2.5 Evaluation Process and Reforms

2.5.1 Continuous Internal Evaluation(CIE) system

Department of Electrical and Electronics Engineering

Mechanism of Internal assessment is transparent and robust in terms of frequency and mode

The Department conducts **three internal assessment tests** at approximately 6th, 12th and 14th week respectively.

- In 17 scheme and 18 schemes of VTU under CBCS, the weightage on Continuous Internal Evaluation (CIE) and Semester End Exams (SEE) is assigned as 40:60 ratios. The CIE is to be evaluated for 40 marks, in which CIE Test carries 30 marks and the remaining 10 marks will be awarded based on other parameters like assignments, quizzes, class tests etc as stipulated by VTU Regulation 18OB8.2.
- In a semester, three CIE Tests i.e. Test-1, Test-2 and Test-3 will be conducted for 50 marks each and average of three tests will be reduced to 30 marks to consider it as final CIE component.
- Test papers are set, evaluated and assessed by course teachers and the marks so obtained are share with students.
- Process for setting/selection of the question paper:

  i. For each CIE Test, Minimum 02 sets of question papers shall be set for each course by the respective course teacher(s) along with scheme of evaluation and solution. The portions/syllabus to be covered will be decided at the beginning of the semester for the First test, and similarly the portion for the Second and Third Internal tests soon after the completion of Test-1 and Test-2 respectively.

  ii. HOD will pick 01 set and hand over to Test coordinator for printing. The Department EMS coordinator has to submit the selected question paper with scheme (approved by HOD) in sealed cover to the COE before three days of the commencement of the Internals Assessment. The EMS coordinator will further assist the exam cell for taking care of number of copies to be printed and the distribution to the allotted rooms.

  iii. While setting the question paper the course coordinator should take care to cover all COs and the RBT levels up to level-3 at least.
- Seating plan and table marking is followed even for internal assessment tests and it is displayed on the notice board along with the internal assessment time table.
- Immediately after the test, the course coordinator shall discuss the test paper in the class. The scheme and solution of the course to be evaluated is required to be displayed for student's notice.
- The evaluated blue books shall be made available to students to enable students to gauge their performance in the test.
- The marks to be updated if any changes. If there is a grievance from the student with regard to the marks awarded, the HOD can get it verified/valued by the second/subject expert to guarantee the justice. A final mark of each test is finally entered to AIMS for further needful.

Department of Electrical and Electronics Engineering

- Within one week of completion of CIE Test, the Department Test Coordinators has to submit the CIE marks along with CIE Result Analysis to COE.

HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

UNIVERSITY CALENDER

Visvesvaraya Technological University

"Jnana Sangama" Belagavi-590018, Karnataka State, India

Dr. A. S. Deshpande B.E., M.Tech., Ph.D.
Registrar

Phone: (0831) 2498100
Fax: (0831) 2405467

Ref: VTU/BGM/SO7/2020-21/ 4162

Dated: 4 DEC 2020

NOTIFICATION

Subject: Revised Academic Calendar for ODD semester 2020-21(Tentative) regarding...

Reference: Hon'ble Vice-Chancellor Approval dated 02.12.2020

Revised Academic Calendar for III, V, and VII semesters of B.E./B.Tech./B.Plan /B.Arch., and IX semester of B.Arch., III & V semester of MCA, III semesters of MBA, M.Tech., and M.Arch., for the academic Year 2020-21 is hereby notified as enclosed.

The Principals of Affiliated, Constituent, and Autonomous Engineering Colleges are hereby informed to bring the contents of this Notification to the notice of all the concerned.

Sd/-

REGISTRAR

Encl: Revised Academic Calendar for odd semester of 2020-21 (Tentative)

To,

1. The Principals of all affiliated/ constituent /Autonomous Engineering Colleges under the ambit of VTU Belagavi.
2. The Chairpersons of all Departments, Centres for PG Studies in Belagavi, Kalaburgi, Muddenahalli, and Mysore.

Copy to:

1. To the Hon'ble Vice-Chancellor through the secretary to VC, VTU Belagavi for information
2. The Registrar (Evaluation), VTU Belagavi for information.
3. The Regional Directors (I/c) of all the regional offices of VTU for circulation.
4. The Special Officer CNC VTU Belagavi for uploading on VTU website
5. PS to Registrar VTU Belagavi
6. All the concerned Special Officer/s and Caseworker/s of the academic section, VTU, Belagavi

04.12.2020

REGISTRAR

Department of Electrical and Electronics Engineering

Revised Academic Calendar of VTU, Belagavi for ODD Semester of 2020-21 (Tentative)

	I Sem B. E. / B. Tech. / B. Arch./B.Plan	I sem M.Tech./MBA /MCA/M.Arch.	III, V B. E. /B. Tech./B.Plan/ B.Arch & VII sem BPlan /BArch & IX Sem B. Arch.	VII Sem B. E. /B. Tech	III & V Sem MCA	III Sem MBA	III Sem M. Tech.	III Sem M. Arch.
Commencement of ODD Semester	14.12.2020	Will be announced later	01.09.2020	01.09.2020	01.09.2020	01.09.2020	01.09.2020	01.09.2020
Last Working day of ODD Semester	25.03.2021		16.01.2021	16.01.2021	16.01.2021	16.01.2021	16.01.2021	16.01.2021
Practical Examinations	29.03.2021 Onwards#		21.01.2021 Onwards#	21.01.2021 Onwards#	08.02.2021 Onwards#	--	21.01.2021 Onwards#	--
Theory Examinations	12.04.2021 To 30.04.2021		08.02.2021 To 27.03.2021	08.02.2021 To 27.03.2021	21.01.2021 To 06.02.2021	21.01.2021 To 19.02.2021	28.01.2021 To 13.02.2021	21.01.2021 To 06.02.2021
Internship			---	29.03.2021 To 10.04.2021	---	---	---	---
Internship Viva-Voce			---	---	---	---	15.02.2021 To 22.02.2021	---
Professional training / Organization study			---	---	---	22.02.2021 To 03.04.2021	---	---
Commencement of EVEN Semester	03.05.2021		29.03.2021	12.04.2021	15.02.2021	05.04.2021	23.02.2021	08.02.2021

NOTE:

- VII Semester B. E. / B. Tech. students shall have to undergo **Internship** as per circular of University **VTU/Aca/2019-20/85, dated 12.05.2020.**
- I Semester B. E/ B. Tech / B. Arch Students shall compulsorily undergo **Induction Program** for 01 Weeks.
- The classroom sessions for all the semesters would be in **ONLINE mode/blended mode** until further orders.
- The Institute needs to function for **six days** a week with additional hours **(Saturday is a full working day).**
- The faculty/staff shall be available to undertake any work assigned by the university.
- If any of the above dates are declared to be a holiday then the corresponding event will come into effect on the next working day.
- (#) Notification regarding the Calendar of Events relating to the conduct of **University Examinations** will be issued by the Registrar (Evaluation) from time to time.
- Academic Calendar may be modified based on guidelines/directions issued in the future by MHRD/UGC/AICTE/State Government.
- Revised Academic Calendar is also applicable for **Autonomous Colleges.**
- The MBA students are permitted to carry out **project work** in blended mode (ONLINE/OFFLINE). More emphasis on OFFLINE mode wherever feasible.

04-12-2020
REGISTRAR

Department of Electrical and Electronics Engineering

ACADEMIC CALENDER

Department of Electrical and Electronics Engineering

Adherence Report

Sample Adherence for the ODD Sem - AY-2020-21

ATME College of Engineering

Department of Electrical and Electronics Engineering

Academic Calendar (ODD SEMESTER, 2020-21)

WEEK	MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	No. of days/week	COLLEGE EVENTS/ Departement Events	Remarks
1	SEPTEMBER			1	2	3	4	5	4	3rd, 5th & 7th Sem: commencement of Online Classes / Induction program	As Planned for III and V and VII sem
2		6	7	8	9	10	11	12	6	State Level Quiz Competition	Preponed to 2nd Sep to 5th Sep 2020 due to other activity
3		13	14	15	16	17	18	19	4	Mahalaya Amavasya	
4		20	21	22	23	24	25	26	6	Webinar for 3rd and 5th sem	Postponed to 21st and 23rd October 2020 due to pre-occupied schedule of resource person
5		27	28	29	30				3	Final Year Project Synopsis Submission	As Planned
5	OCTOBER					1	2	3	1	Commencement of Offline Classes for 3,5 & 7 Sem, 2nd-Gandhi Jayanthi	Commencement of offline classes-Postponed to November as per VTU circular
6		4	5	6	7	8	9	10	6	First I A for 3rd , 5th and 7th Semester	IA-1: As Planned
7		11	12	13	14	15	16	17	5	Technical Talk/ workshop for 3rd Sem, Project Phase-1 Review	Technical Talk postponed due to pre-occupied schedule of resource person. Project phase-1 review postponed to 29th Oct, 2nd Nov to 7th Nov 2020 due to TCS technical drive
8		18	19	20	21	22	23	24	6	Workshop for 7th semester	Postponed to due Placement activities
9		25	26	27	28	29	30	31	3	Ayudha Pooja, Vijaya Dashami, Eid-Milad , Valmiki Jayanthi	
10	NOVEMBER	1	2	3	4	5	6	7	5	Kannada Rajyotsava, Technical Talk/ workshop for 3rd Sem, National Cancer Awareness day	Workshop on tool usage postponed to 21st to 23rd Dec 2020 due to pre-occupied schedule of resource person
11		8	9	10	11	12	13	14	5	Second IA for 3rd , 5th and 7th Semester, 14th-Naraka Chaturdashi	Postponed by one day due to three FDP on NAAC was organised by College from 9th to 11th Nov 2020
12		15	16	17	18	19	20	21	4	Balipadyami	
13		22	23	24	25	26	27	28	6	Workshop for 5th sem	Workshop postponed to 24th and 26th Dec 2020 due to non availability of resource person, the event is conducted after a month
14		29	30						1		

WEEK	MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	No. of days/week	COLLEGE EVENTS	Remarks
14	DECEMBER			1	2	3	4	5	3	Kanakadasa Jayanthi , Virtual Technical Fest (Hackathon)	Virtual Technical Fest (Hackathon): As planned: Conducted on 4th and 7th of Dec 2020
15		6	7	8	9	10	11	12	6		
16		13	14	15	16	17	18	19	4		
17		20	21	22	23	24	25	26	5	25th-Christmas	
18		27	28	29	30	31			4	Third I A for 3rd ,5th and 7th Semesters, World science day for peace and development	IA-3 as planned
18	JANUARY						1	2	2		
19		3	4	5	6	7	8	9	6	LAB Interenals for Semesters 3,5 and 7	Conducted for 5th and 7th sem on 13th, 15th and 16th of January due to hands on sessions were given in additional to online lab session
20		10	11	12	13	14	15	16	6	Improvement IA for Semesters 3,5 and 7, LAST working day for ODD Sem 2020-21, Makra Sankranthi	LWD for 5th and 7th sem- 16th Jan
21		17	18	19	20	21	22	23			
22		24	25	26	27	28	29	30		Republic Day, IA-1 week for III sem lateral in last week of Jan and 1st week of Feb	IA-1 for III sem lateral as planned (27th, 28th, 30th of Jan, 2nd, 3rd and 4th of Feb)
23		31									

Page 1

Department of Electrical and Electronics Engineering

39	23	FEBRUARY		1	2	3	4	5	6		End of Odd Semester Practical Exams	25th, 27th, 28th and 30th of Jan - VTU Lab exam conducted for V and VII sem
40	24		7	8	9	10	11	12	13		Commencement of Odd Semester Theory Exams	
41	25		14	15	16	17	18	19	20		IA -2 for III sem lateral in week 3 and week 4	IA-2 for III sem lateral as planned (18th, 19th, 22nd to 24th of Feb)
42	26		21	22	23	24	25	26	27		IA-3 for III sem lateral in last week of Feb and 1st week of Mar	IA-3 for III sem lateral as planned (2tth, 27th, of Feb , 2nd and 3rd of Mar)
43	27		28									
44		March		1	2	3	4	5	6		Lab IA for III sem planned on 26th Feb and 1st Mar	Lab IA for III sem - As planned (26th of Feb and 1st of Mar)
45			7	8	9	10	11	12	13		Last working day for III sem	As planned
46			14	15	16	17	18	19	20			
47			21	22	23	24	25	26	27			
48			28	29	30	31						
49												

HoD

Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

SAMPLE TEST PROCESS:2020-2021

Department of Electrical and Electronics Engineering

During the pandemic, IA Test was conducted through virtual platform in Microsoft Teams

AY:2020-2021 [Odd and Even Semester]

During the pandemic special care was taken to keep the Test process robust. Invigilators were allotted who monitored the entire process of test conduction.

1. Test Schedule announcement to students through circular
2. Scrutiny of IA-QP as previously followed.
3. Student Group allotment in the Microsoft Teams channel.
4. Invigilators allotment in MS Team Group
5. During the entire Test process, Students have to keep the camera on.
6. Test paper will be deployed in MS Teams Channel using MS Teams Form
7. Test process was video documented and monitored by Invigilator with the assistance of Test coordinator. Dean Academics, Head of the Department, Test coordinator monitored the process by visiting all the MS Teams channels. Instructors were allotted in every group to monitor any technical issues
8. Students entered Name, USN, Signature in every sheet and uploaded the Test script in the submission form provided.

HoD

Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

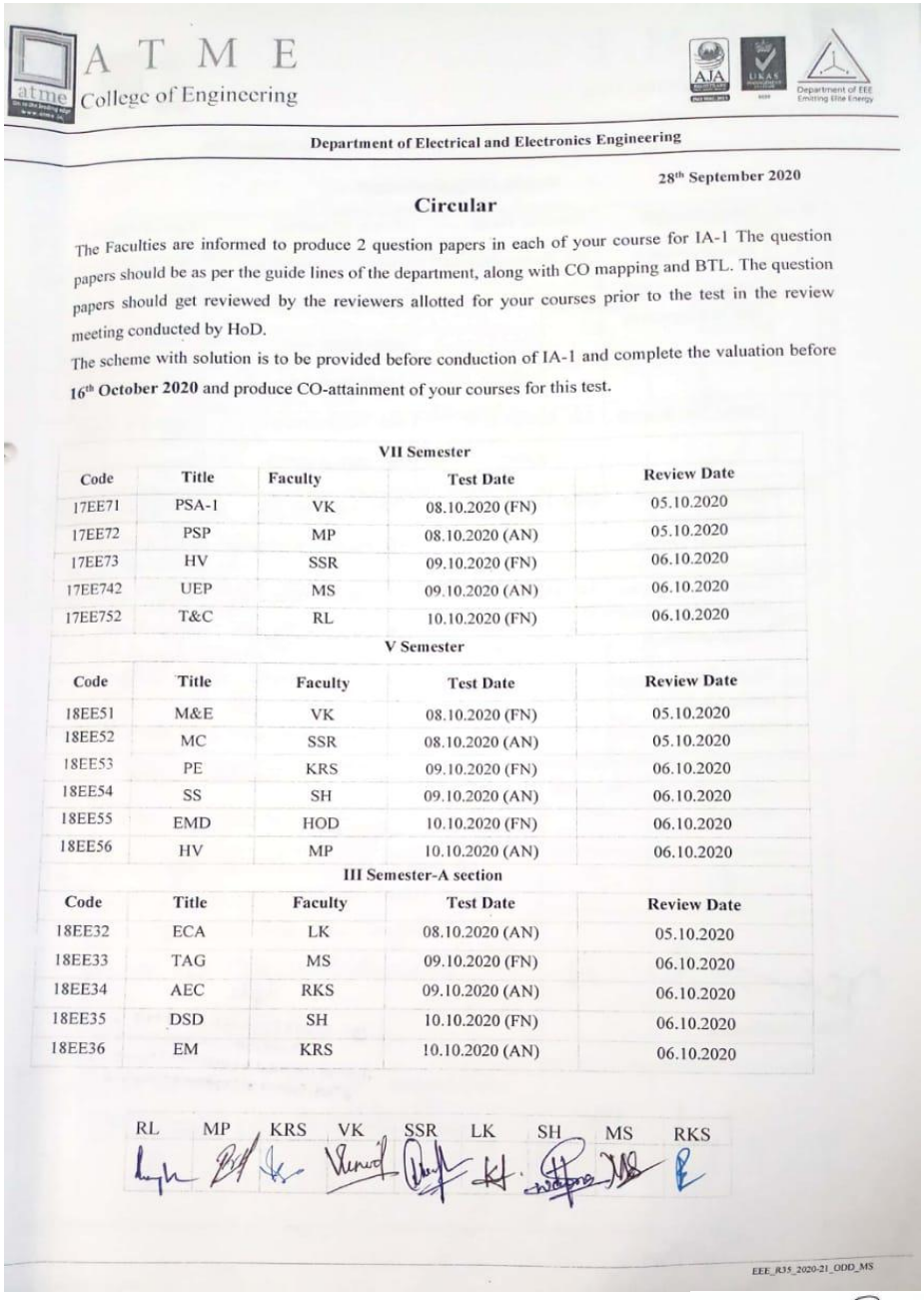
Department of Electrical and Electronics Engineering

Online Test Process

AY:2020-2021
ODD Semester

A. Schedule for Continuos Internal Assessment(CIE)

Sample Process: IA-1



A T M E
College of Engineering

Department of Electrical and Electronics Engineering

28th September 2020

Circular

The Faculties are informed to produce 2 question papers in each of your course for IA-1 The question papers should be as per the guide lines of the department, along with CO mapping and BTL. The question papers should get reviewed by the reviewers allotted for your courses prior to the test in the review meeting conducted by HoD.

The scheme with solution is to be provided before conduction of IA-1 and complete the valuation before **16th October 2020** and produce CO-attainment of your courses for this test.

