P		40
13	301103722308	Dheeraj Kumar Sori	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		NIL

Subject Teacher

HOD

DIPALI SOREN TUDU

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Attendance Register: Tutorial Classes

CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY , BHILAI

ATTENDANCE SHEET

Year/Sem: 2nd/4th **For the Session of Jan-June 2023**

Branch: Mechanical Engineering

Subject: Manufacturing Process (Tutorial)

Sub. Teacher: Dr. R. H. Gajghat

Class Roll No.	University Roll No.	Name of Student	1 (13/1)	2 (20/1)	3 (25/1)	4 (15/2)	5 (22/2)	6 (28/2)	7 (5/3)	8 (7/3)	9 (9/3)	10	11	12	13	14	15	16	17	18	19	20	Total
1	301103721001	Dinesh Kumar Yadav	P	P	P	P	A	P	P	P	P												8
2	301103721003	Shreyansh Ekka	P	P	A	P	P	A	P	P	P												7
3	301103721004	Shivam	A	A	A	A	A	A	A	A	A												Nil
4	301103721006	Atul Hirwani	P	P	P	A	P	P	P	P	P												8
5	301103721007	Bhupendra Kumar Sen	P	P	A	P	P	A	P	P	P												7
6	301103722301	Prashant Yadav	P	A	P	P	A	P	A	P	P												6
7	301103722302	Aman Uikey	A	A	A	A	A	A	A	A	A												Nil
8	301103722303	Alakh Niranjan	P	A	P	A	P	A	P	P	P												6
9	301103722304	Ankush Kumar	A	A	A	A	A	A	A	A	A												Nil
10	301103722305	Amit Sahu	P	P	P	A	P	P	P	P	P												8
11	301103722306	Poonam	P	A	P	A	A	P	P	P	P												6
12	301103722307	Sneha Motwani	P	P	A	A	P	P	P	A	P												6
13	301103722308	Dheeraj Kumar Sori	A	A	A	A	A	A	A	A	A												Nil

Subject Teacher

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Teaching Aids
(PPT, NPTEL Videos, Seminars, Group Discussions and Quiz etc)

Metal Casting
https://www.youtube.com/watch?v=bpQvapWFv_Y
https://www.youtube.com/watch?v=-Wr8ei6jsIM
https://www.youtube.com/watch?v=XaEZo7QDh7s
Arc Welding
https://www.youtube.com/watch?v=DIf_l8l5BkY
Gas Welding
https://www.youtube.com/watch?v=fs1UhhJH0E8
Resistance Welding
https://www.youtube.com/watch?v=66-RK0DPXfU
Brazing & Braze Welding
https://www.youtube.com/watch?v=BROj_D-NEnE
Lathe Operations
https://www.youtube.com/watch?v=hheFVuUBpxo
Shaper Operations
https://www.youtube.com/watch?v=ifYuumL0k8E
Planner Operations
https://www.youtube.com/watch?v=4S4nGSoYeYM
Milling Operations
https://www.youtube.com/watch?v=Gun5Kr-lmls
Broaching Operations
https://www.youtube.com/watch?v=lTngKubuYjY

Lecture Notes
(Separate pdf file attached)

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PRACTICAL COURSE FILE

Christian College of Engineering & Technology, Bhilai (Affiliated to Chhattisgarh Swami Vivekanand Technical University, Bhilai)	
Name of Program: BTech - Mechanical Engineering	Semester: IV
Course (Subject): Manufacturing Science Lab	**Course Code: B037423(037)**
Total Lab Periods: 02	Batch Size: 30
Academic Year: 2022-23	Credit: 1

Faculty Name: Dr Radheshyam H. Gajghat	Designation: Professor
Contact No.: 9229486034	Email ID: radhegaj@gmail.com

Course Educational Objectives (CEOs): Manufacturing is the backbone of any industrialized nation. The objective of the course is to provide an overview of the different manufacturing processes which are commonly employed in the industry to fabricate component using different materials.

Course Outcomes (COs):

On successful completion of the course, the student will be able to:

1. Demonstrate the use of green sand molding process for casting.
2. Demonstrate the use of various machine tools for important machining operations.
3. Explain the tool geometry of single point cutting tool and twist drill.
4. Explain the practicability of various metal joining processes like arc welding, resistance welding, soldering and brazing.
5. Obtain practical skills in inspection and testing of casting and welding defects.

Scheme of Evaluation (Practical)

Component	Max Marks	Min Marks	Duration
End Semester Examination	40	20	NA
Teachers Assessment	20	10	NA
Total	60		

List of experiments:
(At least 10 experiments are to be performed by each student)

Foundry

1. Moulding of a multi-piece pattern by green sand moulding.
2. Making a mould (with core) and casting.

Machine Tool

3. Taper turning in a Lathe
4. Thread cutting in Lathe
5. Slot cutting in Shaper
6. Gear cutting in milling machine using indexing head.
7. Alignment testing of Lathe
8. Drilling, boring and reaming of a hole.

Cutting Tool

9. Study of turning tool of Lathe (Tool signature)
10. Study of twist drill

Welding

11. Joining MS plates by arc welding (SMAW, MIG)
12. Joining metal sheet by resistance welding
13. Joining metal by soldering/brazing

Inspection and Testing

14. Inspection of casting defect and welding defects
15. Non destructive testing of casting and welding defects

Practical Schedule:

Exp. No.	Date of Experiment		Experiment to be Performed	Remarks if any
	Batch I	Batch II		
1	21/3/23	NA	Moulding of a multi-piece pattern by green sand moulding.	Related to Unit-1
2	28/3/23	NA	Making a mould (with core) and casting.	Related to Unit-1
3	11&18/4/23	NA	Taper turning in a Lathe	Related to Unit-4
4	25/4/23	NA	Thread cutting in Lathe	Related to Unit-4
5	2/5/23	NA	Slot cutting in Shaper	Related to Unit-4
6	16&23/5/23	NA	Gear cutting in milling machine using indexing head.	Related to Unit-5
7		NA	Alignment testing of Lathe	Related to Unit-4
8	30/5/23	NA	Drilling, boring and reaming of a hole.	Related to Unit-5
9	6/6/23	NA	Study of turning tool of Lathe (Tool signature)	Related to Unit-4
10	13/6/23	NA	Study of twist drill	Related to Unit-5
11	20/6/23	NA	Joining MS plates by arc welding (SMAW, MIG)	Related to Unit-2
12		NA	Joining metal sheet by resistance welding	Related to Unit-3
13	4/7/23	NA	Joining metal by soldering/brazing	Related to Unit-3
14	11/7/23	NA	Inspection of casting defect and welding defects	Related to Unit-3
15		NA	Non destructive testing of casting and welding defects	Related to Unit-3

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Practical Attendance Sheet:

CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY , BHILAI

ATTENDANCE SHEET

Year/Sem: 2nd/4th **For the Session of Jan-June 2023**

Branch: Mechanical Engineering

Subject: Manufacturing Process Lab

Sub. Teacher: Dr. R. H. Gajghat

Class Roll	University Roll No.	Name of Student	1 (24/3)	2 (28/3)	3 (1/4)	4 (18/4)	5 (25/4)	6 (2/5)	7 (16/5)	8 (23/5)	9 (30/5)	10 (6/6)	11 (13/6)	12 (20/6)	13 (4/7)	14 (11/7)	15	16	17	18	19	20	Total
1	301103721001	Dinesh Kumar Yadav	P	P	P	A	P	P	P	A	P	P	P	P	P	P							12
2	301103721003	Shreyansh Ekka	P	A	P	P	A	P	P	P	P	P	P	P	P	P							12
3	301103721004	Shivam	A	A	A	A	A	A	A	A	A	A	A	A	A	A							Nil
4	301103721006	Atul Hirwani	P	P	P	P	P	P	P	A	P	P	A	P	P	P							12
5	301103721007	Bhupendra Kumar Sen	P	P	P	P	P	A	P	P	P	P	P	P	P	P							13
6	301103722301	Prashant Yadav	P	P	P	P	P	P	P	P	P	P	P	P	A	P							13
7	301103722302	Aman Uikey	A	A	A	A	A	A	A	A	A	A	A	A	A	A							Nil
8	301103722303	Alakh Niranjan	P	A	P	P	P	A	P	P	P	P	P	P	P	A							11
9	301103722304	Ankush Kumar	A	A	A	A	A	A	A	A	A	A	A	A	A	A							Nil
10	301103722305	Amit Sahu	P	P	P	P	P	P	P	P	P	P	A	P	P	P							13
11	301103722306	Poonam	P	P	P	P	P	A	P	P	P	P	P	P	P	P							13
12	301103722307	Sneha Motwani	P	A	P	P	P	P	P	A	P	A	P	P	P	P							11
13	301103722308	Dheeraj Kumar Sori	A	A	A	A	A	A	A	A	A	A	A	A	A	A							

Subject Teacher

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Evaluation Sheet (Practical)

S.N.	Uni. Roll No.	Name of Students	Enroll No.	TA (20)	Attend (12)	LR1 (2)	LR2 (2)	V1 (2)	V2 (2)	Attend %
1	301103721001	Dinesh Kumar Yadav	CA7685	18	10	2	2	2	2	90
2	301103721003	Shreyansh Ekka	CA7681	18	10	2	2	2	2	90
3	301103721004	Shivam	CA7682							
4	301103721006	Atul Hirwani	CA7684	18	10	2	2	2	2	90
5	301103721007	Bhupendra Kumar Sen	CA7686	19	11	2	2	2	2	95
6	301103722301	Prashant Yadav	AS1109	19	11	2	2	2	2	95
7	301103722302	Aman Uikey	CB5575							
8	301103722303	Alakh Niranjan	CB5576	17	9	2	2	2	2	88
9	301103722304	Ankush Kumar	AI5115							
10	301103722305	Amit Sahu	BF8691	19	11	2	2	2	2	95
11	301103722306	Poonam	BF8692	19	11	2	2	2	2	95
12	301103722307	Sneha Motwani	BI0587	17	9	2	2	2	2	88
13	301103722308	Dheeraj Kumar Sori	BE1777							

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SAMPLE LABORATORY MANUALS

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Criterion 1

LABORATORY MANUALS

DEPARTMENT OF MECHANICAL ENGINEERING
CHRISTIAN COLLEGE OF ENGG. AND TECHNOLOGY, BHILAI

LAB RECORD

OF

DYNAMICS OF MACHINE LAB

DEPARTMENT OF MECHANICAL ENGINEERING

NAME OF STUDENT _____

SEMESTER _____

BATCH _____

ROLL NO. _____

ACADEMIC SESSION _____

CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY
Kailash Nagar, Near Industrial Estate, Bhilai, Distt.-Durg, C.G.
Ph.No. : 0788 2286662/3/4, Fax. No. 0788 2285266
Website www.mpccet.org & www.mpccet.ac.in

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Criterion 1

LABORATORY MANUALS

Established In 1998
CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY
Managed By St. Thomas Mission, Bhilai
Approved by AICTE and Affiliated to CSVTU, Bhilai
If You Aim High, We Provide The Means

PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

1. **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. **Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design / development of solutions**: 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.

4. **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.
5. **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **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 engineering practice.
7. **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication**: Communicate 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.

11. **Project management and finance**: 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 and in multi disciplinary environments.
12. **Life- long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

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Criterion 1

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Course Objectives:

The overall objective of this course is to impart an understanding of techniques for dynamic analysis of machines and their components

Course Outcomes:

On successful completion of the course, the student will be able to:

1. Analyze the vibration parameters of various systems.
2. Analyze gyroscopic parameters.
3. Analyze various types of governors.
4. Find the critical speed of different diameters of shafts.
5. Analyze the effects of unbalance in machine and methods to reduce/eliminate these effects.

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Dynamics of Machine Lab	
Semester: B Tech 5th	Code: C037522(037)

LIST OF EXPERIMENTS (PRESCRIBED BY C.S.V.T.U.)

Exp.No.	EXPERIMENTS (Minimum 10 Experiments needs to be performed)
1	To find out the oscillations of simple pendulum with universal vibration apparatus.
2	To find out the oscillations of Compound pendulum with universal vibration apparatus.
3	To find out the radius of gyration of bi-filler suspension with universal vibration apparatus.
4	To find out undamped torsional vibrations of single rotor system with universal vibration apparatus.
5	To find out the frequency of damped torsional vibration of single rotor system with universal vibration apparatus
6	To measure the frequency of torsional vibrations of single rotor system with universal vibration apparatus.
7	To measure the frequency of torsional vibrations of double rotor system with universal vibration apparatus.
8	To find out free vibration of helical coiled spring with universal vibration apparatus.
9	To study forced damped vibration of a spring mass system and simple supported beam with universal vibration apparatus
10	To find out the Gyroscopic couple and prove the Gyroscopic law with Gyroscope apparatus.
11	To find out the Power and effort of Proel, Porter &Hartnell Governor with Governor Apparatus
12	To find out the critical speed for different diameters of shaft by whirling of shaft apparatus.
13	To verify the static and dynamic balancing for different planes and masses by balancing apparatus

DEPARTMENT OF MECHANICAL ENGINEERING
CHRISTIAN COLLEGE OF ENGG. AND TECHNOLOGY, BHILAI

DYNAMICS OF MACHINE LAB

5th SEM. MECHANICAL

LIST OF EXPERIMENTS

Sl. NO.	NAME OF EXPERIMENTS	PAGE NO.	PERFORMED ON	REMARKS
1.	To find out the oscillations of simple pendulum with universal vibration apparatus.			
2.	To find out the oscillations of Compound pendulum with universal vibration apparatus.			
3.	To determine the radius of gyration of a body using bi-filler suspension.			
4.	To measure the frequency of torsional vibrations of single rotor system with universal vibration apparatus.			
5.	To measure the frequency of torsional vibrations of double rotor system with universal vibration apparatus.			
6.	To find out free vibration of helical coiled spring with universal vibration apparatus.			
7.	To find out the gyroscopic couple and prove that gyroscopic law with Gyroscope apparatus.			
8.	To find out the power and effort of Proell, Porter & Hartnell governor with governor apparatus.			
9.	To find out the critical speed for different diameters of shaft by whirling of shaft apparatus.			
10	To verify the static and dynamic balancing for different planes and masses by balancing apparatus.			

Signature of Teacher

DEPARTMENT OF MECHANICAL ENGINEERING
CHRISTIAN COLLEGE OF ENGG. AND TECHNOLOGY, BHILAI

EXPERIMENT No. - 1

AIM:

To find out the oscillations of simple pendulum with universal vibration apparatus.

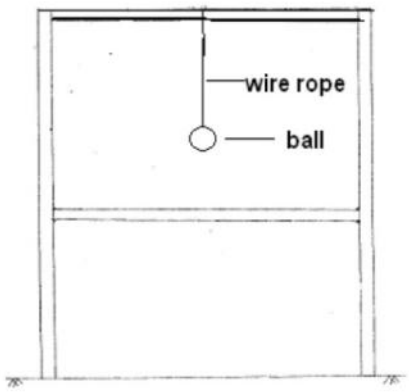
APPARATUS:

The unit is as shown in figure suitably fitted to the sturdy frame and following accessories are attached to it.

- Oscillating pendulum

Supporting apparatus to be used:

- Stop watch
- Measuring tape



simple pendulum

PROCEDURE:

Fix the balls with nylon ropes into the gripping chucks provided at the top beam of the frame & adjust the balls to suitable length. Measure the length of pendulum as shown. Oscillate the pendulum & measure the time required for 10 oscillations, repeat the procedure by changing the ball & changing the length.

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OBSERVATION:

S.No.	Ball size (diameter)	Length (cms)	Time for 10 oscillations t	T_{expt} t/n	T_{th}

CALCULATIONS:

DEPARTMENT OF MECHANICAL ENGINEERING
CHRISTIAN COLLEGE OF ENGG. AND TECHNOLOGY, BHILAI

CONCLUSION:

Time period of simple pendulum is proportional to square root of length L.

GRAPH

Plot a graph of T^2 Vs. L.

VIVA QUESTION:

1. What is the difference between linear frequency & circular frequency of vibration?

2. What do you mean by time period in vibration?

3. What is longitudinal vibration?

4. What do you mean by free vibration?

5. Derive the equation of motion for simple pendulum in free vibration?

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CHRISTIAN COLLEGE OF ENGG. AND TECHNOLOGY, BHILAI

EXPERIMENT No. - 2

AIM:

To find out the oscillations of Compound pendulum with universal vibration apparatus.

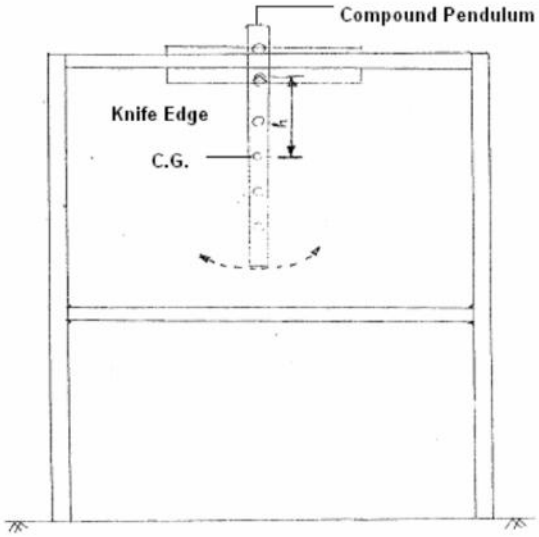
APPARATUS:

The unit is as shown in figure suitably fitted to the sturdy frame and following accessories are attached to it.

- Oscillating pendulum

Supporting apparatus to be used:

- Stop watch
- Measuring tape



THEORY:

A right body, when allowed to oscillate in vertical plane about the axis of suspension under the action of gravitational force is called a compound pendulum. The Dynamic unit is provided with a simple design as shown.

PROCEDURE:

Fix the brass bush in any of the holes of the pendulum & mount the pendulum over the suspension shaft. Fitted at top beam of frame. Oscillate the pendulum & measure the time required for 10 oscillations. Repeat the procedure by putting the bush in different holes.

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OBSERVATION:

S.No.	Length of compound pendulum L	Center of gravity (h)	Number of Oscillations	Time reqd. for n Oscillation	T_{expt} in sec t/n	K_{th}	K_{expt}

CALCULATIONS:

DEPARTMENT OF MECHANICAL ENGINEERING
CHRISTIAN COLLEGE OF ENGG. AND TECHNOLOGY, BHILAI

RESULTS:

- The equivalent length of pendulum is found to be .....mm.
- The radius of gyration is found to be .....mm.

CONCLUSION:

By experiment it is fount that radius of gyration K is verified the Theoretically & experimentally.

VIVA QUESTION:

1. What is the difference between free vibration & forced vibration?
2. Write the equation of motion for compound pendulum?
3. What is then natural frequency of vibration of compound pendulum?
4. What do you mean by compound pendulum?
5. Derive the expression for frequency of oscillation for pendulum?
6. What do you mean by time period of pendulum?

DEPARTMENT OF MECHANICAL ENGINEERING
CHRISTIAN COLLEGE OF ENGG. AND TECHNOLOGY, BHILAI

EXPERIMENT No. - 3

AIM:

To determine the radius of gyration of a body using bi-filler suspension.

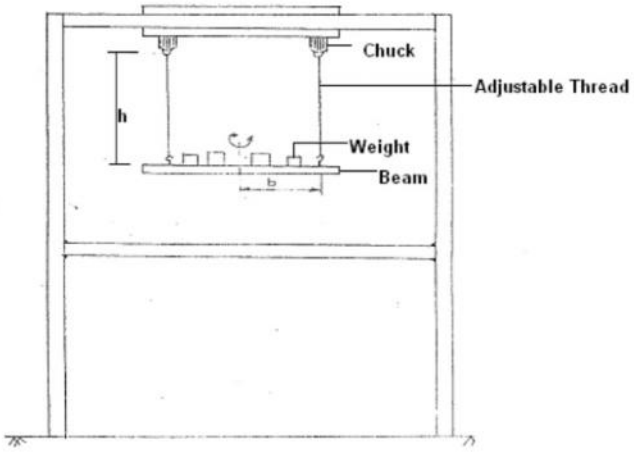
APPARATUS:

The unit is as shown in figure suitably fitted to the sturdy frame and following accessories are attached to it.

- Bi-filler suspension setup
- Weights

Supporting apparatus to be used:

- Stop watch
- Measuring tape



PROCEDURE:

Attach the bi-filler suspension strings in the chuck mounted at top beam of the frame. Adjust the string to equal lengths. Fix the weights required over the beam of bi-filler. Oscillate the system about vertical axis passing through the center of beam. Measure the time required for 10 oscillations. Repeat the procedure by changing the length of suspension.

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OBSERVATION:

S.No.	Length of cord in cm		Weight attached	No of oscillations	Time required for (n) oscillation	T_{exp} (sec)	K_{th}	K_{expt}
	L	b cm	Kg	n	t	t/n		
1.								
2.								
3.								

CALCULATIONS:

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VIVA QUESTION:

1. What is mean by Bi-Filler suspension system?

2. Define radius of gyration?

3. Differentiate between torsional & longitudinal vibration?

4. What is the natural frequency of vibration in case of Bi-Filler suspension?

5. Derive equation of motion of vibration for Bi-Filler suspension system?

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EXPERIMENT NO. – 4

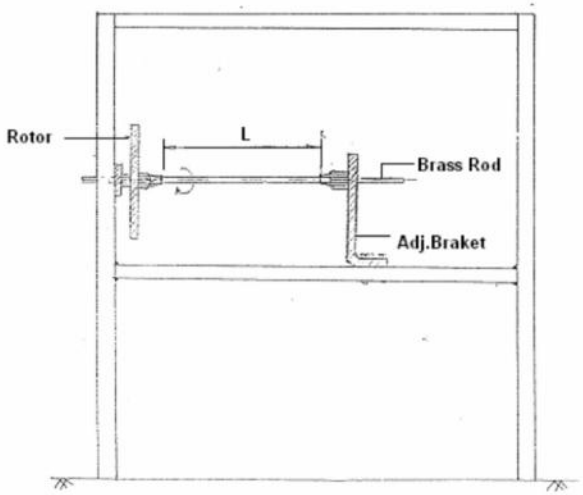
AIM:

To measure the frequency of torsional vibrations of single rotor system with universal vibration apparatus.

APPARATUS:

This unit is as shown in figure suitably fitted to the sturdy frame and following accessories are attached to it.

- Single rotor system
- Shaft
- Stop watch
- Vernier caliper /micrometer
- Measuring tape



PROCEDURE:

Take the bracket on the middle beam of vibration lab fit this bracket at any position. This bracket is fitted with drill chuck. Take spring steel wire and clamp it firmly between any one of the rotor disc and this bracket. Ensure that this clamping is firm. Give a small deflection/twist to the rotor disc. The rotor disc will take some oscillation. Count the oscillation & measure the time required for n number of oscillations.

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OBSERVATION:

1. Diameter of disc =

2. Weight of disc W =

3. Diameter Of shaft/wire d =

OBSERVATION TABLE:

Sr. no.	Length of shaft L cms	No. of oscillation t sec	Time for n oscillation t sec	T_{expt} t/n	T_{th}

CALCULATION:

GRAPH:

Plot a graph of Frequency Vs shaft length.

CONCLUSION:

Periodic time experimentally and theoretically is verified.

VIVA QUESTION:

1. Derive equation of motion of vibration for single rotor system?

2. What do you mean by transmissibility?

3. What do you mean by amplitude of vibration in single rotor system?

4. What is the natural frequency in case of single rotor system?

5. The vibration in this case of single rotor system is free or forced?

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EXPERIMENT No-5

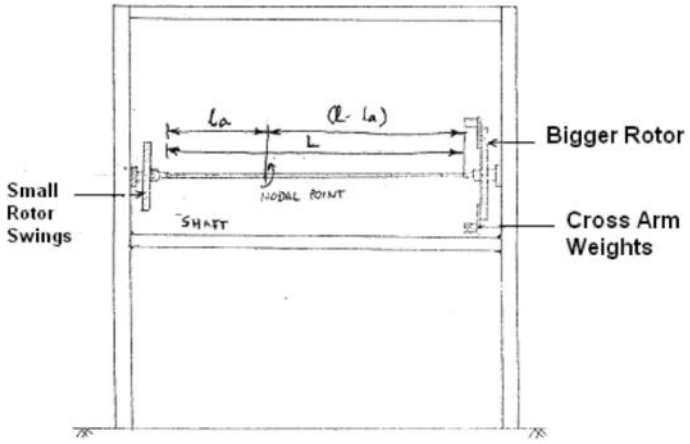
AIM:

To measure the frequency of torsional vibrations of double rotor system with universal vibration apparatus.

APPARATUS:

This unit is as shown in figure suitably fitted to the sturdy frame and following accessories are attached to it.

- Double rotor system
- Shaft
- Stop watch
- Vernier caliper /micrometer
- Measuring tape



PROCEDURE:

Fix the two rotors over the spindles fitted over the frame uprights. Thread the shaft into the chucks & fix the shaft by tightening the chucks. Hold one rotor firm by hand & twist the shaft by gently pulling the rotor. Release the hands. Let the system oscillate. Record the time required for 10 oscillations of system repeat the experiment by adding different weights over the cross arm of the system (add the weights symmetrically)

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OBSERVATION:

Diameter of small rotor d_a = ---- cm
Diameter of bigger rotor d_b = ---- cm
Weight of small rotor W_a = ----- Kg
Weight of bigger rotor W_b = ----- Kg
W_1 = Weight attached to cross arm =
R = Radius of fixation of weight on the arm =
L = Length of shaft between rotors =

OBSERVATION TABLE:

S.No.	No. of Oscillations (**n**)	Time required for **n** Oscillations (t sec.)	T_{expt} (t/n sec)	T_{theor}

CALCULATION:

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GRAPH:

Plot a graph of length Vs Frequency.

VIVA QUESTION:

1. What do you mean by torsional vibration?

2. What is the different between free and forced torsional vibration?

3. Derive the expression for natural frequency of free torsional vibration?

4. What is the natural frequency of vibration for a double rotor system?

5. What is the effect of mass moment of inertia in vibration of double rotor system?

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EXPERIMENT No. 6

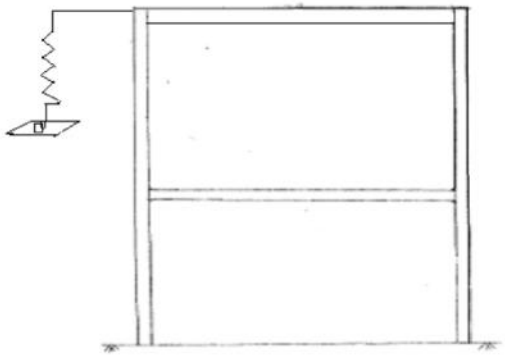
AIM:

To find out free vibration of helical coiled spring with universal vibration apparatus.

APPARATUS:

- Helical coiled spring
- Stop watch
- Measuring tape
- Weights

DIAGRAM:



SPRING MASS SYSTEM

PROCEDURE:

Take any one of the spring and clamp it in the hole provided on bolt, attached to the support of main frame. Now take the weight hanger and clamp it freely to the spring. Measure the length of spring, this is the initial length. Now put a weight of 1 kg in the weight hanger. Tighten the weight clamping strip to avoid falling of weight. Now measure the length of spring and note down. Give vertical oscillations. Count the oscillations and note down time required for these oscillations. Go on increasing the load and repeat the procedure.

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OBSERVATION TABLE:

Sr. no.	Wt. Attached W(kg)	Deflection of spring (δ)cm	Stiffness k =W/δ	Mean Stiffness	Time for 10 oscillation	T_{expt} t/n	T_{th}

CALCULATION:

CONCLUSION:-

Period of vibration is verified theoretically & experimentally.

VIVA QUESTION:

1. What is longitudinal vibration?

2. What is the natural frequency of vibration for a helical spring?

3. Write the equation of motion of helical coil spring?

4. Explain how stiffness affects the natural frequency of a spring?

5. What is the difference between free vibration and forced vibration?

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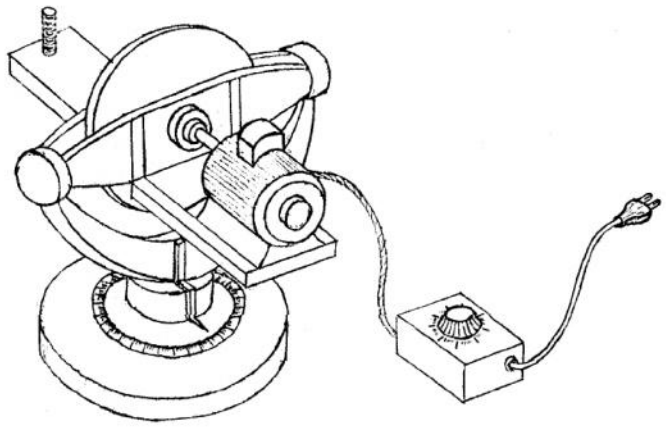
EXPERIMENT No.7

AIM:

To find out the gyroscopic couple and prove that gyroscopic law with Gyroscope apparatus.

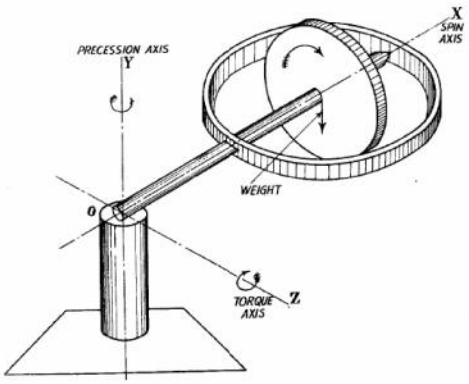
APPARATUS REQUIRED: Gyroscope, Tachometer, Stopwatch, Weight balance, Autotransformer.

THEORY: The gyroscope consists of an electric motor supported within a ring mounted on ball bearing which is carried on a cradle attached to a vertical shaft with ball bearings. A disc is mounted co-axially to the armature. A loading arm carrying a counter-poise and hanger is attached to the ring. The heavy base is of mild steel and has a vertical shaft. It has four leveling screws and a spirit level mounted to the base for leveling. A brass angular scale is fitted to the cradle, which enables the angle of the tilt of loading arm to be found when the precession is arrested by stopping the rotation of cradle. Knowing the time for one revolution, the angular velocity of precession can be determined.