VII Semester

Code	Title	Faculty	Test Date	Review Date
17EE71	PSA-1	VK	08.10.2020 (FN)	05.10.2020
17EE72	PSP	MP	08.10.2020 (AN)	05.10.2020
17EE73	HV	SSR	09.10.2020 (FN)	06.10.2020
17EE742	UEP	MS	09.10.2020 (AN)	06.10.2020
17EE752	T&C	RL	10.10.2020 (FN)	06.10.2020

V Semester

Code	Title	Faculty	Test Date	Review Date
18EE51	M&E	VK	08.10.2020 (FN)	05.10.2020
18EE52	MC	SSR	08.10.2020 (AN)	05.10.2020
18EE53	PE	KRS	09.10.2020 (FN)	06.10.2020
18EE54	SS	SH	09.10.2020 (AN)	06.10.2020
18EE55	EMD	HOD	10.10.2020 (FN)	06.10.2020
18EE56	HV	MP	10.10.2020 (AN)	06.10.2020

III Semester-A section

Code	Title	Faculty	Test Date	Review Date
18EE32	ECA	LK	08.10.2020 (AN)	05.10.2020
18EE33	TAG	MS	09.10.2020 (FN)	06.10.2020
18EE34	AEC	RKS	09.10.2020 (AN)	06.10.2020
18EE35	DSD	SH	10.10.2020 (FN)	06.10.2020
18EE36	EM	KRS	10.10.2020 (AN)	06.10.2020

RL MP KRS VK SSR LK SH MS RKS

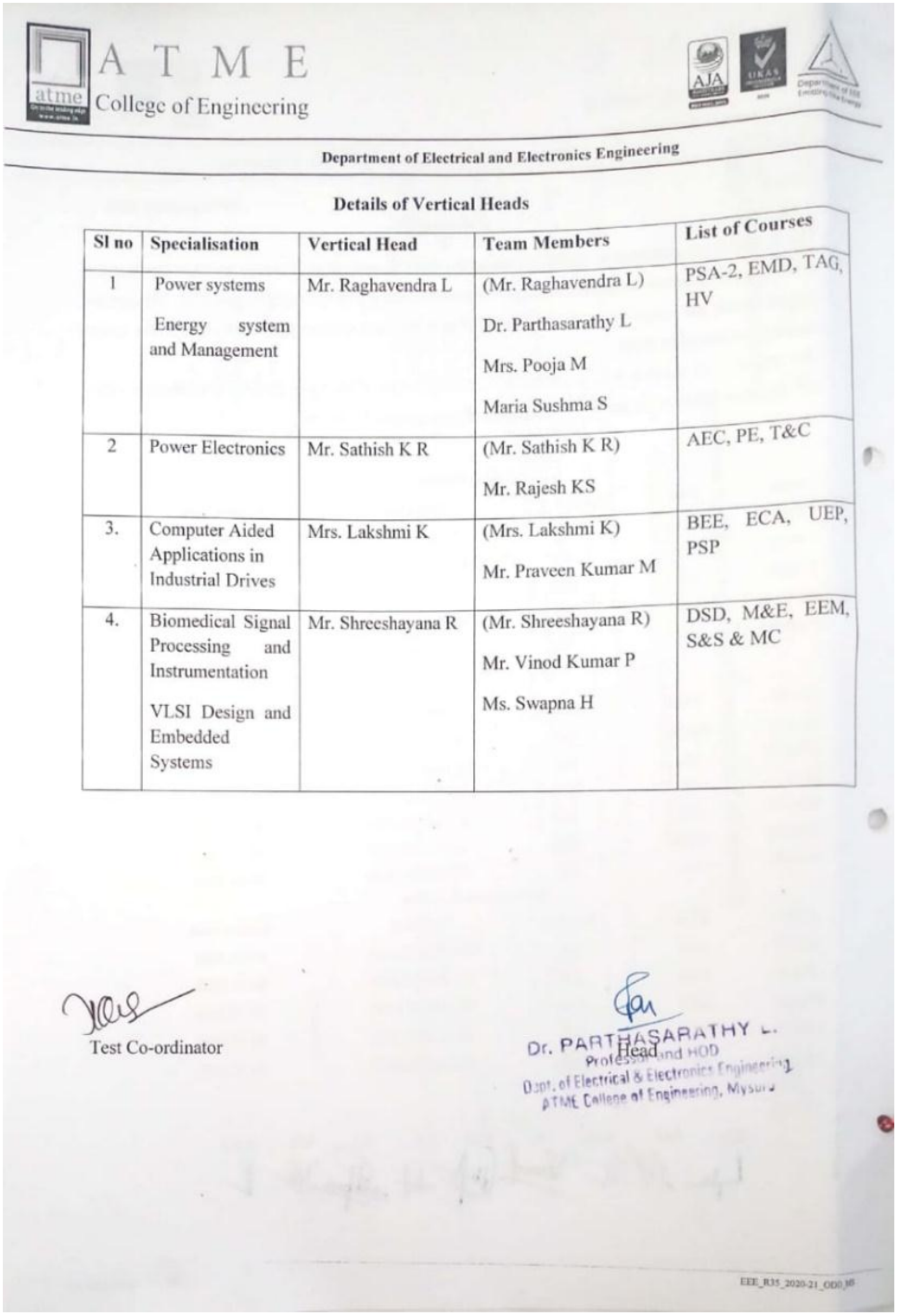
EEE_R35_2020-21_ODD_MS

HoD

Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

B. Vertical Heads and Course List mapped



A T M E
College of Engineering

Department of Electrical and Electronics Engineering

Details of Vertical Heads

Sl no	Specialisation	Vertical Head	Team Members	List of Courses
1	Power systems Energy system and Management	Mr. Raghavendra L	(Mr. Raghavendra L) Dr. Parthasarathy L Mrs. Pooja M Maria Sushma S	PSA-2, EMD, TAG, HV
2	Power Electronics	Mr. Sathish K R	(Mr. Sathish K R) Mr. Rajesh KS	AEC, PE, T&C
3.	Computer Aided Applications in Industrial Drives	Mrs. Lakshmi K	(Mrs. Lakshmi K) Mr. Praveen Kumar M	BEE, ECA, UEP, PSP
4.	Biomedical Signal Processing and Instrumentation VLSI Design and Embedded Systems	Mr. Shreeshayana R	(Mr. Shreeshayana R) Mr. Vinod Kumar P Ms. Swapna H	DSD, M&E, EEM, S&S & MC

Test Co-ordinator

Dr. PARTHASARATHY L.
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

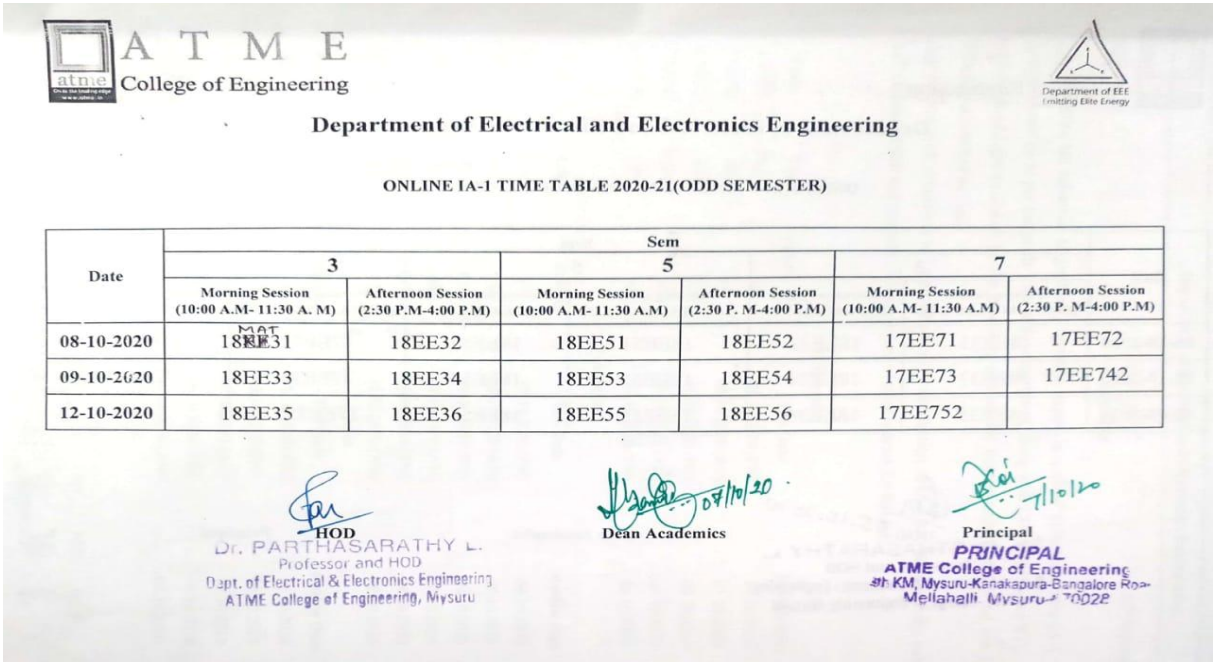
Head

EEE_R35_2020-21_ODD_05

HoD
Dr. PARTHASARATHY L.
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

C. IA-1 TIME TABLE



A T M E
College of Engineering

Department of Electrical and Electronics Engineering

ONLINE IA-1 TIME TABLE 2020-21(ODD SEMESTER)

Date	Sem					
	3		5		7	
	Morning Session (10:00 A.M- 11:30 A. M)	Afternoon Session (2:30 P.M-4:00 P.M)	Morning Session (10:00 A.M- 11:30 A.M)	Afternoon Session (2:30 P. M-4:00 P.M)	Morning Session (10:00 A.M- 11:30 A.M)	Afternoon Session (2:30 P. M-4:00 P.M)
08-10-2020	18MAT31	18EE32	18EE51	18EE52	17EE71	17EE72
09-10-2020	18EE33	18EE34	18EE53	18EE54	17EE73	17EE742
12-10-2020	18EE35	18EE36	18EE55	18EE56	17EE752	

HOD
Dr. PARTHASARATHY L.
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

07/10/20
Dean Academics

7/10/20
Principal
PRINCIPAL
ATME College of Engineering
13th KM, Mysuru-Kanakapura-Bangalore Road
Mellahalli, Mysuru-570028

HoD
Dr. PARTHASARATHY L.
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

D. Invigilator Allotment and Channel Details

Online IA-1 Invigilation Allotment

Channel Name: III_IA_LK				
Sl. No.	**Faculty Name with Designation**	**Student Name**	**Student USN**	**Semester/Section**
1	Mrs. Lakshmi K, Assistant Professor	RAKESH B	4AD18EE025	III-A
2		ANUSHA D	4AD19EE001	
3		BHAVANA K N	4AD19EE002	
4		CHANDAN KUMAR A K	4AD19EE003	
5		CHANDANKUMAR B V	4AD19EE004	
6		CHANDAN M	4AD19EE005	
7		SAHANA K M	4AD19EE006	
8		KAVYA G	4AD19EE007	
9		MEGHANA M	4AD19EE008	
10		MOHAMMED ISMAIL	4AD19EE009	
11		MOHAMMED SYED YAKOOB	4AD19EE010	
12		PRUTHVI RAJ K	4AD19EE011	
13		S SONIKA	4AD19EE013	
14		SAHANA P	4AD19EE014	
15		SANJANA P	4AD19EE015	
16		SHASHANK S	4AD19EE016	
17		SUDEEP SIDDARAJU	4AD19EE017	
18		SUMANTH P	4AD19EE018	
19		TUSHAR P V	4AD19EE019	
20		USHA M C	4AD19EE020	
21		Y S SHREYAS	4AD19EE021	
22		VARSHITHA P K	4AD19EE022	
23		VISHRUTH M B	4AD19EE023	
24		YOGESH H S	4AD19EE024	
25		ABDUL BASEER KHATTAL	4AD18EE001	

Department of Electrical and Electronics Engineering

Channel Name: V_IA_G1_RL				
Sl. No.	**Faculty Name with Designation**	**Student Name**	**Student USN**	**Semester/Section**
1	Mr. Raghavendra L, Associate Professor	ADITHYA K S	4AD18EE002	V- Group1
2		AISHWARYA M	4AD18EE003	
3		ANUSHA N K	4AD18EE004	
4		CHANDAN KUMAR C B	4AD18EE005	
5		CHANDAN M N	4AD18EE006	
6		DAMINI DORA K P	4AD18EE007	
7		DEEKSHITHA V	4AD18EE009	
8		FAWZ AHAMED N S	4AD17EE010	
9		GAGANA S	4AD18EE010	
10		JEEVITH U	4AD18EE011	
11		KAVERI K	4AD18EE012	
12		LAKSHMI A A	4AD18EE013	
13		LANKESH H D	4AD18EE014	
14		MADHUGOWDA H K	4AD18EE015	
15		MANJUNATHA K B	4AD18EE016	
16		MANOJKUMAR K S	4AD18EE017	
17		MISBAH AFSHEEN	4AD18EE018	
18		MOHAMMED SUHAIL	4AD18EE019	
19		MONIKA P	4AD17EE024	
20		NAYANA K S	4AD18EE020	

Channel Name: V_IA_G2_SH				
Sl. No.	**Faculty Name with Designation**	**Student Name**	**Student USN**	**Semester/Section**
1	Ms. Swapna H, Assistant Professor	POOJA BAI	4AD18EE021	V- Group 2
2		PRAVEEN GOWDA S B	4AD18EE022	
3		PREETHU N	4AD18EE023	
4		RADHIKA M S	4AD18EE024	
5		SHASHI KUMAR V	4AD18EE026	
6		Syed Faiza	4AD18EE027	
7		VINOD H V	4AD18EE028	
8		VIVEK S	4AD18EE029	

9		YASEEN Ulla Khan	4AD18EE030	
10		ABHISHEK R	4AD19EE400	
11		BASAVARAJU B S	4AD19EE401	
12		BHANUPRAKASHA B R	4AD19EE402	
13		BHARATH S	4AD19EE403	
14		CHANDAN S MAHADEV	4AD19EE404	
15		CHANDRA SHEKARA G R	4AD19EE405	
16		CHARAN M V	4AD19EE406	
17		DARSHAN M R	4AD19EE407	
18		GOWTHAM P	4AD19EE408	
19		GOWTHAMI H S	4AD19EE409	
20		HEMANTH B S	4AD19EE410	

Channel Name: V_IA_G3_VK

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mr. Vinod Kumar P, Assistant Professor	LOKESH B K	4AD19EE411	V- Group 3
2		MAHADEVAPRASAD R	4AD19EE412	
3		MANASA H P	4AD19EE413	
4		MD SALMAN AHMED	4AD19EE414	
5		NAVEEN B	4AD19EE415	
6		NIRANJANAKUMAR K M	4AD19EE417	
7		PAVANRAJ N P	4AD19EE418	
8		PRAJWAL S	4AD19EE419	
9		PURUSHOTHAM P S	4AD19EE420	
10		RAJAT P KARAVATE	4AD19EE421	
11		SANJAY S	4AD19EE422	
12		SHIVAPRASAD C M	4AD19EE423	
13		SRIKANTA SHARMA M S	4AD19EE424	
14		SYED DANISH	4AD19EE425	
15		SYED FAIZAN MOHAMMED	4AD19EE426	
16		VENKATARAMU H D	4AD19EE427	
17		VIJAY KUMAR C	4AD19EE428	
18		VINAY M J	4AD19EE429	
19		GAGAN S SHEKAR	4AD17EE032	
20		SAHANA HM	4AD18EE400	

Department of Electrical and Electronics Engineering

Channel Name: VII_IA_G1_KRS				
Sl. No.	**Faculty Name with Designation**	**Student Name**	**Student USN**	**Semester/Section**
1	Mr. Sathish K R, Assistant Professor	BINDHU V	4AD15EE006	VII- Group1
2		GULABI P	4AD15EE012	
3		NAIK NEHA SURESH	4AD15EE021	
4		RAKSHITH K N	4AD16EE034	
5		ROHITH D	4AD16EE036	
6		AKSHAY D	4AD17EE001	
7		ARPITHA R	4AD17EE002	
8		ASHA P	4AD17EE004	
9		ASHWINI C R	4AD17EE005	
10		ASHWINI D S	4AD17EE006	
11		B ROSHAN	4AD17EE007	
12		DEEPTHI M	4AD17EE008	
13		DHANYATHA M	4AD17EE009	
14		GAGANA S	4AD17EE011	
15		HARSHA K M	4AD17EE012	
16		HASEEBULLA BAIG	4AD17EE013	
17		INDRANI L	4AD17EE014	
18		JOSHUA H RAYAPURI	4AD17EE015	

Channel Name: VII_IA_G2_RKS				
Sl. No.	**Faculty Name with Designation**	**Student Name**	**Student USN**	**Semester/Section**
1	Mr. Rajesh K S, Assistant Professor	LOKESH D	4AD17EE016	VII- Group 2
2		MAHADEVA SWAMY A S	4AD17EE017	
3		MAMATHA	4AD17EE018	
4		MANOJ K N	4AD17EE019	
5		MANOJ M	4AD17EE020	
6		MOHAMED FARIS	4AD17EE021	
7		MOHAMMED HUZAIF	4AD17EE022	
8		MOHAMMED SHAH FAISAL M P	4AD17EE023	
9		PRADEEP K	4AD17EE025	
10		PRASHANTH R	4AD17EE026	
11		PRIYANKA P D	4AD17EE027	
12		RACHANA K GOWDA	4AD17EE028	

Department of Electrical and Electronics Engineering

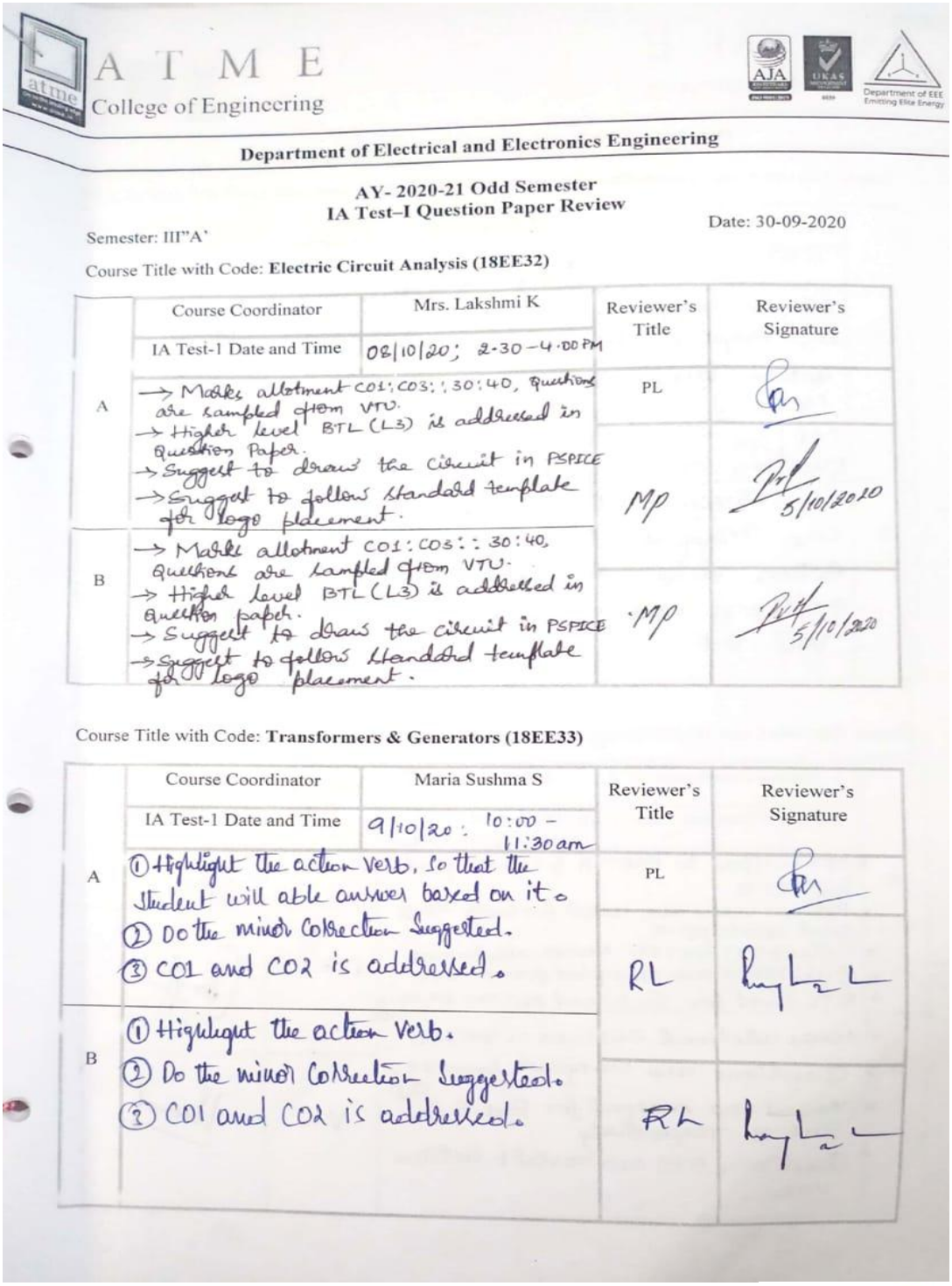
13		RAMYASHREE S	4AD17EE029	
14		RUQUIA NAAZ KHANUM	4AD17EE030	
15		SAHANA B	4AD17EE031	
16		SHWETHA N	4AD17EE033	
17		SIMRAH FATHIMA	4AD17EE034	
18		SOWMYA M N	4AD17EE035	

Channel Name: VII_IA_G3_SSR				
Sl. No.	**Faculty Name with Designation**	**Student Name**	**Student USN**	**Semester/Section**
1	Mr. Shreeshayana R, Assistant Professor	SUPRITHA R	4AD17EE036	VII- Group 3
2		SYED RAWOOFUR RAHMAN	4AD17EE038	
3		TASMIYA DOUHA	4AD17EE039	
4		VARUN A	4AD17EE040	
5		VEDAVATHI R	4AD17EE041	
6		VIKAS M V	4AD17EE042	
7		VIRAT S MIRLE	4AD17EE043	
8		KIRANKUMAR G	4AD17EE401	
9		IMPANA S G	4AD18EE401	
10		KAVYA H M	4AD18EE402	
11		NAGENDRASWAMY	4AD18EE403	
12		PALLAVI P N	4AD18EE404	
13		PAVAN M	4AD18EE405	
14		PRAKASH M R	4AD18EE406	
15		RAVISHANKAR Y K	4AD18EE407	
16		ROHITH K P	4AD18EE408	
17		SHARATH H S	4AD18EE410	
18		SMITHA M P	4AD18EE411	

HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

E. Sample IA Question Paper Review by Vertical Heads and Teams for their respective courses



ATME College of Engineering

Department of Electrical and Electronics Engineering

AY- 2020-21 Odd Semester
IA Test–I Question Paper Review

Semester: III"A" Date: 30-09-2020

Course Title with Code: **Electric Circuit Analysis (18EE32)**

	Course Coordinator	Mrs. Lakshmi K	Reviewer's Title	Reviewer's Signature
	IA Test-1 Date and Time	08/10/20; 2-30 – 4.00 PM		
A	→ Marks allotment CO1:CO3:: 30:40, Questions are sampled from VTU. → Higher level BTL (L3) is addressed in Question Paper. → Suggest to draw the circuit in PSPICE → Suggest to follow standard template for logo placement.		PL MP	5/10/2020
B	→ Marks allotment CO1:CO3:: 30:40, Questions are sampled from VTU. → Higher level BTL (L3) is addressed in Question paper. → Suggest to draw the circuit in PSPICE → Suggest to follow standard template for logo placement.		MP	5/10/2020

Course Title with Code: **Transformers & Generators (18EE33)**

	Course Coordinator	Maria Sushma S	Reviewer's Title	Reviewer's Signature
	IA Test-1 Date and Time	9/10/20: 10:00 – 11:30 am		
A	① Highlight the action verb, so that the student will able answer based on it. ② Do the minor correction suggested. ③ CO1 and CO2 is addressed.		PL RL	
B	① Highlight the action verb. ② Do the minor correction suggested. ③ CO1 and CO2 is addressed.		RL	

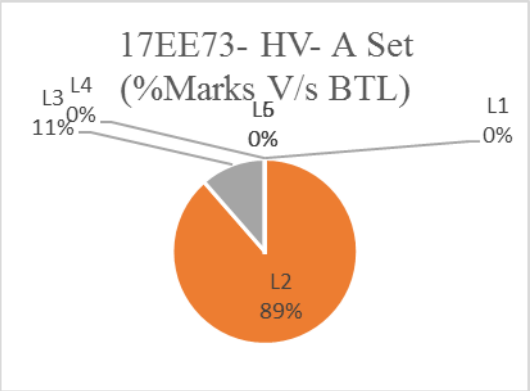
HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

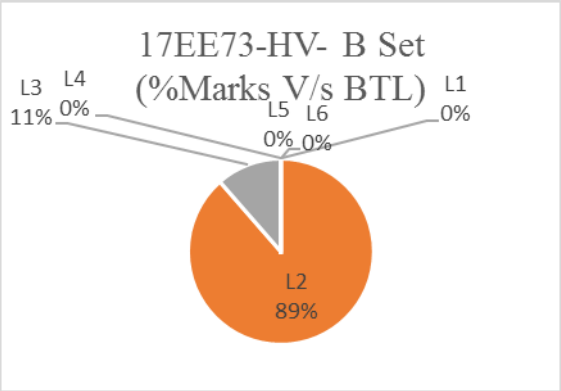
Department of Electrical and Electronics Engineering

F. Blooms Taxonomy Level Mapping for Course

SL No.	17EE73- HV- A Set		
	Levels	Marks allotted	17EE73-HVE- A Set QP (%Marks V/s BTL)
1	L1	0	0
2	L2	62	89
3	L3	8	11
4	L4	0	0
5	L5	0	0
6	L6	0	0

SL No.	17EE73-HV- B Set		
	Levels	Marks allotted	17EE73-HVE- B Set QP (%Marks V/s BTL)
1	L1	0	0
2	L2	62	89
3	L3	8	11
4	L4	0	0
5	L5	0	0
6	L6	0	0





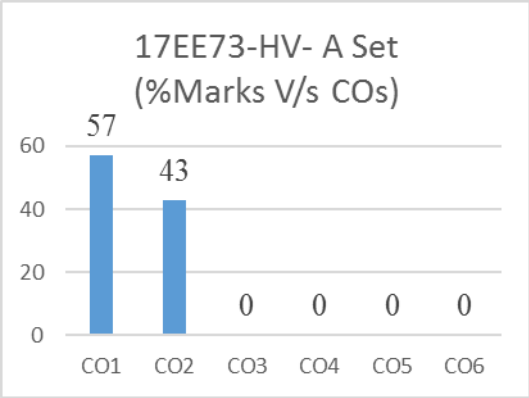
HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

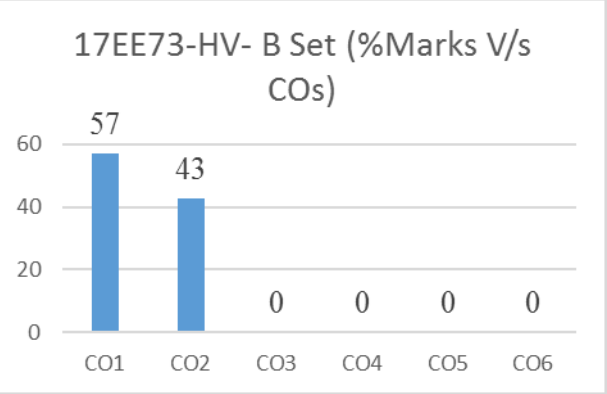
Department of Electrical and Electronics Engineering

G. Course Outcomes Weightage

	17EE73-HV- A Set		
SL No.	CO s	Marks allotted	17EE73- A Set QP (%Marks V/s COs)
1	CO1	40	57
2	CO2	30	43
3	CO3	0	0
4	CO4	0	0
5	CO5	0	0
6	CO6	0	0

	17EE73-HV- B Set		
SL No.	COs	Marks allotted	17EE73- B Set QP (%Marks V/s COs)
1	CO1	40	57
2	CO2	30	43
3	CO3	0	0
4	CO4	0	0
5	CO5	0	0
6	CO6	0	0



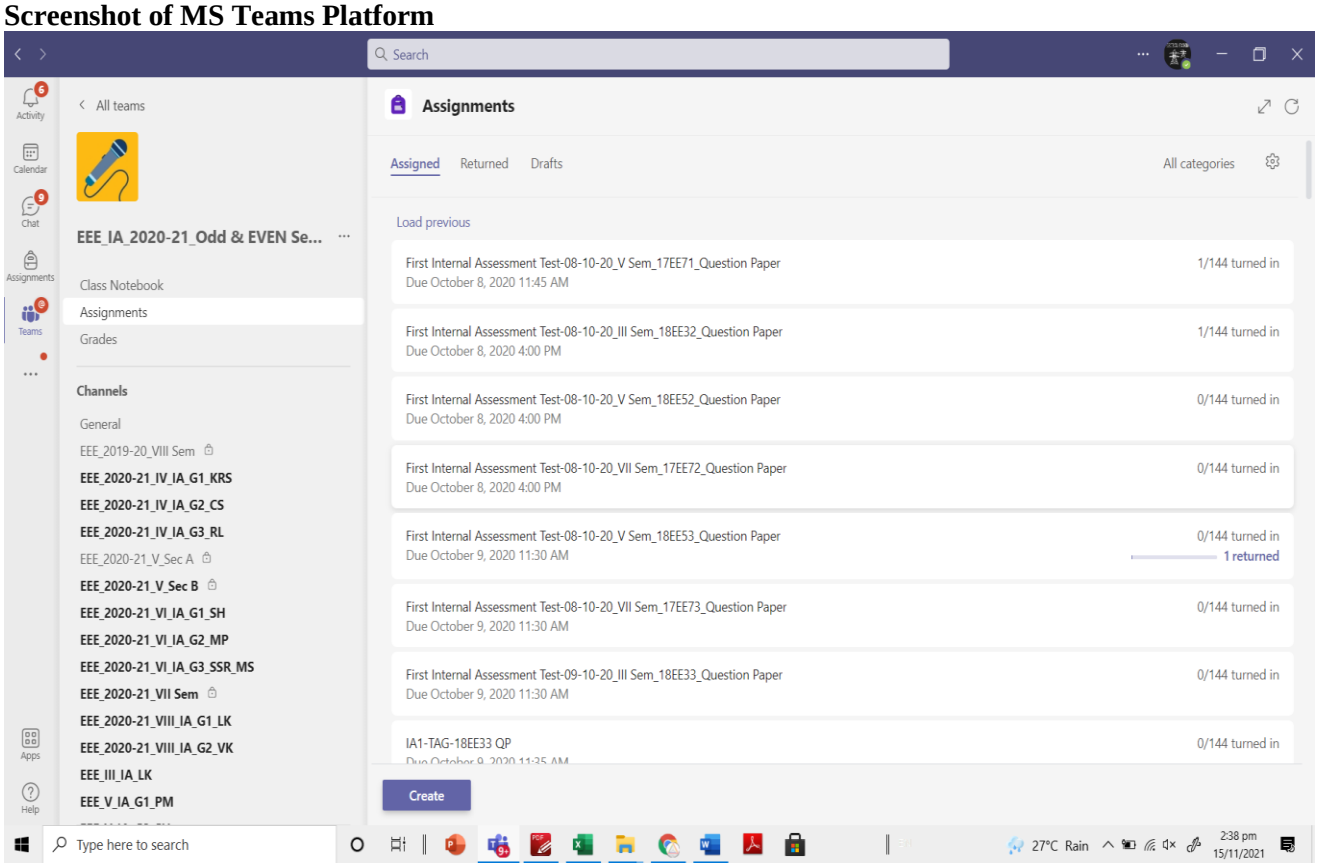


HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

H. The IA co-ordinator will deploy the selected IA question paper out of Pattern A and B by Dept. Head in the Online IA platform

Screenshot of MS Teams Platform

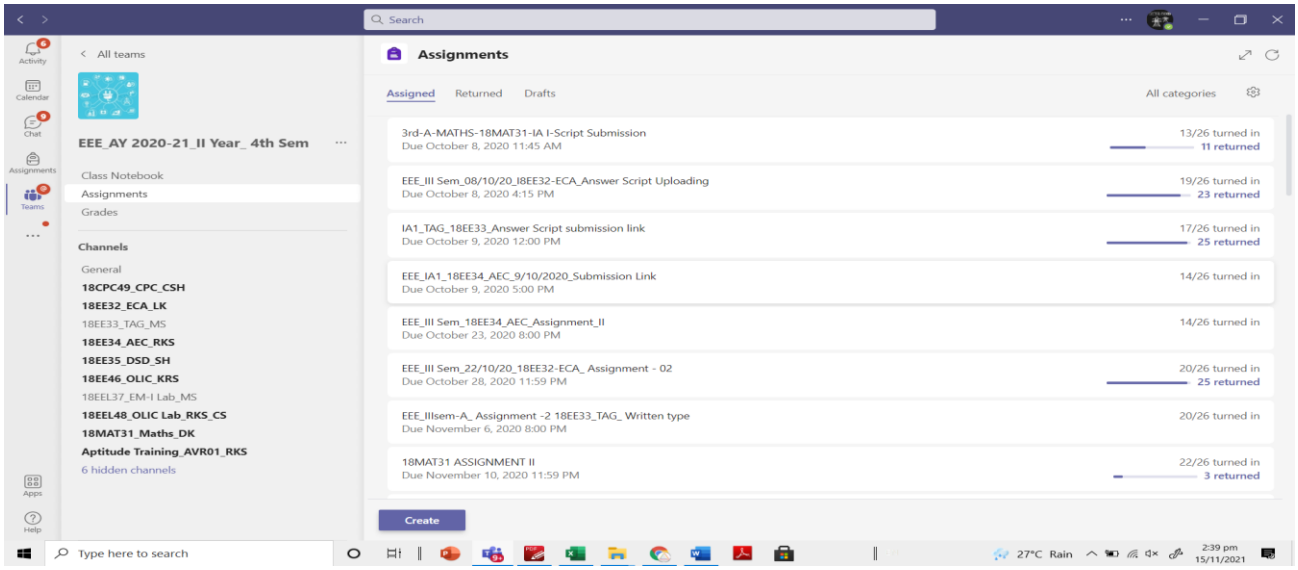


HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

I. The respective course co-ordinator will share the path to students for uploading the scanned copy of IA answer scripts

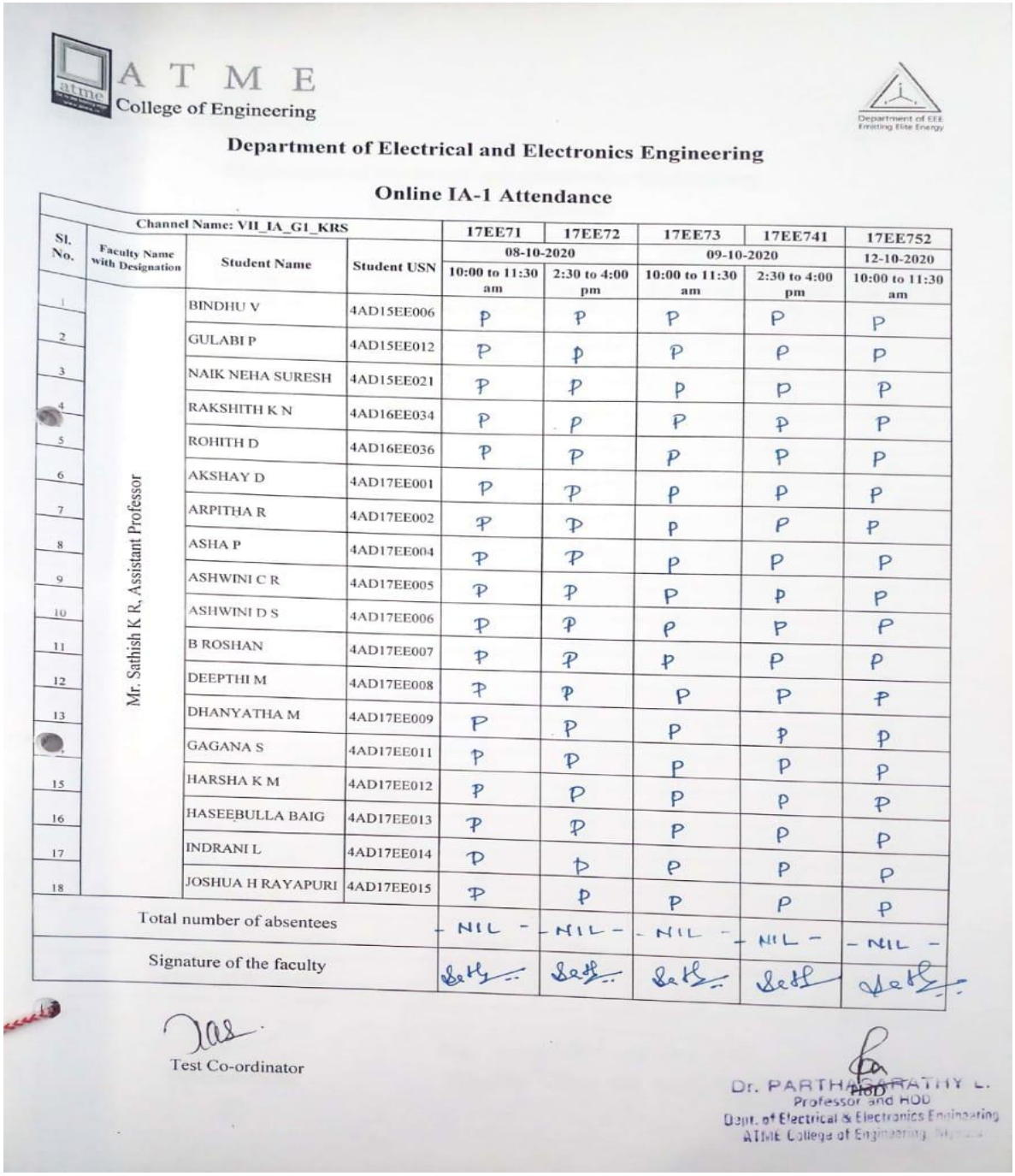
Screenshot for IA Script submission



HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

J. Sample IA-1 Attendance sheet



ATME College of Engineering

Department of Electrical and Electronics Engineering

Online IA-1 Attendance

Channel Name: VII_IA_G1_KRS				17EE71	17EE72	17EE73	17EE741	17EE752
Sl. No.	Faculty Name with Designation	Student Name	Student USN	08-10-2020		09-10-2020		12-10-2020
				10:00 to 11:30 am	2:30 to 4:00 pm	10:00 to 11:30 am	2:30 to 4:00 pm	10:00 to 11:30 am
1	Mr. Sathish K R, Assistant Professor	BINDHU V	4AD15EE006	P	P	P	P	P
2		GULABI P	4AD15EE012	P	P	P	P	P
3		NAIK NEHA SURESH	4AD15EE021	P	P	P	P	P
4		RAKSHITH K N	4AD16EE034	P	P	P	P	P
5		ROHITH D	4AD16EE036	P	P	P	P	P
6		AKSHAY D	4AD17EE001	P	P	P	P	P
7		ARPITHA R	4AD17EE002	P	P	P	P	P
8		ASHA P	4AD17EE004	P	P	P	P	P
9		ASHWINI C R	4AD17EE005	P	P	P	P	P
10		ASHWINI D S	4AD17EE006	P	P	P	P	P
11		B ROSHAN	4AD17EE007	P	P	P	P	P
12		DEEPTHI M	4AD17EE008	P	P	P	P	P
13		DHANYATHA M	4AD17EE009	P	P	P	P	P
14		GAGANA S	4AD17EE011	P	P	P	P	P
15		HARSHA K M	4AD17EE012	P	P	P	P	P
16		HASEEBULLA BAIG	4AD17EE013	P	P	P	P	P
17		INDRANI L	4AD17EE014	P	P	P	P	P
18		JOSHUA H RAYAPURI	4AD17EE015	P	P	P	P	P
Total number of absentees				- NIL -	- NIL -	- NIL -	- NIL -	- NIL -
Signature of the faculty								

Test Co-ordinator

HoD
Dr. PARTHASARATHY L.
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering

HoD
Dr. PARTHASARATHY L.
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

K. IA QP and SCHEME

ATME College of Engineering

Department of Electrical & Electronics Engineering

FIRST INTERNAL ASSESSMENT TEST

COURSE CODE	:	17EE73	TIME	10AM to 11.30AM
COURSE	:	HIGH VOLTAGE ENGINEERING	DATE	09.10.2020
SEM	:	VII	MAX.MARKS	50

Q. No.	PART-A (Each Question carries 10 Marks) Answer any Three Full Questions	Marks	CO's	BTL
1.	a. **Interpret** Streamers theory is applicable for pd value (1Mark) a. >1000mmHg-cm b. <1000mmHg-cm c. >1mmHg-cm & <2mmHg-cm d. >1mmHg-cm b. **Interpret** the Time Lag for Breakdown is composed of: (1Mark) a. Positve and Negative b.Statistical & Formative c. Statistical & Affirmative d. Statistical & Paschen	2M	CO1	L2
	c. What is Ionization process. **Explain** how ionization occurs due to collision and photo-ionization with suitable diagram.	8M	CO1	L2
2.	a. **Interpret** Paschen found that Voltage is a function only of: (1Mark) a. Product of the pressure & temperature b. Product of the pressure & voltage c. Product of the pressure & current d. Product of the pressure & gap length b.**Interpret** Cavitations theory states that dielectric strength of liquid dielectric material depends on: (1Mark) a. Temperature b. Electrodes c. Hydrostatic pressure d. Voltage	2M	CO1	L2
	c. **Explain** the current growth expression for Townsends primary and secondary ionization process with suitable diagram.	8M	CO1	L2
3.	a. **Solve,** What will be the breakdown strength of air for a small gap of 20cm under uniform field condition and standard atmospheric condition: (1Mark) a. 25.57kV/cm b. 24kV/cm c. 20kV/cm d. 27kV/cm b. **Interpret,** which is not a type of breakdown mechanism in Solid dielectric: (1Mark) a. Intrinsic breakdown b. Cavitation breakdown c. Avalanche breakdown d. Treeing & Tracking	2M	CO1	L2 L2
	c. **Explain** the following methods of breakdown in liquid dielectrics i. Suspended Particle theory ii. Bubbles theory	8M	CO1	L2
4.	a. In an experiment with certain gas, it was found that the steady state current is 5.5×10^{-8} A at 8kV at a gap distance of 0.4cm between the electrode plates. Keeping the field constant and reducing the distance by 0.1cm results in a current of 5.5×10^{-9}A. Solve for Townsend's primary ionization co-efficient. (1Mark) a. 5/cm-torr b. 7.676/ cm-torr c. 6.99/cm-torr d. 7/cm-torr b.**Interpret,** In thermal breakdown,heat generated under d.c. stress (1Mark) a. $W_{dc} = E^2\sigma$ b. $Wdc = E\sigma$ b. $W_{dc} = E^2\sigma f$ d. $Wdc = E^2\sigma fd$	2M	CO1	L2 L2
	c.**Explain** Streamers theory with relevant diagram.	8M	CO1	L2

Department of Electrical and Electronics Engineering

ATME College of Engineering
Department of EEE Emitting Elite Energy

Department of Electrical & Electronics Engineering

Q. No.	PART-B (Each Question carries 10 Marks) Answer any TwoFull Questions	Marks	CO's	BTL
5.	a. **Interpret**, in Cock croft- Walton type high voltage DC set, Output voltage is: **(1Mark)** a.2n b. 2nVmax c.Vmax d. 2nVmaxI b.In cascaded transformers, **interpret** which statements are correct: **(1Mark)** i. Natural cooling is sufficient; ii. star or delta connection are possible iii. More space requirement ; iv. Meter winding is used a. i,ii b. i,ii,iv c.i,ii,iii,iv d.i,ii,iii	2M	CO2	L2
	c. A 8stage Walton Circuit has a capacitance of 0.05µF. The secondary voltage of supply transformer is 125kV at a frequency of 150Hz.If the load current is 5mA, Solve for: **i)** % Voltage Regulation **ii)** % Ripple **iii)** Optimum number of stages for maximum output **iv)** Maximum output voltage	8M	CO2	L3
6.	a. **Interpret** in Tesla coil, output frequency range is: **(1Mark)** a. 5kHz to 10MHz b. 50kHz to 1MHz c. 100Hz to 1KHz d. 1MHz to 10MHz b. **Interpret,** in Series resonant transformer Q factor of the circuit gives themagnitude of the voltage multiplication across the test object under **(1Mark)** a. Standard room pressure b. Standard room temperature c. Both a & b d. Resonance	2M	CO2	L2
	c. With relevant circuit diagram, explain how transformers are connected in cascade for HVAC power generation	8M	CO2	L2
7.	a. **Interpret, Tesla Coil is:** **(1Mark)** a. high frequency resonant transformer circuit b. Doubly tuned resonant c. Both a&b d. Only a b. **Interpret,** The primary voltage rating is 10 kV and the secondary may be rated to as high as 500 to 1000kV.Is the statement correct: **(1Mark)** a. False b. True c. Neither d. Partially True	2M	CO2	L2
	c. With relevant circuit diagram, **Explain** i. Series Resonant Transformer ii. Parallel Resonant Transformer	8M	CO2	L2

HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

A T M E
College of Engineering
Department of EEE
Emitting Elite Energy

Department of Electrical & Electronics Engineering

COURSE OUTCOMES

CO1	Interpret the conduction and breakdown phenomenon in dielectrics.
CO2	Apply the principles of generation of high voltage, currents and Impulse voltages.
CO3	Apply measurement techniques for High Voltage, current and Impulse voltages.
CO4	Interpret overvoltage phenomenon and insulation coordination in electric power systems.
CO5	Solve the dielectric properties and interpret the testing methods of surge arrestors and switchgear.

Bloom's Taxonomy Level	
L1	**Remembering**
L2	**Understanding**
L3	**Applying**
L4	**Analyzing**
L5	**Evaluating**
L6	**Creating**

Dr. PARTHASARATHY L.
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

ATME College of Engineering
Department of EEE Emitting Elite Energy

Department of Electrical & Electronics Engineering

Solution and Scheme of valuation

Semester: VII
Course Title and Code: High voltage Engineering / 17EE73
Date: 09/10/2020
Max. Marks: 50

Question No.	Solution	CO's	BTL	Marks Allocated
1	a) option a: >1000mHg-cm	CO1	L2	1mark
	b) option b: Statistical & formative	CO1	L2	1 mark / 2marks
	c) Ionisation is defined as a process of liberation of free electron from a gas molecule with continous generation of positive ion			1mark
	Ionisation by collision $e^- + A \xrightarrow{\mathcal{E} > V_i} e^- + A^+ + e^-$ A = atom, A^+ = +ve ion e^- : electron. In collision process, a free electron collides with a neutral gas molecule & gives rise to new electron & the ion. If the energy gained during the travel between collision in a low pressure gas column in which electric field E is applied across two parallel plates, becomes high then it causes a liberation of electron from its atomic shell			3mark
	Photo ionisation The ionisation caused by cosmic radiation or photons is called photo ionisation. It occurs when the amount of radiation energy			2marks

Key Word: BTL: Bloom's Taxonomy Level

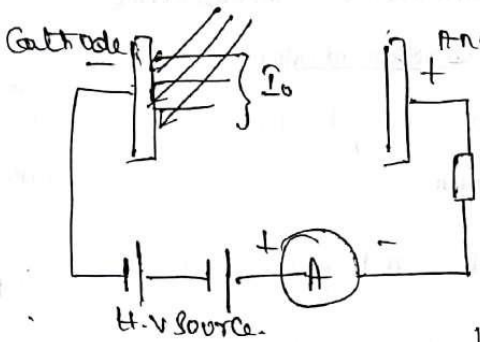
SHREESHAYANA K
Course Coordinator Name and Signature

Dr. PARTHASARATHY L.
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering
Signature of HoD

Department of Electrical and Electronics Engineering

Question No.		CO's	BTL	Marks Allocated

absorbed by an atom or molecule exceeds its ionisation potential



2 marks

$h\nu + A \rightleftharpoons A^+ + e^-$ | $E > Ai$; condition for breakdown

3 marks

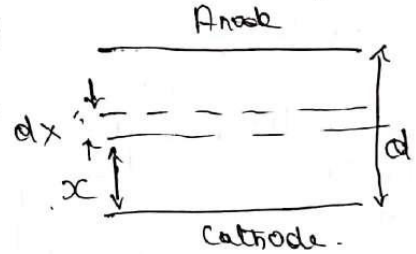
h → planks constant; C = velocity of light

$E = h\nu = hc/\lambda$

(2) a) Option d: Product of pressure & gap length — CO1 | L2 | 1 mark

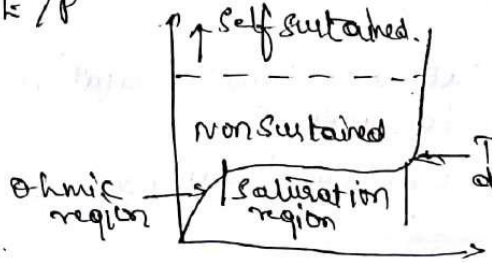
b) Option c: Hydrostatic pressure — CO1 | L2 | 1 mark

c)



i) Let us asume no electrons are emitted from cathode. Let α be Average no of ionising collisions made by electron/cm.

$\alpha = E/p$



Course Coordinator Name and Signature

Dr. PARTHASARATHY C.
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru
Signature of HOD

$dn_x = \alpha n_x dx$

$\frac{dn_x}{n} = \alpha dx$

$\ln n = \alpha x + A$ —(1)

$A = \ln n_0$ in (1)

$\therefore \ln n = \alpha x + \ln n_0$

$\ln n - \ln n_0 = \alpha x$

$\ln\left(\frac{n}{n_0}\right) = \alpha x \Rightarrow \frac{n}{n_0} = e^{\alpha d}$ at $x = d$

$\therefore n = n_0 e^{\alpha d}$

Avg current $\boxed{I = I_0 e^{\alpha d}}$

Let Total no of electron n reaching anode,

$n = (n_0 + n_+) e^{\alpha d}$

$n_+ = \gamma [n - (n_0 + n_+)]$

$n_+ = \gamma n - \gamma n_0 - \gamma n_+$

$n_+ = \frac{\gamma (n - n_0)}{1 + \gamma}$

Substituting, $n = \left[n_0 + \frac{\gamma (n - n_0)}{1 + \gamma}\right] e^{\alpha d}$.

$n\left[1 + \gamma\left(1 - e^{\alpha d}\right)\right] = n_0 e^{\alpha d}$.

$\therefore I = \frac{I_0 e^{\alpha d}}{\left[1 - \gamma\left(e^{\alpha d} - 1\right)\right]}$

(3) a) option a: 25.57 kV/cm — CO1 L2 1mark

b) option B: cavitation breakdown — CO1 L2 1mark

2 marks

c) 1) Suspended particle theory

Commercial liquids will always contain solid impurities like fibres/dispersed solid particles & gaseous bubbles — CO1 L2 1mark

Course Coordinator Name and Signature

Dr. PARTHASARATHY L.
Signature of HoD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

2) $\varepsilon_2 > \varepsilon_1$

permittivity of liquid dielectrics ε_1 & ε_2 : permittivity of solid impurities.

$$F = \frac{1}{2r^3} \frac{(\varepsilon_2 - \varepsilon_1)}{2\varepsilon_1 + \varepsilon_2} \text{ grad } E^2.$$

3) If only gas bubbles are present $\varepsilon_2 < \varepsilon_1$ — 3 mark.

$r \rightarrow$ spherical particles of radius r

$E \rightarrow$ applied field.

2) Bubbles theory

Theory states that dielectric strength of liquid dielectric material depends on hydrostatic pressure. — 2 mark

Here voltage drop along the length of bubble equals to minimum value of voltage in the paschen's curve.

$$E_0 = \frac{1}{(\varepsilon_1 - \varepsilon_2)} \left[\frac{2\pi\sigma(2\varepsilon_1 + \varepsilon_2)}{r} \left\{ \frac{\pi}{4} \sqrt{\left(\frac{V_b}{2rE_0}\right)} \right\} \right]^{1/2}$$

σ = surface tension of liquid — 2 mark

ε_1 = permittivity of liquid; ε_2 = permittivity of gas bubble; r = inial radius of gas bubble.

8 marks

(4) a) option b: 7.676/cm-torr — Col L_2 1 mark

b) option a: $W_{dc} = E_\sigma^2$ — Col L_2 1 mark

2 marks

Course Coordinator Name and Signature

Dr. PARTHASARATHY L.
Signature of HoD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

(4)

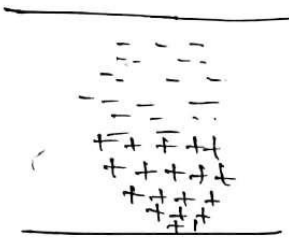
c) Streamers theory / Avalanche breakdown:

1) Streamer mechanism of B.D is also known as kanal mechanism of Breakdown. CO1 KL2 3marks

2) It is valid only if $E_0 = V/d$

3) It is a phenomenon that occurs in both insulating & semiconducting materials

A streamer discharge also known as filamentary discharge, is a type of transient electrical discharge. It is formed when exposed to large potential difference.



2marks

Step 1: Formation of avalanche.

Step 2: Formation of avalanche creates space Charge which leads additional electric field.

Step 3: Electric field enhance growth of new avalanche. Ionized region grows quickly & expands & finally Breakdown occurs

3marks

2marks

Part B

(5) a) option b: $2nV_{max}$ CO2 L2 1mark.

b) option c: i, ii, iii, iv CO1 L2 1 mark

2marks

Course Coordinator Name and Signature

Signature of HoD

Dr. PARTHASARATHY L.
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

5 c) a) ripple voltage $\delta V = \frac{I}{fC}\frac{n(n+1)}{2}$ — CO2 L3

$\delta V = \frac{5\times10^{-3}}{150\times0.05\times10^{-6}} \times \frac{8\times9}{2} = 24\,kV$ — 2 marks

b) Regulation: $\Delta V = \frac{I}{fC}\left[\frac{2n^3+n^2}{3}\frac{n}{2}-\frac{n}{6}\right]$ — 2 marks

$= 248\,kV$

$\therefore$ Regulation $= \frac{V}{2nV_{max}} = 12.4\%$ — 2 marks

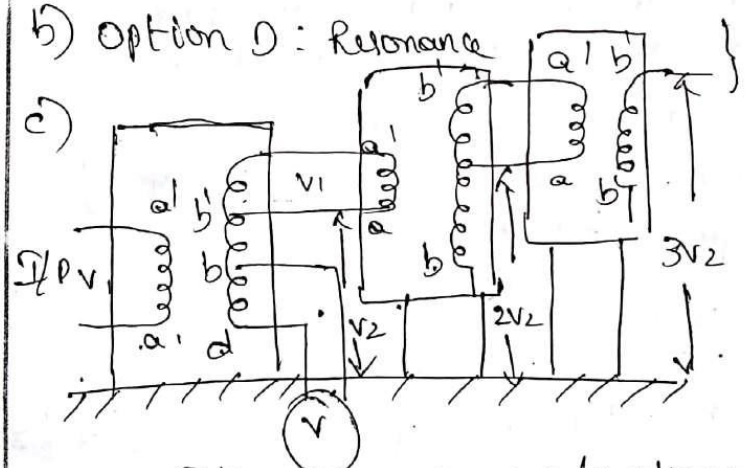
c) Optimum stages

$n_{opti} = \sqrt{\frac{V_{max}fC}{I}}$ — 2 marks

$\therefore = 14$ stages — 8 marks

6 a) Option B: 50kHz to 1MHz — CO2 L2 1 mark

b) Option D: Resonance — CO2 L2 1 mark.

c) 

CO2 L2 — 4 marks.

V_1 → I/P voltage; V_2 = O/P voltage

aa' – LV primary winding; bb' – H.V secondary winding; cc' excitation winding; bad – melal winding

Course Coordinator Name and Signature

Dr. PARTHASARATHY L.
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru
Signature of HoD

1) First transformer is at ground potential along with its tank
2) Second transformer is kept on insulators & maintained at a potential of V_2.
3) The H.V winding of the 1st unit is connected to the tank of second unit.
4) The L.V winding of this unit is supplied from the excitation winding of the first transformer which is in series with H.V winding of 1st transformer at its H.V end.
5) Isolating transformers IS1, IS2 & IS3 are 1:1 ratio transformers — 3 mark

Need: when test voltage requirements are less than 300KV, a single transformer can be used. > 300KV cascaded transformer is used — 1 mark

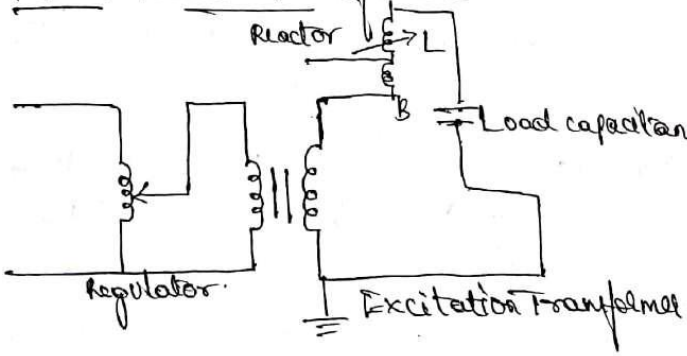
4 marks

(7) a) Option C: Both a & b — CO2 L2 1 mark

b) Option b: True — CO2 L2 1 mark

2 marks

c) Series Resonant Transformer — CO2 L2 — 2 marks



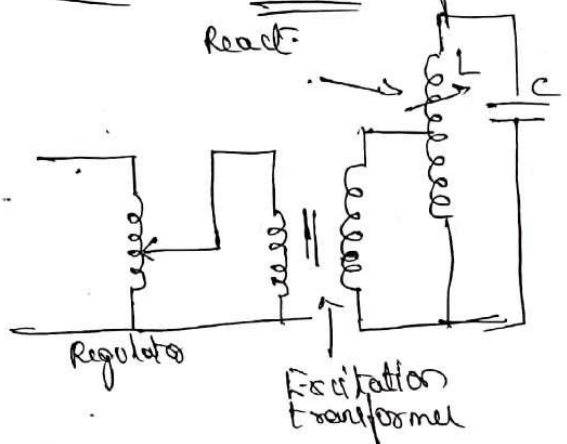
Course Coordinator Name and Signature

Dr. PARTHASARATHY L.
Signature of HoD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

(1) A voltage regulator of either auto transformer type or the induction regulator type is connected to supply mains.
(2) Secondary winding of exciter transformer is connected across H.V reactor L & capacitive load C.
(3) Inductance of reactor L, ratio 10:1
(4) Q factor: order of 50

2 marks

Parallel Resonant Transformer



2 marks

(1) In the parallel resonant mode the H.V reactor is connected as an auto transformer & the ckt is connected as a parallel resonant circuit.

2 marks

(2) Independent of the degree of tuning & the Q-factor.

(3) Advantage: Parallel resonant ckt more stable o/p voltage with high rate of rise of test voltage.

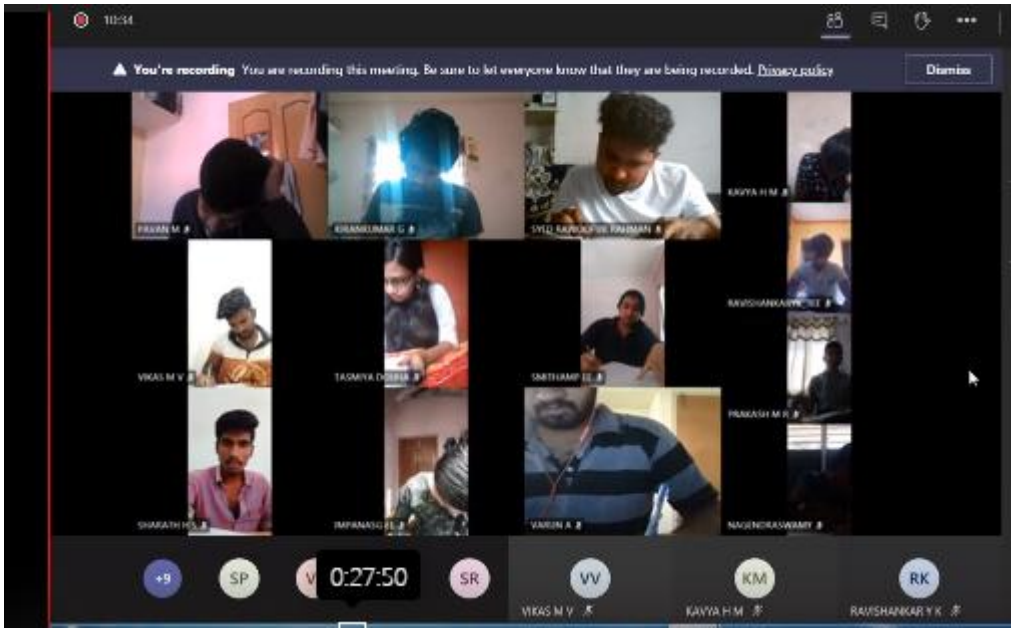
3 marks

Course Coordinator Name and Signature

Dr. PARTHASARATHY L.
Signature of HoD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

K. IA Recording Screenshot



HoD

Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

ASSIGNMENT

Department of Electrical and Electronics Engineering

AY:2020-2021

The Department follows the following components for the evaluation of **Assignments (10 Marks/Course).**

The components below can be considered for 6Marks under Component A. Remaining 4 marks is assigned for skill enhancement through MOOC Certification under Component B

Component A: Assignment

1. Quiz on the topics relevant to the syllabus or beyond syllabus. (Weightage of 2 Marks)
2. Write Up Assignment (Solving VTU QP/Descriptive/Numerical Questions). (Weightage of 2 Marks)
3. Group assignments (Weightage of 2 Marks)

Component B: MOOC Certification

- For registration of the course (Weightage of 2 Marks)
- Completion of the course (Weightage of 2 Marks)

HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

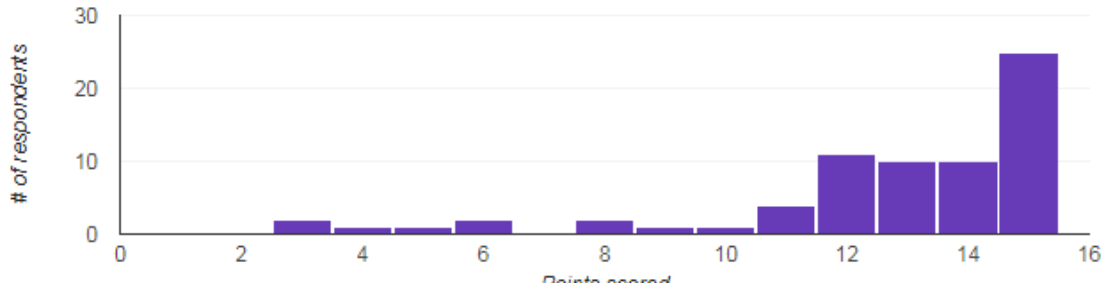
QUIZ

Course: Basic Electrical Engineering
Course Code:18ELE23
Course Outcome: CO-1
A sec: 32/42
C Sec: 37/42