PRINCIPLE OF GYROSCOPE: Principle of gyroscope can be easily under stood from the toy gyroscope. A rotating disc supported on gimbals' rings rotates with an angular velocity of spin denoted by ω, Gimbaled ring has a projected rod which is supported on frictionless surface such a toy when given to the child, would at first glance, make him feel that the torque created by the weight of the unit would cause the mass to fall vertically downwards. The mass executes a motion country to the first reaction-the motion that has been experimentally and analytically verified. The axis of the rotating shaft rotates about the vertical axis on with an angular velocity denoted by ω_p. it is called the velocity of precession. If friction is considered zero, the axis of rotation of the rotating disc would revolve in the horizontal plane XOZ. But normally the energy

is dissipated in friction that is always there and the energy comes from the disc. Thus the rotating disc will gradually drop.



GYROSCOPE

USES OF GYROSCOPE:

- Sea vessels.
- Aircraft.
- Automobiles.
- Bombsights.
- Missiles.

According to the law of gyroscope-

The torque, $\mathbf{T= I_p.\omega.\omega_p}$

I_P =mass moment of inertia of the dics.

ω = Angular velocity about horizontal axis.

ω_p = Angular velocity of precision.

Where $\omega= 2\pi n/60$ rad/s

$\mathbf{\omega_p= 2\pi/t_p}$

t_p = time for one revolution in the horizontal plane.

PROCEDURE:

1) Set the instrument perfectly horizontal by four leveling screw and the sprit level.
2) Switch on the motor and obtain the desired speed by changing the variable resistance.
3) Determine the motor speed by a tachometer.
4) Move the counter piece to keep the loading arm horizontal so as to show zero on angular brass scale.

5) Put the hanger with known weight at the end of the loading arm.
6) Note the time of one revolution.
7) Keeping the speed constant, increase the load, thus the torque, to find out corresponding angular speed of precession.
8) Change the motor speed the experiment.
9) Plot the graph between torque and speed of precession.
10) Calculate the value of moment of inertia of the disc.

OBSERVATION TABLE:

S. No.	Rotor Speed N(RPM)	Weight gms	Time for ^{0} precision sec	velocity of spin ω rad/sec	velocity of precision ω_p rad/sec	T_{act}	T_{theo}
1							
2							
3							
1							
2							
3							

CALCULATION:

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RESULT: The law of gyroscope is verified.

PRECAUTIONS:

1) The motor speed should be kept constant by a voltage stabilizer.
2) The gyroscope should be leveled properly.
3) The time should be measured accurately.

VIVA QUESTIONS:

1. Write short notes on gyroscope.

2. What do you understand by gyroscopic couple?

3. Explain the application of gyroscopic principles to aircrafts?

4. Describe the gyroscopic effect on sea going vessels?

5. Discuss the effect of the gyroscopic couple on a two-wheeled vehicle when taking a turn.

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EXPERIMENT No.8

OBJECT:

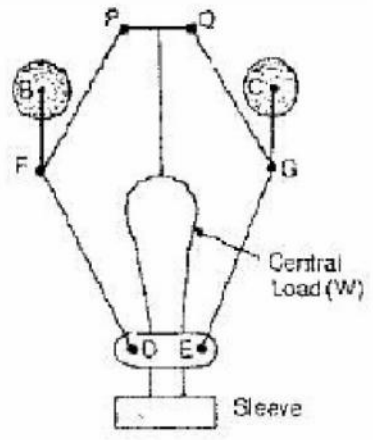
To find out the power and effort of Proell, Porter & Hartnell governor with governor apparatus.

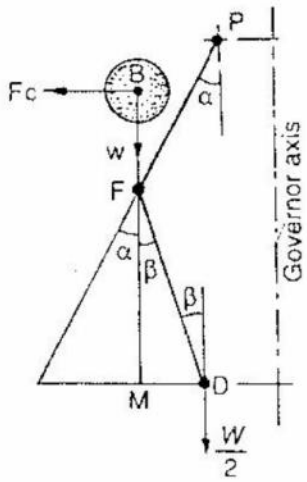
APPARATUS: Proell governor, Porter governor, Hartnell governor, weighing balance, scale and graph paper.

THEORY:

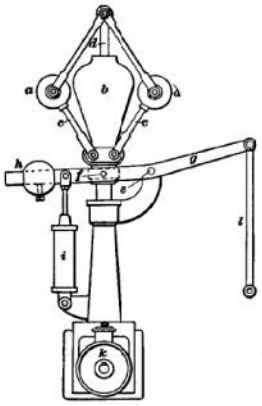
1. Proell Governor:

The proell governor has the balls fixed at B& C to the extension of the links DF & EG as shown in fig. the arms FP and GQ are pivoted at P and Q respectively. Consider the equilibrium of the forces on one-half of the governor as shown in fig. The instantaneous center lies on the intersection of the line PF produced and the line from D drawn perpendicular to the spindle axis. The perpendicular BM is drawn on ID.





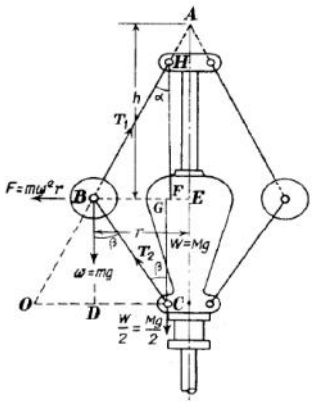
2. Porter Governor: The Porter Governor was the first effective High Speed engine governor, Designed by the American engineer George Porter. The governor is driven via a pulley (k) through a set of bevel gears (not shown) a vertical shaft (d) is rotated, this in turn drives from above the governor balls (a), through linkages (c) the large and heavy governor deadweight (b) is also rotated, this is free to slide up and down the shaft (d) but rotates at the same speed as the balls.



As rotational speed increases centrifugal force acts on the balls and they try to fly outwards, they are restricted by the linkages (c) held by the weight of the dead-weight (b), however, when a speed is reached at which this force exceeds the resistance imposed by the dead-weight they will lift the weight up and be allowed move outwards.

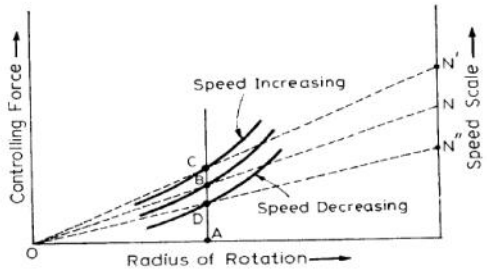
This action lifts the collar at the base of the dead-weight at point (f) this lifts the lever (g) which is pivoted at point (e) the lever has a counterbalance weight (a) and a dashpot or oil damper (i) which prevents rapid movements of the governor mechanism which can lead to the engine 'hunting' which is unwanted speed fluctuations due to the sensitivity of the governor.

Linkage (l) moves up or down and is connected to the engine this controls the steam allowed into the cylinder either by the amount allowed through a valve or the amount of time a valve is open for, if the engine runs too fast either the quantity of steam allowed in will be reduced or it will be let in for a shorter time, if the engine runs slower then either more steam is let in or it is let in for a longer time.



PORTER GOVERNOR

M= mass of the sleeve in kg.
W= weight of the sleeve= Mg in Newton's.
r = radius of the governor; distance from axis of rotation to the ball center, in meters.
m= mass of the governor ball in kg.
w= mg= weight of the balls in Newton's.
$F= mw^2r$= centrifugal force due to each ball, in Newton's.
T_1= tension in the upper arm, Newton's.
T_2= tension in the lower arm, Newton's.



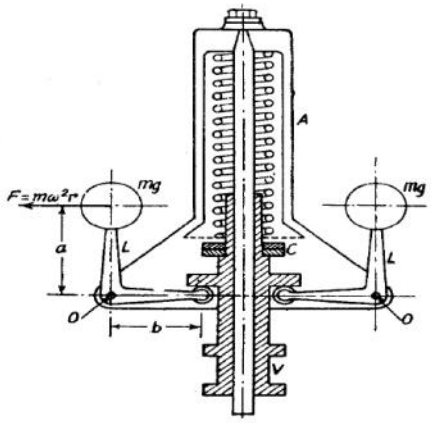
3. Hartnell Governor:

A Hartnell governor is shown as. The bracket is keyed to the spindle and can revolve with it. The two bell crank levers are pivoted to the bracket at O. the ends of the lower arm of the levers are connected to the sleeve and at the ends of the other arms of the levers are provided with the governor balls as shown.

With the rotation of the spindle, the bracket will revolve, resulting in revolving of the balls .due to the centrifugal forces on the balls, the sleeve will be lifted. The force on the sleeve will be controlled by the downward thrust of the spring, which is conveyed to the sleeve, which is through the struts, which pass through the holes drilled in the bracket and further

Connected to the sleeve. The lock nut at the top end of the spindle is provided to alter the spring thrust so as to adjust the equilibrium speed at certain position without certain limits when the engine running.

A simple diagram of the Hartnell governor is shown in fig.



Where,

m= mass of the ball in kg.

w= mg= weight of each ball, in Newton's.
M= mass of the sleeve in kg.
W=Mg= weight of the sleeve in Newton's.
S= force exerted by the spring, in Newton's.
P= stiffness of the spring or spring rate in N/m
N= speed of rotation in rpm
a= length of vertical arm or weight arm or ball arm in m.
b= length of horizontal arm or sleeve arm in m.
r= radius of the rotation, in m.

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OBSERVATION TABLE FOR PROELL GOVERNOR

Sl No.	Speed , N rpm	Sleeve Lift x (cm)	Angular Velocity ω (Rad/sec)	Radius of rotation , r	Force F

CALCULATION FOR PROELL GOVERNOR

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OBSERVATION TABLE FOR PORTOR GOVERNOR

S.No.	Speed, N (rpm)	Sleeve Lift x (cm)	W weight	Height h mm	Radius of rotation, R c. m.	α	Force F

CALCULATION FOR PORTER GOVERNOR

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OBSERVATION TABLE FOR HARTNELL GOVERNOR

S. NO.	speed, n rpm	Sleeve displacement x	Radius of rotation mm	ω	Force F

CALCULATION FOR HARTNELL GOVERNOR

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PROCEDURE FOR PROELL & PORTOR GOVERNOR:

1) Measure the length of columns of the governors and weight, which are to place on sleeve.
2) Connect the governor the load on the governor.
3) Slowly increase the load on the governor.
4) Note down 3 to 4 sets of reading of speed of governor using –Tachometer at the regular interval of voltage.
5) Note down the height of sleeve or a particular speed for finding the radius of rotation.

PROCEDURE FOR HARTNELL GOVERNOR:

1) Plot a graph between displacement of the sleeve from the mean position and the radii of the balls.
2) Determine the mass of the balls and the length of the arms of the bell crank lever.
3) Start the motor and adjust the speed so that the ball runs at the innermost position. Note the sleeve position and from the graph determine the ball radius r_2.
4) Increase the speed and adjust its speed so that the ball runs at the outermost position. Again note down the sleeve position and determine the ball radius r_1.
5) Calculate the forces f_1 and f_2.
6) Calculate the spring stiffness.

GRAPHS:

1. FOR PROELL GOVERNOR:
A) Force vs. radius of rotation
B) Speed vs. sleeve displacement

2. **FOR PORTER GOVERNOR:**
A) Force vs. radius of rotation
B) Speed vs. sleeve displacement

3. FOR HARTNELL GOVERNOR:
A) Force vs. radius of rotation
B) Speed vs. sleeve displacement

PRECAUTIONS:
1. Change the speed of the motor slowly.
2. Measure the speed of the motor accurately.
3. Use a constant voltage transformer to keep the speed constant.
4. Load on governors should be increase slowly.
5. Tachometer should be read only when it attained a constant value.
6. All the nut should be tighten.
7. Parallel error for noting down sleeve height should be avoid

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VIVA QUESTIONS:

1. What is the function of a governor? How does it differ from that of a flywheel?

2. State the different type of governors.

3. Explain the term height of the governor.

4. What is stability of a governor?

5. Explain the term 'effort' and 'Power' of a Porter & Proell governor?

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EXPERIMENT NO. 9

OBJECT:

To find out the critical speed for different diameters of shaft by whirling of shaft apparatus.

APPARATUS REQUIRED: Stroboscope, Tachometer, scale.

DIAGRAM:

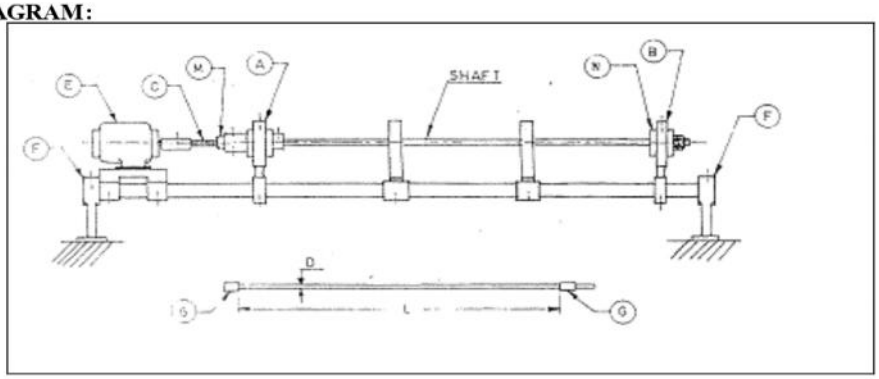


Fig.1

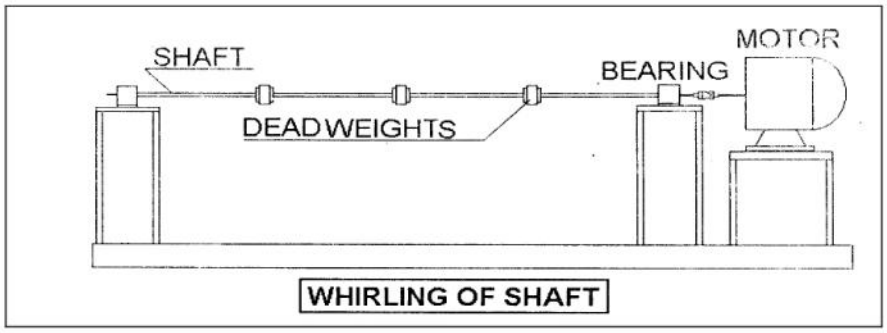


Fig.2

THEORY:

All shafts having self-weighted, deflect during rotation even in the absence of external load. The magnitude of deflection depends up on the stiffness of the shaft and its supports, the total mass of shaft and attached parts, the unbalance of the mass and the amount of damping in the system. As

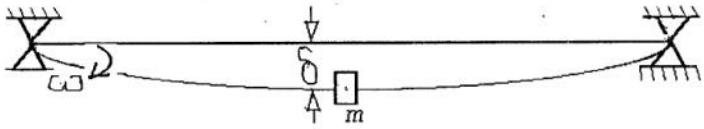
the speed of rotation increases gradually, a speed is reached, where the shaft starting' or vibrating violently. This speed is called FIRST CRITICAL SPEED or WHIRLING SPEED of the shaft. The mode of mode of bend is the simplest and known as the first mode. The Whirling speed is very nearly same as the NATURAL FREQUENCY as negligibly small difference occurs due to the gyroscopic action of the masses in the bent position.

OBSERVATIONS TABLE:

Sl,No	Length (c.m.)	Diameter(mm)	Speed(N) in rpm	Node	End condition

CALCULATION:

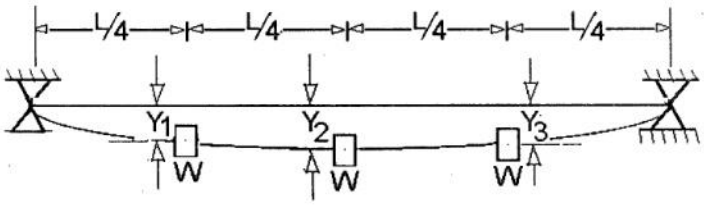
For a shaft with single attached mass:-



$\omega_c = \sqrt{k/m} = \sqrt{g/\delta}$
k = stiffness,
m = mass attached
δ = static deflection
g = Acceleration due to gravity.

The relation shows c) c depends on the location of the mass also.

For a shaft with self weight and multimass system:



The apparatus consist of a shaft with self weight and three discs of equal weight; W placed on the shaft as shows in the figure. Weight of shaft unit length is "w"

{1). The upper bound value of the first critical speed can be calculated by the energy balance method, commonly known as RAYLEIGH-RITZ EQUATION.

The general equation is given as (without considering self weight):

$$\omega_c = \sqrt{\frac{g\sum W_n y_n}{\sum W_n y_n^2}}$$

If the effect of the self weight is considered the equation is given as:-

$$\omega_c = \sqrt{\frac{g\left[W.Y_1 + (W + w.L)Y_2 + W.Y_3\right]}{\left[W.Y_1^2 + (W + w.L)Y_2^2 + W.Y_3^2\right]}}$$

Y1, Y2, Y3 are the total deflection considering also deflection for the given configuration,

$$Y_1 = Y_3 = \frac{9}{256}.\frac{wl^3}{EI} + \frac{19}{2048}.\frac{wl^4}{EI} = [----]$$

Where E = Modulus of elasticity,
I = MI of the shaft

$$Y_2 = \frac{19}{384}.wl^4 + \frac{5}{384}.wl^4 = [----]$$

Another approximation for the first critical speed of multimass system, lower bound value providing, is known as DUNKERLEY EQUATION.

$$\frac{1}{\omega_c^2} = \frac{1}{\omega_1^2} + \frac{1}{\omega_2^2} + \frac{1}{\omega_3^2} + --------$$

Where, ω = first critical speed.
$\omega_1, \omega_2, \omega_3$ are the critical speed, for only mass no. 1, 2, 3 etc respectively.
For the apparatus,

$$\frac{1}{\omega_c^2} = \frac{1}{\omega_1^2} + \frac{1}{\omega_2^2} + \frac{1}{\omega_3^2} = [-----]$$

$\omega_1, \omega_2, \omega_3$ are the critical speed for the masses at three different location on the shaft respectively and ω_s is the critical speed for self weight of the shaft.

$$\omega_1 = \sqrt{g/\delta_1} = [-----]$$

$$\omega_2 = \sqrt{g/\delta_2} = [-----]$$

$$\omega_3 = \sqrt{g/\delta_3} = [-----]$$

$$\omega_s = \sqrt{5g/4\delta_{max}} = [-----]$$

Where δ_{max} = Max. Deflection due to self weight only.
E, I, W, w, L are same as above.
Results

From the above calculation the critical/whirling speed of the shaft ii
1) Using RAYLEIGH-RITZ EQUATION =
2) Using DUNKERLEY EQUATION. =
Experimentally whirling speed of the shaft is =

PRECAUTIONS:

1. The masses should be attached firmly.
2. Increase the speed gradually.
3. Keep your body away from the rotating shaft.
4. There must not be misalignment of ends.

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VIVA QUESTIONS:

1. Explain the term 'whirling speed' or 'critical speed' of a shaft?

2. Prove that the whirling speed for a rotating shaft is same as the frequency of natural transverse vibration.

3. What do you mean by natural frequency?

4. Which factor affects the critical speed of a shaft and why?

5. Define the term eccentricity?

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EXPERIMENT NO. 10

OBJECT: To verify the static and dynamic balancing for different planes and masses by balancing apparatus.

APPARATUS USED:- Static & dynamic Balancing m/c.

THEORY :-

Static balance Static balance occurs when there is no resultant centrifugal force (centrifugal couple) and the centre of gravity is on the axis of rotation. To avoid the stress upon the bearings caused by the centrifugal couple, counterbalancing weights must be added. The unbalancing weights are an idealization, of course. For example, in the case of an automobile tire the imbalance is due to imperfections of manufacture that make the tire composition inhomogeneous.

Dynamic balance

This occurs when there is no resulting turning moment along the axis of rotation. Dynamic balancing is done on parts that are long compared to their diameters such as rotor assemblies. These parts require balancing to be done in two planes since the actual imbalance will intersect the centerline/axis. Unless both ends of the part are balanced, mass imbalance will continue to exist. Rotor assemblies that MCE manufactures are balanced dynamically (in two planes).

Balancing can be achieved by the addition or removal of mass in certain locations. MCE only provides balancing by use of mass removal which is achieved by abrasive material removal or by drilling/machining. Note that when designing your part, take into account that material removal will be required and allow for extra material such as a balancing ring or thicker flanges than required by design to achieve mechanical structural integrity.

A system of rotating masses is said to be in static balance if the combined mass centre of the system lies on the axis of rotation. Whenever a certain mass is attached to a rotating shaft, it exerts some centrifugal force, whose effect is to bend the shaft and to produce vibrations in it. In order to prevent the effect of centrifugal force, another mass is attached to the opposite side of the shaft. The process of providing the second mass in order to counteract the effect of the centrifugal force of the first mass, is called balancing of rotating masses.

The following cases are important from the subject point of view :

1. Balancing of a single rotating mass by a single mass rotating in the same plane.
2. Balancing of a single rotating mass by two masses rotating in different planes.
3. Balancing of different masses rotating in the same plane.
4. Balancing of different masses rotating in different planes.

PROCEDURE :- Remove the belt, the value of weight for each block is determined by clamping each block in turn on the shaft and with the cord and container system suspended over

the protractor disc, the number of steel balls, which are of equal weight are placed into one of the containers to exactly balance the blocks on the shaft. When the block becomes horizontal, the number of balls N will give the value of wt. for the block.

For finding out W_r during static balancing proceed as follow:

1. Remove the belt.
2. Screw the combined hook to the pulley with groove. This pulley is diff. than the belt pulley.
3. Attached the cord end of the pans to above combined hook.
4. Attached the block no.-1 to the shaft at any convenient position and in vertical downward direction.
5. Put steel balls in one of the pans till the blocks starts moving up. (upto horizontal position).
6. Number of balls give the W_r value of block-1. repeat this for 2-3 times and find the average no. of balls.
7. Repeat the procedure for other blocks.

OBSERVATION TABLE:-

S.no.	Mass (m) Gms.	Inclination	Distance from plane x(l) m	Couple

CALCULATION :- The balancing masses and angular positions may be determined graphically as given below :-

1. First of all, draw the couple polygon from the data which are calculated in table to some suitable scale. The vector distance represents the balanced couple. The angular position of the balancing mass is obtained by drawing, parallel to vector distance. By measurement will be find the angle.

2. Then draw the force polygon from the data, which are calculated in table to some suitable scale. The vector distance represents the balanced force. The angular position of the mass is obtained by drawing, parallel to vector distance. By measurement will be find the angle in the clockwise direction from mass.

PRECAUTIONS :-

1. Couple should be represented by a vector drawn perpendicular to the plane of the couple.

2. Angular position measure carefully in clockwise direction.

3. Vector diagram should be represent with suitable scale.

VIVA QUESTIONS :-

1. Why is balancing of rotating parts necessary for high speed engines ?

2. Explain the terms 'static balancing' and 'dynamic balancing'. State the necessary conditions to achieve them.

3. Discuss how a single revolving mass is balanced by two masses revolving in different planes.

4. How the different masses rotating in different planes are balanced?

5. Explain the method of balancing of different masses revolving in the same plane.

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LAB RECORD

OF

FLUID MECHANICS

5TH SEM MECHANICAL

DEPARTMENT OF MECHANICAL ENGINEERING

NAME OF STUDENT _____

SEMESTER _____

BATCH _____

ROLL NO. _____

ACADEMIC SESSION _____

CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY
Kailash Nagar, Near Industrial Estate, Bhilai, Distt.-Durg, C.G.
Ph.No. : 0788 2286662/3/4, Fax. No. 0788 2285266
Website www.ccetbhilai.ac.in

Criterion 1

LABORATORY MANUALS

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If You Aim High, We Provide The Means

PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

1. **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. **Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design / development of solutions**: 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.

4. **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.
5. **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **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 engineering practice.
7. **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication**: Communicate 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.

11. **Project management and finance**: 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 and in multi disciplinary environments.
12. **Life- long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

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Course Objectives:

The core objective of this course is to impart an understanding of performance testing of Hydraulic Turbines and Hydraulic Pumps at constant speed and Head and to develop an understanding of basic working principles of various fluid machines.

Course Outcomes:

On successful completion of the course, the student will be able to:

1. Analyze the performance parameters of Pelton Turbine.
2. Analyze the performance parameters of Francis and Kaplan Turbine
3. Analyze the performance parameters of Centrifugal Pump and Reciprocating Pump.
4. Determine Lift and drag force over an air foil.
5. Explain the construction and working of various fluidic devices.

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Fluid Machines Lab	
Semester: B Tech 5th	**Code: C037523(037)**

LIST OF EXPERIMENTS (PRESCRIBED BY C.S.V.T.U.)

Exp.No.	EXPERIMENTS (Minimum 10 Experiments needs to be performed)
1	Performance characteristics of Pelton wheel turbine.
2	Performance characteristics of Francis turbine
3	Performance characteristics of Kaplan turbine.
4	Performance characteristics of variable speed centrifugal pump.
5	Performance characteristics of rated speed centrifugal pump
6	Performance characteristics of multi stage centrifugal pump.
7	Study of Wind Tunnel (Open Circuit blower type)
8	Determination of Lift and drag force over an airfoil.
9	To study the working of fluid IC devices (Analog and Digital)
10	To study the Hydraulic Accumulator
11	To study the Hydraulic Intensifier
12	To study the Hydraulic Crane
13	To study the Hydraulic lift
14	To study the Hydraulic Ram
15	To study the Jet Pump
16	To study the Air Lift Pump
Note- Minimum 7 Experiments & 3 Studies are to be performed by each student.	

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FLUID MECHANICS LAB

5TH SEM MECHANICAL

LIST OF EXPERIMENTS

S.NO.	NAME OF EXPERIMENTS	PAGE NO.	PERFORMED ON	REMARKS
01	To Study the variation of friction factor for pipe flow.			
02	To verify Impulse Momentum Principle.			
03	To determine the hydraulic coefficients (Cc,Cv,&Cd) of a orifice.			
04	To determine the coefficient of discharge of mouthpiece.			
05	To verify Bernoulli's theorem.			
06	To find C_d for the flow through notches & weir apparatus.			
07	To determine head losses in various pipe fittings.			
08	To study the transition from laminar to turbulent flow and to determine the lower critical Reynolds number.			
09	To determine the metacentric height of a ship model.			
10	Free & forced vortex apparatus.			

Signature of Teacher

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EXPERIMENT NO: 01

LOSSES IN PIPE FRICTION

AIM: To Study the variation of friction factor for pipe flow.

THEORY: When a fluid flowing through the pipe, it is subjected to resistance to flow due to shear forces between the wall and fluid particles and between the fluid particles also. This resistance is generally called frictional resistance. This resistance is depends upon the velocity of flow and area of surface in contact. It also depends upon type of flow, i.e. laminar or turbulent. This frictional resistance causes loss of pressure in the direction of flow.

PROCEDURE:

1. Fill up water in the sump tank. (This water should be free of any oil content.)
2. Open all the outlet valves and start the pump.
3. Check for leakages by closing three of outlet valves, for each pipe, and correct the leaks, if any.
4. Open the outlet valves of the pipe to be tested.
5. Remove all the air bubbles from manometer and connecting pipes.
6. Reduce the flow. Adjust outlet valves, so that water heads in manometer are to the readable height.
7. Note down the heads and flow rate.
8. Now, increase the flow and accordingly adjust the outlet valve, so that water will not overflow. Note down heads and flow.
9. Repeat the procedure for other pipes.

(Note –during measuring the heads, slight variation may occur due to voltage change, valves etc. In such cases, average reading may be taken).

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OBSERVATION TABLE

Types of pipe	Head drop		Flow rate t sec time for 10 lt in Sec.
	h1	h2	
G.I (21mm)			
G.I (17mm)			
Cu (14.5mm)			
Al (17.5mm)			

For every pipe,

Area of pipe, A= $\pi\backslash 4 \times D^2$ m^2

Discharge, Q =0.01/t m^3/sec.

Velocity of water, v=Q/A m/sec.
Let f be the coefficient of friction. Test length of pipe is 1 meter.
For 1 meter length, drop of head, hf
h_f =manometer difference.
Use to Darcy-Weisbach equation,
Where, f = coefficient of friction.
L = length of pipe.
v = velocity of water m/sec
g = gravitational acceleration =9.81 m/sec^2.
d = inside diameter of pipe, m
The value of coefficient of friction is not constant and depends upon roughness of pipe inside surface and Reynolds Number. Any oil content in water also affects value of f.

RESULT:
1] Loss of head due to friction is proportional to length of pipe and square of velocity.
2] Loss of head is inversely proportional to inside diameter of pipe.
3] Average value of 'f' for-
a) 21 mm. G.I. pipe -

b) 17 mm. G.I. pipe -
c) 14.5 mm. Cu pipe. -
d) 12.5 mm. Al pipe. -

VIVA QUESTIONS:

1. In what way does the flow through a rough pipe differ from that in a smooth pipe?
2. Why do pipes behave as a hydro dynamically smooth or rough when turbulent flow takes place through them?
3. What do you understand by aging of pipes?
4. What is the mean by a smooth boundary and a rough boundary?
5. Distinguish between effective and actual roughness of a conduit boundary?

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EXPERIMENT NO: 02

IMPACT OF JET

AIM: To verify Impulse Momentum Principle.

THEORY: The apparatus consists of a chamber provided with Perspex sheets. A floating vane fixing rod is provided over the chamber to which the vane is fixed. An initial balance weight is provided for balancing the vane. Another sliding weight is provided to balance the vane-fixing rod while the jet is striking the vane. A nozzle is fixed below the vane through which a vertical jet issues. A control valve provided controls the pressure at the pressure at the jet and hence the flow rate and velocity of the jet.