Insights

Average	Median	Range
12.61 / 15 points	13 / 15 points	3 - 15 points

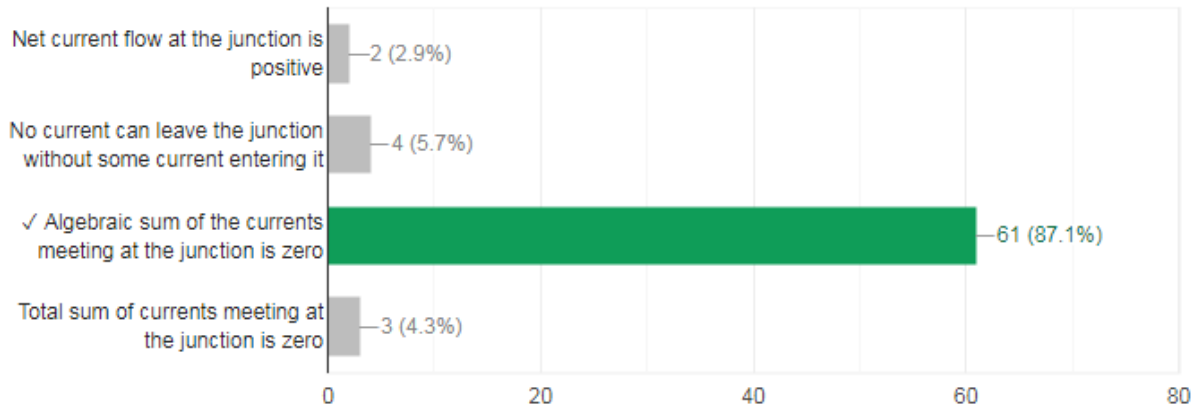
Total points distribution



18ELE23_ASSIGNMENT-2_WEEKLY QUIZ-2

1.Kirchhoff's current law states that

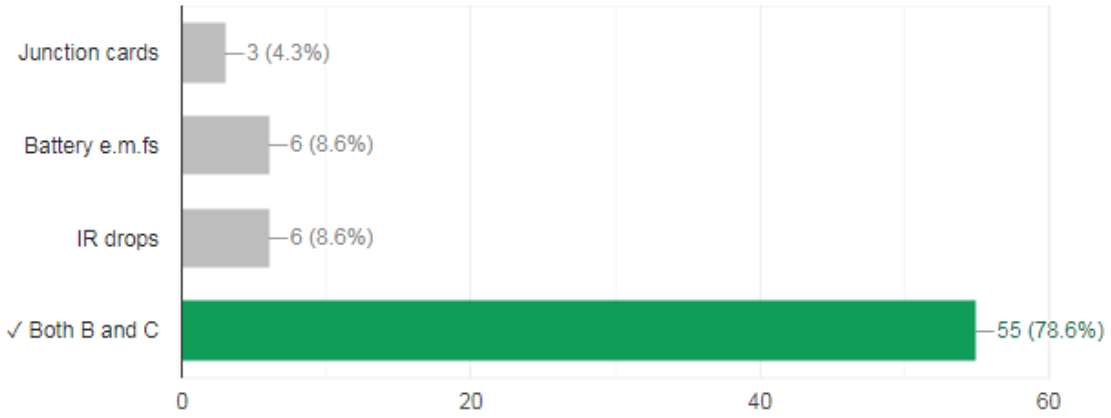
61 / 70 correct responses



Department of Electrical and Electronics Engineering

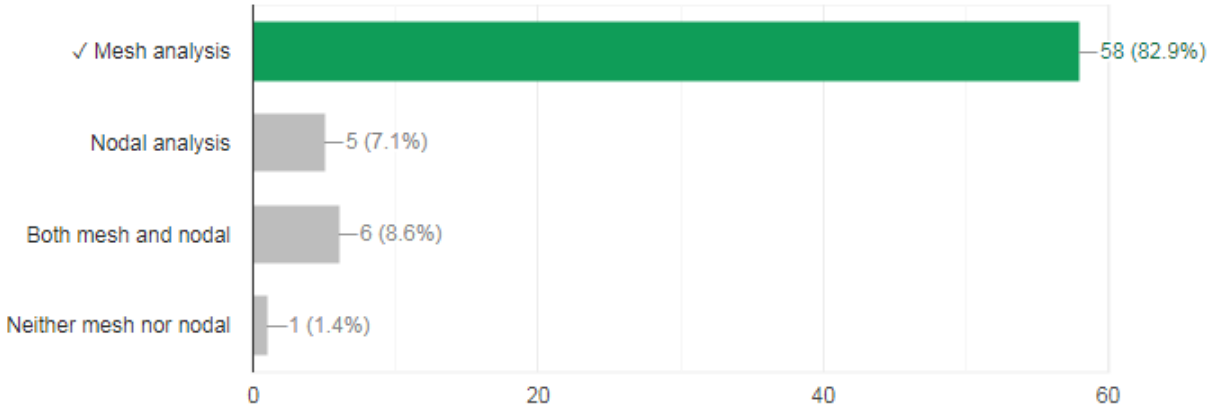
2.Kirchhoff's voltage law is related to

55 / 70 correct responses



3.KVL is applied in _____

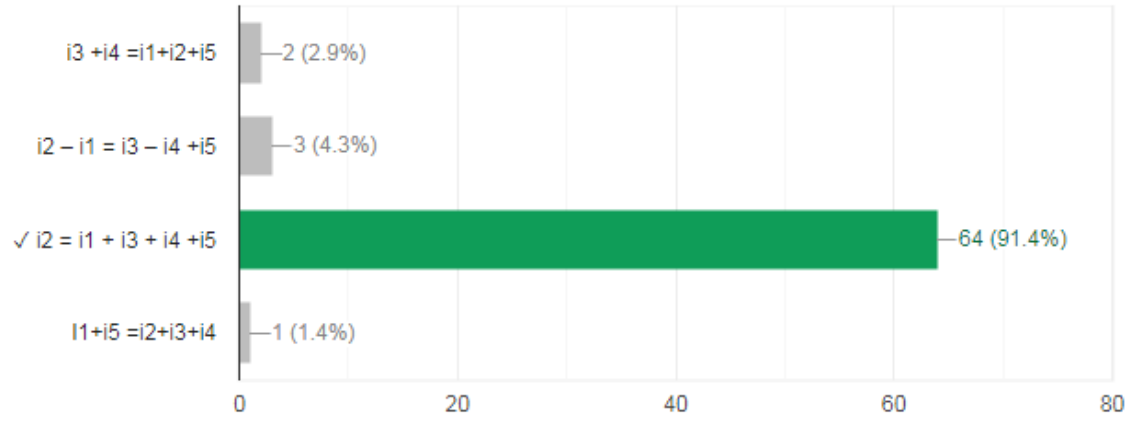
58 / 70 correct responses



Department of Electrical and Electronics Engineering

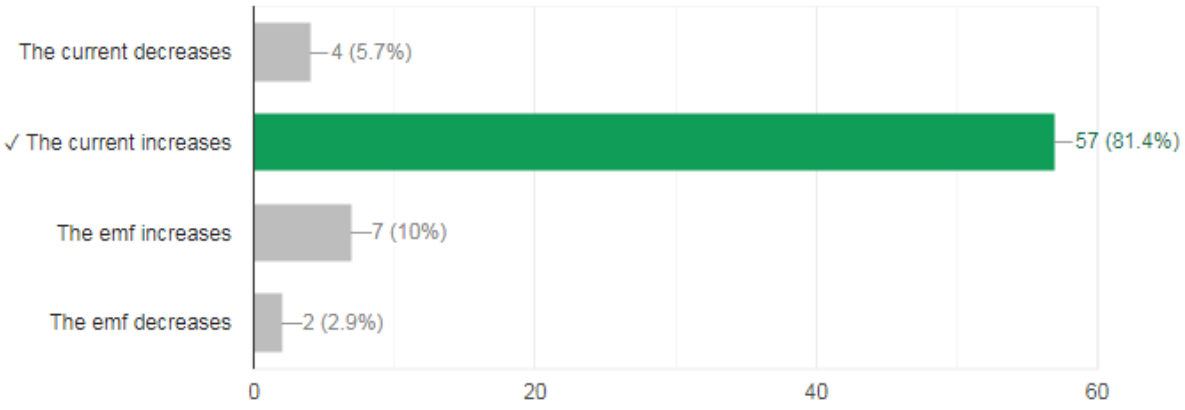
4.If i1, i3,i4,i5 are the entering currents, i2 is the leaving current,how is the equation represented?

64 / 70 correct responses



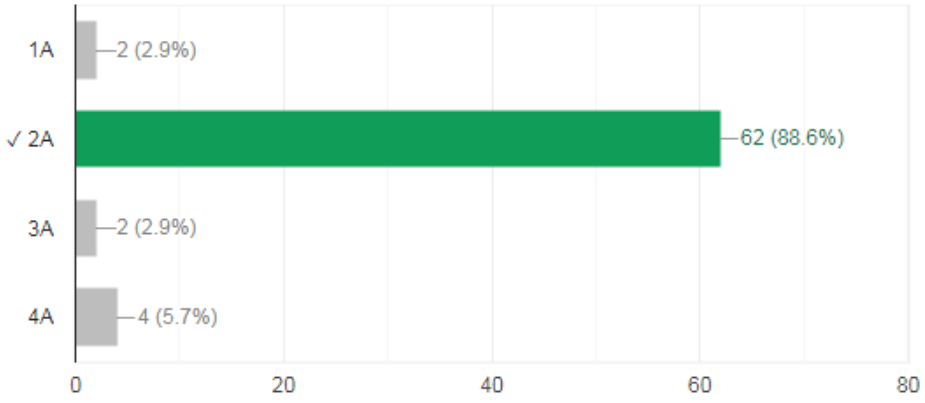
5.When the cells are connected in parallel, then

57 / 70 correct responses



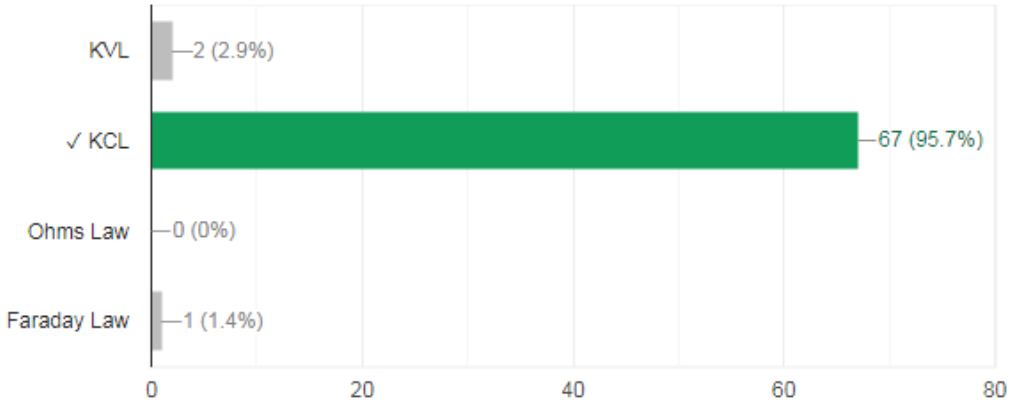
6. If i1, i3 are the entering currents;i2 is the leaving current ,determine i4 if i1=5A, i2=6A, i3=3A

62 / 70 correct responses



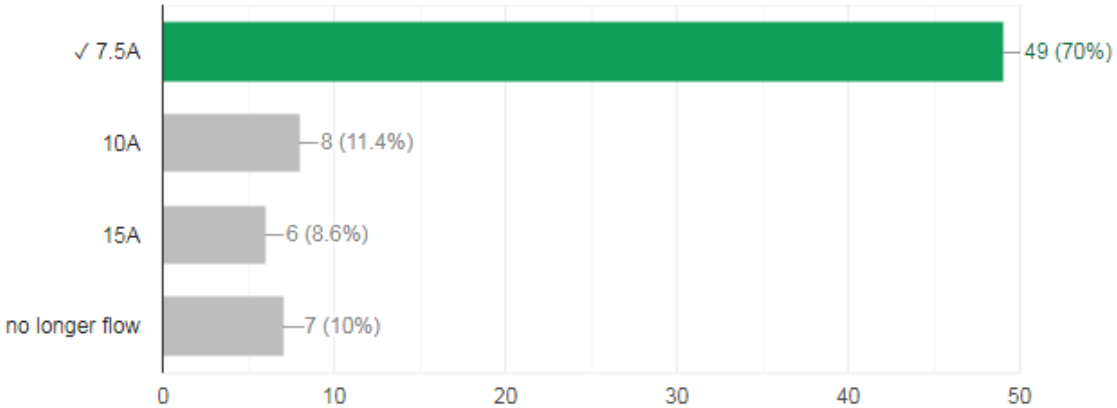
7. Which of the following laws is used in the nodal analysis of the network

67 / 70 correct responses



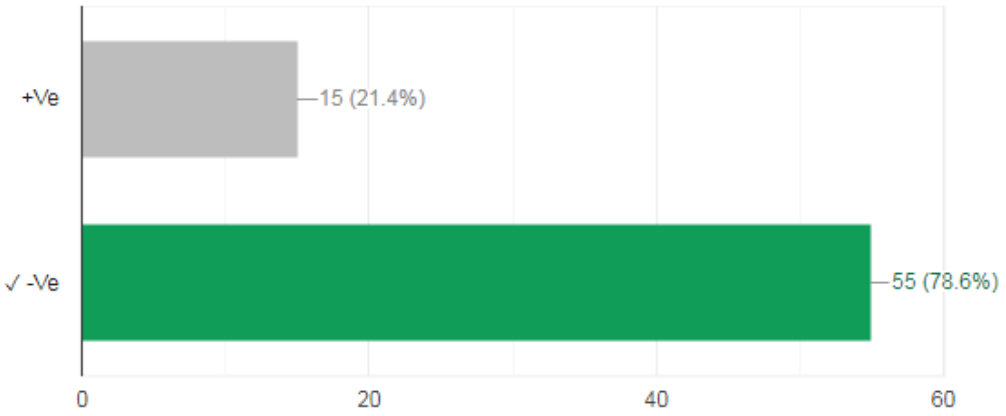
8.Certain circuit has three incoming currents having values 5 A, 9 A, and 1 A and two outgoing currents passing through two parallel resistors having equals values of resistance. The outgoing current flowing through first parallel resistor will be

49 / 70 correct responses



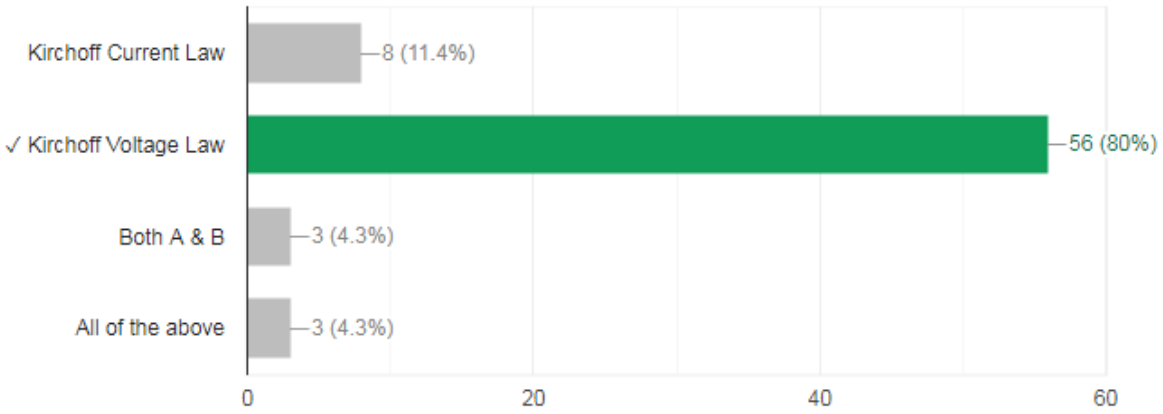
9. As per Kirchoff Law, Potential Drop is considered with what sign

55 / 70 correct responses



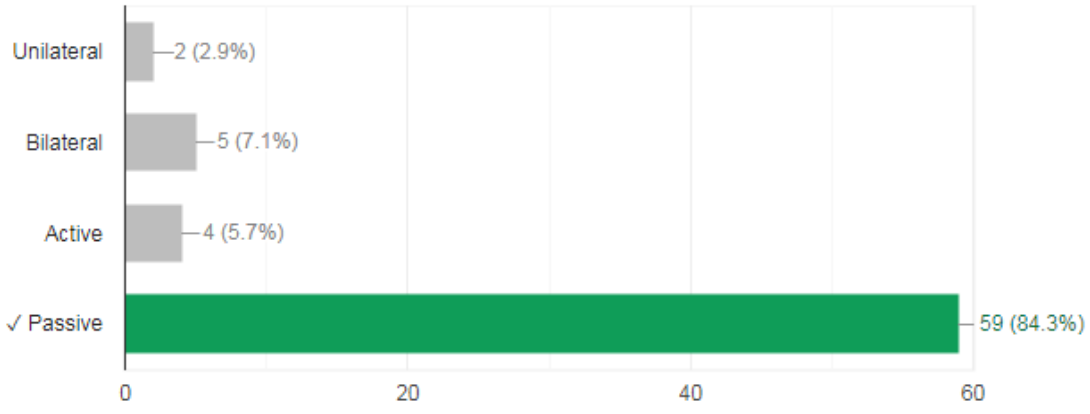
10.Algebraic sum of I*R and Algebraic sum of E in a closed network is Zero. Which Law States this?

56 / 70 correct responses



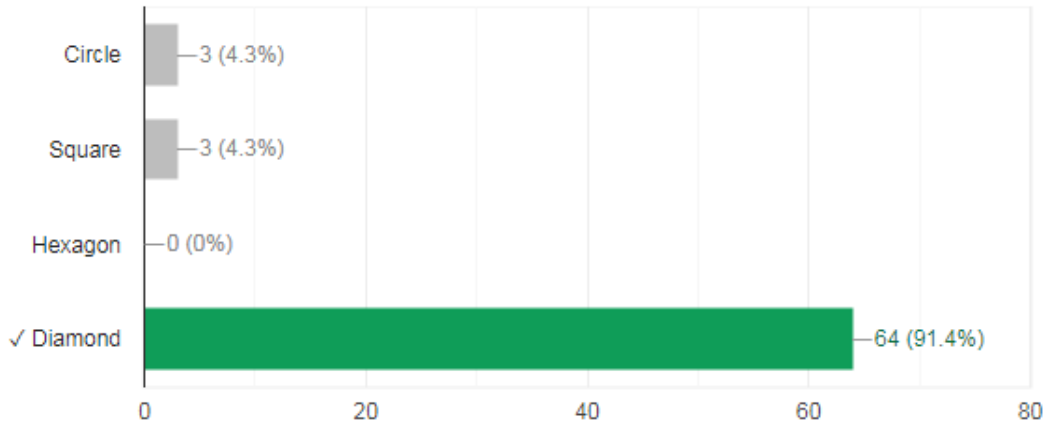
11.A circuit having neither any energy source nor e.m.f. source is called the .....circuit

59 / 70 correct responses



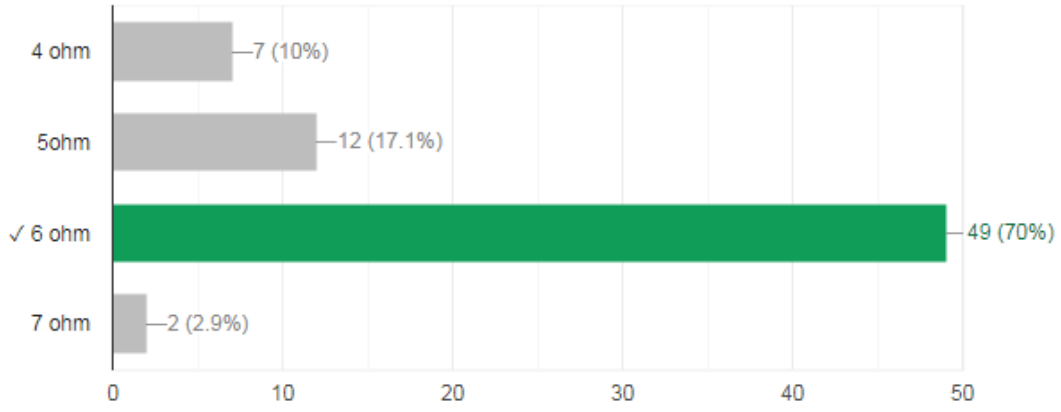
12. The dependant sources are normally represented in what shape?

64 / 70 correct responses



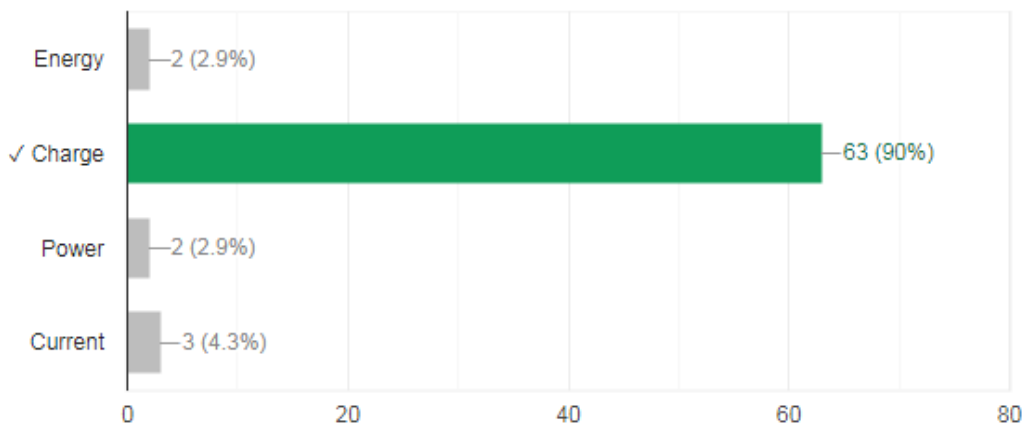
13.A resistance of 10 ohm is connected in series with the two resistance of each of 15 ohm arranged in parallel, what resistance must be shunted across this parallel combination so that the total current taken will be 1.5A from a 20V supply fed.

49 / 70 correct responses



14.KCL is a consequance of Law of conservation of

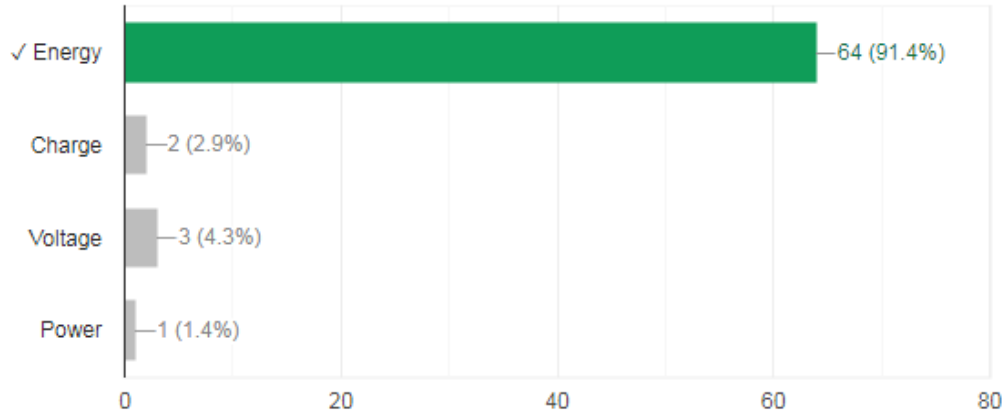
63 / 70 correct responses



Department of Electrical and Electronics Engineering

15.KVL is a consequence of Law of conservation of

64 / 70 correct responses



Marks

A Section

Score	NAME	USN	SECTIO
14 / 15	Ponnanna C P	4AD20EE014	A
6 / 15	Moulya	4AD20CV019	A
15 / 15	Nithin Gowda.S	4AD20CV021	A
15 / 15	Nikhil H N	4AD20EE007	A
12 / 15	Abhishek R	4AD20CVM005	A
15 / 15	Shashanth R	4AD20EC064	A
15 / 15	Ashith.s.gowda	4AD20EE005	A
13 / 15	Faseeha fathima	4AD20EC020	A
6 / 15	Vaijinath	4AD20EE017	A
3 / 15	Namratha M G	4AD20EC042	A
15 / 15	Chethan Kumar Mc	4AD20EC014	A
5 / 15	Uzma Taj	4AD20EC074	A
15 / 15	Niranjan	4AD20EC044	A
3 / 15	Nisarga br	2020CNECF144	A
9 / 15	NISARGA NJ	4AD20EC046	A
14 / 15	Basavaraju R	4AD20EC008	A
11 / 15	Harshitha AC	4AD20EC022	A
14 / 15	Poorvika.N	4AD20EC052	A
15 / 15	Faeza taskeen	4AD20EE006	A
14 / 15	Chethana. U	4AD20EC016	A
12 / 15	Mohammed Yahya	2020mnecm097	A
8 / 15	Keerthana.n	4AD20EC028	A
15 / 15	Likhith	4AD20CV017	A
13 / 15	Asha s	4AD20CV004	A
11 / 15	Shashank S N	4AD20EC063	A
12 / 15	Sinchana P	4AD20EC065	A
12 / 15	Pallavi M	4AD20CV022	A
13 / 15	Keerthana M	4AD20EC027	A
15 / 15	Vishwas m s	4AD20EC076	A
15 / 15	Saraswathi M	4AD20EC062	A
15 / 15	Yashwanth.B.J	4AD20EC078	A
13 / 15	DARSHAN MD	2020MNCVM106	A

Department of Electrical and Electronics Engineering

C Section

Score	NAME	USN	SECTION
8 / 15	Likith .M	4AD20EC034	C
10 / 15	Nisarga SD	4AD20CV020	C
12 / 15	Likhita.N	4AD20EC033	C
11 / 15	Sagari G N	4AD20EC060	C
13 / 15	Rashmitha B S	4AD20EC058	C
12 / 15	Dheeraj S P	4AD20EC018	C
12 / 15	Tejas A	4AD20EC072	C
14 / 15	Amrutha J S	4AD20EC004	C
13 / 15	Thriveni NA	4AD20CV028	C
14 / 15	Hruthik N	4AD20EE008	C
13 / 15	ABHILASH Y N	4AD20CV001	C
13 / 15	Mohammed Jasir	4AD20EC038	C
12 / 15	Purushotham S	4AD20EC055	C
14 / 15	Kavya	4AD20EC026	C
15 / 15	KARTHIK P U	4AD20EC024	C
15 / 15	CHANDU N	4AD20CV009	C
14 / 15	Arun V	4AD20EE004	C
13 / 15	Chandan gowda k s	4AD20EC011	C
14 / 15	Arun s	4AD20EC005	C
15 / 15	Suman v m	4AD20CV026	C
15 / 15	Raehan ahmed	4AD20EE015	C
11 / 15	Ayesha sultana R	4AD20CV006	C
15 / 15	Supreeth R	4AD20EC069	C
15 / 15	Ashwini Raj	4AD20CV005	C
15 / 15	RAMYA.B.	4AD20EC057	C
12 / 15	Kunal U	4AD20EC031	C
15 / 15	Jayasimha N	4AD20CV013	C
15 / 15	Khushi.A	4AD20CV015	C
12 / 15	Lavanya.Gk	4AD20EE010	C
15 / 15	Thanush kumar B N	4AD20EC073	C
15 / 15	Aishwarya.L	4AD20EC002	C
14 / 15	BHUMIKA MS	4AD20EC010	C
12 / 15	Aathiqa Fathima Khanum	4AD20EE001	C
13 / 15	kiran vishwakarma v	4AD20CV016	C
15 / 15	Chethan MC	4AD20EC015	C
15 / 15	KHUSHI M	4AD20EC029	C
15 / 15	Delphina Jerusha	4ad20ec017	C

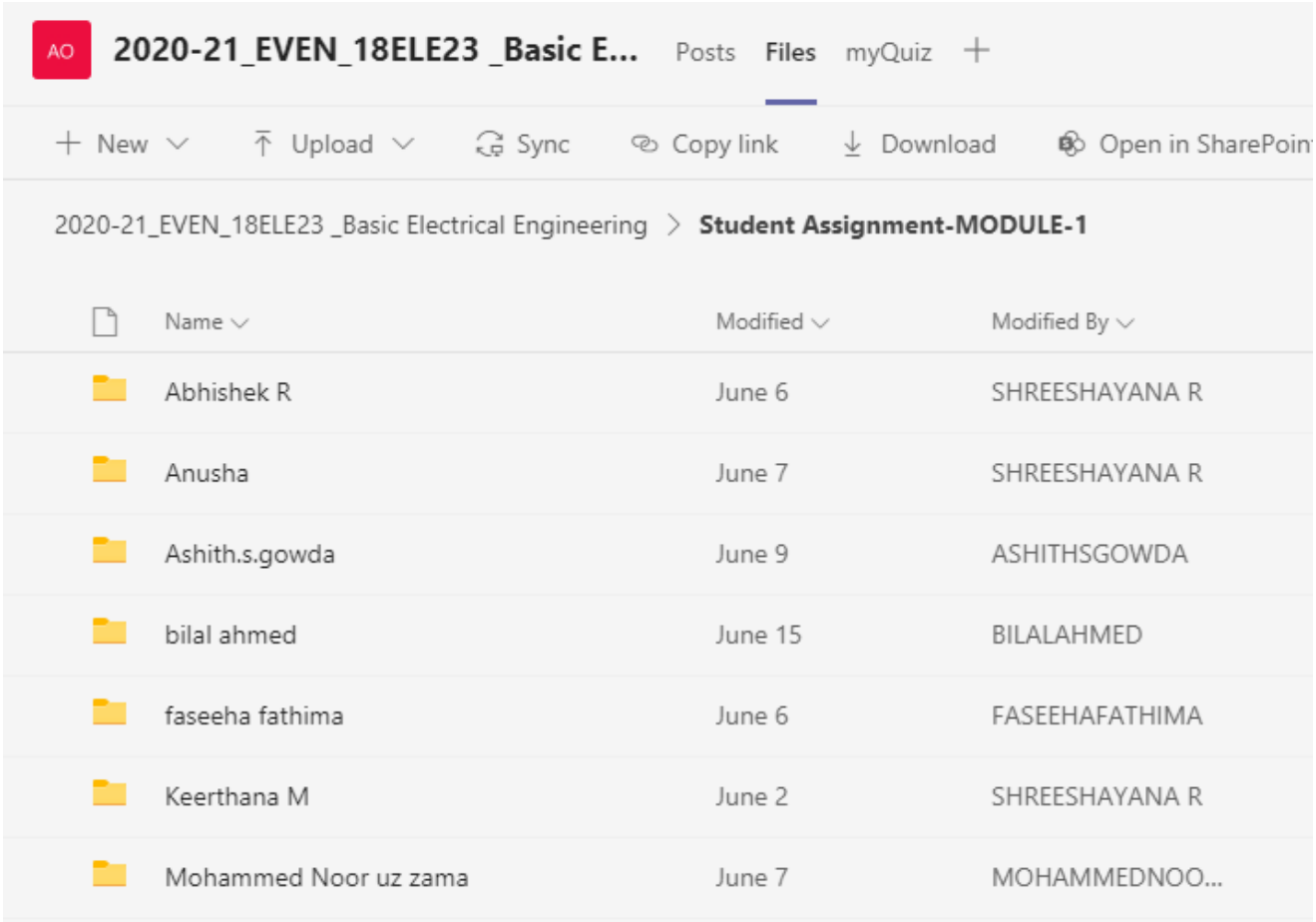
HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

Write Up Assignment

Course: Basic Electrical Engineering
Course Code:18ELE23
Course Outcome: CO-1, CO-3
A sec: 43/43
C Sec:42/42
Total Questions: 6
Each Question carries: 5 Marks

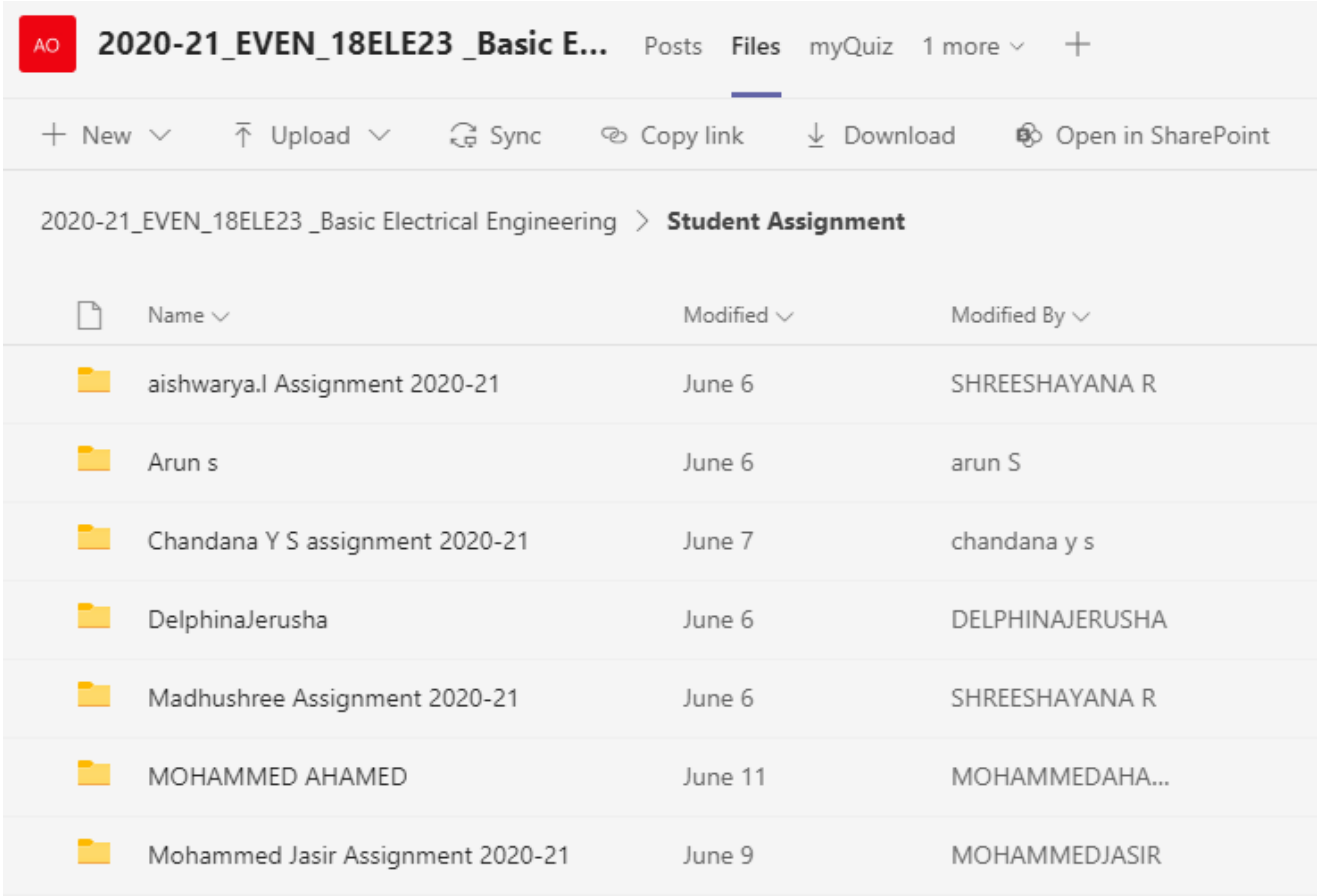
Document Proof
A Section



HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

C Section

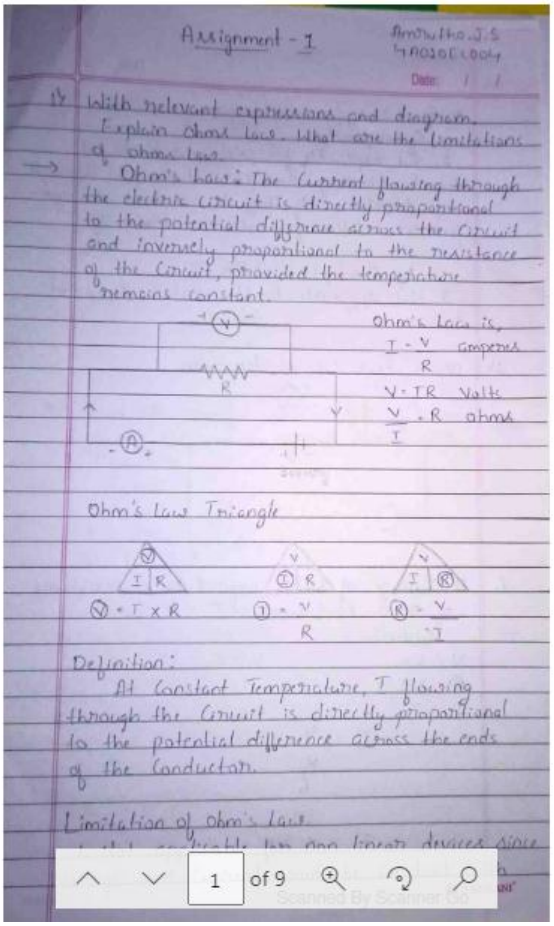


HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

Sample Assignment

Amrutha JS electrical assignment.pdf



Assignment - 1

Amrutha J S

1) With relevant expressions and diagram. Explain ohms law. What are the limitations of ohms law.

→ Ohm's law: The current flowing through the electric circuit is directly proportional to the potential difference across the circuit and inversely proportional to the resistance of the circuit, provided the temperature remains constant.

Ohm's law is,
$I = \frac{V}{R}$ amperes
$V = IR$ Volts
$\frac{V}{I} = R$ ohms

Ohm's Law Triangle

$V = I \times R$ $I = \frac{V}{R}$ $R = \frac{V}{I}$

Definition:
At constant Temperature, I flowing through the circuit is directly proportional to the potential difference across the ends of the conductor.

Limitation of ohm's law

1 of 9

Scanned By Scanner Go

HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

1st assignment EEE.pdf

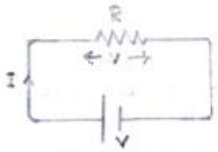
ELECTRICAL AND ELECTRONICS
ASSIGNMENT - 01

Q1. With relevant expressions and diagram. Explain Ohm's Law. What are the limitations of ohm's law.

Solution : Write the following details

1. Definition
2. Circuits and Equation
3. Ohm's Law Triangle
4. Limitations

1. **Definitions**: Ohm's law states that "The current flowing through a conductor is directly proportional to the potential difference across its ends", provided at constant Temperature and other physical conditions remain constant.

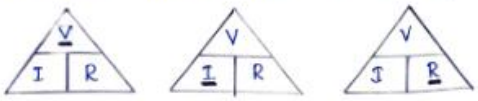


In the above figure, 'I' is the current through the conductor of resistance and 'V' is the potential difference across its ends, then by Ohm's law.

$$I \propto V$$
$$V = I \times R$$

The relation between current, voltage can be expressed in 3 ways

① $V = IR$ ② $I = V/R$ ③ $R = V/I$



HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

shashank S N,4AD20EC063.pdf

Assignment - 6

1. Define frequency, peak factor, form factor, Average value, RMS value.

frequency: The number of cycles completed by an alternating quantity per second is known as the frequency. It is denoted by f and is measured in cycles/second which is known as hertz. $f = \frac{1}{T}$ Hz

Form factor (k_f):

The form factor of an alternating quantity is defined as the ratio of r.m.s value to the average value

$$k_f = \frac{\text{r.m.s value}}{\text{average value}}$$

Peak factor (k_p)

The peak value of an alternating quantity is defined as the ratio of maximum value of the r.m.s value.

$$k_p = \frac{\text{maximum value}}{\text{r.m.s value}}$$

Average value: The average value of an alternating quantity is defined as that value which is obtained by averaging all the instantaneous values over a period of half cycle.

HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

Assignment Marks

A Section

SL.No.	USN	NAME	Remarks	Marks
1	4AD20CV002	ABHISHEK R	Submitted and verified	30
2	4AD20EC003	AKASH K	Submitted and verified	30
3	4AD20EE002	AKHILESH R	Submitted and verified	30
4	4AD20CV003	ANUSHA C K	Submitted and verified	30
5	4AD20CV004	ASHA S	Submitted and verified	30
6	4AD20EE005	ASHITH S GOWDA	Submitted and verified	30
7	4AD20EC008	BASAVARAJU R	Submitted and verified	30
8	4AD20CV007	BILAL AHMED	Submitted and verified	30
9	4AD20EC014	CHETHAN KUMAR M C	Submitted and verified	30
10	4AD20EC016	CHETHANA U	Submitted and verified	30
11	4AD20CV010	DARSHAN M D	Submitted and verified	30
12	4AD20EE006	FAEZA TASKEEN	Submitted and verified	30
13	4AD20EC020	FASEEHA FATHIMA	Submitted and verified	30
14	4AD20EC022	HARSHITHA A C	Submitted and verified	30
15	4AD20EC027	KEERTHANA M	Submitted and verified	30
16	4AD20EC028	KEERTHANA N	Submitted and verified	30
17	4AD20CV017	LIKHITH M	Submitted and verified	30
18	4AD20EC039	MOHAMMED NOORUZZAMA	Submitted and verified	30
19	4AD20EC040	MOHAMMED UMAR TAQI	Submitted and verified	30
20	4AD20EC041	MOHAMMED YAHYA	Submitted and verified	30
21	4AD20CV019	MOULYA L S	Submitted and verified	30
22	4AD20EC042	NAMRATHA M G	Submitted and verified	30
23	4AD20EE007	NIKHIL H N	Submitted and verified	30
24	4AD20EC044	NIRANJAN N	Submitted and verified	30
25	4AD20EC045	NISARGA B R	Submitted and verified	30
26	4AD20EC046	NISARGA N J	Submitted and verified	30
27	4AD20CV021	NITHIN GOWDA S	Submitted and verified	30
28	4AD20CV022	PALLAVI M	Submitted and verified	30
29	4AD20EE014	PONNANNA C P	Submitted and verified	30
30	4AD20EC052	POORVIKA N	Submitted and verified	30
31	4AD20EC054	PRASHANTH D	Not Submitted and verified	0
32	4AD20EC056	RAHUL HEJAMADI J V	Submitted and verified	30
33	4AD20EC062	SARASWATHI M	Submitted and verified	30
34	4AD20EC063	SHASHANK S N	Submitted and verified	30
35	4AD20EC064	SHASHANTH R	Submitted and verified	30
36	4AD20EC065	SINCHANA P	Submitted and verified	30
37	4AD20EC067	SRINIVAS Y R	Submitted and verified	30
38	4AD20EC068	SUMANTH MR	Submitted and verified	30
39	4AD20EC074	UZMA TAZ	Submitted and verified	30
40	4AD20EE017	VAIJINATH	Submitted and verified	30
41	4AD20CV029	VENKATESH A R	Submitted and verified	30
42	4AD20EC076	VISHWAS M S	Submitted and verified	30
43	4AD20EC078	YASHWANTH B J	Submitted and verified	30

Department of Electrical and Electronics Engineering

C Section

SL.No.	USN	NAME	Remarks	Marks
1	4AD20EE001	AATHIQA FATHIMA KHANUM	Submitted and verified	30
2	4AD20CV001	ABHILASH Y N	Submitted and verified	30
3	4AD20EC002	AISHWARYA L	Submitted and verified	30
4	4AD20EC004	AMRUTHA J S	Submitted and verified	30
5	4AD20EC005	ARUN S	Submitted and verified	30
6	4AD20EE004	ARUN V	Submitted and verified	30
7	4AD20CV005	ASHWINI RAJ	Submitted and verified	30
8	4AD20CV006	AYESHA SULTANA R	Submitted and verified	30
9	4AD20EC010	BHUMIKA M S	Submitted and verified	30
10	4AD20EC011	CHANDAN GOWDA K S	Submitted and verified	30
11	4AD20EC012	CHANDANA Y S	Submitted and verified	30
12	4AD20EC013	CHANDRASHEKHAR R	Submitted and verified	30
13	4AD20CV009	CHANDU N	Submitted and verified	30
14	4AD20EC015	CHETHAN M C	Submitted and verified	30
15	4AD20EC017	DELPHINA JERUSHA	Submitted and verified	30
16	4AD20EC018	DHEERAJ S P	Submitted and verified	30
17	4AD20EE008	HRUTHIK N	Submitted and verified	30
18	4AD20CV013	JAYASIMHA N	Submitted and verified	30
19	4AD20EC024	KARTHIK P U	Submitted and verified	30
20	4AD20EC026	KAVYA	Submitted and verified	30
21	4AD20CV015	KHUSHI A	Submitted and verified	30
22	4AD20EC029	KHUSHI M	Submitted and verified	30
23	4AD20CV016	KIRAN VISHWAKARMA V	Submitted and verified	30
24	4AD20EC031	KUNAL U	Submitted and verified	30
25	4AD20EE010	LAVANYA G K	Submitted and verified	30
26	4AD20EC033	LIKHITA N	Submitted and verified	30
27	4AD20EC034	LIKITH M	Submitted and verified	30
28	4AD20CV018	MADHUSHREE M	Submitted and verified	30
29	4AD20EC037	MOHAMMED AHAMED	Submitted and verified	30

Department of Electrical and Electronics Engineering

30	4AD20EC038	MOHAMMED JASIR	Submitted and verified	30
31	4AD20EC043	NEETHASHREE R S	Submitted and verified	30
32	4AD20CV020	NISARGA S D	Submitted and verified	30
33	4AD20EC055	PURUSHOTHAM S	Submitted and verified	30
34	4AD20EE015	RAEHAN AHMED	Submitted and verified	30
35	4AD20EC057	RAMYA B	Submitted and verified	30
36	4AD20EC058	RASHMITHA B S	Submitted and verified	30
37	4AD20EC060	SAGARI G N	Submitted and verified	30
38	4AD20CV026	SUMAN V M	Submitted and verified	30
39	4AD20EC069	SUPREETH R	Submitted and verified	30
40	4AD20EC072	TEJAS A	Submitted and verified	30
41	4AD20EC073	THANUSH KUMAR B N	Submitted and verified	30
42	4AD20CV028	THRIVENI N A	Submitted and verified	30

HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

Group Assignment

Students are assigned different case studies work to submit report

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELAGAVI

RELAY AND HIGH VOLTAGE VIRTUAL LAB

"To Measure the Dielectric Strength of Transformer Oil"

Submitted by

HASEEBULLA BAIG (4AD17EE013)
MOHAMMED HUZAIF (4AD17EE022)
SIMRAH FATHIMA (4AD17EE034)
SYED RAWOOFUR RAHMAN (4AD17EE038)

Mr. Shreeshayana R, M.Tech
Assistant Professor, Department of EEE, ATMECE, Mysuru

A T M E
College of Engineering

Department of Electrical and Electronics Engineering
ATME COLLEGE OF ENGINEERING
13 KM STONE, MYSURU KANAKAPURA BENGALURU ROAD, MYSURU-570028

To Measure the Dielectric Strength of Transformer Oil

Objective:

To determine the dielectric strength of the given transformer oil.

Components required:

Fig.1: Portable oil testing set

Fig 2: HV transformer

Fig.3: Gap setting gauge

HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

Connection diagram:

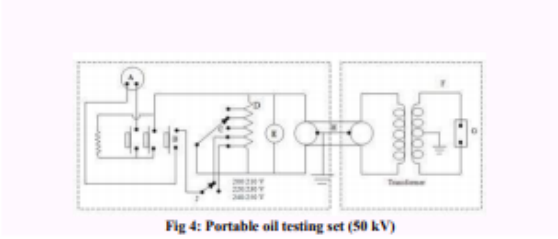


Fig 4: Portable oil testing set (50 kV)

A- Socket for Supply loads

B- Push

C- Multiple Point Control

D- Auto Transformer

E- Voltmeter

F- Step up Transformer

G- Test Cell

H- Inter Connecting Cable

I- Supply Voltage Selector Switch

Theory:

The two unit portable testing set is designed for the periodical testing of samples of insulating oils drawn from plant on site and for checking the dielectric strength of new samples of oil. The equipment is designed to operate from 200/250V, 50Hz, Single phase AC supply. Test gap voltage up to 50kV, it consists of two units, one is containing the testing transformer and other control and metering equipments. These equipments are kept in a metal box to provide full protection to the apparatus during transport and storage. The gap is adjusted between electrodes in accordance with British Standard Specification (BSS) no. 148.

Procedure:

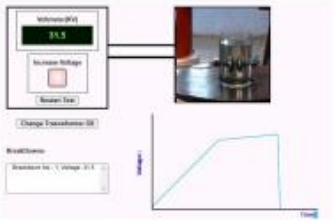
1. Place the High Voltage transformer unit about 7 away from the control unit.
2. The control unit is connected to supply voltage taking care that the earth connections are effective.
3. The multiple point control switch is set at its lowest tapping.
4. The push button on control unit is pressed firmly for at least 5 seconds. Note that no Breakdown to occurs, in which case button should be released at once without delay. Break down is indicated by a continuous discharge across the gap, bubbling of oil in the cell and meter indicating a sudden voltage drop.

Observations:

Sl no.	Breakdown voltage
1.	31.5
2.	30.3
3.	28.6
4.	31.5
5.	29.4

Simulation:

Trial 1:



HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Department of Electrical and Electronics Engineering

ATME COLLAGE OF ENINEERING

13th KM Stone,Mysuru- Kanakapura-Bengaluru Road, Mysuru- 560 02

A T M E
College of Engineering

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

COURSE: BASIC ELECTRICAL ENGINEERING

COURSE CODE: 18ELEL27

SEMESTER: II

SECTION: A

TOPIC: Measurement of Three Phase Power using two wattmeter method

TEAM MEMBERS:

1. NIRANJAN – 4AD20EC044
2. NIKHIL H N – 4AD20EE007
3. PONNANNA C P – 4AD20EE014
4. NITHIN GOWDA S – 4AD20CV021

Measurement of Three Phase Power using two wattmeter method

Objective: Power Measurement in Balanced 3-Phase Inductive Load Using Two Wattmeter.

Apparatus Required:

Sl. No	Particulars	Range	Quantity
1	Ammeter	(0-5) A	1
2	Voltmeter	(0-600V)	1
3	Wattmeter	600V, 0-5 A, UPF	02
4	3-ϕ Star connected Inductive Load (Balanced)	-	-

Theory:

The current coils of the two wattmeters are inserted in any two lines and the potential coil of each joined to the third line. It can be proved that the sum of the instantaneous powers indicated by wattmeter W1 and wattmeter W2 gives the instantaneous power absorbed by the three loads L1, L2 and L3. A star-connected load is considered in the following discussion although it can be equally applied to Delta-connected loads because a delta connected load can always be replaced by an equivalent star-connected load

Variations in Wattmeter Readings

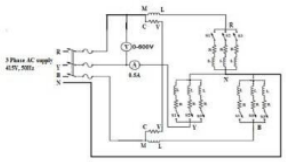
a) When φ= 0 i.e. power factor is unity (i.e. resistive load) then,W1 = W2 = VLILcos30°, both wattmeters indicate equal and positive i.e. up-scale readings

b) When φ= 60° i.e. power factor = 0.5 (lagging) Then W2 = VLILcos (30° + 60°) = 0. Hence, the power is measured by W1 alone

c) When 90° >φ> 60° i.e. 0.5 > p.f > 0, then W1 is still positive but reading of W2 is reversed because the phase angle between the current and voltage is more than 90°. For getting the total power, the reading of W2 is to be subtracted from that of W1, under this condition W2 will read 'down scale' i.e. backwards. Hence, to obtain a reading on W2 it is necessary to reverse either its pressure coil or current coil, usually the All readings taken after reversal of current coil or pressure coil are to be taken as negative

d) When φ= 90° (i.e. pure inductive or capacitive load), then W1 = VLILcos(30°+90°) = VLIsin30°; W2 = VLILcos(30°+90°) = −VLIL sin 30°, as seen, the two readings are equal but of opposite sign. Therefore W1 −W2 = 0

Circuit Diagram:

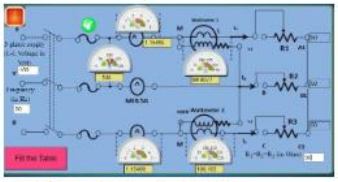


Procedure:

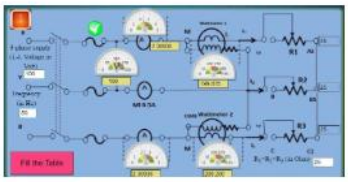
1. Connections are made as shown in the circuit diagram.
2. Keep all the load switches in the off position and close the supply switch.
3. Apply balanced load in steps and note down the readings of ammeter, voltmeter & both wattmeters.
4. Switch off the loads and open the supply switch.
5. Calculate the active power and reactive power
6. Repeat the procedure from steps 2 to 4 and calculate active power and reactive power.

The Multiplication Factor (MF) of the wattmeter: Multiplication Factor (MF) = (voltage range x current range x power factor) / (range of the wattmeter scale)

Variations in Wattmeter Reading when R= 25ohm



Variations in Wattmeter Reading when R= 50ohm



f

The actual power measurement is the scale reading multiplied by the Multiplication Factor (MF)

Sl. No.	VRY	IR	VBY	IB	IR	W1 in watts (Wattmeter Constant K1=2)	W2 in watts (Wattmeter Constant K2=2)	Active Power consumed P=W1+W2 watts
1	100	2.3093977	100	2.3093977	2.3093977	199.81587	200.20609	400.02166
2	100	1.1546988	100	1.1546988	1.1546988	99.907785	100.10304	200.01083
3	100	0.5773494	100	0.5773494	0.5773494	49.953892	50.051523	100.00541
4	100	0.2886747	100	0.2886747	0.2886747	24.976946	25.025761	25.001354

Outcomes: After completion of this experiment the students will be able to do measurement of Three Phase Power using two wattmeter method.

Department of Electrical and Electronics Engineering

MOOC Certification

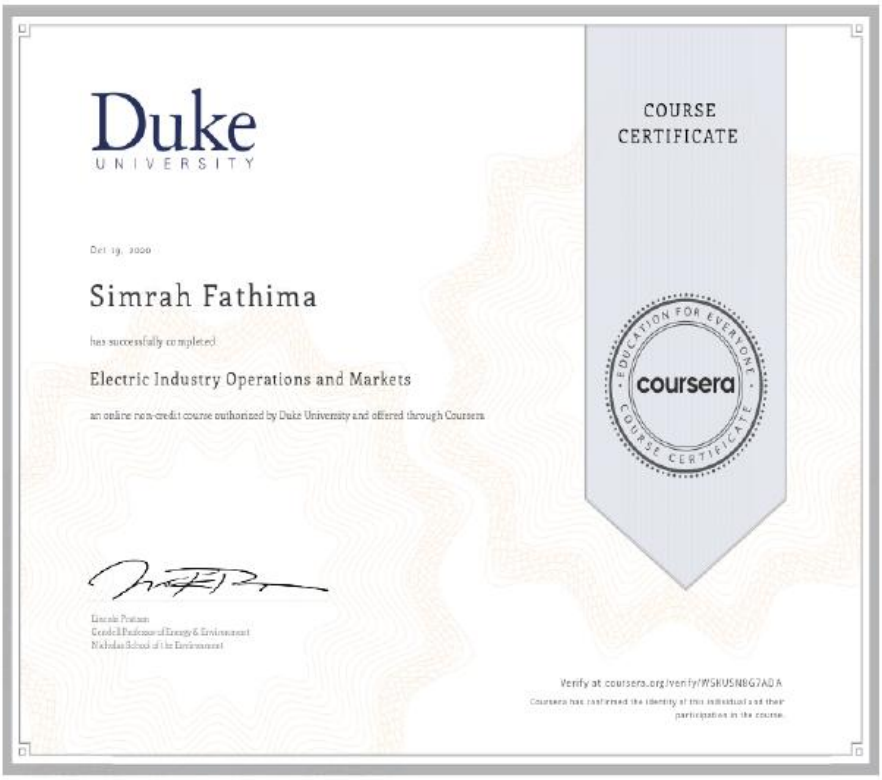
Details are collected through google form

NAME	USN	Have you registered for Online course	Provide the Course detail	Upload the Course registration screen shot	Have you completed Online course	Upload the Course Certificate
Gulabi P	4AD15EE012	Yes	Electrodynamics: Analysis of el	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Rakshith K N	4AD16EE034	Yes	Electric industry operations and	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Rohith D	4AD16EE036	Yes	Electrodynamics: Analysis of El	https://drive.google.com/open?	Yes	https://drive.google.com/open?
AKSHAY D	4AD17EE001	Yes	Python	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Arpitha R	4AD17EE002	Yes	Electrodynamics analysis of ele	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Asha P	4AD17EE004	Yes	Microcontroller Embedded C p	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Asha P	4AD17EE004	Yes	The Internet of thing (IoT)2020	https://drive.google.com/open?	Yes	https://drive.google.com/open?
ASHWINI DS	4AD17EE006	Yes	Electrodynamics: Analysis of El	https://drive.google.com/open?	Yes	https://drive.google.com/open?
B Roshan	4AD17EE007	Yes	Electrodynamics, Electric Indu	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Deepthi M	4AD17EE008	Yes	Electric Power Systems	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Dhanyatha M	4AD17EE009	Yes	Electro dynamics - Analysis of e	https://drive.google.com/open?	Yes	https://drive.google.com/open?
HARSHA K M	4AD17EE012	Yes	Electrodynamics	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Manoj k.n	4AD17EE019	Yes	Electrodynamics	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Mohamed Faris	4ad17ee021	Yes	Energy. Enterprises	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Mohammed shah Faisal mp	4AD17EE023	Yes	System management	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Rachana K Gowda	4AD17EE028	Yes	Python	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Ramyashree. S	4AD17EE029	Yes	Electrodynamics - Analysis of E	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Ruquia naaz khanum	4AD17EE030	Yes	Gustovalley technovations	https://drive.google.com/open?	Yes	https://drive.google.com/open?
SAHANA B	4AD17EE031	Yes	Electrodynamics and electrical	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Simrah Fathima	4AD17EE034	Yes	1.) Programming for Everybody	https://drive.google.com/open?	Yes	https://drive.google.com/open?
Sowmya M N	4AD17EE035	Yes	Coursera	https://drive.google.com/open?	Yes	https://drive.google.com/open?

a. Few of the sample certifications by our students

b. Sample Outcomes

SIMRAH FATHIMA	4AD17EE034



Department of Electrical and Electronics Engineering

UNIVERSITY OF MICHIGAN

COURSE CERTIFICATE

17.09.2020

Simrah Fathima

has successfully completed

Python Data Structures

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

Charles Severance
Clinical Professor, School of Information
University of Michigan

coursera

Verify at coursera.org/verify/Q6UYKBDWL2L5
Coursera has confirmed the identity of this individual and their participation in the course.

SUPRITHA R	4AD17EE036

SUNY The State University of New York

COURSE CERTIFICATE

01.10.2020

SUPRITHA R

has successfully completed

Electric Power Systems

an online non-credit course authorized by University at Buffalo and The State University of New York and offered through Coursera

Ilya Grinberg, Professor
Engineering Technology
Buffalo State College

coursera

Verify at coursera.org/verify/MD4PQKGRYNL5
Coursera has confirmed the identity of this individual and their participation in the course.

HoD
Dr. PARTHASARATHY
Professor and HOD
Dept. of Electrical & Electronics Engineering
ATME College of Engineering, Mysuru

Mechanism of internal assessment is transparent and robust in terms of frequency and mode.

The Department of Electronics and Communication Engineering conducts **three internal assessments.** First assessment will be conducted at 6th week, second at 12th and third at 14th week from the commencement respective semester. The IA Committee informs the test schedule to the faculties and students through a circular. Also the faculties are informed to set the question papers as per the guidelines in the IA Circular and has to mail to the Head of the Department on or before the deadline mentioned in the circular.

The review committee headed by the HOD and the senior Professors of the department will review the question papers set by the faculties and suggest for modifications if any and selects the question paper. Each test will cover one third of the syllabus. After valuation, the scheme and solutions are discussed in the class and the marks are uploaded into the CERP portal. From the CERP portal the results are sent to the parents.