Flat and hemispherical vanes are provided. The vanes can be inter changeably fixed to the rod. By adjusting the sliding weight, rod is balanced when the jet is striking the vane. By taking the moment about the fulcrum, impact force can be calculated. A nozzle of diameter 6.5mm and 8mm is provided.

EXPERIMENTAL PROCEDURE:

1. Fix the required vane to the fixing rod. Adjust the balancing weight so that vane-fixing rod is in horizontal position.
2. Fill up sufficient water in the sump tank.
3. Open the control valve fully and start the pump. The jet strikes the vane.
4. Put the sliding weight over the rod and adjust its distance such that the vane-fixing rod is balanced.
5. Note down the discharge and distance of the sliding weight.
6. Repeat the procedure by changing the control valve position.
7. Repeat the procedure for another vane.

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OBSERVATION TABLE

Sl No.	Nozzle diameter	Type of vane	Time for 10lit discharge t(Sec)	Weight added (Kg) m	Distance of sliding weight L

Taking the nozzle of 8mm diameter.
Diameter of jet, $d = 8 \times 10^{-3}$ m.

$\therefore$ Cross sectional area of jet, $a = 5 \times 10^{-5}$ m^2.

Experimentally, taking moments about the fulcrum,
Distance of vane from the fulcrum is 0.135m (along the beam)

VIVA QUESTIONS:

1. Explain the impulse-momentum principle?
2. Describe the nature of various forces normally included in the momentum equation?
3. Briefly comment on the condition under which energy theorem and momentum theorem are applicable?

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EXPERIMENT NO: 03

FLOW THROUGH ORIFICE

AIM: To determine the hydraulic coefficients (C_C, C_V, &C_d) of a orifice

THEORY: An orifice is an opening made in the side or bottom of tank, having a closed parameter, through which the fluid may be discharged. A mouthpiece is short tube fitted to a same size circular opening provided in a tank so that fluid may be discharged through it. Orifice and mouthpiece are used to measure the rate of flow of liquid. The apparatus is to designed to measure the coefficient of discharge of orifice the apparatus consists of a supply tank at the side of which a universal fixture for mounting orifice. A centrifugal pump supplies the water to supply tank. Head over the orifice is controlled by a by pass valve provided at pump discharge. A measuring tank is provided to measure the discharge. A measuring tank is provided to measure the discharge. A gauge for measuring X and Y coordinates of jet from the orifice is provided which is used to calculate C_v of orifice.

Specification

- Supply tank-0.3x0.3mx1 m, height
  Orifice-ϕ8mm&ϕ10mm orifice (brass)-one each. The orifices are small circular orifices running free.
- X-Y gauges for orifice jet coordinates.
- Measuring tank 0.3x0.3x0.3m height.
- Sump tank of suitable capacity
  0.5 pump with valve

PROCEDURE

1) Orifice:

1. Fill up sufficient water in sump tank & supply tank, up to the level of orifice fixture.
2. Fit the required orifice to the tank.
3. Start the pump, adjust the supply valve. Wait for sometime for water level in supply tank to become steady.
4. When water level becomes steady, note down time required for 10 liters level rise in measuring tank.

5. Measure X and Y coordinate of two points in jet, one of which should be closer to orifice & the other away from the orifice.
6. Repeat the procedure for different heads and for the other orifice.

OBSERVATION TABLE

Sl no.	Head (m)	Time for 10 litres level rise in measuring tank, t(sec)	X_1 (cm)	Y_1 (cm)	X_2 (cm)	Y_2 (cm)

VIVA QUESTIONS:

1. Define Orifice?
2. Give the complete classification of orifices.
3. Explain the phenomenon of jet contraction in orifice flow?
4. Define C_C, C_V, C_d of a small orifice.
5. Discuss the factors that offset the values of the orifice coefficient.

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EXPERIMENT NO: 04

FLOW THROUGH MOUTHPIECE

AIM: To determine the coefficient of discharge of mouthpiece.

THEORY: An orifice is an opening made in the side or bottom of tank, having a closed perimeter, through which fluid may be discharged. A mouthpiece is a short tube fitted to a same size circular opening provided in a tank so that fluid may flow through it. Orifice and mouthpiece are used to measure the rate of flow of liquid. The apparatus is designed to measure the co-efficient of discharge of orifice and mouthpiece.

The apparatus consists of a supply tank, at the side of which universal fixture for mounting orifice or mouthpiece is attached. A centrifugal pump supplies the water to supply tank. A pass valve provided at pump discharge controls head over the orifice/mouthpiece. A gauge for measuring tank is provided to measure the discharge. A gauge for measuring X and Y co-ordinates of jet from the orifice is provided, which is used to calculate Cv of orifice.

SPECIFICATION:

1. Supply tank – 0.3 x 0.3 x 1 m height.
2. Mouthpiece – ϕ 12 x 48 – 1no.
   - ϕ12 x12 –1no.
   - ϕ12 x 12L, Board's mouthpiece – 1no.
   - ϕ12 exit dia. Convergent mouthpiece – 1no.
3. Measuring tank 0.3 x 1.3 x 0.3 m height.
4. Sump tank of suitable capacity.
5. 0.5HP pump with valve.

PROCEDURE:

1. Fit the required mouthpiece.
2. When water level in supply tank becomes steady, note down the time required for 10 liters level rise in measuring tank.
3. Repeat the procedure for different heads and different mouthpieces and complete the observation table.

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OBSERVATION TABLE

Sl. No.	Mouth piece used	Head (m)	Time for 10 liters level rise in measuring tank, t(sec)

VIVA QUESTIONS:

1. Define Mouthpiece?
2. Derive the discharge equation of an external mouthpiece.
3. What is the maximum possible head of water that this type of mouthpiece can sustain?
4. What is the difference between orifice and mouthpiece?

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EXPERIMENT NO: 05

VERIFICATION OF BERNOULLI'S THEOREM

AIM: To verify Bernoulli's theorem.

THEORY: When an incompressible fluid is flowing through a closed conduit, it may be subjected to various forces, which cause change of velocity, and acceleration or energies involved. The major forces involved are pressure and body forces. Due to elevation of conduits, pressure may change or due to change of cross section, velocity of fluid may change or there is change of velocity, pressure also change accordingly. In other words, if velocity energy of fluid is raised, its pressure will drop, i.e. total energy of fluid is constant at any two points in the path of flow. The theorem is known as Bernoulli's theorem. Hence, when applied to steady irrotational flow of in compressible fluids,

$$\frac{P}{w} + \frac{V^2}{2g} + Z = C$$

Where,

P = pressure
V = velocity at the point
Z = potential head from datum

APPARATUS

The apparatus consists of a rectangular flow channel, which is tapered along the length. Flow area at inlet is maximum and it goes on reducing towards outlet. Water is fed to flow channel through a supply tank. Outlet is also collected through outlet tank. A collector fitted can be directed either in drain or flow measurement tank.

PROCEDURE:

1. Connect the water pipe to the inlet valve
2. Reduce flow by inlet gate valve, so that there is only a small rise of water in the last pressure tapping.
3. Allow the levels to stabilize and note down the heads.
4. Close outlet valve of the measuring tank, put the collector in the measuring tank and measure the time to raise water level by 10 liters.

5 Now repeat the procedure by changing the discharge and note the drop of head towards outlet for each observation

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OBSERVATIONS TABLE

Sl No.	Head in cms Tappings 1, 2, 3, 4, ----------14	Discharge time for 10 litres of water flow

CONCLUSIONS:

As value of 'C' is fairly constant, total energy of flow is same over the entire length.

1. As velocity of flow increases, pressure head drops.
2. Bernoulli's equation, i.e.

$$\frac{P}{w} + \frac{V^2}{2g} + Z = C$$

PRECAUTIONS:

1. Note down the head readings after the level has been stabilized.
2. After noting the discharge, drain the measuring tank.
3. After completion of experiment, drain all the water from the equipment.

VIVA QUESTIONS:

1. All the term of Bernoulli's equation: $p/w + V^2/2g + z = C$ have the units: Joules per Newton. In this true? Explain?
2. What are the limitations of Bernoulli's equation?
3. How is the Bernoulli's equation related to the first law of thermodynamics?
4. Which form of the Bernoulli's equation will be more suitable for application to flow of gases?
5. Explain how Bernoulli's equation which is valid for irrotational flows, can be used to solve real fluid flow problems.

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EXPERIMENT NO: 06

FLOW OVER NOTCH & WEIR APPARATUS

AIM: To find C_d for the flow through notches & weir apparatus.

THEORY: The notch is hydraulically defined as an opening provided in the side of tank liquid level in tank is below the top edge of the opening. Notches are generally used for measuring the flow of liquid in channels.

The Unit is provided with following notches:-

1) Triangular notch
2) Rectangular notch
3) Sharp crested weir

In the Unit a centrifugal pump sucks the water from the sump tank, and discharges it to a small flow channel. The notch is fitted at the end of channel. All the notches are interchangeable. The water flowing over the notch falls in the collector.
Water coming from the collector can be directed to the sump tank or to the measuring tank for the measurement of flow.

PROCEDURE:

1) Fit the required notch in the flow channel
2) Fill up the water in the sump tank.
3) Close the water supply gate valve to the channel and fill up the water in the channel up to sill level.
4) See that water does not leak from the notch.
5) Check the leakage of hose pipes also and keeps the collector diverted in the sump tank.
6) Take down the initial reading of crest level (sill tank) by the sliding depth gauge.
7) Now start the pump and open the gate valve slowly so that water starts flowing over the notch.
8) Let the water level become stable and note down the height of water surface at the upstream side by the sliding depth gauge.
9) Close the drain valve of measuring tank, direct the collector into measuring tank.
10) Take the readings for different flow rates.
11) Repeat the same procedure for other notch also.

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OBSERVATION TABLE

NOTCH TYPE: - Triangular / Rectangular

Sl No	Sill level reading 's' mts	Water height on upstream side 'h' mtr	Discharge time for 10 litres 't' sec

RESULTS

1. Average C_d of the triangular notch is.....
2. Average C_d of rectangular notch is.....

VIVA QUESTIONS

1. Explain Notches and Weirs?
2. What is it that is suppressed in a suppressed weir?
3. Why is it necessary to ventilate the nappe in the case of a suppressed weir?
4. List out the advantages and limitation of various notches and weirs?
5. How will you classify weirs?

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EXPERIMENT NO: 07

PIPE FITTING APPARATUS

AIM: To determine head losses in various pipe fittings.

THEORY: While installing a pipeline for conveying a fluid, it is generally not possible to install a long pipeline of same size all over and straight for various reasons, like space restrictions, aesthetics, location of outlet etc. Hence, the pipe size varies and it changes its direction. Also, various fittings are required to be used. All these variations of sizes and the fittings cause the loss of fluid head. The apparatus is designed to demonstrate the loss due to following fittings-

1) Pipe bend (large bend)
2) Pipe elbow (small bend)
3) Sudden expansion of the flow.
4) Sudden contraction of the flow.

The set up consist of 15mm basic piping, in which the above fittings are installed. A pressure tapping is provided at inlet and outlet of each fitting, which is connected to a common differential manometer. A gate valve at outlet and a bypass valve at pump discharge control the flow of water.

PROCEDURE:

1) Fill up sufficient clean water in the sump tank.
2) Fill up mercury in the manometer.
3) Connect the electrical supply. See that the flow control valve and bypass valve are fully opened and all the manometer cocks are closed. Keep the water-collecting funnel in the sump tank side.
4) Start the pump and adjust the floe rate. Now, slowly open the manometer tapping connection of small bend. Open both the cocks simultaneously.
5) Open air vent cocks. Remove air bubbles and slowly & simultaneously close the cocks. Note down the manometer readings and flow rate.
6) Close the cocks and similarly, note down the readings for other fittings. Repeat the procedure for different flow rates.

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OBSERVATION TABLE

Fittings	Manometer difference cms. of Hg	Flow rate t, sec.
Elbow		
Pipe bend		
Sudden Contraction		
Sudden Enlargement		

In elbow, there is no change in the magnitude of velocity of water, but there is change in direction of water, hence head losses exist.
For elbow, mean area, $A = (\pi/4)\ d2. = 2.83 \times 10^{-4}\ m^2$
Diameter of the elbow, $d = 19mm = 0.019m$.

CONCLUSION:

1) For any type of fitting, there is a loss of head, but its magnitude depends upon the type of fitting.
2) Loss of head occurs due to changes in magnitude or direction of the fluid velocity.

PRECAUTION:

1) Open both the manometer cocks slowly and simultaneously, otherwise the mercury will run away from the manometer.
2) Operate the valve gently. Does not force rotate them.
3) Always use clean water for the experiment.

VIVA QUESTIONS:

1. What are the different types of head losses in pipes?
2. How does the head loss affect the pipe flow?
3. What is the reason for head losses?
4. How the head losses can be minimized?
5. What is the formula for head loss for sudden contraction and sudden expansions?

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EXPERIMENT NO: 08
REYNOLD'S APPARATUS

AIM: To study the transition from laminar to turbulent flow and to determine the lower critical Reynolds number.

THEORY: Whenever a fluid flowing through the pipe, the flow is either laminar or turbulent. When fluid flowing in parallel layer or lamina sliding past adjustment lamina, its called laminar flow. When the fluid does not flow in parallel layers and there is intermingling of fluid particles then the fluid said to be turbulent. OSBORN REYNOLDS first demonstrated existence of these two types in 1883.

The dynamic apparatus consist of constant head supply tank supplied with water. This tank provided with the bell mouth outlet to which a transparent tube is fitted.

At outlet of the tube a regulating valve provided. a dye tank containing coloured dye is fitted above the supply tank. The water is flow through the pipe and dye is injected at the center of the pipe. When the velocity of flow is low, (i.e. flow is laminar) then dye is remaining in the form of straight filament as the velocity of water

(i.e. flow of water) is increased, a state is rejected when the dye filament becomes irregular and water. With further increase of velocity of water through the pipe, dye filament becomes more and more irregular and ultimately the dye diffuse over the entire cross section of the tube.

The velocity at which the flow changes from to turbulent for the case of given fluid at given temperature and in a given pipe is known as critical velocity. The state of flow between these two types of flow is known as transition state or flow is transition.

The occurrence of laminar and turbulent flow is governed by relative magnitude of inertia and viscous forces. Reynolds related the inertia forces the inertia forces to viscous forces and arrived at a dimensionless parameter now called Reynolds number.

I.D. of pipe = 25 mm cross section area of pipe

$A = 4.9 \times 10^{-4} m^2$

Where, V = velocity, m/sec

L =characteristics linear dimension

D = diameter of pipe =0. 025m

ν = kinematics viscosity of pipe = 0.805×10^{-6} m^2/s

Re = V x 31055.9

While increasing the velocity, laminar flow is distributed at slightly higher velocity. But at the time of decreasing velocity, the flow does not turn to laminar at this velocity, but laminar at still lower velocity is called lower critical velocity.

Lower critical Reynolds number flow is always laminar and above upper critical Reynolds number flow is always turbulent. Practically, upper critical Reynolds number lies between 2700 to 4000 and lower critical Reynolds, number is approximately 2000.between Reynolds number 2000 and 4000 the transition region exists.

PROCEDURE:

1. Fill up sufficient water in the dye tank and put a small amount of potassium per magnet in water.
2. Start water flow. Adjust the water flow to about 2 lpm starts the dye injection.
3. Wait for some time. Steady line of dye will be observed. Adjust dye flow, if required.
4. Slowly increases the water flow see that water level in the supply tank remains constant. At particular flow rate, dye line will be disturbed note down this flow rate.
5. Further increase the flow. The disturbances of dye line will go on increasing and at certain flow; the dye line diffuses over the entire cross section. Note down this flow.
6. Slightly increase the flow and then slowly reduce the flow. Note the flow at which diffused dye tends to become steady, (beginning of transition zone while reducing velocity.)
7. Further reduce the flow and note the flow at which dye line becomes straight and steady.

OBSERVATION:

1. Increasing velocity
   a) Flow at beginning of transition.
   b) Flow at beginning of turbulence.
2. Decreasing velocity
   a) Flow at beginning of transition.
   b) Flow at beginning of laminar region.

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VIVA QUESTIONS

1. Define Reynolds number?
2. What is the formula of a Reynolds number for pipe flow?
3. What is the value of Reynolds number for laminar flow?
4. What is the significant of Reynolds number?
5. Differentiate laminar and turbulent flow in terms of Reynolds number?

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EXPERIMENT NO: 09

METACENTRIC HEIGHT MODEL

AIM: To determine the metacentric height of a ship model.

THEORY: When metacentre lies below the centre of gravity, then slight angular displacement of body causes to form a couple that tends to increase the angular displacement further. This is called unstable equilibrium. When metacentre lies exactly on the center of gravity then slight angular displacement does not create any couple, hence body remains in its new position. This is called neutral equilibrium. Hence, in a design of ship, care has to be taken to keep the metacentre well above the center of gravity, so that the ship is in stable equilibrium.

The apparatus consists of a ship model, which is made of rectangular shape for the purpose of simplicity. A movable weight slides in a guide bar at the deck. An upright is provided at the center of the ship from which is hung a plumb. When the weight is shifted from the center position, the ship tilts slightly. The angle of tilt (or angle of heel) is determined with the help of plumb. The position of the metacentre is then determined by displacement of weight and angle of heel.

PROCEDURE:

1.) Fill up water in the floating tank.
2.) Keep the ship floating over the water.
3.) See that plumb indicates zero reading.
4.) Displace the weight on the deck.
5.) Measure the displacement of weight and distance indicated by plumb.
6.) Repeat the procedure for different displacement of weight.

OBSERVATIONS TABLE

Sl No.	Weight displacement x cm	Plumb displacement d cm

1. Weight of the ship, W = 4.2 Kg.
2. Sliding weight on the deck, w = 0.17 Kg.
3. Vertical distance of plumb scale from plumb suspension point, L = 0.21 Mtr. Let distance moved by the weight w at the deck be x. Let angle of heel (through which the ship is tilted) be θ.

Since the point corresponds to metacentre for small angles of heel only, the true metacentric height is limiting value of GM →θ. For this, plot a graph of values of Gm for various values of θ and take the metacentric height of GM at θ = 0°.

VIVA QUESTIONS:

1. Define metacentric height of a floating body?
2. Which factor the Metacentric height depends?
3. Define metacentre of a floating body.
4. What are the criteria of stability of a floating body?
5. Explain how the metacentric height of a ship model is determined in the laboratory?

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LABORATORY MANUALS

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EXPERIMENT NO: 10

FREE & FORCED VORTEX APPARATUS

AIM: To obtain the surface profile and the total head distribution of a forced vortex.

THEORY: When a liquid contained in a cylindrical vessel is given the rotation either due to rotation of vessel about vertical axis or due to tangential velocity of water, surface of water no longer remains horizontal but it depresses at the centre and rises near the walls of the vessel. A rotating mass of fluid is called vortex and motion of rotating mass of fluid is vortex motion. Vortices are of two types viz. forced vortex and free vortex. When a cylinder is in rotation then the vortex is called forced vortex. If water enters a stationary cylinder then a vortex is called free vortex.

The apparatus consists of a perpex cylinder with drain at center of bottom. The cylinder is fixed over a rotating platform which can be rotated with the help of a D.C. motor at different speeds. A tangential water supply rip is provided with flow control valve. The whole unit is mounted over the sump tank. Water is supplied by a centrifugal pump.

SPECIFICATIONS:

1) Cylindrical vessel 200 mm dia with central bottom outlet, mounted over rotating platform. D.C. motor with controller to rotate the vessel.
2) Measuring tank 600 × 400 × 250 mm mounted over the sump tank.
3) Pump to circulate the water.
4) X-Y co-ordinate measurement probe.

PROCEDURE:

A) FORCED VORTEX –

1) Close the drain valve of the cylindrical vessel. Fill up some water (say 4-5 cms height from bottom) in the vessel.
2) Switch 'ON' the supply and slowly increase motor speed. Do not start the pump.

3) Keep motor speed constant and wait till the vortex formed in the cylinder stabilizes. Once the vortex is stabilized note down the co-ordinates of the vortex & complete the observation table.

4) With the surface attachment of tachometer, measure outside surface speed of vessel & note down in observation table.

(Tachometer is not supplied with the unit)

B) FREE VORTEX-

1) Keep the orifice at the bottom centre of the vessel.

2) Open the bypass valve & start the pump.

3) Observe the vortex in the vessel.

OBSERVATIONS :

A) Forced Vortex –

Sr. No.	Radius (x co-ordinate) Cms	Height (z) (y co-ordinate) cms	Surface Speed m/min

Similarly calculate values of Z at different r.

(Note- For forced vortex, linear velocity of the cylinder does not equal the actual water velocity near the I.D. of cylinder. Also for free vortex, as water does not enter exactly tangentially & velocity changes after it enters the cylinder which is not known, it is very difficult to calculate velocity of water exactly, the theoretical calculations deviate much from the observations. It can be readily observed that water comes out from pipe with

high velocity, but velocity of water near the walls of cylinder appears to be very less).

PRECAUTIONS:

1) While making the experiment of forced vortex, see that water does not spill away from the vessel. Do not increase the speed of rotation excessively.
2) Do not start pump for forced vortex experiment.

VIVA QUESTIONS:

1. Define the terms: Vortex flow, forced vortex flow, & forced vortex flow.
2. Differentiate between forced & free vortex flow.

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LAB RECORD

OF

REFRIGERATION & AIR CONDITIONING

DEPARTMENT OF MECHANICAL ENGINEERING

NAME OF STUDENT _____

SEMESTER _____

BATCH _____

ROLL NO. _____

ACADEMIC SESSION _____

CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY
Kailash Nagar, Near Industrial Estate, Bhilai, Distt.-Durg, C.G.
Ph.No. : 0788 2286662/3/4, Fax. No. 0788 2285266
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PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

1. **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design / development of solutions**: 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.
4. **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.
5. **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **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 engineering practice.
7. **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication**: Communicate 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.
11. **Project management and finance**: 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 and in multi disciplinary environments.
12. **Life- long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

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Course Objectives:

The main objective of the course are: to demonstrate the concepts discussed in Computer Integrated Manufacturing course, to introduce CNC part programming for simulation of various machining operations, to educate the students on Flexible Manufacturing System and Robot Programming and also on the hydraulics, pneumatics and electro–pneumatic systems.

Course Outcomes: On successful completion of the course, the student will be able to:

1. Demonstrate an understanding of concepts discussed in Computer Integrated Manufacturing course and its implementation in manufacturing
2. Write CNC part programs using CADEM simulation package for simulation of machining operations such as Turning, Drilling & Milling.
3. Write programs for Flexible Manufacturing Systems.
4. Write programs for Robotics.
5. Demonstrate an understanding of the operating principles of hydraulics, pneumatics and electro–pneumatic systems.

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REFRIGERATION & AIR CONDITIONING

Refrigeration & Air-Conditioning Lab	
Semester: B Tech 7th	**Code: D037721(037)**

Exp.no.	EXPERIMENTS (Minimum 7 Experiments needs to be performed by each students)
1	To study domestic refrigerator.
2	To study the hermetically sealed compressor.
3	To study Refrigeration Tutor and to determine the following:- a. Theoretical coefficient of performance b. Actual coefficient of performance. c. Theoretical capacity of the plant d. Actual capacity of the plant
4	To study the mechanical heat pump and to determine the following:- a. Theoretical coefficient of performance b. Actual coefficient of performance. c. Theoretical capacity of the plant d. Actual capacity of the plant
5	To study the air and water heat pump and to determine the following:- a. Theoretical coefficient of performance of the system as a refrigerator and as a heat pump. b. Actual coefficient of performance of the system as a refrigerator and as a heat pump. c. Capacity of the system in tons as a refrigerator. d. Capacity of the system in kW as a heat pump under the following conditions of operation:- i. Water cooled condenser and water-cooled evaporator. ii. Water-cooled condenser and air-cooled evaporator. iii. Air-cooled condenser and air-cooled evaporator. iv. Air-cooled condenser and water-cooled evaporator.
6	To study the following processes onthe air conditioning test rig: a. Sensible heating b. Sensible cooling c. Sensible cooling/cooling dehumidification d. Humidification and cooling
7	To find the efficiency of cooling tower test rig.
8	To study the simple vapor absorption system.
9	To study the AC Simulator and to determine the following: a. Sensible heating b. Sensible cooling c. COP of R-22 d. Air washer efficiency e. Sensible heat load applied f. Latent heat load applied g. RSHF h. ESHF i. Creation of different climatic conditions in AC simulator

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REFRIGERATION & AIR CONDITIONING

7th SEM MECHANICAL

LIST OF EXPERIMENTS

S.NO.	NAME OF EXPERIMENTS	PAGE NO.	PERFORMED ON	REMARKS
01	To study refrigeration tutor and to determine the following- a. Theoretically co-efficient of performance. b. Actual co-efficient of performance. c. Theoretical capacity of the plant. Actual capacity of the plant.			
02	To study the following processes on the air conditioning test rig- a. Sensible heating. b. Sensible cooling c. Sensible cooling/cooling dehumidification. d. Humidification and cooling			
03	To study the air and water heat pump and to determine the following- a. Theoretical co-efficient of performance of the system as a refrigerator and as a heat pump. b. Actual C.O.P. of the system as a refrigerator and as a heat pump.			

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	c. Capacity of the system in tons as a refrigerator. d. Capacity of a system as kW as a heat pump under the following conditions of operation- i. Water-cooled condenser and water-cooled evaporator. ii. Water-cooled condenser and air-cooled evaporator. iii. Air-cooled condenser and air-cooled evaporator. iv. Air-cooled condenser and water-cooled evaporator.			
04	To study the mechanical heat pump determine the following- a. Theoretical coefficient of perform b. Actual co-efficient of performance c. Theoretical capacity of the plant. d. Actual capacity of the plant.			
05	To study the domestic refrigerator.			
06	To study the hermetically sealed compressors.			
07	To study the simple vapour absorption system.			
08	To find out the efficiency of Cooling tower test rig.			

Signature of Teacher

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GENERAL INFORMATION ON REFRIGERATION AND AIRCONDITIONING

Refrigeration is a process of removing heat at low temperature and rejecting it at a relatively higher temperature. Normally refrigeration is used when temperatures required are lower than the atmosphere.

The media used for providing refrigeration is a fluid called the refrigerant and the process of refrigeration is achieved by different methods such as vapour compression, absorption, steam jet refrigeration system etc.

The most commonly used system is the vapour compression cycle for which either rotary, reciprocating or centrifugal compressors are used. An extensive survey, recommends, reciprocating compressors are to be the best suited for a wide range of application and different sizes.

The most widely used refrigeration application with vapour compressor cycles are air-conditioning and cold storages. In air-conditioning refrigerant in the liquid states is fed to the evaporator through a throttling device and in the process of changing its states from liquid to vapour, it absorb and removes the heat from the space to be air-conditioned. The vapour is compressed to a higher pressure and heat generated is rejected in a condenser to be cooled to the liquid state. This forms the refrigeration cycle in air-conditioning.

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VAPOUR COMPRESSION REFRIGERATION CYCLE

The vapour compression refrigeration cycle is based on the following factors.

(a) Refrigerant rate.
(b) Type of refrigerant used.
(c) Kind of application via air-conditioning, refrigeration, dehumidification etc.
(d) The operating designs parameters.
(e) The system equipments/components proposed to be used in the system.

The vapour compression refrigeration cycle is based on a circulating fluid media, via, a refrigerant having special properties of vaporizing at temperatures lower than the ambient and condensing back to the liquid form, at slightly higher than ambient conditions by controlling the saturation temperature and pressure.

Thus when the refrigerant evaporates or boils at temperature lower than ambient, it extracts or removes heat from the load and lowers the temperature and pressure consequently providing cooling.

The super- heated vapour pressure is increased to a level by the compressor to reach a saturation pressure so that heat added to vapour is dissipated/rejected into the atmosphere, using operational ambient conditions, with cooling medias such as air or water. The vapour is condensed to the liquid form and recycled again to form the refrigeration cycle.

The components used are -:

(a) Evaporator
(b) Reciprocating compressor
(c) Throttling device
(d) Condenser and receiver

The refrigeration cycle can be explained schematically in the two diagrams show in fig. 1 and 2(a) & 2(b).

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(1) Schematic refrigeration cycle with components.
(2) The vapour compression cycle on the mollier diagram.

The working of vapour compression refrigeration cycle and function of each of the above components is given below.

EVAPORATOR

The liquid refrigerant from the condenser at high pressure is fed through a throttling device to an evaporator at a low pressure. On absorbing the heat to be extracted from media to be cooled, the liquid refrigerant boils actively in the evaporator and change state. The refrigerant gains latent heat to vaporize at saturation temperature/pressure and further absorbs sensible heat from media to be cooled and gets fully vaporized and super-heater. The "Temperature-Pressure Relation Chart" table 1 can determine the pressure and temperature in the evaporator.

COMPRESSOR

The compressor is known as heart of the refrigeration system. It pumps the refrigerant vapour in refrigeration cycle as the heart pumps blood in the body. The low temperature, pressure, superheated vapour from the evaporator is conveyed through suction line and compressed by the compressor to a high pressure, without any change of gaseous state and the same is discharged into condenser. During this process heat is added to the refrigerant and known as heat compression. The compressor should have a compression ratio to raise the pressure of refrigerant to such a level that the saturation temperature of the discharge refrigerant is higher than the temperature of the available cooling medium, to enable the super-heated refrigerant to condense at normal ambient condition.

Different types of compressors are reciprocating, rotary and centrifugal and are used for different applications.

CONDENSER

The heat added in the evaporator and compressor to the refrigerant is rejected in condenser at high temperature/high pressure. The super-heated refrigerant vapour enters the condenser to dissipate its heat in three stages. First on entry the refrigerant losses its super-heat, it then losses its latent heat at which the refrigerant is liquidified at saturation temperature pressure. These liquid losses its sensible heat, further and the refrigerant leaves the condenser as a sub-cooled liquid.

The heat transfer from refrigerant to cooling medium (air or water) takes place in the condenser. The sub-cooled liquid from condenser is collected in a receiver (whenever provided) and is then fed through the throttling device by liquid line to the evaporator.

There are several methods of dissipating the rejected heat into the atmosphere by condenser. These are water-cooled, air-cooled or evaporative cooled condensers.
In the water cooled condenser there are several types viz. shell and tube, shell and coil, tube in tube etc. In evaporative cooled condensers both air and water are used. Air-cooled condensers are prime surface type, finned type or plate type.

The selection of type depends upon the application and availability of soft water.

THROTTLING DEVICE

The high-pressure liquid from the condenser is fed to evaporator through a throttling device, which should be designed to pass maximum possible liquid refrigerant to obtain a good refrigeration effect. The liquid the should be property sized to have minimum pressure drop.

The throttling device is a pressure reducing and a regulator for controlling the refrigerant flow. It also reduces the pressure from the discharge pressure to the evaporator pressure without any change of state of the liquid refrigerant.

The types of throttling devices are -:

- Capillary Tubes
- Thermostatic expansion valves
- Hand expansion valves
- Hand valves

The most commonly used throttling device is the capillary tube for applications upto approximate 10 refrigeration tons. The capillary is a copper tube having a small dia-orifice and is selected, based on the system design, the refrigerant flow rate, the operating parameters (such as suction and discharge pressures), type of refrigerant, capable of compensating any variations in load by allowing only liquid refrigerant to flow to the evaporator.

SUMMARY

The working pressures, temperatures and states of the refrigerant in different parts of the refrigeration cycle are shown in fig.

There are mainly two pressures operating in the refrigeration cycle, commonly known as the high side and the low side. The "High Side" is referred to high pressure prevailing from compressor onward right upto the inlet of the throttling device and from the throttling device upto the suction of the compressor is called the "Low Side".

VAPOUR COMPRESSION REFRIGERATION CYCLE DIAGRAM (MOLLIER DIAGRAM)

Earlier the state of the refrigerant in various parts of the refrigeration system, along with the pressures, temperatures etc. have been covered. It is now necessary to understand the individual thermodynamic processes that make up the cycle and also understand the effect of change in a particular part of the cycle on the overall complete cycle. These aspects are greatly simplified by the use of proper charts and diagrams, in which the process, and the complete cycle can be graphically represented for different conditions.

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There are two types of representation in use which are -:

1. The pressure-enthalpy (PH) diagram also known as the mollier diagram.
2. The temperature-enthalpy diagram (TS).

Of these, the pressure-enthalpy (PH) diagram is more commonly used and is explained here under.

MOLLIER DIAGRAM

The mollier of pressure-enthalpy (PH) diagram for a refrigerant is a graph with a number of curves from which various properties of the refrigerant under different conditions of phases can be read.

The curves are drawn by using the values taken from thermodynamic tables of the refrigerant, both at saturation and super-heated conditions. The pressures are represented on the ordinate (left vertical line) and the enthalpy (total heat content) in Btu/lb. are taken on abscissa (bottom horizontal line).

Since pressure and temperature have definite relation at saturation, the horizontal pressure lines can also represent constant temperatures and the diagrams are also termed as temperature-enthalpy diagrams. The charts include a curve, which indicates saturation line showing different states of refrigerant.

The chart is divided into three areas, which are separated from, each other.

(a) Saturated liquid
(b) Saturated vapour
(c) The area in between the two having a mixture of liquid and vapour.

PROCESSES:

1. Points falling on the left side saturated liquid curve represent Sub-Cooling.
2. Points on the right side of saturated vapour curve represent Superheating.
3. The horizontal distance between the two curves represent difference in enthalpy level between saturated vapour and liquid at specific pressure and is equal to latent heat of vaporization at the saturation pressure/temperature.

For known values of saturation pressures on high side and low side (PH) diagram or mollier diagram is shown in fig.

For simplification only saturated pressures are assumed. Four processes in refrigeration cycle are explained below:

(a) COMPRESSION

In compressor (vertical line 1-2 on diagram) the compression is assumed as adiabatic (constant enthalpy). No heat is added or subtracted to the refrigerant vapour from outside. The vapour is saturated at the beginning and end of compression. In actual practice, the vapors are super-heated at beginning and end of compression shown by dotted line 1'-2'.

(b) CONDENSER

In condenser (horizontal line 2-3 on diagram) the condensation of refrigeration takes place at constant pressure. The drop in enthalpy (total heat content) is equal to latent heat of condensation (or vapourisation) at saturation pressure. The process is shown by line 2-3 on diagram. The liquid at point 3 is saturated. In actual practice, the vapour is super-heated at beginning of condensation and sub-cooled at end of condensation. The process is shown by line 2'2-3'3. The refrigerant changes its state from vapour to liquid in this process.

(c) THROTTLING

In throttling device (shown by line 3-4 in diagram) this is an adiabatic process, the pressure drop occurs in refrigerant constant enthalpy i.e. on heat transfer occurs between refrigerant and outside. The refrigerant is saturated liquid point 3 and mixture of vapour and liquid at point 4. For sub-cooled liquid the process is shown by dotted line 3'-4'.

(d) EVAPORATION

In evaporator (shown by line 4-1 in diagram) the evaporation of liquid refrigerant takes place at constant pressure. The refrigerant gains latent heat from surrounding medium to be cooled. The refrigerant is saturated vapor at end of evaporation at point 1. The net refrigerating effect is obtained by projection of 1 and 4 on line 0-x i.e. 01-04. In actual cycle taking sub-cooled of liquid refrigerant in condenser and super-heating of refrigerant vapour in evaporator, the net refrigerating effect would be 01-04'. It is seen to obtain better refrigerating effect, sub-cooled in condenser and super-heating in evaporator is essential.

SUMMARY

From mollier diagram the following are known :-

- Sequence of various process involved in the refrigeration cycle
- Refrigerating effect, compression, condensation, throttling

Following can be computed from mollier diagram.

- Refrigerating effect
- Heat equivalent of work done in compression
- Pressure drop in throttling device
- Coefficient of performance and power requirements
- Efficiency of refrigeration cycle
- Power consumption of EER.

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EXPERIMENT NO: 01

REFRIGERATION CYCLE TEST RIG

AIM:

To study refrigeration tutor and to determine the following-

a. Theoretically co-efficient of performance.
b. Actual co-efficient of performance.
c. Theoretical capacity of the plant.
d. Actual capacity of the plant.

DESCRIPTION:

This is a Refrigeration trainer. In this unit various type of experiments can be conducted. The unit is equipped with Kirloskar, Copland, ISI, CAJ-34 model compressor operate on 220Volt AC supply and works on free on F-12. The unit is fitted on sun mica base with compressor air cooled condensor, fan motor, receiver, liquid line indicator, drier, solenoid valve, thermostatic expansion valve, capillary tube expansion valve, flow meter, liquid diversify valves, water caloric meter (cooling coil), suction gauge, discharge gauge, digital temp. Indictor with probe to measure T_1, T_2, T_3, T_4, T_5, & T_6 temp. Heater inside the caloric meter, cooling thermostat, heating thermostat, LPHP cut out other valves to control the liquid and one number charging valve provided to charge the liquid refrigerant. The voltmeter, amp. meter for compressor, amp. meter for heater, energy meter for compressor, energy meter for heater and switch have been provided which are duly interlocked for safety point of view.

PROCEDURE:

1. Switch on main Board, Check Voltage. It should not be less than 190 Volts.
2. Close the Rotameter inlet and outlet by pass valves.
3. Open the Hand shut-off valve on the mode either thermostatic expansion valve or capillary tube expansion valve.
4. Switch on the solenoid valve, when using the mode of Thermostatic Expansion valve.
5. Start the condenser for Fan motor.
6. Switch on the Compressor.

7. See that all the respective indication lights are on.
8. Check and note down the voltage and Amp. of unit.
9. Put the water in the Evaporative Tank / Calorimeter.

Note: Do not runt the unit / or never switch on the Heater without putting water in the evaporative tank.

10. Adjust the cooling thermostat according to your requirement.
11. At the time of start the unit, note not down the reading of Voltage, Amp. Suction and Discharge Gauge – Pressures, Reading of Energy meter for compressor.
12. Check and note down the reading of various temperature through Digital Temp. Indicator, such as T-1, T-2, T-3, T-4,T-5, and T-6 according.
13. Check that the Receiver service valves mist is open during start of the compressor.
14. Always close the door of the Evaporator / Calorimeter.
15. Note down the readings of the various pressure gauges, Absence of any reading will indicate the blockage of pipeline or leakage of Gas.
16. After the gap of 15 minutes start the Agitator motor for two minutes for equalization of the water temperature and note down all the readings.
17. Always run the unit with one Expansion Device, either by expansion valve or capillary tube expansion valve and note down the differences of temperatures and pressures, amps flow rate, etc.
18. While taking the reading of the Rotameter, switch on the Solenoid valve, slightly open by pass valves of the Rotameter; Close the main line and all the (Hand shut of valves) Note down the reading. The Rotameter will show the flow of the liquid refrigerant. The flow rate of the liquid Refrigerant is depending upon the observation of the liquid flowing in the line per minute.
19. While taking the reading of the Rotameter, Through – Capillary Tube Expansion valve. Similarly take reading of Temperatures, Pressures and mass flow rate through Rotameter.
20. After taking the reading, immediately close By-pass valves of the Rotameter.
21. As for the Rotameter is a very much delicate measuring Instrument. So for do not start your unit through Rotameter. Otherwise your Rotameter will Blast out. Use the Rotameter only

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at the time of your experiments. Further, always close the By-pass valves of the Rotameter.

22. Adjust the low pressure and High Pressure cutout.
23. Since the low pressure / and High Pressure cut out is a saving devices. LP will cut down the unit on lower pressure and HP will cut out on High Pressure. HP will cut out on increase of Head Pressure and LP will cutout at the time of Leakage of Gas or close of Receiver Service Valves/Hand Shut off valves.
24. Now let the unit run directly or through either capillary tube Exp. valve or Thermostatic Expansion valve without opening By-pass valves of Rotameter and note down the readings.
25. Now if you want to provide or test load on our compressor.

    a. Switch on Heater.
    b. Adjust the Heating thermostat its range must not go ahead more than 35°C as per ISI conditions.
    c. Adjust the Dimmer state for Heating element.
    d. Check and note down the reading of voltage, Amp. meters, Energy meter for Heating and Energy meter for compressor.
    e. Check and note down the reading of temperatures, pressures and Energy.
    f. Now let the units run at least 10 to 20 minutes.
    g. Switch on the Agitator motor for 2 minutes for Equivalation of water Temperature.
    h. Check Water Temperature through Digit Temp. Indicator. It must not go ahead 35°C.
    i. Again take at least 2 to 3 readings with Rotameter and without Rotameter, with thermostatic Expansion valve or with capillary tube Expansion valve according to your requirements.
    j. After taking your necessary results, Switch off the Heating Process It the unit run with Compressor cooling process.
    k. While closing the unit, first switch off compressor, condensor Fan motor and all the valves and switches on the unit.
    l. Always Check the Indication lights provided on the Board for each component.

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PRECAUTIONS:

1. Check the voltage. It should not be less than 220/230 Volts Single Phase 60 Hz AC supply.
2. Do not run the condensor, without switch on the Fan motor.
3. Do not start the unit, before putting the water in the Evaporative Tank/ water Tank.
4. Whenever the compressor is switched off. Do not switch on the Compressor, before five minutes of Interval.
5. Mount Rotameter Vertically and maintain upwards flow run.
6. Avoid sudden opening / closing of the Hand Shut off valve in the line to Prevent Float hunting and possible glass tube breakage. For this our company will not responsible for Replacement / Repair of the Rotameter.

PUMP DOWN THE GAS.

1. Start the unit and run at least 15 to 20 minutes and check the voltage, Amp. meter, and Gauges Both suction and Discharge gauges.
2. Close the receiver services valves and see that all the controls mounted on the liquid line should be open.
3. Run the unit at least 15 to 20 minutes and see the gauge Pressure, if there is 0 in the gauges, after expansion valves and suction line, and stop the unit with switch off the main switch and all other switches and valves.
4. Now you can also replace any part of the unit, if defective, replace, the parts if any and put it again in the line and light the same.

AGAIN RESTART THE UNIT

1. Check the voltage.
2. Open the Receiver Service valves.
3. Open all the Hand shut off valves (See Rotameter By-pass valves must be closed.)
4. Start the Unit Switch on the main switch.
5. Note down the readings of voltage, amp. meters, Energy meter's Pressure gauges, Dial type thermometers, Readings of glass thermometers etc.
6. Now continuously run your unit, accordingly as per your requirement of experiments. Take at least 2 to 3 readings and close the unit.

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OBSERVATION TABLE:

Take the difference pressures & temperature readings:-

S.N.	Pressures		Temperatures					Rota Meter Mass	V	I
	P1	P2	T1	T2	T3	T4	T5	Flow rate Kg/min.		

Where

T1, P1 Compressor outlet temperature and pressure.
T2 Condensor outlet temperature
T3,P2 Compressor inlet temperature and Pressure.
T4 Calorimeter temperature.
T5 Ambient temperature.

Also not down value of mass flow rate, voltage, current & final value of energy meter.

Now to Calculate C.O.P. of Refrigeration cycle.

$$C.O.P. = \frac{Q}{W} = \frac{\text{Heat Extracted Evaporator.}}{\text{Work done.}}$$

$$= \frac{(h_1 - h_2)}{(h_3 - h_4)}$$

h_1= Enthalpy of refrigeration effects at inlet.

h_2= Enthalpy of refrigeration effects before compressor.
h_3= Enthalpy of refrigeration effects outlet of compressor.
The values of h1, h2, h3 can be calculated from p-h chart at follows. Plot the respective pressure & temperature on p-h chart & find the respective enthalpies on these points. Putting these values in formula we get the C.O.P.

Conversion Factors

1ton of Refrigeration	=	12000 Btu/hr. = 3024 Kcal /hrs.
	=	3519watts
1 Kcal	=	4.187 KJ
1ton	=	4.717H.P.
1kg. per cm^2	=	14.22 Lb per $inch^2$
1kg. per cm^2	=	9.81 N/m^2
1Lb per $inch^2$	=	$\frac{9.81 \times 10^4\ N/m^2}{14.22}$
1Atmospheric pressure	=	1.033kg/Cm = 14.7 PSI
1H.P.	=	746 Watts
1Unit of Electricity	=	1000 Watts/Hr.
1kg	=	2.205 Pound

VIVA QUESTIONS:

1. What is refrigeration?
2. What are the applications of refrigeration?
3. What do you understand by coefficient of performance?
4. What is the standard rating of a refrigeration machine?
5. Enumerate different ways of producing refrigeration?

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EXPERIMENT NO: 02

AIR CONDITIONING TEST RIG

AIM:

To study the following processes on the air conditioning test rig-

a. Sensible heating.
b. Sensible cooling
c. Sensible cooling/cooling dehumidification.
d. Humidification and cooling

PROCEDURE :

1) Switch on main board check voltage. It should not be less than 190 volts
2) Close the rotameter inlet and outlet valves.
3) Open the hand shut-off on the mode either first capillary or second capillary.
4) Start the unit stepwise with condenser fan motor and then compressor.
5) See that all the respective indication lights are on.
6) Check the Amp. Meter -:
   Initially it shell is 15 Amp. And then it will gradually decrease 10 to 12 Amp. It should not exceed 10 Amp. Check for voltage condenser fan motor, more amperes reading load on the compressor.
7) Note down the reading of amp. meter, voltmeter, energy-meter for compressor- motor, compressor, condenser cooling fan motor etc.
8) Note down the reading of the various pressure gauges. Absence of any reading will indicate the blockage of pipeline or leakage of gas.
9) Lower limit for suction pressure is = 50 psi, lower than this indicate less gas flow evaporator. Upper limit of suction pressure is = 80 psi, more than this indicates more gas flow or condenser fan not properly functioning.
10) Cutout should be operated at suitable points – LP at 30 or 35 psi and HP at 300 to 350 psi, differential is 7 to 10 psi for both LP and HP cutout.
11) Discharge pressure – 325 to 350 psi more value indicate improper condensation, condenser fans may not be working or respecting valve shell be closed.

12) Note down the reading of DBT and WBT.
13) Take down the reading of various temperatures.
14) Please note that machine should run on only by expansion device (i.e. either capillary.
15) To take reading on rotameter close the main valve and open bypass valve for rotameter inlet and outlet reading will be Kg / min.
16) To disconnect the rotameter open the main valve then close the bypass valves (inlet & outlet of rotameter).
17) While switching off the machine first switch off the heater of in services, switch off the compressor, condenser fan motor, blower fan motor electrical components fitted on the panel board, then switch off the panel then switch off the main-board.

PUMP DOWN THE GAS

1) Start the unit run at least 15 to 20 minutes check the voltage, Amp.meter and gauges both suction and discharge gauges.
2) Close receiver services valves and see that all the controls mounted on the liquid line should be open.
3) Run the unit at least 15 to 20 minutes and see the gauge pressure, if there is 0 in the gauges, after expansion valve and suction valve line and stop the unit with switch off the main switch and all other switches and valves.
4) Now you can also replace any part of the unit, if defective replace the part if any and put it again in the line and light the same.

IMPORTANT CAUTIONS

1) Check the voltage, it should not be less than 200/240 volts. Single phase 50 hz AC supply.
2) Check the water in the boiler before switching on the boiler.
3) Do not run the compressor, without switch on the fan motor.
4) Do not switch on the heater without switch on the blower fan motor.
5) Whenever the compressor is switched off, do not switch on the compressor before five minutes of interval.
6) Mount rotameter vertically and maintain upwards flow run.

7) Avoid sudden opening/closing of the hand shut off valve in the line to prevent float hunting and possible glass tube breakage. For this our company will not responsible for replacement / repair of the rotameter.

OBSERVATION TABLE:

S.N.	Pressure (PSIG)		Temperature (^{0}F)				V	I
	P_1	P_2	T_1	T_2	T_3	T_4		

Where, T_1, P_1 are compressor outlet temperature and pressure.
T_2, P_2 are condenser outlet temperature and pressure.
T_3 Compressor suction temperature.
T_4 Cooled air temperature.
T_5 Ambient temperature.

	Cooling		Heating		Steam	
	WBT	DBT	WBT	DBT	WBT	DBT
Fresh Air						
Conditioned Air						

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VIVA QUESTIONS:

1. Define an 'air conditioning system'. Name its basic elements.
2. Enumerate the main parts of the equipments in the air conditioning cycle.
3. How is air conditioning system classified?
4. What is the difference between summer air conditioning & winter air conditioning?
5. List the applications of air conditioning.

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Criterion 1

LABORATORY MANUALS

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Criterion 1

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EXPERIMENT NO: 03

WATER COOLER TEST RIG

AIM:

To study the air and water heat pump and to determine the following-

a. Theoretical co-efficient of performance of the system as a refrigerator and as a heat pump.
b. Actual C.O.P. of the system as a refrigerator and as a heat pump.
c. Capacity of the system in tons as a refrigerator.
d. Capacity of a system as kW as a heat pump under the following conditions of operation-
   i. Water-cooled condenser and water-cooled evaporator.
   ii. Water-cooled condenser and air-cooled evaporator.
   iii. Air-cooled condenser and air-cooled evaporator.
   iv. Air-cooled condenser and water-cooled evaporator.

DECRIPTION:

This is a vapour compression water cooler test rig. In this unit various types of experiments can be conducted. The unit is equipped with kirlosker Copeland, ISI, CAJ-2612M model compressor. Operate on 220 volts AC supply and works on R-12. The unit is fitted on sun mica base with compressor air cooled condenser, condenser fan motor; receiver, liquid line indicator, drier, solenoid valve, thermostatic expansion valve, capillary tube expansion valve, flow meter, liquid diversify valves, water cooler evaporator, suction gauge, discharge gauge, digital temp. indicator with prove to measure T_1, T_2, T_3, T_4, T_5 & T_6 temp. heater inside the geyser, water flow rotameter provided with water flow control valve, water pump, LPHP cut out, other valves to control the liquid and one number charging valve provided to charge the liquid refrigerant. The volt meter, Amp. meter for compressor, Amp. meter for heater, energy meter for compressor, energy meter for heater and switch have been provided which are duly interlocked for safety point of view.

PROCEDURE:

1. Switch on main board, check voltage. It should not be less than 190 volts.
2. Close the rotameter inlet and outlet By Pass Valves.
3. Open the hand shut off valve on the mode either thermostatic expansion valve or capillary tube expansion valve.
4. Switch on the solenoid valve, when using the mode of thermostatic expansion valve.
5. Start the condenser fan motor.
6. Switch on the compressor.
7. See that all the respective indication light is on.
8. Check and note down the voltage and Amp. of the unit.
9. Put the water in the water cooler tank.

Note: Do not run the unit / or never switch on the heater without putting Water in the evaporated tanks/ water cooler tank.

10. At the time of start the unit, note down the reading of voltage, Amp. Suction and discharge gauges, pressures, reading of energy meter for compressor.
11. Check and note down the reading of various temperature through digital temp. indicator.
12. Check that the receiver service valves must be open during start of the compressor.
13. Always close the door of the water cooler.
14. Note down the reading of the various pressure gauges, absence of any reading will indicates the blockage of pipeline or leakage of gas.
15. Always run the unit with one expansion device either by the expansion valve or capillary tube expansion valve and note down the differences of temperature and pressure, rotameter flow rate etc.
16. While taking the reading of the rotameter, with solenoid valve, slightly open by pass valves of the rotameter, close the main line, hand shut off valves note down the readings. The rotameter will show the flow of the liquid refrigerant. The flow rate of the liquid refrigerant is depending upon the pressure of the liquid flowing in the line per minute.

17. While taking the reading of the rotameter, through capillary tube expansion valve, switch off the solenoid valve, open the hand shut of valve for capillary, tube expansion valve you will find that our limit is running through capillary tube expansion valve, similarly. Take reading of temperature, pressure and mass flow rate through rotameter.
18. After taking the reading, immediately close by-pass valves of the rotameter.
19. As for the rotameter is a very much delegate-measuring instrument. So for do not start your unit through rotameter. Otherwise your rotameter will blast out. Use the rotameter only at the time of your experiments. Further always close the by-pass valves of the rotameter.
20. Adjust the low pressure and high-pressure cutout.
21. Since the low pressure and high pressure cutout is a saving devices. LP will cut down the unit on low pressure and HP will cutout on high pressure. HP will cutout on increase of head pressure and LP will cutout at the time of leakage of gas or close of receiver service valves / head shut off valves.
22. Now let the unit runs directly through either capillary tube exp. Valve or thermostatic expansion valve without opening by-pass valves of rotameter and note down the reading.
23. Now if you want to provide test load on compressor.

(i) Switch on heater.
(ii) Adjust the temperature its range must not go a head more than 45 ^{o}C for 15 minutes. If the machine is running for more then 15 minutes then temp. must be less than 40 ^{o}C.
(iii) Adjust the dimmer stat for heating element.
(iv) Check and note down the reading of voltage, Amp. meter energy meter for heating and energy meter for compressor.
(v) Check and note down the reading of temperature, pressure and energy.
(vi) Now let the unit runs at least 15 minutes.
(vii) After taking your necessary results, switch off the heating process let the unit run with compressor cooling process.
(viii) While closing the unit first switch off compressor, condenser fan motor and all the other valves and switches on the unit.
(ix) Always check the indication lights provided on the board for each component.

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PRECAUTIONS:

1. Check the voltage, it should not be less than 220/230 volts. Single phase 50 Hz Ac supply.
2. Do not start the compressor without switch on the condenser fan motor.
3. Do not start the unit, before putting the water in the evaporated tank/water cooler tank.
4. Whenever the compressor is switched off. Do not switch on the compressor, before five minutes of interval.
5. Mount rotameter vertically and maintain upwards flow run.
6. Avoid sudden opening/closing of the hand shut off valve in the line to prevent float hunting and possible glass tube breakage. For this our company will not responsible for replacement / repair of the rotameter.

PUMP DOWN THE GAS

1. Start the unit and run at least 15 to 20 minutes and check the voltage, Amp. meter and gauge both suction and discharge gauge.
2. Close the receiver services valves and see that all the controls mounted on the liquid line should be open.
3. Run the unit at least 15 to 20 minutes and see the gauge pressure, if there is 0 in the gauge, after expansion valve and suction line and stop the unit with switch off the main switch and all other switches and valves.
4. Now you can also replace any part of the unit, if defective the parts if any and put it again in the line and light the same.

TO RESTART THE UNIT

1. Check the voltage.
2. Open the receiver service valves.
3. Open all the hand shut off valves (see rotameter by-pass valves must be closed)
4. Start the unit with switch on the main switch.
5. Note down the reading of voltage, Amp. meter, energy meter, pressure gauge, dial type thermometers, reading of glass thermometers etc.
6. Now continuously run your unit, accordingly as per your requirement of experiments. Take at least 2 to 3 reading and close the unit.

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COMPRESSOR SECIFICATIONS:

Rating	–	High temperature R-12 group
Compressor model	–	CAJ 2612m
No. of cylinder	–	1
Displacement per rev.	–	Cu. inch: 1.114; Cc: 18.27
Rated cooling capacity	–	BTU / hr.: 5100; Kcal/hr.: 1285
Refrigerant	–	R-12
Motor circuit	–	CSIR
Compressor cooling	–	FAN 350 CFM
At rating condition	–	Current (Amp.): 4.0; Watts: 675
LRA at rated voltage	–	24
Operating voltage range	–	180 – 260 V
Oil refrigeration grade CC	–	890
Approximate weight kg.	–	21
Rating condition	_	High temp. R-12
Ambient temp.	–	35 °C / or 95 °F
Evaporating temp.	–	7.2 °C / or 45 °F
Condenser temp.	–	55 °C / or 131 °F
Subcooled liquid temp.	–	46 °C / or 115 °F

Suction gas temp.	–	35 °C / or 95 °F	
Refrigerant	–	R-12	
Suction pressure	–	PSIG	kg / cm²
		41.9	2.9
Discharge pressure	–	PSIG	kg / cm²
		180	12.6

COEFFICIENT OF PERFORMANCE OF REFRIGERATION CYCLE

The coefficient of performance (C.O.P.) is the ratio of heat extracted in the evaporator to the work done on the refrigerant. It is also called the theoretical C.O.P. and given as -:

$$\text{Theoretical C.O.P.} = \frac{Q}{W}$$

PRESSURE ENTHALPY (p – h) CHART

It is the most convenient chart for studying the behavior of a refrigerant. It is used to find the C.O.P. of the unit if the pressure and temperature are known of –

h_3 = Enthalpy or total heat of refrigerant at the outlet of the compressor.
h_2 = Enthalpy of refrigerant before it enters the compressor.
h_1 = Total heat of refrigerant at the inlet of the evaporator.

Then $$\text{C.O.P.} = \frac{h_2 - h_1}{h_3 - h_2}$$

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TEST & CALCULATION PROCEDURE:

1. Fill the storage tank up to the rated valve (60lt.)
   - Then switch on the main supply and start the pump with full flow rate for one minutes to equalize the temperature. Note down the water outlet temp.
   - Now start the cycle with all the precautions required. Note down the initial reading of energy meter and keep the flow rate as 60 lt. / hr.
   - Run the unit hour take the reading for different pressures & temperatures. The pressures are –
     a) Compressor outlet.
     b) Condenser outlet.
     c) Expansion outlet.
     d) Compressor inlet.

   (Note – The sequence of gauge from left to right in machine will give the above sequence)

   - Similarly we can get the different temp. from the temp. indicator by rotating the knob at desired number. The sequence is as follows:-
     a) Compressor outlet.
     b) Condenser outlet.
     c) Evaporator inlet.
     d) Evaporator outlet.
     e) Water outlet.
     f) Water inlet.

   (Note down the value of mass flow rate, voltage current and the final value of the energy meter.)

2. After one hour set the water inlet at any desired temp. (say 35 ^{o}C). And take the reading after 15 minute. Keep the flow rate of water at 60 lt. / hr.
   - After 15 minute change the water inlet temp. further and take the readings for next 15 minutes
   - If there is any variation in values of mass flow rate voltage and current then take the mean value for calculation.
   - The observation can also be taken by changing the water flow rate and keeping the temp. constant at any value depending upon the time available for the test.

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OBSERVATION TABLE:

S.N.	Pressure PSIG		Pressure	Mass Flow Rate (Kg/min)	Energy Meter (KWH)		Voltage (V)	Water Flow Rate (Lt/hr)	Current (Amp.)	
	P_1	P_2								

T_1	T_2	T_3	T_4	T_5	T_6

CALCULATION:

1. To find the C.O.P

Convert the pressure from PSIG to PSIG by using formula –

1 PSIA = 14.696 + 1 PSIG

- Convert the temperatures from ºC to 0F by using formula –

$$\frac{C}{5} = \frac{F - 32}{9}$$

- Now draw the pressure enthalpy chart (p – h) chart according to the reading of pressure and temperatures,
- Find the enthalpies h_3, h_2, h_1 at the point's compressor outlet, compressor inlet and evaporator inlet respectively. Then

$$C.O.P. = \frac{h_2 - h_1}{h_3 - h_2}$$

2. To find the cooling capacity

- Change the unit of the mass flow rate (m_1) according to the unit of enthalpy. Suppose the enthalpy is in BTU / LBM then change the mass flow rate from kg / min. to lb / min.
- Cooling capacity m_1 ($h_2 - h_1$) x 60 BTU vapour absorption system / hr.

12000 BTU / hr. = 3024 kcal / hr.
1TR = 3017.8 = 3018 kcal / hr.

- Cooling capacity depending upon the storage capacity

Storage capacity = 60 lt.
Let the water inlet temp. = x ^{0}C
Let the water outlet temp. = y ^{0}C

$$\text{Then cooling capacity} = \frac{60 \times (x - y)}{3000} \quad \text{TR}$$

- If heating is continued to maintain the inlet water temp. during the test. Then add the heating capacity in the cooling capacity to find the capacity of the unit.

$$\text{Heating capacity} = \frac{\text{Power consumed} \times 3.14}{12000} \quad \text{TR}$$

- The power consumed can be taken from the energy by subtracting the initial value from the final and also can be found out taking product of voltage and current.

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VIVA QUESTIONS:

1. What are the types of water-cooled condensers?
2. What do you understand by fouling factor?
3. Write down the Dittus-Boelter equation for waterside coefficient.
4. Give the Grimson's equation for airside coefficient.
5. What are the differences between ordinary & pressure type coolers?
6. What is the basic constructional difference between Jai & Wox coolers?

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EXPERIMENT NO: 04

MECHANICAL HEAT PUMP

AIM :

To study the mechanical heat pump and to determine the following-
a. Theoretical coefficient of performance.
b. Actual co-efficient of performance.
c. Theoretical capacity of the plant.
d. Actual capacity of the plant.

PROCEDURE:

1. Switch on the main board check voltage. It should not be less than 190 volts.
2. Fill the condenser an evaporator tank with water by switching on the pumps.
3. Switch on the compressor.
4. See that all the respective indication lights are on.
5. Check that the receiver service valves must be open during start of the compressor.
6. The condenser and evaporator should be closed at the top.
7. Now proceed the experiment according to the test procedure given a head.

PRECAUTION:

1. Adjust the low pressure and high-pressure cutout. Since the low pressure and high pressure cutout is a saving device. LP will cut down the unit on low pressure and HP will cutout on high pressure. HP will cutout on increase of heat pressure and LP will cutout at the time of leakage of gas or close of receiver service valves / hand shut off valves.
2. Do not start the unit before filling the water in the evaporator tank and in condenser also.
3. Whenever the compressor is switched off. Do not switch on the compressor before five minutes of interval.
4. Mount rotameter vertically and maintain upwards flow run.
5. Avoid sudden opening and closing of the hand shut off valve in the line to prevent float hunting and possible glass breakage for this our company will not responsible for replacement / repair of rotameter.

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PUMP DOWN THE GAS

1. Start the unit and run at least 15 to 20 minutes and check the voltage, Amp. meter and gauge both suction and discharge gauge.
2. Close the receiver service valves and see that all the control mounted on the liquid line should be open.
3. Run the unit at least 15 to 20 minutes and see the gauge pressure, if there is 0 in the gauges, after expansion valve and suction line and stop the unit with switch off the main switch and all other switches and valves.
4. Now you can also replace any part of the unit, if defective the parts if and put it again in the line and light the same.

TO RESTART THE UNIT

1. Check the voltage.
2. Open the receiver service valves.
3. Open all the hand shut off valves.
4. Start the unit with switch on the main switch.
5. Note down the reading of voltmeter, Amp. meter, energy meter's pressure gauges etc.
6. Now continuously run your unit accordingly as per your requirement of experiments. Take at least 2 to 3 reading and close the unit.

TEST & CALCULATION & PROCEDURE:

1 - Start the machine keeping all the precautions in mind that are given in operation manual.

- Fully open the valve to given maximum refrigerant flow.
- Note down the initial reading of energy meter.
- Adjust the water flow rate for condenser and evaporator as 80 LPH taking care not to flood the tank.
- Allow the equipment to stabilize and after 30 minutes take temperatures:
  a) Inlet temp. of water to condenser.
  b) Outlet temp. of water coming out of condenser.
  c) Inlet temp. of water to evaporator.
  d) Outlet temp. of water from evaporator.
  e) Compressor outlet temp.
  f) Condenser outlet temp.

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OBSERVATION TABLE:

S.N.	Pressure		Temperature						Rotameter Reading	V	I	T_7	T_8
	P_1	P_2	T_1	T_2	T_3	T_4	T_5	T_6					

The values h_1, h_2, h_3 i.e. enthalpies can be taken PH chart to plot the PH chart, make the respective pressures and temperatures on the PH chart and find the respective enthalpies.

To calculate power consumption by compressor -:

$$W = VI \cos \phi$$

Where

V = Voltage from voltmeter
I = Current in Amp. from Amp. meter
Cos ϕ = Power factor = 0.8 (Std.)

Note -: Convert the pressures from PSIG to PSIA or to pressure unit as given on your Ph chart.

1 PSIA = 1 PSIA + 14.696

- Convert the temperatures from ^{0}C to ^{0}F by using the formula.

$$\frac{C}{5} = \frac{F - 32}{9}$$

Compressor outlet = h_3
Evaporator outlet = h_2
Evaporator inlet = h_1

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1) **Theoretical C.O.P.**

- The COP for refrigeration in given as -:

$$(COP)_R = \frac{h_2 - h_1}{h_3 - h_2}$$

- The EPR or COP for the heat pump is given as -:

$$(COP)_{HP} = \frac{h_3 - h_1}{h_3 - h_2}$$

And $(COP)_{HP} = (COP)_R + 1$

2) **Actual COP** – It is found that the actual COP is always less than the theoretical , the actual COP is defined by the equation.

$$COP\ (Actual) = \frac{\text{Heat obtain from the condenser (BTU/hr.)}}{\text{Heat equivalent of electric energy input to compressor motor}}$$

$$COP\ (Actual) = \frac{MCp\ (\Delta T) \times 60\ (BTU/hr.)}{\text{Power from energy meter (Kw)} \times 3400}$$

Where M = Mass flow rate of refrigerant.
ΔT = Difference in inlet and outlet temp. of water circulating in condenser.
Cp = Specific heat of water.

3. **Heating Capacity**

Heating capacity = M ($h_3 - h_1$) x 60 BTU/hr.
12000 BTU/hr. = 3024 kcal/hr.

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VIVA QUESTIONS:

1. Why heat pump is most efficient when used for heating purposes?
2. Suggest the different constructional features used in heat pump to improve the overall EPR.
3. Explain the use of heat pump for heating & cooling cycle.
4. Give the industrial applications of heat pumps.
5. In brief what are the heat sources for heat pump?

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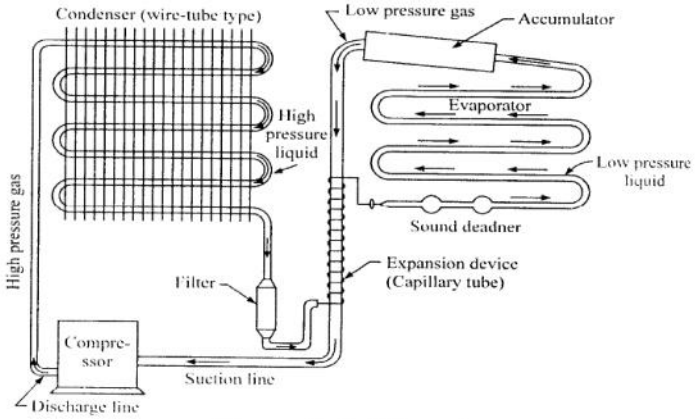
EXPERIMENT NO: 05

DOMESTIC REFRIGERATOR

AIM:
To study the domestic refrigerator.

THEORY: Refrigeration is the science of the producing and maintaining temperatures below that of the surrounding atmosphere. This means the removing of the heat from a substance to be cooled. Heat always passes downhill, from a warm body to a cooler one, until both bodies are at the same temperature.

CONSTRUCTION: Refrigerator are usually rated with internal gross volume and the freezer volume. The freezer space is meant to preserve perishable products at a temperature much below 0°c such as fish, meat, chicken etc., and to produce ice and ice cream as well. The refrigerators in India are available in different sizes of various makes, that is 90,100,140,200,250,380 liters of gross volume. The freezers are usually provided at top portion of the refrigerator space occupying around one-tenth to one-third of the refrigerator volume. In some refrigerators, freezers are provided at the bottom.



Domestic Refrigerator

WORKING:

The low pressure and low temperature refrigerant vapour (usually R-22) is drawn through the suction line to the compressor. The accumulator provided between the suction line and the evaporator collects liquid refrigerant coming out of the evaporator due to incomplete evaporation, if any, prevents it from entering the compressor. The compressor than compress the refrigerant vapour to a high pressure and high temperature. The compressed vapour flows through the discharge line into condenser.

In the condenser the vapour refrigerant at high pressure and at high temperature is condensed to the liquid refrigerant at high pressure and low temperature.

The high-pressure liquid refrigerant then flows through the filter and then enters the capillary tube (expansion devices). The capillary tube is attached to the suction line. The warm refrigerant passing through the capillary tube gives some of its heat to cold suction line vapour. This increases the heat absorbing quality of the liquid refrigerant slightly and increases the superheat of vapour entering the compressor.

The capillary tube expands the liquid refrigerant at high pressure to the liquid refrigerant at low pressure so that a measured quantity of liquid refrigerant is passed into the evaporator.

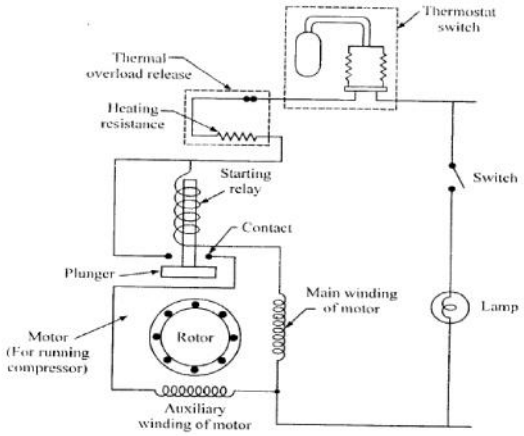
In the evaporator the liquid refrigerant gets evaporated by absorbing heat from the container/articles placed in the evaporative chamber and is sucked back into the compressor and the cycle is repeated.

ELECTRICAL CIRCUIT OF A REFRIGERATOR-

Components-

1. **Lamp and switch**- The arrangement is made in such a way that lamp remains 'off' as the door is closed and becomes 'on' whenever door is opened. When the lamp is on it is easy to trace the commodities placed in the refrigerator.
2. **Thermostat switch**- A thermostat switch maintains a requisite temperature in the refrigerator.
   Freezer- Temperature remains between-7°c to 5°c approx.
   Remaining part of the refrigerator- Temperature remains between 7°c to 15°c

3. **Thermal over load release-** This component is a protective device for compressor motor unit. It operates when temperature of the compressor rises beyond a certain value or excessive current flows in the motor; under such condition the bimetallic strips disconnect the supply to the motor.
4. **Strain relay-** A starting relay starts the motor by the putting starting Winding/auxiliary winding of spilt phase induction motor across the supply.



Electrical circuit of a refrigerator

5. **Electric motor**-Electric motor used is single-phase induction motor, split phase type. It is a fractional horsepower induction motor; its size depends upon the capacity of the refrigerator.

VIVA QUESTIONS:

1. What is a domestic refrigeration system?
2. Explain working and construction of a domestic refrigerator?
3. What is the capacity of a refrigerator?
4. What is the meaning of the one-ton refrigerator?
5. Write a brief note of maintenance of a domestic refrigerator
6. How the domestic refrigerator units are changed?

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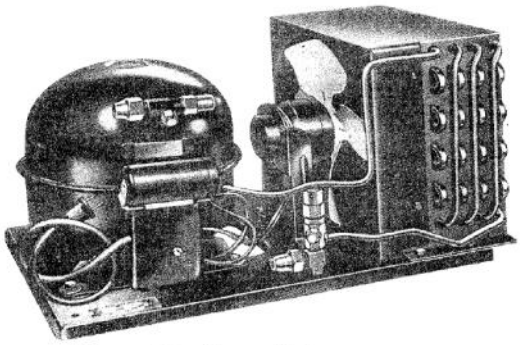
EXPERIMENT NO: 06

HERMETICALLY SEALED COMPRESSOR

AIM:

To study the hermetically sealed compressors.

THEORY: Hermetic, or sealed –type, compressor are directly connected to an electric motor; the motor and compressor operate on the same shaft and are enclosed in a common casing. Condensing units of this type are used almost exclusively in domestic refrigerators and also in locker and home cold-storage plants, drinking fountains, ice cream and food display cabinets, soda fountains and the like. They are made to operate on either the reciprocating or rotary principle and may be mounted with the shaft in either the vertical or horizontal position. In a unit of this type, the revolutions per minutes (rpm) obviously are the same for both compressor and motor. This factor has a very important bearing on the size and design of the unit since it determined the type of refrigerant, the type of control to be used, etc.

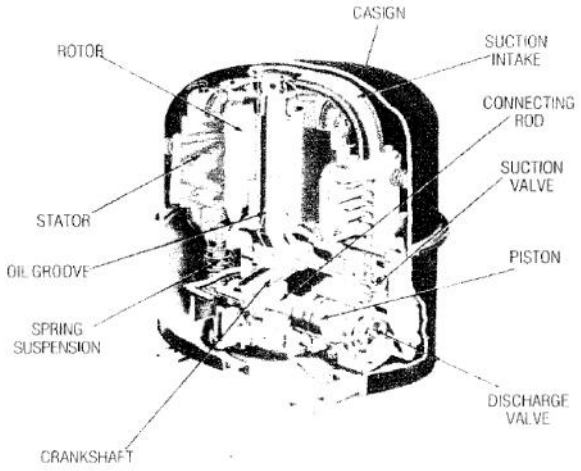


Hermetically sealed compressors

CONSTRUCTION & WORKING: In this unit one-piece housing provides for quietness and a minimum of vibrations. In addition the seal and coupling (always amaintenence problem in open compressors) are eliminated. Still anther dependable feature is the fact that the motor operates in an ideal

atmosphere. Because of the fact that it is entirely enclosed no airborne dust or dirt can reach it. Suction gas at 50° to 60°F cools the motor and shell. Together the foregoing factors ensure long troublefree motor operation.

A different type of compressor in fig. (b) is internally spring-mounted. The motor located above the compressor operates in a vertical position were as the compressor is horizontal. This construction permites operation of the compressor in oil simplifieng the lubricating problem. The suction intake is placed so that the suction vapour must travel through the holes in the motor rotor in order to get to the top of the shell and than to the intake tube.

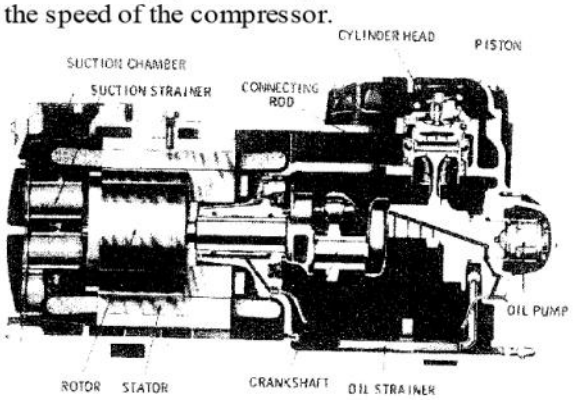


Sectional view of a Vertical Hermetically sealed compressors

Certain models of this type of compressor are provided with internal thermostats, which are inserted in the motor windings and therefore measure motor temperature exactly without allowing for the air gap between the motor and the top of the shell where overloads are normally located. This is particularly important in heat pump applications where the ambient temperature may have considerable influence on the protection system. Because the thermostat is located at the most critical point it gives instantaneous and accurate sensing of the motor temperature and therefore can remove the compressor

from the line at a safe temperature level. It is always operative when the compressor is running.

Another important feature is an antis lug device consisting basically of two assemblies. One is the centrifuge, which is press fit on the crankshaft and therefore rotates at the speed of the compressor.



Sectional view of a Horizontal Hermetically sealed compressors

The refrigerant is drawn in through the holes in the top. Any liquid or oil is expelled through the slots on the side by centrifugal force, and the gas (being lighter) is drawn through the slots in the hub. The second assembly collects the gas and directs it to the cylinder heads. This system always operates when the compressor is running and functions under all conditions that may affect slugging. It is not dependent upon any external component, which may fail, and so is practically full proof.

VIVA QUESTION:

1. What do you understand by hermetically sealed compressors?
2. Where are these hermetic units used?
3. What are the merits and demerits of a hermetically sealed compressor?

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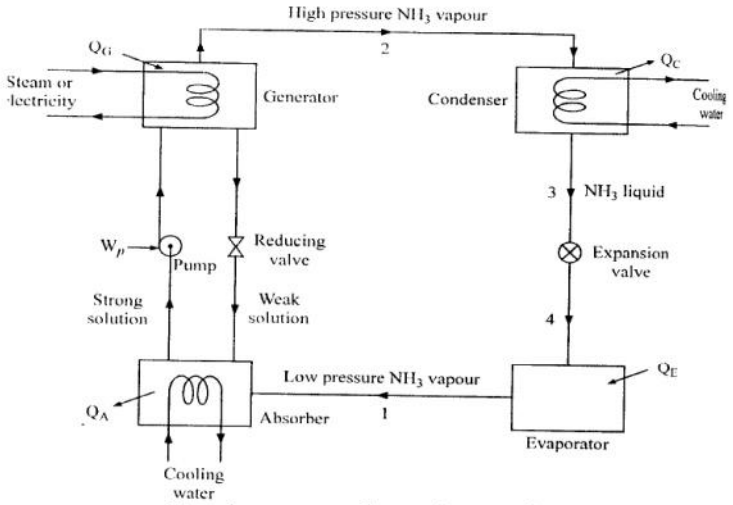
EXPERIMENT NO: 07

VAPOUR ABSORPTION SYSTEM

AIM:

To study the simple vapour absorption system.

THEORY: The vapour absorption refrigeration is a heat-operated system. It is quite similar to the mechanical vapour compression system, which employs reciprocating, centrifugal or rotary compressors. In both the system, we have the evaporator and condenser. The process of evaporation and condensation of the refrigerant takes place at two different pressure levels to achieve refrigeration in both the cases. The different between the two systems lies in the method employed to create the two pressure levels in the system for evaporation and condensation of the refrigerant. They also differ in the manner by which circulation of the refrigerant in the system is achieved.



Simple vapour absorption system

Simple vapour absorption system consists of an absorber, a pump, a generator and a pressure-reducing valve to replace the compression

system. The other components of the system and condenser, expansion valve and evaporator as in the vapour compression system.

WORKING:

- The ammonia vapour leaving the evaporator at point'1' is readily absorbed in the low temperature hot solution in the absorber, realizing the releasing the latent heat of condensation. The temperature of the solution tends to rise, while the absorber is cooled by the circulating water, absorbing the heat of solution Q_A and maintaining a constant temperature.
- Strong solution, rich in ammonia, is pumped (pump increase the pressure of the solution up to 10 bar) to the generator where heat (Q_G)) is supplied from an external source (steam, electricity, gas flame, etc.) since the boiling point of ammonia is less than that of water, the ammonia vapour is given off from the aqua-ammonia solution at high pressure, and the weak solution returns to the absorber through a pressure reducing valve.
- The high-pressure ammonia vapour from the generator is condensed in the condenser to high-pressure liquid ammonia.
- This liquid ammonia is throttled by the expansion valve, and then evaporates, absorbing the heat of evaporation from the surrounding or brine to be chilled. This completes the simple vapour absorption cycle.

VIVA QUESTIONS:

1. What is simple vapour absorption system? State how can efficiency can be improved?
2. What is the basic function of a compressor in a vapour refrigeration system?
3. State the advantages of vapour absorption refrigeration system over vapour compression refrigeration system.

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EXPERIMENT NO: 08

WATER COOLING TOWER APPARATUS

AIM:
To find out the efficiency of cooling tower test rig.

INTRODUCTION: Many air conditioning and industrial processes generate heat which is to be removed and dissipated. Cooling tower is a device which is most commonly used to dissipate heat from various refrigeration, air conditioning and industrial processes. Cooling towers use a combination of heat and mass transfer to cool the water. Water to be cooled is sprayed in tower by spray nozzles, splash bar etc. so that a large water surface is exposed to air. The relative heat levels of water and air cause a portion of water to evaporate, which absorbs its latent heat of evaporation from the water remaining in liquid state. Thus, heat of vaporization at atmospheric pressure is removed from circulating water and is transferred to air stream.

Air is circulated in different ways, e.g. fans, convective currents, natural currents etc. Now days, counter flow forced draught cooling towers are used at many places because of compactness & simplicity. Most of places they have replaced atmospheric and natural draught towers.

DESCRIPTION: The apparatus consists of a cooling tower 200 x 200 mm cross sectional area of 1.5 m height. The tower is provided with expanded wire mesh as packing. The mesh is given special shape for extending water surface area exposed to air. The tower is provided with Perspex front for visualization. Hot water is sprayed evenly through holes in a spray box

provided at the top of the tower, which falls over the packing and flows downwards by gravity. Air is supplied by a blower, which enters the tower through the air box provided at the bottom of the tower, making the unit counter flow forced draught cooling tower.

Escape air box provided at the top of the tower is fitted with eliminators which prevent passage of water droplets with air stream.

Inlet water flows through Rota-meter to geyser & finally sprayed over the packing. Outlet water flow is measured with measuring tank & stop watch. Air flow is measured with orifice and water manometer. A multi-channel Digital Temperature Indicator reads temperatures at various points. Five thermocouples are provided at intermediate locations to note down the intermediate temperatures.

SPECIFICATIONS:

1) Cooling Tower - 200 x 200 mm cross-section, 1.5 m height, filled with aluminum expanded wire mesh packing.
2) Geysers to supply hot water 3 kW capacity - 2 nos.
3) Centrifugal Blower - 1HP
4) Control valves for water and air.
5) Pump for re-circulating the water
6) Measurements –

a) Rota-meter for water inlet flow.
b) Measuring Tank and stop watch for outlet water flow.
c) Orifice with water manometer for air flow measurement (Orifice dia.- mm, $C_d = 0.64$)
d) Multi-channel Digital Temperature Indicator for temperatures at various points.

PROCEDURE:

1) Connect electric supply to the unit & switch on pump.
2) Start the water supply. Switch 'ON' the geysers depending upon the water flow rate and temperature required. (With all geysers working water temperature rise of about 20 - 22°c is obtained at the flow rate of 250 LPH).
3) Start the blower. Cooling of water will start. Normally within 30 to 40 minutes, steady temperatures will be observed. Note down the readings and complete the observation table.
4) Change the airflow and repeat the procedure.
5) Change the water temperature (either by switching ON/OFF the geysers or by changing water flow rates.) If the temperature exceeds 65°C, thermostat will automatically put off the geyser.

DEFINITIONS:

Range –

The difference of inlet and outlet water temperatures is called the range of cooling tower. Actually it is the range through which the water is cooled.

Approach –

The temperature difference between leaving water and entering air wet bulb temperature is known as 'approach' of the cooling tower.

Nomenclature –

m_a = mass flow of air, kg / s

m_w = mass flow of water, kg/s.

d = Diameter of orifice = 35 mm

a = area of orifice = m^2

h_{wi} = enthalpy of water entering tower kJ / Kg.

h_{wo} = enthalpy of water leaving tower, kJ / Kg.

h_{ai} = total enthalpy of air entering tower, kJ / Kg.

h_{ao} = total enthalpy of air leaving tower, kJ / Kg.

$P_{sat\ in}$ = saturation pressure of water vapor in entering air, bar, at dry bulb temperature.

$P_{sat\ out}$ = saturation pressure of water vapor in leaving air, bar.

P_{wi} = partial pressure of water vapor in entering air, bar.

P_{wo} = partial pressure of water vapor in leaving air, bar.

P_a = atmospheric pressure, bar.

RH_i = Relative humidity of entering air, %

RH_o = Relative humidity of leaving air, %

w_i = absolute humidity of entering air, kg / kg of dry air

w_o = absolute humidity of leaving air, kg / Kg of dry air

h_{di} = enthalpy of dry air entering the tower , kJ / kg

h_{do} = enthalpy of dry air leaving the tower , kJ / kg

h_{si} = sensible heat of moisture entering air , kJ / kg

h_{so} = sensible heat of moisture in leaving air , kJ / kg

h_l = latent heat of evaporation of moisture , kJ / kg

h_{sh} = heat superheating of moisture , kJ / kg

ρ_a = density of air, kg / m^3

m_s = mass flow rate of moisture in air, kg / s

C_{pw} = specific heat of water, 4.2 kJ / kg ^{0}k

C_{pa} = specific heat of dry air, 1 kJ / kg ^{0}k

C_{ps} = specific heat of moisture in air, 1.9 kJ / kg ^{0}k.

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OBSERVATIONS:

1) Water inlet flow, LPH, m_{wi} =

2) Water outlet flow,

Time for 5 lit, sec. M_{wo}

3) Manometer difference, mm of water = h_w

4) Temperatures –

i) Air inlet, DB - T_8

WB - T_9

ii) Air Outlet, DB - T_{10}

WB - T_{11}

iii) Water inlet - T_1

iv) Water outlet - T_7

v) Intermediate water temperatures - T_2
T_3
T_4
T_5
T_6

CALCULATIONS:

During cooling, water is assumed to be in the form of a droplet. The bulk water is surrounded by bulk air. The interface between water & air is assumed to be a film of saturated air having an intermediate temperature.

As surrounding air temperatures (wet and dry bulb) approach the bulk water temperature at that position, air becomes saturated with moisture at that temperature. Under adiabatic conditions equilibrium is reached at the temperature of adiabatic saturation i.e. at thermodynamic wet bulb temperature of air. This is lowest attainable temperature in a cooling tower.

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°c	Water & Steam $p_{sat\ kg/cm^2}$	Sat. Water $h_{sw,kJ/kg}$	Evaporation L ,kJ / Kg	Steam h_{st} kJ / kg.
0	0.006228	0.0 0	2496.7	2496.7
1	0.007198	8.4 0	2492.10	2500.5
2	0.006664	4.22	2494.18	2498.4
3	0.007723	12.62	2489.48	2502.1
4	0.008289	16.80	2487.40	2504.2
5	0.008890	20.98	2484.12	2505.1
6	0.009530	25.21	2482.39	2507.6
7	0.010210	29.39	2480.31	2509.7
8	0.010932	33.61	2477.69	2511.3
9	0.011690	37.79	2475.21	2513.0
10	0.012513	41.97	2473.13	2515.1
11	0.013376	46.15	2470.65	2516.8
12	0.014291	50.33	2472.67	2523.0
13	0.015261	54.51	2465.59	2520.1
14	0.016289	58.69	2463.41	2522.1
15	0.017376	62.87	2461.43	2524.3
16	0.018527	67.04	2558.95	2526.0
17	0.019745	71.23	2456.37	2527.6
18	0.02103	75.41	2453.89	2529.3
19	0.02239	79.59	2451.81	2531.4
20	0.02383	83.77	2459.23	2533.0
21	0.02534	87.95	2446.85	2534.8
22	0.02694	92.13	2444.67	2536.8

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23	0.02863	96.31	2442.19	2538.5
24	0.03041	100.45	2440.15	2540.6
25	0.03229	104.63	2436.67	2542.3
26	0.03426	108.81	2435.09	2543.9
27	0.03634	112.99	2433.01	2546.0
28	0.03853	177.17	2429.93	2547.1
29	0.04083	121.35	2427.75	2549.1
30	0.04125	125.48	2426.02	2551.5
31	0.04580	129.66	2005.44	2135.1
32	0.04847	133.84	2421.36	2555.2
33	0.05123	138.2	2418.70	2556.9
34	0.0.5423	142.20	2416.40	2558.6
35	0.0.5733.	146.34	2414.36	2560.7
36	0.06057	150.52	2411.48	2562.0
37	0.06398	154.70	2409.30	2564.0
38	0.06755	158.88	2407.12	2566.1
39	0.07120	163.06	2404.74	2567.8
40	0.07520	167.24	2402.26	2569.5
41	0.07930	171.42	2400.08	2571.5
42	0.08360	175.56	2397.64	2573.2
43	0.08809	179.74	2394.36	2574.1
44	0.09279	183.92	2392.68	2576.6

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DEPARTMENT OF MECHANICAL ENGG.
CHRISTIAN COLLEGE OF ENGG. AND TECHNOLOGY, BHILAI

VIVA QUESTIONS:

1. What are the factors that influence the performance of a cooling tower?
2. What are the different types of cooling towers in use for refrigeration?
3. What is wet bulb approach of a cooling tower?
4. What is Algae?
5. What are the routine maintenance steps connected with the cooling tower?
6. Define the efficiency of a cooling tower.

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DEPARTMENT OF MECHANICAL ENGG.
CHRISTIAN COLLEGE OF ENGG. AND TECHNOLOGY, BHILAI

Established in 1998
CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY
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Ref No./CCET/Elect./2022/001

Date: 04.03.2022

NOTICE

All the staff members of Department of Electrical are hereby informed that a meeting will be held on 04.03.2022 at 11:00 AM in HOD chamber. All faculty members are requested to attend the meeting.

Agenda of Meeting is as follows:

a. 3rd sem End Sem Exam exam(online) .
b. Practical Exam of 5th sem (May June 2022).
c. Preparation of annual budget.
d. Distribution of duties as per the requirements of CSVTU inspection.
e. Technologia 2022.
f. Recommendation of IQAC.

Head of Department
Department of Electrical Engineering
Christian College of Engg & Tech,
Kailash Nagar, Industrial Estate,
HOD, Electrical

Copy to:

1. Principal CCET Bhilai
2. IQAC Coordinator

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Date: 2023.11.08 20:45:53 -08'00'

MINUTES OF MEETING

Date :04.03.2022
Department :Dept of Electrical Engineering, CCET Bhilai
Subject of Meeting : Discussion on online exam, budget, CSVTU inspection.

Following Persons were present

1.Dr. Avinash Kumar
2.Mr. Prashant Bawaney
3.Mr. Ashish Dewangan
4.Mr. AkashDewangan
5.Ms. RichaSahu

Discussion

- For the inspection the following are the duties assigned:-

1. Dr. Avinash Kumar is taking the charge of Machine lab.
2. Mr. Prashant Bawaney has been given the responsibility of Power System lab.
3. Mr. Ashish Dewangan has been given the responsibility of BEEE lab .
4. Mr. AkashDewangan and Ms. RichaSahu has been given the responsibility of Power electronics and electric drives lab.

- What are the points to be considered for online exam is discussed .
- Pre- requisites for preparation of annual budget discussed.

All the above agenda points were discussed in details

Avinash
HOD
Head of Department
Department of Electrical Engineering
Christian College of Engg & Tech,
Kailash Nagar, Industrial Estate,

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Date: 2023.11.08 20:46:15 -08'00'

Ref No./CCET/Elect./2022/002

Date: 02.04.2022

NOTICE

All the staff members of the Department of Electrical are hereby informed that a meeting will be held on 02.04.2022 at 11:00 AM in the HOD chamber. All faculty members are requested to attend the meeting.

Agenda of Meeting is as follows:

a. Conduction of 3rd sem practical exam(online) from 4th April.
b. Removing the unwanted scrap from department
c. CT 1 and assignment 1 question paper for 8th sem.
d. Project presentation on of 8thsem.
e. Subject allocation of 6th sem.
f. Recommendation of IQAC.

Avinash
HOD
Electrical

Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech,
Kailash Nagar, Industrial Estate,

Copy to:

1 Principal CCET Bhilai

2 IQAC Coordinator

DIPALI SOREN TUDU

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Date: 2023.11.08 20:46:32 -08'00'

MINUTES OF MEETING

Date :02.04.2022

Department :Dept of Electrical Engineering, CCET Bhilai

Subject of Meeting : Conduction of 3rd sem practical Exam, Removing of scrap, CT assignment and project presentation of 8th sem and subject allocation of 6th sem.

Following Persons were present

1. Dr. Avinash Kumar
2. Mr. Prashant Bawaney
3. Mr. Ashish Dewangan
4. Mr. AkashDewangan
5. Ms. RichaSahu

Discussion

a. The 3rd-semester practical exam will be conducted online from April 4th, 2022. The unwanted scrap that needs to be removed should be identified and disposed of properly.

b. Question papers for CT 1 and assignment 1 for the 8th semester need to be prepared, and a link for submission should be provided.

c. The project presentation for the 8th semester is scheduled for April 5th.

d. The subjects allocated for the 6th semester will depend on the specific academic program or curriculum, and you would need to refer to your institution's course catalog or contact your academic advisor for this information.

All the above agenda points were discussed in details.

Conclusion

It was concluded that all the staff members of the department have to implement the plan as mentioned in the enclosures.

Avinash

Head of Department
HOD, Electrical
Department of Electrical Engineering
Christian College of Engg & Tech,
Kailash Nagar, Industrial Estate,

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Date: 2023.11.08 20:46:49 -08'00'

Ref No./CCET/Elect./2022/003 Date: 04.05.2022

NOTICE

All the staff members of the Department of Electrical are hereby informed that a meeting will be held on 04.05.2022 at 12:00 noon in the HOD chamber. All faculty members are requested to attend the meeting.

Agenda of Meeting is as follows:

a. CT 2 and assignment 2 question papers for 8th sem student.
b. Subject allocation of 4th sem.
c. CT 1 and Assignment 1 of 6th Sem.
d. Mtech 1st sem practical exam.
g. Recommendation of IQAC.

Head of Department
Department of Electrical Engineering
Christian College of Engg & Tech,
Kailash Nagar, Industrial Estate,

HOD, Electrical

Copy to:

1. Principal CCET Bhilai
2. IQAC Coordinator

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Date: 2023.11.08 20:47:24 -08'00'

MINUTES OF MEETING

Date :04/05/2022
Department :Dept of Electrical Engineering, CCET Bhilai
Subject of Meeting : Planning of even semester exam and MTech practical exam.
Following Persons were present

1. Dr. Avinash Kumar
2. Mr. Prashant Bawaney
3. Ms. RichaSahu
4. Mr. Ashish Dewangan
5. Mr. AkashDewangan

Discussion

a. CT 2 and assignment 2 question papers for 8thsem student is instructed to be prepared.

b. Following subjects allocated to the faculties for 4th sem:
1. EMF: Dr. Avinash Kumar
2. PS1 : Mr. Prashant Bawaney
3. S&S: Ms. RichaSahu
4. AE : Mr. Ashish Dewangan
5. EM II : Mr. AkashDewangan

c. CT 1 and Assignment 1 of 6thSem is instructed to be prepared .
d. Mtech 1stsem practical exam will start in May 2nd week.

All the above agenda points were discussed in details.

Avinash
HOD, Electrical
Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech.
Kohka Kurud, Industrial Estate,

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Date: 2023.11.08 20:47:41 -08'00'

Ref No./CCET/Elect./2022/004 Date: 05.06.2022

NOTICE

All the staff members of Department of Electrical are hereby informed that a meeting will be held on 05.06.2022at 11:00 AM in HOD chamber. All faculty members are requested to attend the meeting.

Agenda of Meeting is as follows:

a. CT 1 and Assignment 1 for 4th sem.
b. Conduction of 8thsem practical exams in offline mode.
c. Preparation of Time-table for practical exams.
d. Subject allocation for Mtech 2nd Sem
e. Recommendation of IQAC.

HOD, Electrical

Head of Department,
Department of Electrical Engineering
Christian College of Engg. & Tech.
Kailash Nagar, Industrial Estate,

Copy to:

1. Principal CCET Bhilai
2. IQAC Coordinator

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MINUTES OF MEETING

Date :05.06.2022
Department :Dept of Electrical Engineering, CCET Bhilai
Subject of Meeting : Planning for even semester April-May 2022

Following Persons were present

1. Dr. Avinash Kumar
2. Mr. Prashant Bawaney
3. Ms. RichaSahu
4. Mr. Ashish Dewangan
5. Mr. AkashDewangan

Discussion

a. CT 1 and Assignment 1 for 4th sem is instructed to be prepared.
b. 8th sem practical exams will be conducted in offline mode fron 2nd week of june. So, the time-table for practical exams needs to be prepared.
c. Following are the subjects allocated to faculties for Mtech 2nd Sem.
   i. Advance HV protection system: Mr. Ashish Dewangan
   ii. HV Testing: Mr. AkashDewangan
   iii. CAPS: Mr. Prashant Bawaney
   iv. Distribution System planning: Ms.Richa Sahu
   v. Optimization Technique : Mr. Dilip Das

All the above agenda points were discussed in details.

Avinash
HOD
Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech,
Kailash Nagar, Industrial Estate,

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Ref No./CCET/Elect./2022/005

Date: 02.07.2022

NOTICE

All the staff members of Department of Electrical are hereby informed that a meeting will be held on 02.07.2022at 11.30 AM in HOD chamber. All faculty members are requested to attend the meeting.

Agenda of Meeting is as follows:

a. Status report of present/absent students in CGPET.
b. CT2 and Assignment 2 for 6th sem (online).
c. Recommendation of IQAC.

HOD
Electrical

Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech.
Kailash Nagar, Industrial Estate,

Copy to:

1. Principal CCET Bhilai
2. IQAC Coordinator

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MINUTES OF MEETING

Date :02.07.2022
Department :Dept of Electrical Engineering, CCET Bhilai
Subject of Meeting : Planning for 6th semester and status report of students in CGPET.

Following Persons were present

1. Dr. Avinash Kumar
2. Mr. Prashant Bawaney
3. Ms. RichaSahu
4. Mr. Ashish Dewangan
5. Mr. AkashDewangan

Discussion

a. The faculties have updated the respective centers data of present/absent students.
b. CT2 and Assignment 2 question papers for 6th sem is to be prepared and link is to be generated for online submission.

All the above agenda points were discussed in details.

A Vinayh
HOD
Head of Department,
Department of Electrical Engineering
Christian College of Engg. & Tech.
Kailash Nagar, Industrial Estate,
Electrical

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Ref No./CCET/Elect./2022/006

Date: 07.08.2022

NOTICE

All the staff members of Department of Electrical are hereby informed that a meeting will be held on 07.08.2022 at 12:00 noon in HOD chamber. All faculty members are requested to attend the meeting.

Agenda of Meeting is as follows:

a. CT2 and assignment 2 of 4th sem.
b. Recommendation of IQAC.

Avinash
HOD
Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech,
Kailash Nagar, Industrial Estate,
Electrical

Copy to:

1 Principal CCET Bhilai

2 IQAC Coordinator

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MINUTES OF MEETING

Date :07.08.2022
Department :Dept of Electrical Engineering, CCET Bhilai
Subject of Meeting : Planning of 4th semester.
Following Persons were present

1.Mr. Prashant Bawaney
2.Mr. Ashish Dewangan
3.Mr. AkashDewangan
4.Ms. RichaSahu

Discussion

1. CT2 and assignment 2 question paper of 4thsem is to be prepared and to be conducted on 2nd week of august.

All the above agenda points were discussed in details.

HOD
Electrical

Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech.
Kailash Nagar, Industrial Estate,

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Ref No./CCET/Elect./2022/007

Date: 04.09.2022

NOTICE

All the staff members of Department of Electrical are hereby informed that a meeting will be held on 04.09.2022at 11:00 AM in HOD chamber. All faculty members are requested to attend the meeting.

Agenda of Meeting is as follows:

a. Allocation of subjects for 7th sem.
b. Recommendation of IQAC.

Avinash
HOD, Electrical
Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech,
Kailash Nagar, Industrial Estate,

Copy to:

1 Principal CCET Bhilai

2 IQAC Coordinator

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CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY
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MINUTES OF MEETING

Date :04.09.2022
Department :Dept of Electrical Engineering, CCET Bhilai
Subject of Meeting : Distribution of subjects as per for 7th sem.
Following Persons were present

1. Mr. Prashant Bawaney
2. Mr. Ashish Dewangan
3. Mr. AkashDewangan
4. Ms. RichaSahu

Discussion

Following subjects have been allocated to the following faculties for 7th sem.

HVE	High Voltage Engineering	Mr. Ashish Dewangan
ED	Electrical Drives	Mr. AkashDewangan
EAM	Energy Auditing and Management	Mr. Prashant Bawaney
PAS	Power Apparatus System	Ms. RichaSahu

All the above agenda points were discussed in details.

Avinash
HOD
Electrical

Head of Department
Department of Electrical Engineering
Christian College of Engg & Tech.
Kailash Nagar, Industrial Estate,

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Ref No./CCET/Elect./2022/008

Date: 07.10.2022

NOTICE

All the staff members of Department of Electrical are hereby informed that a meeting will be held on 07.10.2022 at 12:00 noon in HOD chamber. All faculty members are requested to attend the meeting.

Agenda of Meeting is as follows:

a. Subject allocation of 5th sem.
b. Recommendation of IQAC.

HOD, Electrical

Head of Department
Department of Electrical Engineering
Christian College of Engg & Tech.
Kailash Nagar, Industrial Estate,

Copy to:

1 Principal CCET Bhilai

2 IQAC Coordinator

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CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY

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MINUTES OF MEETING

Date :07.10.2022

Department :Dept of Electrical Engineering, CCET Bhilai

Subject of Meeting : Distribution of subjects for 5th sem.

Following Persons were present

1.Mr. Prashant Bawaney
2.Mr. Ashish Dewangan
3.Mr. AkashDewangan
4.Ms. RichaSahu

Discussion

Following are the subjects allocated :-

a.	CSE	Control System Engg	Mr. Ashish Dewangan
b.	PSA	Power System Analysis	Mr. Prashant Bawney
c.	PE	Power Electronics	Ms. RichaSahu
d.	EMMI	Electrical Measurement	DrPagya
e.	PPE	Power Plant Engg	Mr.AkashDewangan

All the above agenda points were discussed in details.

HOD Electrical

Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech,
Kailash Nagar, Industrial Estate,

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Ref No./CCET/Elect./2022/009

Date: 06.11.2022

NOTICE

All the staff members of Department of Electrical are hereby informed that a meeting will be held on 06.11.2022 at 11:00 AM in HOD chamber. All faculty members are requested to attend the meeting.

Agenda of Meeting is as follows:

a. Subject Distribution of Mtech 1st Sem.
b. Subject distribution Btech 3rd Sem.
c. Recommendation of IQAC.

HOD, Electrical

Head of Department
Department of Electrical Engineering
Christian College of Engg & Tech,
Kailash Nagar, Industrial Estate,

Copy to:

1 Principal CCET Bhilai

2 IQAC Coordinator

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CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY

MINUTES OF MEETING

Date :06.11.2022
Department :Dept of Electrical Engineering, CCET Bhilai
Subject of Meeting : Distribution of subjects for Mtech 1st sem and Btech 3rd sem.
Following Persons were present

1.Mr. Prashant Bawaney
2.Mr. Ashish Dewangan
3.Mr. AkashDewangan
4.Ms. RichaSahu

Discussion

a. Subject has been Distribution for 1StSemMtech.
b. Following are the subjects allocated for 3rdsem :-

M - III	Mathematics - III	Dr. Dilip Das
ECA	Electrical Circuit Analaysis	Mr. Prashant Bawaney
EM - I	Electrical Machines - I	Mr. Ashish Dewangan
DE	Digital Electronics	Mr. AkashDewangan
NM	Numerical Methods	Dr. Dilip Das

All the above agenda points were discussed in details.

HOD Electrical

Head of Department
Department of Electrical Engineering
Christian College of Engg. & Tech.
Kallash Nagar, Industrial Estate,

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Date: 2023.11.08 20:53:11 -08'00'

Ref No./CCET/Elect./2022/010

Date: 07.12.2022

NOTICE

All the staff members of Department of Electrical are hereby informed that a meeting will be held on 07.12.2022at 11:00 AM in HOD chamber. All faculty members are requested to attend the meeting.

Agenda of Meeting is as follows:

a. CT1 and Assignment 1 for 5thsem and 7th sem.
b. Recommendation of IQAC.

HOD
Electrical

Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech,
Kallash Nagar, Industrial Estate,

Copy to:

1 Principal CCET Bhilai

2 IQAC Coordinator

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CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY

MINUTES OF MEETING

Date :07.12.2022
Department :Dept of Electrical Engineering, CCET Bhilai
Subject of Meeting : Planning of CT and Assignment for 3rd and 7th sem.

Following Persons were present

1. Dr. ShailendraVerma
2. Mr. Prashant Bawaney
3. Mr. Ashish Dewangan
4. Mr. AkashDewangan
5. Ms. RichaSahu

Discussion

1. CT1 and Assignment 1 question paper for 5th sem and 7th sem is to prepared and scheduled after 12th Dec 2022.

All the above agenda points were discussed in details.

Head of Department
Department of Electrical Engineering
Christian College of Engg. & Tech.
Kallesh Nagar, Industrial Estate,

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CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY

Ref No./CCET/Elect./2022/011 Date: 07.01.2023

NOTICE

All the staff members of Department of Electrical are hereby informed that a meeting will be held on 07.01.2023 at 11:30 AM in HOD chamber. All faculty members are requested to attend the meeting.

Agenda of Meeting is as follows:

a. Documents required for NAAC.
b. CT 2 and assignment 2 paper for 3rd, 5thsem and 7th sem.
c. Submission of student data.
d. Recommendation of IQAC.

HOD, Electrical

Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech,
Kallash Nagar, Industrial Estate,

Copy to:

1 Principal CCET Bhilai

2 IQAC Coordinator

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Date: 2023.11.08 20:54:14 -08'00'

MINUTES OF MEETING

Date :07.01.2023
Department :Dept of Electrical Engineering, CCET Bhilai
Subject of Meeting : Documents for NAAC, Planning of odd semester

Following Persons were present

1. Dr. ShailendraVerma
2. Mr. Prashant Bawaney
3. Mr. Ashish Dewangan
4. Mr. AkashDewangan
5. Ms. RichaSahu

Discussion

a. What Documents will be required for NAAC is discussed.
b. CT 2 and assignment 2 paper for 3rd, 5thsem and 7thsem is to be prepared and the CT is to be scheduled accordingly.
c. Student data of various school which are collected by the department faculties is updated .

All the above agenda points were discussed in details.

HOD
Electrical

Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech.
Kallash Nagar, Industrial Estate,

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Date: 2023.11.08 20:54:33 -08'00'

CHRISTIAN COLLEGE OF ENGINEERING & TECHNOLOGY

Ref No./CCET/Elect./2022/012 Date: 05.02.2023

NOTICE

All the staff members of Department of Electrical are hereby informed that a meeting will be held on 05.02.2023 at 10:00 AM in HOD chamber. All faculty members are requested to attend the meeting.

Agenda of Meeting is as follows:

a. Submission of published journals in format for NAAC.
b. Technologia 2023.
c. Practical Exam of 5th sem.
d. Recommendation of IQAC.

HOD
Electrical

Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech,
Kailash Nagar, Industrial Estate,

Copy to:

1 Principal CCET Bhilai

2 IQAC Coordinator

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Date: 2023.11.08 20:55:21 -08'00'

MINUTES OF MEETING

Date :05.02.2023

Department :Dept of Electrical Engineering, CCET Bhilai

Subject of Meeting : NAAC documents requirement, technologia and 5th sem practical exam

Following Persons were present

1. Dr. ShailendraVerma
2. Mr. Prashant Bawaney
3. Mr. Ashish Dewangan
4. Mr. AkashDewangan
5. Ms. RichaSahu

Discussion

a. The faculties are given format for Submission of their published journals since the past 5 years .

b. Faculties are asked to submit papers and motivate students for the same for Technologia 2023.

c. Practical Exam of 5th sem is scheduled from 13.02.2023.

All the above agenda points were discussed in details.

HOD
Electrical

Head of Department,
Department of Electrical Engineering
Christian College of Engg & Tech.
Kailash Nagar, Industrial Estate,

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Date: 2023.11.08 20:55:52 -08'00'

Ref No./CCET/Elect./2022/013

Date: 07.03.2023

NOTICE

All the staff members of Department of Electrical are hereby informed that a meeting will be held on 07.03.2023at 10:00 AM in HOD chamber. All faculty members are requested to attend the meeting.

Agenda of Meeting is as follows:

a. Subject allocation for 6th sem.
b. Time table preparation.
c. CT 1 time table for 8th sem.
d. Recommendation of IQAC.

HOD, Electrical

Head of Department
Department of Electrical Engineering
Christian College of Engg. & Tech.
Kailash Nagar, Industrial Estate

Copy to:

1 Principal CCET Bhilai

2 IQAC Coordinator

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Date: 2023.11.08 20:56:18 -08'00'

MINUTES OF MEETING

Date :07.03.2023
Department :Dept of Electrical Engineering, CCET Bhilai
Subject of Meeting : Planning of even semester.
Following Persons were present

1. Dr. ShailendraVerma
2. Mr. Prashant Bawaney
3. Mr. Ashish Dewangan
4. Mr. AkashDewangan
5. Ms. RichaSahu

Discussion

1. Following are the subjects allocated for 6th sem :-

Switchgear and Protection	Dr. ShailendraVerma
Energy Auditing and Management	Mr. Prashant Bawaney
Instrumentation Techniques	Mr. Ashish Dewangan
Microprocessor and its application	Mr. AkashDewangan
Fibre Optics	Ms. RichaSahu

2. Time table is being prepared for 6th sem and 8th sem CT exam.

All the above agenda points were discussed in details.

HOD
Electrical

Head of Department
Department of Electrical Engineering
Christian College of Engg. & Tech.
Kailash Nagar, Industrial Estate

DIPALI SOREN TUDU
Digitally signed by DIPALI SOREN TUDU
Date: 2023.11.08 20:56:34 -08'00'

The Role of Faculty in Curriculum Development and Evaluation

DIPALI SOREN TUDU

Digitally signed by DIPALI SOREN TUDU
Date: 2023.11.08 20:57:09 -08'00'

Criterion 1

Curricular Planning and Implementation QlM 1.1.1

Confidential & most Urgent

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
Newai, PO Newai, Distt. Durg (CG) 491 107
Exam Cell: 0788-2445017 , 0788-2445024 (Phone)

Letter No. **CSVTU/Confd./EXAM/Nov-Dec 2020/558132(37)00480** Bhilai, Date : **04-Jan-2021**

To,
DILLIP KUMAR DASH
UID : **00480**
Christian College Of Engineering & Technology - Bhilai

558132(37)

Subject:Appointment for setting of Question Paper & providing solution to the Questions.

Dear Sir/Madam,

I have been directed to inform you that you are appointed as Question Paper setter for CSVTU end semester exam.

Subject: **Elective-I- Computational Techniques (558132(37))** Course & Sem: **M.Tech , SEMESTER 1**

Branch: Mechanical Engg.

Max Marks: **100** Minimum Pass Mark: **40** Duration: **3 Hrs** Scheme: **New**

Presuming that you will be accepting the appointment, enclosed herewith are all the relevant papers on the subject. **In case you are unable to accept the appointment, it is requested that all the papers sent may please be returned with your refusal letter in enclosed format.**

It is requested that only one question paper be prepared in accordance with the enclosed syllabus.

It may kindly be noted that for Diploma courses of Polytechnic, Hindi version of each question is to be given immediately below the English version.

PLEASE SET QUESTIONS FROM EACH UNIT WITH INTERNAL CHOICE. Please try to accommodate all questions of the paper within the following framework-

(i) Average Level	-	40%	Please go through the syllabus of the
(ii) Medium Level	-	40%	subject before setting the questions.
(iii) Difficult Level	-	20%	

The manuscript of the question paper & solution to the questions should be kept in separate envelop marked 'C' & 'E' respectively. These should be sealed & kept in envelop 'B', in which the declaration form duly filled in should also be kept. The envelop containing all the above documents should be sealed properly and delivered in person or sent through registered post insured for Rs. 100/- to the undersigned by the due date.

No sign of indication should be marked on the envelop 'C' which can disclose the identity of the setter.

Please avoid to include solved problems given in the text book.

1.	Paper setting	(i) (ii)	Rs. 450/- (for Diploma and UG courses) Rs. 600/- (for PG courses)
2.	Solutions of questions & Memorandum of instructions to valuers- (MANDATORY)	(i) (ii)	Rs 400/- (for UG / PG courses) Rs 300/- (for diploma courses)

Please return all the documents in case of refusal or if any relative is appearing in the said Examination. Inform the undersigned if you come to know in future that some relative is appearing.

Please read & follow the "Instructions for paper setters" very carefully.
Due Date of Receipt of Manuscript at CSVTU: 14-Jan-2021

Please supply solution to NUMERICAL PROBLEMS and STEP MARKING scheme in envelop 'E.'

Yours Faithfully

Exam Controller
CSVTU, Bhilai

DIPALI SOREN TUDU

Digitally signed by DIPALI SOREN TUDU
Date: 2023.11.08 20:57:31 -08'00'

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
Newai, PO Newai, Distt. Durg (CG) 491 107
Exam Cell: 0788-2445017 , 0788-2445024 (Phone)

Letter No. **CSVTU/Confd./EXAM/Nov-Dec 2020/5100111(024)00480** Bhilai, Date : **04-Jan-2021**

To,
DILLIP KUMAR DASH
UID : **00480**
Christian College Of Engineering & Technology - Bhilai

5100111(024)

Subject:Appointment for setting of Question Paper & providing solution to the Questions.

Dear Sir/Madam,

I have been directed to inform you that you are appointed as Question Paper setter for CSVTU end semester exam.

Subject: **Mathematical Methods for Power Engineering (5100111(024))** Course & Sem: **M.Tech , SEMESTER 1**
Branch: Elect. Engg.
Max Marks: **100** Minimum Pass Mark: **40** Duration: **3 Hrs** Scheme: **New**

Presuming that you will be accepting the appointment, enclosed herewith are all the relevant papers on the subject. **In case you are unable to accept the appointment, it is requested that all the papers sent may please be returned with your refusal letter in enclosed format.**

It is requested that only one question paper be prepared in accordance with the enclosed syllabus.

It may kindly be noted that for Diploma courses of Polytechnic, Hindi version of each question is to be given immediately below the English version.

PLEASE SET QUESTIONS FROM EACH UNIT WITH INTERNAL CHOICE. Please try to accommodate all questions of the paper within the following framework-

(i) Average Level	-	40%	Please go through the syllabus of the subject before setting the questions.
(ii) Medium Level	-	40%	
(iii) Difficult Level	-	20%	

The manuscript of the question paper & solution to the questions should be kept in separate envelop marked 'C' & 'E' respectively. These should be sealed & kept in envelop 'B', in which the declaration form duly filled in should also be kept. The envelop containing all the above documents should be sealed properly and delivered in person or sent through registered post insured for Rs. 100/- to the undersigned by the due date.

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Please avoid to include solved problems given in the text book.

1.	Paper setting	(i) (ii)	Rs. 450/- (for Diploma and UG courses) Rs. 600/- (for PG courses)
2.	Solutions of questions & Memorandum of instructions to valuers- (MANDATORY)	(i) (ii)	Rs 400/- (for UG / PG courses) Rs 300/- (for diploma courses)

Please return all the documents in case of refusal or if any relative is appearing in the said Examination. Inform the undersigned if you come to know in future that some relative is appearing.

Please read & follow the "Instructions for paper setters" very carefully.
Due Date of Receipt of Manuscript at CSVTU: 14-Jan-2021

Please supply solution to NUMERICAL PROBLEMS and STEP MARKING scheme in envelop 'E.'

Yours Faithfully

Exam Controller
CSVTU, Bhilai

DIPALI SOREN TUDU
Digitally signed by DIPALI SOREN TUDU
Date: 2023.11.08 20:57:50 -08'00'

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
Newai, PO Newai, Distt. Durg (CG) 491 107
Exam Cell: 0788-2445017 , 0788-2445024 (Phone)

Letter No. **CSVTU/Confd./EXAM/Nov-Dec 2020/B024315(024)00480** Bhilai, Date : **04-Jan-2021**

To,
DILLIP KUMAR DASH
UID : **00480**
Christian College Of Engineering & Technology - Bhilai

B024315(024)

Subject:Appointment for setting of Question Paper & providing solution to the Questions.

Dear Sir/Madam,

I have been directed to inform you that you are appointed as Question Paper setter for CSVTU end semester exam.

Subject: **Numerical Methods (B024315(024))** Course & Sem: **B.Tech , SEMESTER 3**

Branch:

Max Marks: Minimum Pass Mark: Duration: Scheme:

Presuming that you will be accepting the appointment, enclosed herewith are all the relevant papers on the subject. **In case you are unable to accept the appointment, it is requested that all the papers sent may please be returned with your refusal letter in enclosed format.**

It is requested that only one question paper be prepared in accordance with the enclosed syllabus.

It may kindly be noted that for Diploma courses of Polytechnic, Hindi version of each question is to be given immediately below the English version.

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(ii) Medium Level	-	40%	subject before setting the questions.
(iii) Difficult Level	-	20%	

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2.	Solutions of questions & Memorandum of instructions to valuers- (MANDATORY)	(i) (ii)	Rs 400/- (for UG / PG courses) Rs 300/- (for diploma courses)

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Please read & follow the "Instructions for paper setters" very carefully.
Due Date of Receipt of Manuscript at CSVTU: 14-Jan-2021

Yours Faithfully

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DIPALI SOREN TUDU Digitally signed by DIPALI SOREN TUDU
Date: 2023.11.08 20:58:06 -08'00'

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Newai, PO Newai, Distt. Durg (CG) 491 107
Exam Cell: 0788-2445017 , 0788-2445024 (Phone)

Letter No. **CSVTU/Confd./EXAM/Nov-Dec 2020/324351(14)00480** Bhilai, Date : **01-Jan-2021**

To,
DILLIP KUMAR DASH
UID : **00480**
Christian College Of Engineering & Technology - Bhilai

324351(14)

Subject:Appointment for setting of Question Paper & providing solution to the Questions.

Dear Sir/Madam,

I have been directed to inform you that you are appointed as Question Paper setter for CSVTU end semester exam.

Subject: **Mathematics III (324351(14))**		Course & Sem:	**B.E , SEMESTER 3**
Branch: Elect.			
Max Marks: **80**	Minimum Pass Mark: **28**	Duration: **3 Hrs**	Scheme: **New**

Presuming that you will be accepting the appointment, enclosed herewith are all the relevant papers on the subject. **In case you are unable to accept the appointment, it is requested that all the papers sent may please be returned with your refusal letter in enclosed format.**

It is requested that only one question paper be prepared in accordance with the enclosed syllabus.

It may kindly be noted that for Diploma courses of Polytechnic, Hindi version of each question is to be given immediately below the English version.

PLEASE SET QUESTIONS FROM EACH UNIT WITH INTERNAL CHOICE. Please try to accommodate all questions of the paper within the following framework-

(i) Average Level	-	40%	Please go through the syllabus of the
(ii) Medium Level	-	40%	subject before setting the questions.
(iii) Difficult Level	-	20%	

The manuscript of the question paper & solution to the questions should be kept in separate envelop marked 'C' & 'E' respectively. These should be sealed & kept in envelop 'B', in which the declaration form duly filled in should also be kept. The envelop containing all the above documents should be sealed properly and delivered in person or sent through registered post insured for Rs. 100/- to the undersigned by the due date.

No sign of indication should be marked on the envelop 'C' which can disclose the identity of the setter.
Please avoid to include solved problems given in the text book.

1.	Paper setting	(i) (ii)	Rs. 450/- (for Diploma and UG courses) Rs. 600/- (for PG courses)
2.	Solutions of questions & Memorandum of instructions to valuers- (MANDATORY)	(i) (ii)	Rs 400/- (for UG / PG courses) Rs 300/- (for diploma courses)

Please return all the documents in case of refusal or if any relative is appearing in the said Examination. Inform the undersigned if you come to know in future that some relative is appearing.

Please read & follow the "Instructions for paper setters" very carefully.
Due Date of Receipt of Manuscript at CSVTU: 11-Jan-2021

Please supply solution to NUMERICAL PROBLEMS and STEP MARKING scheme in envelop 'E.'

Yours Faithfully

Exam Controller
CSVTU, Bhilai

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
Newai, PO Newai, Distt. Durg (CG) 491 107
Exam Cell: 0788-2445017 , 0788-2445024 (Phone)

Letter No. **CSVTU/Confd./EXAM/Nov-Dec 2020/324311(14)00480** Bhilai, Date : **01-Jan-2021**

To,
DILLIP KUMAR DASH
UID : **00480**
Christian College Of Engineering & Technology - Bhilai

324311(14)

Subject:Appointment for setting of Question Paper & providing solution to the Questions.

Dear Sir/Madam,

I have been directed to inform you that you are appointed as Question Paper setter for CSVTU end semester exam.

Subject: **Mathematics III (324311(14))**		Course & Sem:	**B.E , SEMESTER 3**
Branch: Elect., EEE			
Max Marks: **80**	Minimum Pass Mark: **28**	Duration: **3 Hrs**	Scheme: **Old**

Presuming that you will be accepting the appointment, enclosed herewith are all the relevant papers on the subject. **In case you are unable to accept the appointment, it is requested that all the papers sent may please be returned with your refusal letter in enclosed format.**

It is requested that only one question paper be prepared in accordance with the enclosed syllabus.

It may kindly be noted that for Diploma courses of Polytechnic, Hindi version of each question is to be given immediately below the English version.

PLEASE SET QUESTIONS FROM EACH UNIT WITH INTERNAL CHOICE. Please try to accommodate all questions of the paper within the following framework-

(i) Average Level	-	40%	Please go through the syllabus of the
(ii) Medium Level	-	40%	subject before setting the questions.
(iii) Difficult Level	-	20%	

The manuscript of the question paper & solution to the questions should be kept in separate envelop marked 'C' & 'E' respectively. These should be sealed & kept in envelop 'B', in which the declaration form duly filled in should also be kept. The envelop containing all the above documents should be sealed properly and delivered in person or sent through registered post insured for Rs. 100/- to the undersigned by the due date.

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1.	Paper setting	(i) (ii)	Rs. 450/- (for Diploma and UG courses) Rs. 600/- (for PG courses)
2.	Solutions of questions & Memorandum of instructions to valuers- (MANDATORY)	(i) (ii)	Rs 400/- (for UG / PG courses) Rs 300/- (for diploma courses)

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Please read & follow the "Instructions for paper setters" very carefully.
Due Date of Receipt of Manuscript at CSVTU: 11-Jan-2021

Please supply solution to NUMERICAL PROBLEMS and STEP MARKING scheme in envelop 'E.'

Yours Faithfully

Exam Controller
CSVTU, Bhilai

DIPALI SOREN TUDU
Digitally signed by DIPALI SOREN TUDU
Date: 2023.11.08 20:59:19 -08'00'

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
Newai, PO Newai, Distt. Durg (CG) 491 107
Exam Cell: 0788-2445017 , 0788-2445024 (Phone)

Letter No. **CSVTU/Confd./EXAM/Apr-May 2020/558132(37)00480** Bhilai, Date : **19-Mar-2020**

To,
DILLIP KUMAR DASH
UID : **00480**
Christian College Of Engineering & Technology - Bhilai

558132(37)

Subject:Appointment for setting of Question Paper & providing solution to the Questions.

Dear Sir/Madam,

I have been directed to inform you that you are appointed as Question Paper setter for CSVTU end semester exam.

Subject: **Elective-I- Computational Techniques (558132(37))** Course & Sem: **M.Tech , SEMESTER 1**

Branch: Mechanical Engg.

Max Marks: **100** Minimum Pass Mark: **40** Duration: **3 Hrs** Scheme: **New**

Presuming that you will be accepting the appointment, enclosed herewith are all the relevant papers on the subject. **In case you are unable to accept the appointment, it is requested that all the papers sent may please be returned with your refusal letter in enclosed format.**

It is requested that only one question paper be prepared in accordance with the enclosed syllabus.

It may kindly be noted that for Diploma courses of Polytechnic, Hindi version of each question is to be given immediately below the English version.

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(iii) Difficult Level	-	20%	

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Please read & follow the "Instructions for paper setters" very carefully.
Due Date of Receipt of Manuscript at CSVTU: 29-Mar-2020

Please supply solution to NUMERICAL PROBLEMS and STEP MARKING scheme in envelop 'E.'

Yours Faithfully

Exam Controller
CSVTU, Bhilai

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
Newai, PO Newai, Distt. Durg (CG) 491 107
Exam Cell: 0788-2445017 , 0788-2445024 (Phone)

Letter No. **CSVTU/Confd./EXAM/Apr-May 2020/322452(14)00480** Bhilai, Date : **09-Mar-2020**

To,
DILLIP KUMAR DASH
UID : **00480**
Christian College Of Engineering & Technology - Bhilai

322452(14)

Subject:Appointment for setting of Question Paper & providing solution to the Questions.

Dear Sir/Madam,

I have been directed to inform you that you are appointed as Question Paper setter for CSVTU end semester exam.

Subject: **Discrete Structures (322452(14))**		Course & Sem:	**B.E , SEMESTER 4**
Branch: CSE			
Max Marks: **80**	Minimum Pass Mark: **28**	Duration: **3 Hrs**	Scheme: **New**

Presuming that you will be accepting the appointment, enclosed herewith are all the relevant papers on the subject. **In case you are unable to accept the appointment, it is requested that all the papers sent may please be returned with your refusal letter in enclosed format.**

It is requested that only one question paper be prepared in accordance with the enclosed syllabus.

It may kindly be noted that for Diploma courses of Polytechnic, Hindi version of each question is to be given immediately below the English version.

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(ii) Medium Level	-	40%	subject before setting the questions.
(iii) Difficult Level	-	20%	

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Please read & follow the "Instructions for paper setters" very carefully.
Due Date of Receipt of Manuscript at CSVTU: 19-Mar-2020

Please supply solution to NUMERICAL PROBLEMS
and STEP MARKING scheme in envelop 'E.'

Yours Faithfully

Exam Controller
CSVTU, Bhilai

DIPALI SOREN TUDU
Digitally signed by DIPALI SOREN TUDU
Date: 2023.11.08 21:00:00 -08'00'

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
Newai, PO Newai, Distt. Durg (CG) 491 107
Exam Cell: 0788-2445017 , 0788-2445024 (Phone)

Letter No. **CSVTU/Confd./EXAM/Apr-May 2020/A000212(014)00480** Bhilai, Date : **19-Mar-2020**

To,
DILLIP KUMAR DASH
UID : **00480**
Christian College Of Engineering & Technology - Bhilai

A000212(014)

Subject:Appointment for setting of Question Paper & providing solution to the Questions.

Dear Sir/Madam,

I have been directed to inform you that you are appointed as Question Paper setter for CSVTU end semester exam.

Subject: **Mathematics-II (A000212(014))** Course & Sem: **B.Tech , First Year Semester**

Branch:

Max Marks: **100** Minimum Pass Mark: **35** Duration: **3 Hrs** Scheme: **New AICT**

Presuming that you will be accepting the appointment, enclosed herewith are all the relevant papers on the subject. **In case you are unable to accept the appointment, it is requested that all the papers sent may please be returned with your refusal letter in enclosed format.**

It is requested that only one question paper be prepared in accordance with the enclosed syllabus.

It may kindly be noted that for Diploma courses of Polytechnic, Hindi version of each question is to be given immediately below the English version.

PLEASE SET QUESTIONS FROM EACH UNIT WITH INTERNAL CHOICE. Please try to accommodate all questions of the paper within the following framework-

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(iii) Difficult Level	-	20%	

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1.	Paper setting	(i) (ii)	Rs. 450/- (for Diploma and UG courses) Rs. 600/- (for PG courses)
2.	Solutions of questions & Memorandum of instructions to valuers- (MANDATORY)	(i) (ii)	Rs 400/- (for UG / PG courses) Rs 300/- (for diploma courses)

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Please read & follow the "Instructions for paper setters" very carefully.
Due Date of Receipt of Manuscript at CSVTU: 29-Mar-2020

Please supply solution to NUMERICAL PROBLEMS and STEP MARKING scheme in envelop 'E.'

Yours Faithfully

Exam Controller
CSVTU, Bhilai

DIPALI SOREN TUDU
Digitally signed by DIPALI SOREN TUDU
Date: 2023.11.08 21:00:17 -08'00'

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
Newai, PO Newai, Distt. Durg (CG) 491 107
Exam Cell: 0788-2445017 , 0788-2445024 (Phone)

Letter No. **CSVTU/Confd./EXAM/Apr-May 2021/B000311(014)00480** Bhilai, Date : **12-Jun-2021**

To,
DILLIP KUMAR DASH
UID : **00480**
Christian College Of Engineering & Technology - Bhilai

B000311(014)

Subject:Appointment for setting of Question Paper & providing solution to the Questions.

Dear Sir/Madam,

I have been directed to inform you that you are appointed as Question Paper setter for CSVTU end semester exam.

Subject: **Mathematics - III (B000311(014))**		Course & Sem:	**B.E , SEMESTER 3**
Branch:			
Max Marks:	Minimum Pass Mark:	Duration:	Scheme:

Presuming that you will be accepting the appointment, enclosed herewith are all the relevant papers on the subject. **In case you are unable to accept the appointment, it is requested that all the papers sent may please be returned with your refusal letter in enclosed format.**

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Please return all the documents in case of refusal or if any relative is appearing in the said Examination. Inform the undersigned if you come to know in future that some relative is appearing.

Please read & follow the "Instructions for paper setters" very carefully.
Due Date of Receipt of Manuscript at CSVTU: 22-Jun-2021

Please supply solution to NUMERICAL PROBLEMS and STEP MARKING scheme in envelop 'E.'

Yours Faithfully

Exam Controller
CSVTU, Bhilai

DIPALI SOREN TUDU
Digitally signed by DIPALI SOREN TUDU
Date: 2023.11.08 21:00:38 -08'00'

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
Newai, PO Newai, Distt. Durg (CG) 491 107
Exam Cell: 0788-2445017 , 0788-2445024 (Phone)

Letter No. **CSVTU/Confd./EXAM/Apr-May 2021/B022411(014)00480** Bhilai, Date : **12-Jun-2021**

To,
DILLIP KUMAR DASH
UID : **00480**
Christian College Of Engineering & Technology - Bhilai

B022411(014)

Subject:Appointment for setting of Question Paper & providing solution to the Questions.

Dear Sir/Madam,

I have been directed to inform you that you are appointed as Question Paper setter for CSVTU end semester exam.

Subject: **Discrete Mathematics (B022411(014))**		Course & Sem:	**B.Tech , SEMESTER 4**
Branch:			
Max Marks:	Minimum Pass Mark:	Duration:	Scheme:

Presuming that you will be accepting the appointment, enclosed herewith are all the relevant papers on the subject. **In case you are unable to accept the appointment, it is requested that all the papers sent may please be returned with your refusal letter in enclosed format.**

It is requested that only one question paper be prepared in accordance with the enclosed syllabus.

It may kindly be noted that for Diploma courses of Polytechnic, Hindi version of each question is to be given immediately below the English version.

PLEASE SET QUESTIONS FROM EACH UNIT WITH INTERNAL CHOICE. Please try to accommodate all questions of the paper within the following framework-

(i) Average Level	-	40%	Please go through the syllabus of the
(ii) Medium Level	-	40%	subject before setting the questions.
(iii) Difficult Level	-	20%	

The manuscript of the question paper & solution to the questions should be kept in separate envelop marked 'C' & 'E' respectively. These should be sealed & kept in envelop 'B', in which the declaration form duly filled in should also be kept. The envelop containing all the above documents should be sealed properly and delivered in person or sent through registered post insured for Rs. 100/- to the undersigned by the due date.

No sign of indication should be marked on the envelop 'C' which can disclose the identity of the setter.
Please avoid to include solved problems given in the text book.

1.	Paper setting	(i) (ii)	Rs. 450/- (for Diploma and UG courses) Rs. 600/- (for PG courses)
2.	Solutions of questions & Memorandum of instructions to valuers- (MANDATORY)	(i) (ii)	Rs 400/- (for UG / PG courses) Rs 300/- (for diploma courses)

Please return all the documents in case of refusal or if any relative is appearing in the said Examination. Inform the undersigned if you come to know in future that some relative is appearing.

Please read & follow the "Instructions for paper setters" very carefully.
Due Date of Receipt of Manuscript at CSVTU: 22-Jun-2021

Please supply solution to NUMERICAL PROBLEMS and STEP MARKING scheme in envelop 'E.'

Yours Faithfully

Exam Controller
CSVTU, Bhilai

DIPALI SOREN TUDU
Digitally signed by DIPALI SOREN TUDU
Date: 2023.11.08 21:01:03 -08'00'

Confidential & most Urgent

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
Newai, PO Newai, Distt. Durg (CG) 491 107
Exam Cell: 0788-2445017 , 0788-2445024 (Phone)

Letter No. **CSVTU/Confd./EXAM/Apr-May 2021/B000311(014)00480** Bhilai, Date : **12-Jun-2021**

To,
DILLIP KUMAR DASH
UID : **00480**
Christian College Of Engineering & Technology - Bhilai

B000311(014)

Subject:Appointment for setting of Question Paper & providing solution to the Questions.

Dear Sir/Madam,

I have been directed to inform you that you are appointed as Question Paper setter for CSVTU end semester exam.

Subject: **Mathematics - III (B000311(014))**		Course & Sem:	**B.E , SEMESTER 3**
Branch:			
Max Marks:	Minimum Pass Mark:	Duration:	Scheme:

Presuming that you will be accepting the appointment, enclosed herewith are all the relevant papers on the subject. **In case you are unable to accept the appointment, it is requested that all the papers sent may please be returned with your refusal letter in enclosed format.**

It is requested that only one question paper be prepared in accordance with the enclosed syllabus.

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(i) Average Level	-	40%	Please go through the syllabus of the
(ii) Medium Level	-	40%	subject before setting the questions.
(iii) Difficult Level	-	20%	

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Please avoid to include solved problems given in the text book.

1.	Paper setting	(i) (ii)	Rs. 450/- (for Diploma and UG courses) Rs. 600/- (for PG courses)
2.	Solutions of questions & Memorandum of instructions to valuers- (MANDATORY)	(i) (ii)	Rs 400/- (for UG / PG courses) Rs 300/- (for diploma courses)

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Yours Faithfully

Exam Controller
CSVTU, Bhilai

DIPALI SOREN TUDU
Digitally signed by DIPALI SOREN TUDU
Date: 2023.11.08 21:01:19 -08'00'

Confidential & most Urgent

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
Newai, PO Newai, Distt. Durg (CG) 491 107
Exam Cell: 0788-2445017 , 0788-2445024 (Phone)

Letter No. **CSVTU/Confd./EXAM/Apr-May 2021/B022411(014)00480** Bhilai, Date : **12-Jun-2021**

To,

DILLIP KUMAR DASH
UID : **00480**

Christian College Of Engineering & Technology - Bhilai

B022411(014)

Subject:Appointment for setting of Question Paper & providing solution to the Questions.

Dear Sir/Madam,

I have been directed to inform you that you are appointed as Question Paper setter for CSVTU end semester exam.

Subject: **Discrete Mathematics (B022411(014))** Course & Sem: **B.Tech , SEMESTER 4**

Branch:

Max Marks: Minimum Pass Mark: Duration: Scheme:

Presuming that you will be accepting the appointment, enclosed herewith are all the relevant papers on the subject. **In case you are unable to accept the appointment, it is requested that all the papers sent may please be returned with your refusal letter in enclosed format.**

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Yours Faithfully

Exam Controller
CSVTU, Bhilai

DIPALI SOREN TUDU
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Date: 2023.11.08 21:01:35 -08'00'

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY,BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय,भिलाई

Sl. No.	Board of Studies	Chairman	Professor (Two)	Reader/Associate Professor (Four)	Lecturer/Asstt. Professor (Six)	Student Member	External Member	Invited Person
19.	Applied Chemistry	Dr.Mrs.A.Vani GDRCET,Bhilai	Dr. Santosh Kumar Sar BIT,Durg Dr.Mrs.Shweta Choubey BIT,Durg	Dr. Preeti Nand Kumar CCET,Bhilai Dr. Sumita Nair BIT,Durg Dr. Shilpa Sharma REC,Raipur Dr. Mrs Laxmikant SSTC-SSGI,Bhilai	Mr. Etesh Kumar Jangel AITM,Rajnandgaon Mrs. Neelima Mishra CIT,Rajnandgaon Dr. Mrs. Deepti Sahare RIT,Raipur Dr. Yashu Verma BIT, Durg Ms. Leena Dewangan CIT,Rajnandgaon Mrs. Shraddha Shukla CIT,Rajnandgaon			
20.	Applied Maths	Dr. Ashutosh Narayan BIT,Durg	Dr.Sanjay Sharma BIT,Durg Dr. Dilip Kumar Das CCET,Bhilai	Dr. Kamshwar Nath Mishra BIT,Durg Dr. Manoj Kumar Jha REC,Raipur Dr. Shilpi Dewangan SSTC-SSEC FET,Bhilai Dr. Sandeep Shrivastava SSTC-SSEC FET,Bhilai	Mr. Sharda Charan Gupta RCET,Raipur Mr. Manoj Kumar Dewangan MMCT,Raipur Mr. Pankaj Kumar Sarde RCET,Raipur Mr. Arun Rai CIT,Rajnadgaon Dr.Vikas Kumar Mishra RCET,Raipur Mr. Bhuwan Lal Malage SSTC-SSGI,FET Bhilai			
21.	Mechatronics Engineering	Mr. Rajesh Kumar (Asso.Prof.) CSIT,Durg	Nil Nil	Mr. Rajesh Kumar Mr.Deepak Singh CSIT,Durg	Mr. Pradeep Ku mar Agrawal CSIT,Durg			

DIPALI SOREN TUDU

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Date: 2023.11.08 21:02:02 -08'00'

Criterion 1

Curricular Planning and Implementation QlM 1.1.1

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

CSVTU/Academic /2018/ 1754 Bhilai, Date 9./.7./.18.

To,

The Chairmen & nominated members,
Board of Studies (BE Courses)

Sub: 4th Meeting of Chairmen and nominated members, BoS (BE Courses).

With reference to above subject this is to inform that the meeting of Chairmen, along with nominated members, Board of Studies (BE Courses) will be held as per schedule given below, regarding development of Curriculum of BE Courses as per AICTE guidelines.

Board of Studies	Date	Time
Electronics & Communication Engineering, Physics, Chemistry, Maths	12-07-2018	2:00 PM
Civil, Electrical, Mechanical, Computer Science & Engineering	13-07-2018	2:00 PM

Venue:- Vivekanand Conference Hall, 2nd Floor, CSVTU Campus, Bhilai

You are requested to kindly inform other members of your group (Bos), to attend the meeting.

Note: TA will be admissible as per CSVTU prevailing rules.

Registrar 9/7/18
CSVTU, Bhilai

Copy to:-

1. Principal (S) with a request to kindly release the chairman, and other Member of BoS for the said meeting.

Village-Newai, Post-Newai, Bhilai, Distt.-Durg (Chhattisgarh) PIN-491107
Ph. No.: 0788-2200062, Fax No.: 0788-2445020, Website: www.csvtu.ac.in,
E-mail: registrar@csvtu.ac.in

DIPALI SOREN TUDU
Digitally signed by DIPALI SOREN TUDU
Date: 2023.11.08 21:02:22 -08'00'

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

CSVTU/Academic /2018/1754 Bhilai, Date 9./.7./.18.

To,

The Chairmen & nominated members,
Board of Studies (BE Courses)

Sub: 4th **Meeting of Chairmen and nominated members, BoS (BE Courses).**

With reference to above subject this is to inform that the meeting of Chairmen, along with nominated members, Board of Studies (BE Courses) will be held as per schedule given below, regarding development of Curriculum of BE Courses as per AICTE guidelines.

Board of Studies	Date	Time
Electronics & Communication Engineering, Physics, Chemistry, Maths	12-07-2018	2:00 PM
Civil, Electrical, Mechanical, Computer Science & Engineering	13-07-2018	2:00 PM

Venue:- Vivekanand Conference Hall, 2nd Floor, CSVTU Campus, Bhilai

You are requested to kindly inform other members of your group (Bos), to attend the meeting.

Note: TA will be admissible as per CSVTU prevailing rules.

Registrar 9/7/18
CSVTU, Bhilai

Copy to:-

1. Principal (S) with a request to kindly release the chairman, and other Member of BoS for the said meeting.

Village-Newai, Post-Newai, Bhilai, Distt.-Durg (Chhattisgarh) PIN-491107
Ph. No.: 0788-2200062, Fax No.: 0788-2445020, Website: www.csvtu.ac.in,
E-mail: registrar@csvtu.ac.in

DIPALI SOREN TUDU
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Date: 2023.11.08 21:02:59 -08'00'

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

CSVTU/Academic /2018/1754 Bhilai, Date 5./7./18.

To,

The Chairmen & nominated members,
Board of Studies (BE Courses)

Sub: 4th **Meeting of Chairmen and nominated members, BoS (BE Courses).**

With reference to above subject this is to inform that the meeting of Chairmen, along with nominated members, Board of Studies (BE Courses) will be held as per schedule given below, regarding development of Curriculum of BE Courses as per AICTE guidelines.

Board of Studies	Date	Time
Electronics & Communication Engineering, Physics, Chemistry, Maths	12-07-2018	2:00 PM
Civil, Electrical, Mechanical, Computer Science & Engineering	13-07-2018	2:00 PM

Venue:- Vivekanand Conference Hall, 2nd Floor, CSVTU Campus, Bhilai

You are requested to kindly inform other members of your group (Bos), to attend the meeting.

Note: TA will be admissible as per CSVTU prevailing rules.

Registrar
CSVTU, Bhilai
5/7/18

Copy to:-

1. Principal (S) with a request to kindly release the chairman, and other Member of BoS for the said meeting.

Village-Newai, Post-Newai, Bhilai, Distt.-Durg (Chhattisgarh) PIN-491107
Ph. No.: 0788-2200062, Fax No.: 0788-2445020, Website: www.csvtu.ac.in,
E-mail: registrar@csvtu.ac.in

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Date: 2023.11.08 21:03:26 -08'00'

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No...../CSVTU/ACAD/FM/2016

Notification

Bhilai, Date : .....

Board of Studies for Engineering Colleges

Sl. No.	Board of Studies	Chairman	Professor (Two)	Reader/Associate Professor (Four)	Lecturer/Asstt. Professor (Six)	Student Member	External Member	Invited Person
1	Computer Science and Engineering	Dr.Ramesh Kumar B.I.T,Durg	Dr. Asha Shripad Ambhaikar RCET,Bhilai	Dr .Mrs. Arpana Rawal-BIT	Mis.Sushmita Chakraborty RCET,Bhilai			
				Ms. Preeti Manke I.T.Korba	Mr.Abhishek Pandey DIMATE,Raipur			
			Dr. Sourabh Rugta RCET, Bhilai	Ms. Archana Chodhary CCET,Bhilai	Mr. Mukesh S Chouhan RCET,Bhilai			
				Mr. Anurag Sharma REC,Raipur	Mrs.Nidhi Chandrakar DIMAT,Raipur			
					Mr.Rajesh Tiwari SSTC-SSGI,FET,Bhilai			
					Mr.Rohit Raja SSTC-SSGI,FET,Bhilai			
2	Information Technology	Ms. Latika Shyam Pinjarkar (Associate Prof.) SSTC-SSGI-FET, Bhilai)	Nil	Ms. Latika Shyam Pinjarkar SSTC-SSGI,FET,Bhilai	Mr.Toran Verma ,RECT,Bhilai			
				Mr.Bhagawati Charan Patel SSTC-SSGI ,FET,Bhilai	Mr.Saurabh Pandya SSTC-SSGI,FET,Bhilai			
					Mr. Vikash Pandey BIT,Durg			
					Mrs. Kashi Shubhashri Spurjeen BIT,Durg			
					Mr. Rajiv Pathak BIT,Durg			
					Mr. Amarendra Kumar Singh BIT,Durg			
3	Computer Application	Dr .Mrs. Mitta Venkati Padma vati BIT,Durg	Dr .Mrs. Mitta Venkati Padma vati BIT,Durg	Dr .Mrs. Ani Thomas BIT,Durg	Ms. V Sarita RCET,Bhilai			
				Mrs. Sunita Soni BIT, Durg	Ms. Soma Mishra RCET,Bhilai			
			Dr .Mrs. Smita Selet SSTC-SSGI	Ms.Bindu Xavier DIMT,Raipur	Ms. Monita Roy Choudhary RCET,Bhilai			
				Mr. Ajay Kumar Kushwaha RCET,Bhilai	Mrs. Sweta Kharya BIT,Durg			
					Mr. Om Prakash Dewangan RECT,Bhilai			
					Ms. Bhavana Vishwakarma RCET,Bhilai			

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Date: 2023.11.08 21:03:43 -08'00'

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY,BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय,भिलाई

Sl. No.	Board of Studies	Chairman	Professor (Two)	Reader/Associate Professor (Four)	Lecturer/Asstt. Professor (Six)	Student Member	External Member	Invited Person
4.	Electrical Engineering	Dr.soory Prakash Shulak BIT,Durg	Dr. Ms.Anupama Pushkar Huddar BIT,Durg	Mr. Naveen Goel SSTC-SSGI FET Bhilai	Mr. V.N.Singh New GEC,Raiput			
			Dr.Satya Prakash Dubey RCET,Bhilai	Mr. Saji T Chako SSTC-SSGI FET Bhilai	Mr. B.Shridhar CCET,Bhilai			
				Mrs.Debjani Chattopadhyay SSTC-SSGI FET Bhilai	Mrs Roshni Rahangdale SSTC-SSGI,FET Bhilai			
				Mr.Hemant Saheb rao Kulat SSTC-SSGI,FET,Bhilai	Mrs. Megha Chandrakar Kataria REC,Bhilai			
					Mrs.Payal Roy CCET,Bhilai			
					Gouranga Chandrra Biswal BIT,Durg			
5.	Electronics &Telecommunication Engineering	Dr.Mrs.Monisha Sharma SSTC-SSGI,FET,Bhilai	Dr.Mrs.Monisha Sharma SSTC-SSGI,FET,Bhilai	Dr. Mohd. Rafique Khan GEC,Raipur	Mr. Sanjay Kumar Dekate GEC,Raipur			
			Dr . Mohan Awasthy RCET,Bhilai	Anil Kumar Shrivastava RCET,Bhilai	Ms. Himani Agrawal SSTC-SSGI FET Bhilai			
				Dr M R Meshram GEC,Bilaspur	Ms. Susmita Ghose RCET,Bhilai			
				Mrs. Jaspal Bagga SSTC-SSGI FET Bhilai	Mr. Chandrahas Sahu SSTC-SSGI FET ,Bhilai			
					Mr. Balram Timande RCET,Bhilai			
					Ms. Kiran Dewangan BIT,Durg			
6	Electronic & Instrumentation	Mrs .Archana Tiwari (Asso.Prof.) CSIT,Durg		Mrs .Urmila S Soni CSIT,Durg	Mr. Shailendra Kumar Dewangan CSIT,Durg			
				Mr. Rajesh Kumar Gupta CSIT,Durg	Mr. Prabhas Kumar Gupta CSIT,Durg			
			Nil		Mr. Jitendra Kumar SSTC-SSGI FET Bhilai			

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Date: 2023.11.08 21:04:30 -08'00'

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY,BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय,भिलाई

Sl. No.	Board of Studies	Chairman	Professor (Two)	Reader/Associate Professor (Four)	Lecturer/Asstt. Professor (Six)	Student Member	External Member	Invited Person
7.	Electrical & Electronics Engineering	Dr Ram Narayan Patel SSTC-SSGI,FET,Bhilai	Dr. Ram Narayan Patel SSTC-SSGI, FET,Bhilai	Dr. Vivek Kumar Chandra CSIT,Durg	Mr. Mahesh Singh SSTC-SSGI FET Bhilai			
			Dr. Anup Mishra BIT,Durg	Dr.Mrs.Surekha Bhusnur BIT,Durg	Mr. Devanand Bhonsle SSTC-SSGI FET,Bhilai			
				Mr. Ashraf Jafri CSIT,Durg	Mr. Raj Kumar Jhapte SSTC SSGI, FET,Bhilai,Bhilai			
				Mr. Pawan Chandrakar Tapre SSTC-SSGI FET Bhilai	Ms. Shruti Mishra SSTC-SSGI,FET Bhilai			
					Mr. Nokesh kumar Dewangan CIT,Rajnandgaon			
					Mr. Chitesh Dubey CIT, Rajnandgaon			
8.	Mechanical Engineering	Dr. Sapan Kumar Ganguly BIT,Burg	Dr. Tata Rama Rao BIT,Raipur	Mr.Preetam Kumar Sarva GEC,Jagdalpur	Mr. Gautam Kumar Biswas RIT,Raipur			
			Dr.K Sridhar CSIT,Durg	Mr.Praveen Kumar Borkar RECT,Raipur	Mr. Amit Sarda CCET,Bhilai			
				Mr. P.V. Joshi SSTC-SSGI,FET Bhilai	Mr. Gurmeet Singh Gahir SSTC-SSGI,FET Bhilai			
				Mr. Lkshman Sondhi SSTC-SSGI,FET Bhilai	Mr. Siddarth Tiwari SSTC-SSGI,FET, Bhilai			
					Mr. Sumit Agrawal RCET,Bhilai			
					Mr. Devesh Shrivastava BIT,Durg			
9.	Civil Engineering	Dr. Mohan Kumar Gupta BIT,Durg	Dr. Pradeep Kumar Sahoo CIT,Rajnandgaon	Mr. Ghanshyam Prasad Khare GEC,Jagadalpur	Mr.Nishant Trapthi SSTC-SSGI,FET			
			Dr.Shashikant Jaiswal BIT,Durg	Mrs.Seema Chauhan GEC,Bilaspur	Mr. Santosh Kumar SSTC-SSGI FET,Bhilai			
				Dr. Arun Kumar Thalia GDRCET,Bhilai	Ms. Prerna Agrawal SSIPMT,Raipur			
				Mr. Manoj Kumar Tiwari SSTC SSGI FET,Bhilai, Bhilai	Mr. Aniruddha Sinha SSTC SSGI FET,Bhilai, Bhilai			
					Ms. Aradhana Pachauri YITM,Rajnandgaon			
					Mr.Swapan Kumar Mandal, YITM,Rajnandgaon			

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Date: 2023.11.08 21:05:42 -08'00'

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

Sl. No.	Board of Studies	Chairman	Professor (Two)	Reader/Associate Professor (Four)	Lecturer/Asstt. Professor (Six)	Student Member	External Member	Invited Person
10.	Humanities	Dr.Chandra Shekhar Sharma (Asso.Prof.) CSIT,Durg		Dr. Jaya Mishra RCET,Bhilai	Dr. Neema Sajju Balan RECT,Bhilai			
			Nil	Mr.Gangadhar Deheri CEC,Bhilai	Dr. Anjana Shikhar BIT,Durg			
			Nil	Dr. Indrani Singh Rai RCET,Raipur	Mrs. Shobha Pandey RIT,Raipur			
				Dr. Ashish Sharma RSRRCET,Bhilai	Mrs. Mausumy Ray Choudhary DIMAT,Raipur			
					Ms. Aparana Mukharjee SSIPMT,Raipur			
					Dr.Narayani Sharma YITM,Rajnandgaon			
11.	Management	Dr.Sanjay Guha BIT,Durg	Dr.Jagdish H Vyas DIMAT,Raipur	Mr.Satywardhan Tiwari BIT,Durg	Ms. Pooja Bahel SSTC-SSGI ,FET Bhilai			
			Dr.Souren Sarkar SSTC-SSGI,FET,Bhilai	Mr.R Sridhar RIT,Raipur	Ms. Shikha Sondhi SSTC-SSGI,FET Bhilai			
				Dr. Mrs. Reshma Shrivastava DIMAT,Raipur	Dr. Daljeet Singh Wadhwa BIT,Durg			
				Mr.Nitin Jain SSIPMT,Raipur	Dr. Mrs.Sheeta Sharma BIT,Durg			
					Mr.Saurabh Tomar BIT,Durg			
					Mrs. Judith Nagar BIT,Durg			
12.	Metallurgical Engineering							

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY,BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय,भिलाई

Sl. No.	Board of Studies	Chairman	Professor (Two)	Reader/Associate Professor (Four)	Lecturer/Asstt. Professor (Six)	Student Member	External Member	Invited Person
				Mr. S B S Tekam GEC,Bilaspur				
13.	Mining Engineering	Mr. S B S Tekam (Asso.Prof) GEC,Bilaspur	Nil	Nil	Nil			
			Nil	Nil	Nil			
				Nil	Nil			
			Shri. Amit Roy Principal CIP,Raipur	Dr. Mrs. Sweety Lanjaniya CEC,Bilaspur	Mr.Amit Alexander RCPSR,Bhilai			
			Dr. Siva Shonkar Nayak SVITS,Bilaspur	Dr. Utpal Jana CEC,Bilaspur	Mr.S.Prakash Rao CIP,Raipur			
14.	Pharmacy	Dr.D.K.Tripathi RCPSR-Bhilai		Dr. Trilochan Satpathy CIP,Raipur	Dr. Rohitas Deshmukh SSTC-SSGI,FET Bhilai			
				Dr.Ajazuddin RCPSR,Bhilai	Mr.Vijendra Kumar SRSIP,Kumahari			
					Ms.Madhulika Pradhan RCPSR,Bhilai			
					Mr. Sandeep Kumar Sonkar RCPSR,Bhilai			
				Mr.Amit Khare RIT,Raipur	Mr.Mukesh Thite RIT,Raipur			
15.	Chemical Engineering	Mr.Amit Khare (Asso.Prof) RIT,Raipur	Nil	Nil	Mr. Gaurav Chandrakar RIT,Raipur			
			Nil	Nil				

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DIPALI SOREN TUDU
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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

Sl. No.	Board of Studies	Chairman	Professor (Two)	Reader/Associate Professor (Four)	Lecturer/Asstt. Professor (Six)	Student Member	External Member	Invited Person
16.	Bio-Technology	Dr.Tanu Shree Chatterjee (Asso.Prof.) RIT,Raipur		Dr. Tanushree Chatterjee RIT Raipur	Mr.Mohit Sharad Mishra RIT,Raipur			
					Ms. Roshni Meghnani RIT,Raipur			
			Nil	Nil				
					Nil			
					Nil			
17.	Architectures	Arvind Kumar Ahirwar (Asso.Prof.) GEC,Raipur		Arvind Kumar Ahirwar GEC,Raipur				
			Nil	Nil				
18.	Applied Physics	Dr.Ruby Das BIT,Durg	Dr. Samit Tiwari BIT,Durg	Dr. Sandhya Pillai CCET,Bhilai	Mr.Chandra Shekhar Robinson BIT,Durg			
			Dr. Mohan Lal Verma SSTC-SSGI FET,Bhilai	Dr. Roshan Mathew DIMAT,Rajpur	Dr. Rajesh Lalwani BIT,Durg			
				Dr. Devi Singh Raghuvanshi SSTC-SSGI FET,Bhilai	Mr. Prashant Kumar Sahu BIT,Durg			
				Dr. Sahid A Siddiqui GDRCET,Bhilai	Mr. Shyam Singh Rahangdale CIT,Rajnandgaon			
					Ms. Arpana Shrivastava CIT,Rajnandgaon			
					Mr.Rajesh Chopda YITM,Rajnandgaon			

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY,BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय,भिलाई

Sl. No	Board of Studies	Chairman	Professor (Two)	Reader/Associate Professor (Four)	Lecturer/Asstt. Professor (Six)	Student Member	External Member	Invited Person
19	Applied Chemistry	Dr. Madhurima Pandey (Professor BIT, Durg)	Dr. Santosh Kumar Sar BIT,Durg Dr.Mrs.Shweta Choubey BIT,Durg	Dr. Preeti Nand Kumar CCET,Bhilai Dr. Sumita Nair BIT,Durg Dr. Shilpa Sharma REC,Raipur Dr. Mrs Laxmikant SSTC-SSGI, FET Bhilai	Mr. Etesh Kumar Jangel AITM,Rajnandgaon Mrs. Neelima Mishra CIT,Rajnandgaon Dr. Mrs. Deepti Sahare RIT, Raipur Dr. Yashu Verma BIT, Durg Ms. Leena Dewangan CIT, Rajnandgaon Mrs. Shraddha Shukla CIT, Rajnandgaon			
20	Applied Maths	Dr. Ashutosh Narayan BIT,Durg	Dr.Sanjay Sharma BIT,Durg Dr. Dilip Kumar Das CCET,Bhilai	Dr. Kamshwar Nath Mishra BIT,Durg Dr. Manoj Kumar Jha REC,Raipur Dr. Shilpi Dewangan SSTC-SSEC FET,Bhilai Dr. Sandeep Shrivastava SSTC-SSEC FET Bhilai	Mr. Sharda Charan Gupta RCET,Raipur Mr. Manoj Kumar Dewangan MMCT, Raipur Mr. Pankaj Kumar Sarde RCET, Raipur Mr. Arun Rai CIT,Rajnadgaon Dr. Vikas Kumar Mishra RCET,Raipur Mr. Bhuwan Lal Malage SSTC-SSGI,FET Bhilai			
21	Mechatronics Engineering	Mr. Rajesh Kumar (Asso.Prof.) CSIT,Durg	Nil Nil	Mr. Rajesh Kumar Mr.Deepak Singh CSIT,Durg	Mr. Pradeep Ku mar Agrawal CSIT,Durg			

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Criterion 1

Curricular Planning and Implementation QlM 1.1.1

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Criterion 1

Curricular Planning and Implementation QlM 1.1.1

rediffmail Mailbox of amitsarda3

Subject: Meeting of BOS and Deans at 03.00 PM on May 30, 2019 (Thursday) in the Vivekanand Hall, CSVTU, Bhilai

From: Pro Vice Chancellor CSVTU <pvc@csvtu.ac.in> on Thu, 30 May 2019 00:07:25

To: monisha.sharma10@gmail.com, principal.014.csvtu@gmail.com, archanatiwari@csitdurg.in, archanat1972@gmail.com, sanguha65@gmail.com, principal.001.csvtu@gmail.com, sapn.bit@gmail.com, akhare88@gmail.com, principal.012.csvtu@gmail.com, tanushree52004@yahoo.com, Soorya prakash Shukla <sp.shukla@bitdurg.ac.in>, anupmishra.bit123@gmail.com, hodcivil@bitdurg.ac.in, vmetta@gmail.com, rk_bitd@rediffmail.com, latikabhorkar@gmail.com, chandrashekhar.mail@gmail.com, sbstekam69@gmail.com, principal.007.csvtu@gmail.com, BIT Chemistry <hodchemistry@bitdurg.ac.in>, ashutoshmaths.narayan@gmail.com, rajeshkumr@csitdurg.in, "Dr. Sourabh Rungta" <sourabh@rungta.ac.in>, manishasharma1@rediffmail.com, principal@bitdurg.ac.in, pradeep_ghosh@hotmail.com, saket07@rediffmail.com, saketwsu@gmail.com, prinicipal@ssipmt.com, archalok@yahoo.co.in, dr.manishaagrawal@rungta.ac.in, maninsha_anuashi@yahoo.co.in, wakratund@gmail.com, mrmeshram@gecjdp.ac.in, baggajaspal@gmail.com, dr.skdekate@gecjdp.ac.in, chandrahassscet@gmail.com, balramtimande@gmail.com, kiran.dewangan@gmail.com, Ruby Das <ruby.das@bitdurg.ac.in>, samit_tiwari@rediffmail.com, madhu_sandhyain@yahoo.com, dsraghu29@gmail.com, shahidsiddiqui0@gmail.com, 78692wow@gmail.com, robinsoncs_777@rediffmail.com, rajeshlalwani12003@yahoo.co.in, prashantsahu_27@yahoo.co.in, bhumichopda@gmail.com, nandinipreeti@gmail.com, drsumitanair@yahoo.in, shilpa.creative@gmail.com, lkanta73@gmail.com, dr.yashu.verma@yahoo.com, drrajeshwar67@gmail.com, dillip1_dash@yahoo.co.in, knmbit@gmail.com, drmanojjha4@gmail.com, shilpi.mahesh2003@gmail.com, sandeep03ssitm@gmail.com, scgupta771@gmail.com, blmalager1968@gmail.com, sharmadrashish@yahoo.com, mausumi.mr@gmail.com, snarayani76@gmail.com, skjaiswal67@yahoo.com, nitr.mkt@gmail.com, sannit039@gmail.com, prasanna@rungta.ac.in, pradeepkghosh8@gmail.com, sapan.bit@gmail.com, ksridhar@csitdurg.in, borkar_p@yahoo.com, lsondhi@gmail.com, amitsarda3@rediffmail.com, gurmeetgahir@hotmail.com, sumit_agrawal47@rediffmail.com, devesh.mech@gmail.com, gouranga97@rediffmail.com, arpana_rawal@rediffmail.com, chowdhuryarchana@gmail.com, raj_tiwari_in@yahoo.com

Cc: abhishek jha <abhishekduttjha@gmail.com>, principal.003.csvtu@gmail.com, mkseem670@gmail.com, kulshreshtha_m@ignou.ac.in, vc@csvtu.ac.in

Dear Ma'am/Sir,

Greetings from Chhattisgarh Swami Vivekanand Technical University (CSVTU), Bhilai !!

At the outset, I take this opportunity to convey my gratitude to all Chairmen of respective BOS and Deans for their valuable inputs given during the discussion in meetings held on April 22, 2019 and April 29, 2019 on the issue of development of Programme Structure and Syllabus of First Year degree programme in Engineering & Technology in light of model curriculum of AICTE.

As decided in the meetings, the tentative syllabus for the courses included in the proposed Programme Structure of First and Second Semesters was to be completed by May 15, 2019. In this regard, I am happy to share that the syllabus preparation work could be completed as per schedule. The syllabus so prepared needs to be approved by the respective BOS before placing in the Statutory Bodies of the University. Needless to mention, the Programme Structure and Syllabus are to be implemented with effect from 2019-20 session.

Keeping above in view, a meeting of all Board of Studies for BE courses along with respective Deans has been scheduled on May 30, 2019 at 03.00 PM in the Vivekanand Hall, Second Floor, CSVTU, Bhilai. You are requested kindly to make it convenient to attend the meeting and give your valuable inputs.

All concerned Principals are requested to facilitate the BOS Members of their colleges to attend the meeting. All Chairpersons of BOS are requested to bring TWO hard copies along with soft copy of the proposed syllabus.

With thanks and regards,

Prof. Manoj Kulshrestha
Pro Vice Chancellor
Chhattisgarh Swami Vivekanand Technical University (CSVTU)
Newai, P.O. Newai, BHILAI, Distt. Durg (CG) - 491 107
Phone +91-788-2445033 (O), +91-98101 38664 (M)
On Deputation from Indira Gandhi National Open University (IGNOU), New Delhi

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Date: 2023.11.08 21:08:56 -08'00'

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

Ref. No. CSVTU/Acad./2019/1653 Date: 28/05/2019

To,
The Chairmen and Members
Board of Studies (B.E. Courses)

Sub.- Meeting of Chairmen and Members of Board of Studies (B.E. Courses) on 30.05.2019 at 3 PM.

This is to inform you that a meeting of Chairmen and Members of Board of Studies (BE Courses) has been scheduled to discuss the following agenda:

Agenda: Finalization of the Programme Structure & Syllabus (BE first year courses) and Examination Scheme

Date & Time: 30/05/2019 (03.00 PM)

Venue: Vivekanand Hall, CSVTU, Bhilai

In this regard, you are requested kindly to make it convenient to attend the meeting. The Principals of the institutes are requested to release the concerned members at the above-mentioned date/time. Cooperation from all the concern is solicited.

28/5/19
Registrar
CSVTU, Bhilai

Encl.:
1) List of Chairmen (BoS),
2) List of Members (BoS)

Copy to:
1. PS to H'VC
2. PS to P'VC
3. Principal to all affiliated college with request to release member of BoS.
4. A/C Office
5. Master File

Newai, P.O. Newai, Bhilai, Distt. Durg (Chhttisgarh) - 491107
Ph. No.: 0788-2200062, Fax No.: 0788-2445020, Website: www.csvtu.ac.in, E-mail: registrar@csvtu.ac.in

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Date: 2023.11.08 21:09:35 -08'00'

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

Ref. No. CSVTU/Acad./2019/1653 Date: 28/05/2019

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The Chairmen and Members
Board of Studies (B.E. Courses)

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28/5/19
Registrar
CSVTU, Bhilai

Encl.:
1) List of Chairmen (BoS),
2) List of Members (BoS)

Copy to:
1. PS to H'VC
2. PS to P'VC
3. Principal to all affiliated college with request to release member of BoS.
4. A/C Office
5. Master File

Newai, P.O. Newai, Bhilai, Distt. Durg (Chhttisgarh) - 491107
Ph. No.: 0788-2200062, Fax No.: 0788-2445020, Website: www.csvtu.ac.in, E-mail: registrar@csvtu.ac.in

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Date: 2023.11.08 21:09:59 -08'00'

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

Ref. No. CSVTU/Acad./2019/2051 Bhilai, Date: 03/07/2019

To,

The Chairmen and Members,
Board of Studies (B.E. Course)

Sub.:-Meeting of Board of Studies BE (Mechanical Engineering) on 04.07.2019.

* * * *

With reference to above subject this is to inform that the Meeting of Board of Studies BE (Mechanical Engineering) will be held on **04.07.2019** in the new campus of the University (Utai Road, Newai) at **12.00 PM**. to discuss and finalize the syllabus of **D. Voc and B. Voc** in **Refrigeration and Air Conditioning.**

You are requested to attend the meeting.

Registrar
CSVTU, Bhilai 3/7/19

Copy to:-

1. PS to H'VC
2. PS to P'VC
3. Principal with request to release members of BoS from your Institute.
4. A/c Office
5. Mater File

Newai, P.O. Newai, Bhilai, Distt. Durg (Chhttisgarh) - 491107
Ph. No.: 0788-2200062, Fax No.: 0788-2445020, Website: www.csvtu.ac.in, E-mail: registrar@csvtu.ac.in

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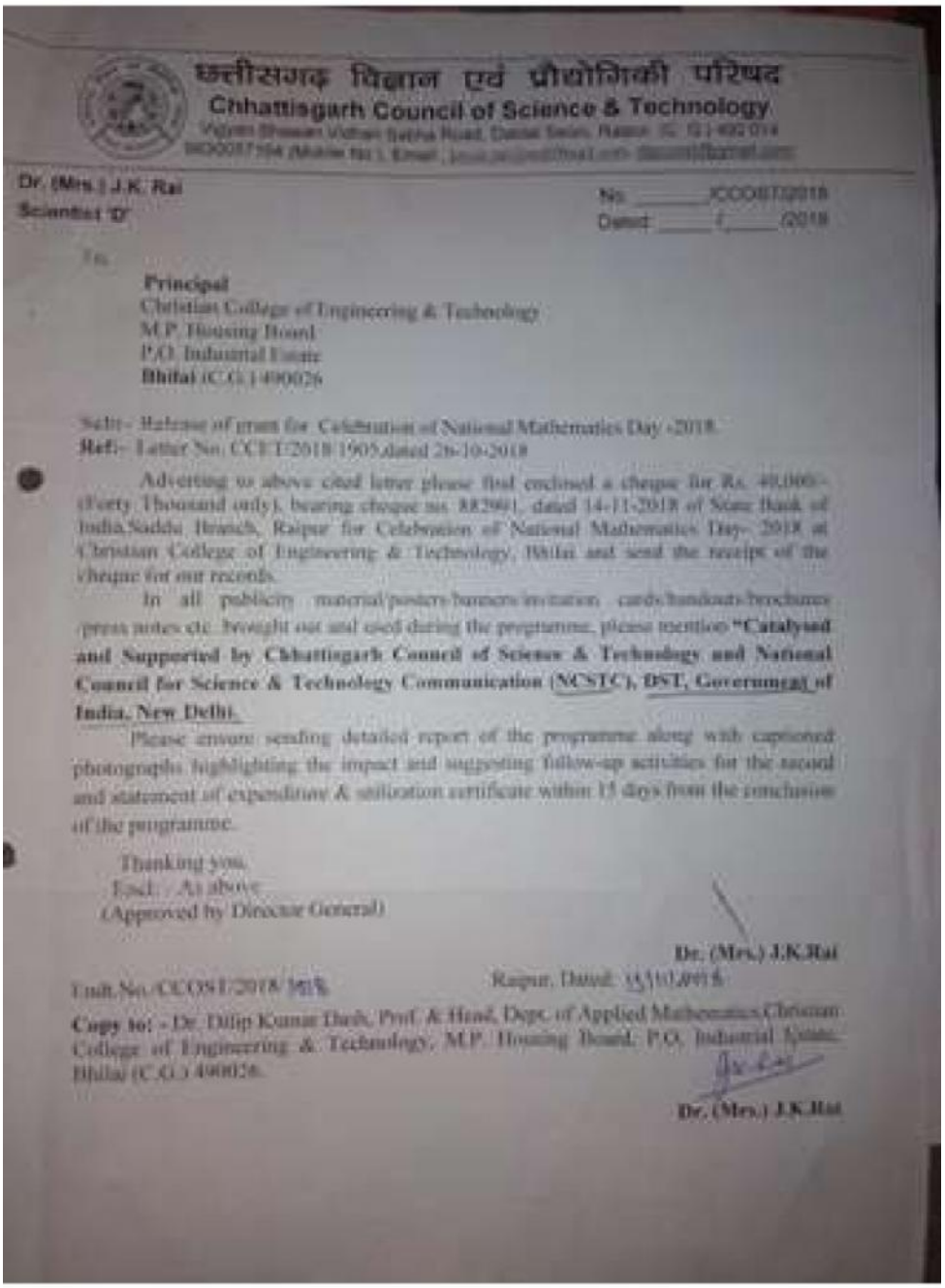
Date: 2023.11.08 21:10:36 -08'00'



छत्तीसगढ़ विज्ञान एवं प्रौद्योगिकी परिषद
Chhattisgarh Council of Science & Technology

Dr. (Mrs.) J.K. Rai
Scientist 'D'

No. _____/CCOST/2018
Dated: _____/_____/2018

To,

Principal
Christian College of Engineering & Technology
M.P. Housing Board
P.O. Industrial Estate
Bhilai (C.G.) 490026

Subj:- Release of grant for Celebration of National Mathematics Day -2018.
Ref:- Letter No. CCET/2018/1905 dated 26-10-2018

Adverting to above cited letter please find enclosed a cheque for Rs. 40,000/- (Forty Thousand only), bearing cheque no. 882901, dated 14-11-2018 of State Bank of India,Saddu Branch, Raipur for Celebration of National Mathematics Day- 2018 at Christian College of Engineering & Technology, Bhilai and send the receipt of the cheque for our records.

In all publicity material/posters/banners/invitation cards/handouts/brochures/press notes etc brought out and used during the programme, please mention **"Catalysed and Supported by Chhattisgarh Council of Science & Technology and National Council for Science & Technology Communication (NCSTC), DST, Government of India, New Delhi.**

Please ensure sending detailed report of the programme along with captioned photographs highlighting the impact and suggesting follow-up activities for the award and statement of expenditure & utilization certificate within 15 days from the conclusion of the programme.

Thanking you,
Encl.: As above
(Approved by Director General)

Dr. (Mrs.) J.K.Rai

Endt.No./CCOST/2018/ 3015 Raipur, Dated: 15/11/2018

Copy to: - Dr. Dilip Kumar Dash, Prof. & Head, Dept. of Applied Mathematics,Christian College of Engineering & Technology, M.P. Housing Board, P.O. Industrial Estate, Bhilai (C.G.) 490026.

Dr. (Mrs.) J.K.Rai

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Criterion 1

Curricular Planning and Implementation QlM 1.1.1

13/03/2023, 11:49 Self Service

Self Service University Meetings Report

University Meetings Report

Meeting Type	Meeting Date	Role	Department	Program	Subject Name
Expert Committee	03-Jan-2020	BOS Member			
Expert Committee	13-Dec-2019	BOS Member			
Question Paper Discrepancy Committee	18-Feb-2020	BOS Member			337351(14)-Mathematics-III

Note: Showing 3 of 3records. To view complete data, please download it to Excel. View More

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Date: 2023.11.08 21:11:32 -08'00'

Self Services Session expires in 29 min

https://csvtu.tcsion.com/SelfServices/home?urn=24230372# 1/1

Criterion 1

Curricular Planning and Implementation QlM 1.1.1

Gmail

Dr.Preeti Nand Kumar <nandinipreeti@gmail.com>

Meeting of BOS and Deans at 03.00 PM on May 30, 2019 (Thursday) in the Vivekanand Hall, CSVTU, Bhilai

1 message

Pro Vice Chancellor CSVTU <pvc@csvtu.ac.in> Thu, May 30, 2019 at 12:07 AM
To: monisha.sharma10@gmail.com, principal.014.csvtu@gmail.com, archanatiwari@csitdurg.in, archanat1972@gmail.com, sanguha65@gmail.com, principal.001.csvtu@gmail.com, sapn.bit@gmail.com, akhare88@gmail.com, principal.012.csvtu@gmail.com, tanushree52004@yahoo.com, Soorya prakash Shukla <sp.shukla@bitdurg.ac.in>, anupmishra.bit123@gmail.com, hodcivil@bitdurg.ac.in, vmetta@gmail.com, rk_bitd@rediffmail.com, latikabhorkar@gmail.com, chandrashekhar.mail@gmail.com, sbstekam69@gmail.com, principal.007.csvtu@gmail.com, BIT Chemistry <hodchemistry@bitdurg.ac.in>, ashutoshmaths.narayan@gmail.com, rajeshkumr@csitdurg.in, "Dr. Sourabh Rungta" <sourabh@rungta.ac.in>, manishasharma1@rediffmail.com, principal@bitdurg.ac.in, pradeep_ghosh@hotmail.com, saket07@rediffmail.com, saketwsu@gmail.com, prinicipal@ssipmt.com, archalok@yahoo.co.in, dr.manishaagrawal@rungta.ac.in, maninsha_anuashi@yahoo.co.in, wakratund@gmail.com, mrmeshram@gecjdp.ac.in, baggajaspal@gmail.com, dr.skdekate@gecjdp.ac.in, chandrahassscet@gmail.com, balramtimande@gmail.com, kiran.dewangan@gmail.com, Ruby Das <ruby.das@bitdurg.ac.in>, samit_tiwari@rediffmail.com, madhu_sandhyain@yahoo.com, dsraghu29@gmail.com, shahidsiddiqui0@gmail.com, 78692wow@gmail.com, robinsoncs_777@rediffmail.com, rajeshlalwani12003@yahoo.co.in, prashantsahu_27@yahoo.co.in, bhumichopda@gmail.com, nandinipreeti@gmail.com, drsumitanair@yahoo.in, shilpa.creative@gmail.com, lkanta73@gmail.com, dr.yashu.verma@yahoo.com, drrajeshwar67@gmail.com, dillip1_dash@yahoo.co.in, knmbit@gmail.com, drmanojjha4@gmail.com, shilpi.mahesh2003@gmail.com, sandeep03ssitm@gmail.com, scgupta771@gmail.com, blmalager1968@gmail.com, sharmadrashish@yahoo.com, mausumi.mr@gmail.com, snarayani76@gmail.com, skjaiswal67@yahoo.com, nitr.mkt@gmail.com, sannit039@gmail.com, prasanna@rungta.ac.in, pradeepkghosh8@gmail.com, sapan.bit@gmail.com, ksridhar@csitdurg.in, borkar_p@yahoo.com, lsondhi@gmail.com, amitsarda3@rediffmail.com, gurmeetgahir@hotmail.com, sumit_agrawal47@rediffmail.com, devesh.mech@gmail.com, gouranga97@rediffmail.com, arpana_rawal@rediffmail.com, chowdhuryarchana@gmail.com, raj_tiwari_in@yahoo.com
Cc: abhishek jha <abhishekduttjha@gmail.com>, principal.003.csvtu@gmail.com, mkseem670@gmail.com, kulshreshtha_m@ignou.ac.in, vc@csvtu.ac.in

Dear Ma'am/Sir,

Greetings from Chhattisgarh Swami Vivekanand Technical University (CSVTU), Bhilai !!

At the outset, I take this opportunity to convey my gratitude to all Chairmen of respective BOS and Deans for their valuable inputs given during the discussion in meetings held on April 22, 2019 and April 29, 2019 on the issue of development of Programme Structure and Syllabus of First Year degree programme in Engineering & Technology in light of model curriculum of AICTE.

As decided in the meetings, the tentative syllabus for the courses included in the proposed Programme Structure of First and Second Semesters was to be completed by May 15, 2019. In this regard, I am happy to share that the syllabus preparation work could be completed as per schedule. The syllabus so prepared needs to be approved by the respective BOS before placing in the Statutory Bodies of the University. Needless to mention, the Programme Structure and Syllabus are to be implemented with effect from 2019-20 session.

Keeping above in view, a meeting of all Board of Studies for BE courses along with respective Deans has been scheduled on May 30, 2019 at 03.00 PM in the Vivekanand Hall, Second Floor, CSVTU, Bhilai. You are requested kindly to make it convenient to attend the meeting and give

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Date: 2023.11.08 21:11:49 -08'00'

Criterion 1

Curricular Planning and Implementation QlM 1.1.1

your valuable inputs.

All concerned Principals are requested to facilitate the BOS Members of their colleges to attend the meeting. All Chairpersons of BOS are requested to bring TWO hard copies along with soft copy of the proposed syllabus.

With thanks and regards,

–

Prof. Manoj Kulshrestha
Pro Vice Chancellor
Chhattisgarh Swami Vivekanand Technical University (CSVTU)
Newai, P.O. Newai, BHILAI, Distt. Durg (CG) - 491 107
Phone +91-788-2445033 (O), +91-98101 38664 (M)
On Deputation from Indira Gandhi National Open University (IGNOU), New Delhi

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

Ref: ...1049.../CSVTU/Admin/2018/ Bhilai, Date: 3/05/18

Sub. : Board of Studies (B.E. Courses): revision of curriculum incorporating model curriculum suggested by AICTE.

For implementation of quality initiatives of AICTE including revised curriculum, the notified BoS (B.E. Courses) is in active mode. To narrow down concern issues to achieve the required target, respective 'Chairman' is empowered to call/convene meeting in this regard with proper pre intimation to university as well as member concern well in advance.

In this connection Principal(s) may take note of it to release member, so as they may attend meeting on said date/time.

Co-operation from all concern is solicited.

Encl: List of Chairmen (BoS-Engg.)

REGISTRAR
CSVTU, Bhilai

Copy to:

1. Principal(s)- with a request to look in to the matter.
2. Concerned member (BoS) Engg.
3. Master File.

Village-Newai, Post-Newai, Bhilai, Distt.-Durg (Chhattisgarh) 491 107
Ph. No.: 0788-2200062, Fax No.: 0788-2445020, Website: www.csvtu.ac.in, E-mail: registrar@csvtu.ac.in

DIPALI SOREN TUDU
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Date: 2023.11.08 21:12:42 -08'00'

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No/CSVTU/Exam/2020/..24 Bhilai, Date: 12-01-2020

To,

The Principal,
CCET, Bhilai (C.G.)

Sub:- Release of faculty for Expert Committee Meeting.

Dr. Dilip Kumar Dash, Professor may please be released on 14th, 15th, 17th and 19th January 2021 from 08:30 am to 11:30 am for confidential work.

12/1/21

Registrar
CSVTU, Bhilai

DIPALI SOREN TUDU
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Date: 2023.11.08 21:13:04 -08'00'

Criterion 1

Curricular Planning and Implementation QlM 1.1.1

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No/CSVTU/Exam/2020/.126 Bhilai, Date: 14-01-2020

To,

The Principal,
CCET, Bhilai (C.G.)

Sub:- Release the faculty for Expert Committee Meeting.

Dr. D.K. Dash, Professor, Department of Applied Mathematics, CCET, Bhilai, kindly may be released for Expert Committee Meeting on 15th January 2020 at 09:30 am at CSVTU Campus, Bhilai.

Examination Controller
CSVTU, Bhilai

DIPALI SOREN TUDU

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Date: 2023.11.08 21:13:26 -08'00'

Criterion 1

Curricular Planning and Implementation QlM 1.1.1