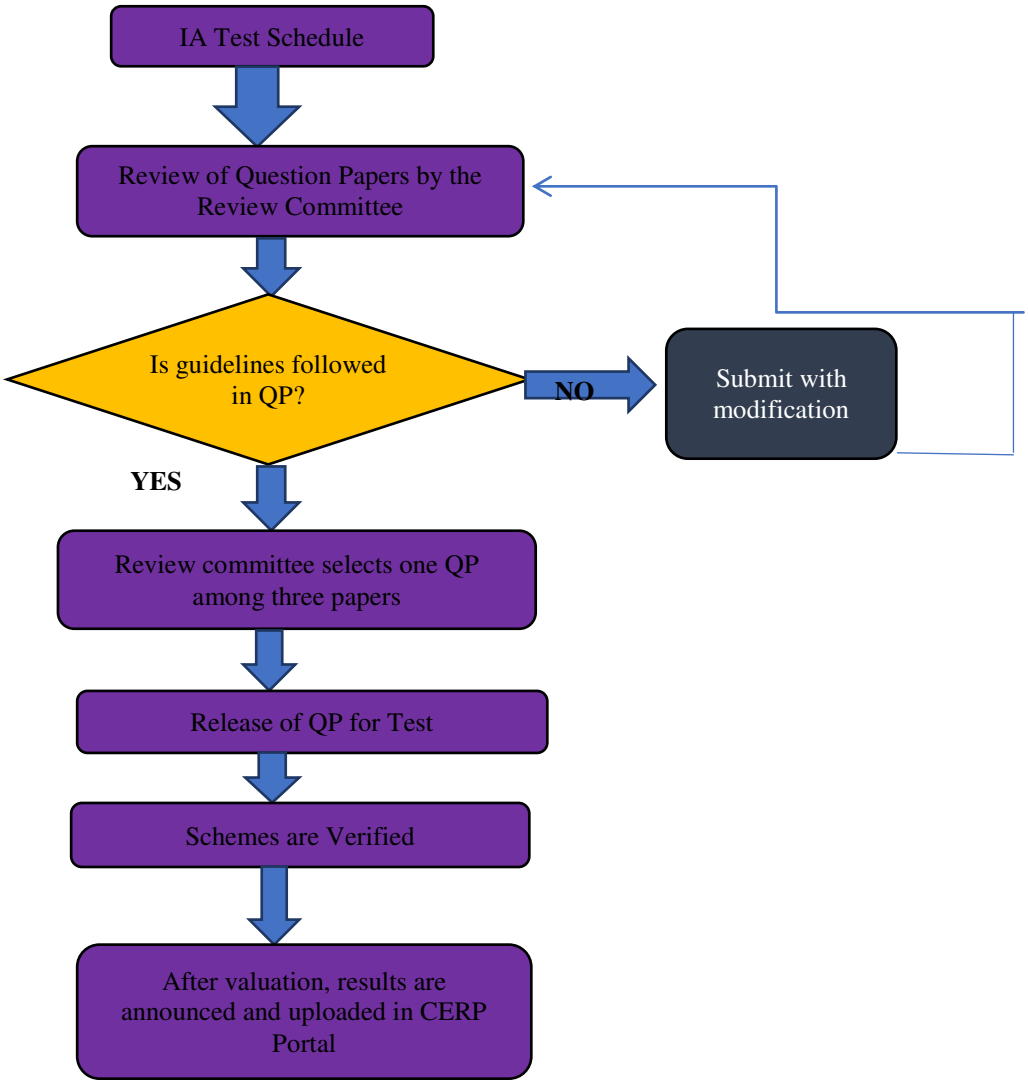


Fig: Test Process

ACADEMIC CALENDAR

ACADEMIC CALENDAR AND ADHERENCE

Adherence for the AY:2020-21 Odd Sem

Sl. No.	Activity	Planned Date	Implemented Date	Remarks
1	Commencement of Odd Semester	1st Sep-2020	1st Sep-2020	As planned
2	Induction program for 3rd ,5th & 7th semester students	1st Sep-2020	1st Sep-2020	As planned
3	First IA	8th , 9th& 10th of Oct 2020	8th , 9th& 12th of Oct 2020	As planned but Third Day internals postponed due to Decennial Function
4	Second IA	12th , 13th& 17th Nov 2020	12th , 13th& 17th Nov 2020	As planned
5	Third IA	28th, 29th& 30thDec 2020	28th, 29th& 30thDec 2020	As planned
6	Last Working Day	10th Mar 2021	10th Mar 2021	As planned

HOD
Dept. of ECE
Professor & Head
Dept. of Electronics & Communication
ATME COLLEGE OF ENGINEERING
Mysuru - 570 028

ATME COLLEGE OF ENGINEERING, MYSURU

Revised Academic Calendar (EVEN SEMESTER, 2020-21)

WEEK	MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	HOLIDAY (H)	COLLEGE EVENTS
1	APRIL					1	2	3		
2		4	5	6	7	8	9	10		
3		11	12	13	14	15	16	17		
4		18	19	20	21	22	23	24		Commencement of 4th, 6th and 8th Semester Classes
5		25	26	27	28	29	30			
5	MAY							1	May Day	
6		2	3	4	5	6	7	8		
7		9	10	11	12	13	14	15	Basava Jayanthi, Ramzan	
8		16	17	18	19	20	21	22		
9		23	24	25	26	27	28	29		FIRST IA 4TH AND 6TH SEM
		30	31							
10	JUNE			1	2	3	4	5		
11		6	7	8	9	10	11	12		
12		13	14	15	16	17	18	19		
13		20	21	22	23	24	25	26		
14		27	28	29	30					

Non Working Saturdays

ATME COLLEGE OF ENGINEERING, MYSURU

Revised Academic Calendar (EVEN SEMESTER, 2020-21)

WEEK	MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	HOLIDAY (H)	COLLEGE EVENTS
14	JULY					1	2	3		SECOND IA 4TH AND 6TH SEM
15		4	5	6	7	8	9	10		
16		11	12	13	14	15	16	17		
17		18	19	20	21	22	23	24	Bakrid	8th Sem Last Working Day, 8th Sem Theory Exam Begins
18		25	26	27	28	29	30	31		8th Sem Theory Exam Ends, THIRD IA 4th AND 6th SEM
18	AUGUST	1	2	3	4	5	6	7		4th and 6th Sem Last Working Day, 8th Sem Internship Viva Voce. LAB IA 4th and 6th Sem.
19		8	9	10	11	12	13	14		Practical Exams Starts for 4th and 6th Sem
20		15	16	17	18	19	20	21	Muharram	Practical Exams Ends for 4th and 6th Sem
21		22	23	24	25	26	27	28		Theory Exams Starts for 4th and 8th Sem
22		29	30	31						
23	SEPTEMBER				1	2	3	4		
24		5	6	7	8	9	10	11	Ganesha Chathurthi	Theory Exams Starts for 4th and 8th Sem
25		12	13	14	15	16	17	18		
26		19	20	21	22	23	24	25	Non Working Saturdays	
27		26	27	28	29	30	31	32		
WORKING DAYS (8th Sem)			14	14	13	13	13	6	73	
WORKING DAYS(4th & 6th)			16	16	15	16	16	7	86	Inclusive of IA tests and other activities

DEAN ACADEMICS
DR. M S GOVINDE GOWDA

PRINCIPAL
DR. L BASAVARAJ

ONLINE TEST PROCESS

Academic Year 2020-21 (Odd Semester)

Due to COVID pandemic the internal assessment during the academic 2020-21 Odd Semester was conducted in **ONLINE MODE using Microsoft Teams Platform**. The IA process for the same is as follows:

1. The test schedule was intimated to both faculty and students.
2. The question paper scrutiny was done as earlier.
3. The test was conducted through MS Teams.
4. Each Invigilator was allotted with maximum of 20 students to monitor.
5. Invigilators have to create a separate channel and the allotted students have to join the respective channel.
6. Question Papers were posted in MS Teams at the start of the test.
7. Students were instructed to turn on the video for complete duration of the test without fail.
8. The test invigilation was recorded by each invigilator.
9. Also, the test was monitored by the Head of the Department, Dean(Academics) and Online IA Squad Committee.
10. After completion students were instructed to upload the scripts in the MS Teams only with the file name as **USN_Name**.

HOD
Dept. of ECE
Professor & Head
Dept. of Electronics & Communication
ATME COLLEGE OF ENGINEERING
Mysuru - 570 028

IA TEST PROCESS

TIME TABLE

ATME
College of Engineering

Department of Electronics and Communication Engineering

(Accredited by NBA, New Delhi. Validity 01.07.2019 to 30.06.2022)

ONLINE IA-1 TIME TABLE 2020-21(ODD SEMESTER)

Date	Semester					
	3 (2018 Scheme)		5 (2018 Scheme)		7 (2017 Scheme)	
	Morning Session (10:00 A.M - 11:30 A. M)	Afternoon Session (2:30 P.M- 4:00 P.M)	Morning Session (10:00 A.M - 11:30 A.M)	Afternoon Session (2:30 P. M- 4:00 P.M)	Morning Session (10:00 A.M- 11:30 A.M)	Afternoon Session (2:30 P. M- 4:00 P.M)
8/10/2020	18MAT31	18EC32	18ES51	18EC52	17EC71	17EC72
9/10/2020	18EC33	18EC34	18EC53	18EC54	17EC73	17EC741
12/10/2020	18EC35	18EC36	18EC55	18EC56	17EC755	*****

HOD

07/10/20

Dean Academics

7/10/2020

Principal

ATME
College of Engineering

Department of Electronics and Communication Engineering

(Accredited by NBA, New Delhi. Validity 01.07.2019 to 30.06.2022)

ONLINE IA-1 TIME TABLE 2020-21(ODD SEMESTER)

Date	Semester					
	5 (2015 Scheme)		5 (2017 Scheme)		7 (2015 Scheme)	
	Morning Session (10:00 A.M - 11:30 A. M)	Afternoon Session (2:30 P.M- 4:00 P.M)	Morning Session (10:00 A.M - 11:30 A.M)	Afternoon Session (2:30 P. M- 4:00 P.M)	Morning Session (10:00 A.M- 11:30 A.M)	Afternoon Session (2:30 P. M- 4:00 P.M)
8/10/2020	15ES51	15EC52	17ES51	17EC52	15EC71	15EC72
9/10/2020	*****	15EC54	*****	17EC54	15EC73	15EC741
12/10/2020	*****	15EC53	*****	17EC53	15EC755	*****

HOD

Dean Academics 07/10/20

Principal 7/10/20

IA CIRCULAR

Date: 07/10/2020

IA CIRCULAR

All the faculty members are hereby informed to set the internal assessment question papers and mail the same to eceiaqpatmece@gmail.com on or before **08th October 2020**. The guidelines to set the question paper are as follows:

1. The faculty should prepare 2 different sets of question paper for the respective subjects without any repetitions.
2. The question paper format, Guidelines for faculty to conduct online IA and the First Online Internals 2020-2021 odd semester time table is attached for your reference.
3. The faculty should prepare common question paper irrespective of section.
4. The Head of the Department will select any one among 2 sets of question paper and the same will be issued during the internal assessment.

Examination Committee

Mr. Pradeep Kumar Y

Mr. Manjunath K

Mrs. Harshitha N

HOD

GUIDELINES FOR FACULTY TO CONDUCT ONLINE IA

1. Online Test has to be done using M S Team Platform.
2. Every Faculty in the Department has to be assigned 15 to 20 students for Internal Assessment (IA) Invigilation/Online monitoring.
3. Each Department has to create a Team naming as **"Internal Assessment 2020-21 (Odd)"**.
4. Further, each Faculty/Invigilators (Assigned in Sl. No.2) has to create a Channel under the above-mentioned team as follows:

   IA_Faculty Initial
5. Each Faculty has to schedule the meeting one day prior to the online Test as per IA Time Table.
6. The invigilators have to login 15 minutes prior to the test commencement and make sure that all the students have joined the session and seated at proper position to take the test.

NOTE: Dr M S Govinde Gowda (Dean Academics), Dr Yathisha L and Mrs. Sneha N P (Dean Academics Supporting Faculty Members) should be added to the Test Team "Internal Assessment 2020-21 (Odd)".

HOD

Date: 07/10/2020

FIRST IA CIRCULAR FOR STUDENTS

This is to inform all the students that First Online Internals 2020-2021 for odd semester is scheduled on **8th, 9th and 10th of October 2020**. The guidelines for Online IA and First Online IA time table are attached for your reference.

Examination Committee

Mr. Pradeep Kumar Y

Mr. Manjunath K

Mrs. Harshitha N

HOD

GUIDELINES FOR STUDENTS TO ATTEND ONLINE IA

1. The Online test is scheduled as follow Morning Session 10.00 AM to 11:30 AM and Afternoon Session 2:30 PM to 4:00 PM.
2. The students should login to the scheduled session before 15 minutes (video can be switched on 5 minutes Prior to the test) to the commencement of the test and adhere to the instructions provided by the Invigilators.
3. The students must set the place in home in prior before taking the test. The place selected should be silent and video should be visible to invigilator.
4. The sitting position during internals should be as in below pic only; if you guys fail to setup as shown in pic, those candidate paper will be considered as malpractice and evaluation is not done.

Position 1

Position 2

5. After the write up, the next 15 minutes, the students have to scan the answer sheet and upload the same in the specified folder ("Assignment" tab in M S Team).
6. The format to name the scanned document is follows: USN_Name_Subjectcode.
7. This process has to be completed within 15 minutes i.e., between 11.30 AM to 11.45 AM and for afternoon session 4.00 PM to 4.15 PM; else it will be considered as malpractice.

HOD

Date: 09/10/2020

CIRCULAR

This is to inform all the students that First Online Internals 2020-2021 for odd semester scheduled on **10th October 2020** is postponed to **12th October 2020** due to Decenial Celebration in the College.

Examination Committee

Mr. Pradeep Kumar Y

Mr. Manjunath K

Mrs. Harshitha N

HOD

Sample Student Group and Invigilators Allotment in the Microsoft Teams Channel

Online IA-1 Invigilation Allotment

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Dr. Prakash Kuravatti, Associate Professor	ABHILASH M B	4AD19EC001	3/A
2		AISHWARYA R	4AD19EC003	3/A
3		ANANYA C	4AD19EC005	3/A
4		ANUSHA Y R	4AD19EC007	3/A
5		ARJUN M	4AD19EC009	3/A
6		AWAIZ MANSOOR	4AD19EC011	3/A
7		BHAVANASHREE N	4AD19EC013	3/A
8		CHAITRA B	4AD19EC015	3/A
9		D RAJKUMAR	4AD19EC017	3/A
10		DHANUSH M C	4AD19EC019	3/A
11		DUSHYANTH M P	4AD19EC021	3/A
12		GOWTHAM A R	4AD19EC023	3/A
13		HARSHITHA R M	4AD19EC025	3/A
14		HEMANTH J	4AD19EC027	3/A
15		JASHWINI K	4AD19EC029	3/A
16		KEERTHI KHATAVKAR R	4AD19EC031	3/A
17		KOUSHIK D KUMAR	4AD19EC033	3/A
18		MAHADEVA PRASAD G S	4AD19EC035	3/A
19		MANOJ K T	4AD19EC037	3/A
20		MANOJKUMAR P	4AD19EC039	3/A
21		MOHAMMED NAWAZ	4AD19EC041	3/A

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Dr. Prathibha M K, Associate Professor	MOHAMMED USMAN	4AD19EC043	3/A
2		NIJAGUNA SWAMY B S	4AD19EC045	3/A
3		NITISH B D GUPTHA	4AD19EC047	3/A
4		PAVAN KUMAR R	4AD19EC049	3/A
5		POOJA D B	4AD19EC051	3/A
6		PRABHUSWAMY B N	4AD19EC053	3/A
7		PRAJWAL C	4AD19EC055	3/A
8		PRATHEEK P S	4AD19EC057	3/A
9		PRIYANKA BAI J G	4AD19EC059	3/A
10		R V CHANDAN	4AD19EC061	3/A
11		RAGASHREE P	4AD19EC063	3/A
12		RAKSHA N R	4AD19EC065	3/A
13		REETHU K M	4AD19EC067	3/A
14		ROHITH S	4AD19EC069	3/A
15		SAMRIN	4AD19EC071	3/A
16		SANJANA R	4AD19EC073	3/A
17		SPARSHA K M	4AD19EC075	3/A
18		STALLAN A	4AD19EC077	3/A
19		SUSHMITHA B	4AD19EC079	3/A
20		SYED ADNAN AHAMED	4AD19EC081	3/A
21		THANYA M	4AD19EC083	3/A

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mrs. Pavithara A C, Assistant Professor	VAISHNAVI N	4AD19EC085	3/A
2		VEDASWI P V	4AD19EC087	3/A
3		YASHASWINI R S	4AD19EC089	3/A
4		YASHWANTH Y P	4AD19EC091	3/A
5		AISHWARYA C J	4AD19EC002	3/B
6		AKASHLUTHER B	4AD19EC004	3/B
7		ANISH B	4AD19EC006	3/B
8		APOORVA VISHWANATH	4AD19EC008	3/B
9		ASFIYA TABASSUM	4AD19EC010	3/B
10		BHARATH M	4AD19EC012	3/B
11		BINDU EDEN	4AD19EC014	3/B
12		CHANDANA L	4AD19EC016	3/B
13		DEEKSHA M	4AD19EC018	3/B
14		DHANYASHREEE S R	4AD19EC020	3/B
15		FAWAZ AHMED KHAN	4AD19EC022	3/B
16		HARSHA M	4AD19EC024	3/B
17		HEERA N	4AD19EC026	3/B
18		HIBA MAHIN	4AD19EC028	3/B
19		JAYANTH S	4AD19EC030	3/B
20		KIRAN S	4AD19EC032	3/B
21		LIKHITHA M	4AD19EC034	3/B

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mr. Abhilash G, Assistant Professor	MANJUNATHA	4AD19EC036	3/B
2		MANOJKUMAR N S	4AD19EC038	3/B
3		MOHAMMED ADNAN HADI	4AD19EC040	3/B
4		MOHAMMED SULAIMAN	4AD19EC042	3/B
5		NAGRAJ S	4AD19EC044	3/B
6		NISHCHITHVARDHAN S	4AD19EC046	3/B
7		NOMAN SABIT	4AD19EC048	3/B
8		POOJA B J	4AD19EC050	3/B
9		POORNA CHANDRA R	4AD19EC052	3/B
10		PRAJWAL B R	4AD19EC054	3/B
11		PRASHANTH L	4AD19EC056	3/B
12		PRERITHA B P	4AD19EC058	3/B
13		PUNEETH B S	4AD19EC060	3/B
14		RACHANA H M	4AD19EC062	3/B
15		RAJAT NARAYAN HEGDE	4AD19EC064	3/B
16		RAVINDRA S HUNDEKAR	4AD19EC066	3/B
17		ROHITH KUMAR K	4AD19EC068	3/B
18		SAHANA C	4AD19EC070	3/B
19		SANIKA C R	4AD19EC072	3/B
20		SHWETHA L	4AD19EC074	3/B
21		SPOORTHY M C	4AD19EC076	3/B

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mr. Guruprasad K N, Assistant Professor	SUPRITH D S	4AD19EC078	3/B
2		SUSHMITHA M S	4AD19EC080	3/B
3		TANYA S	4AD19EC082	3/B
4		THRIPTHI B S	4AD19EC084	3/B
5		VANITHA B	4AD19EC086	3/B
6		Y N GOWTHAMI	4AD19EC088	3/B
7		YASHWANTH K	4AD19EC090	3/B
8		AKSHAY	4AD17EC003	5/A
9		B BERNICE MATTENAI	4AD17EC007	5/A
10		AISHWARYA B	4AD18EC001	5/A
11		ANEES FATHIMA A B	4AD18EC003	5/A
12		ANUSHA A R	4AD18EC005	5/A
13		APOORVA H S	4AD18EC007	5/A
14		CAROLINE SYMPHONY S	4AD18EC009	5/A
15		CHANDANA M D	4AD18EC011	5/A
16		CHETHAN S	4AD18EC015	5/A
17		DASHARATHA A M	4AD18EC017	5/A
18		HAJIRA SIMRAN	4AD18EC019	5/A
19		HARSHITHA H J	4AD18EC021	5/A
20		HITHASHREE S G	4AD18EC023	5/A
21		KARTHIK R	4AD18EC025	5/A

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mr. Pradeep Kumar Y, Assistant Professor	LAKSHITH GOWDA J K	4AD18EC027	5/A
2		LIKHITH V KUMAR GOWDA	4AD18EC029	5/A
3		MANSOOR FATHAK	4AD18EC031	5/A
4		MEGHANA S	4AD18EC033	5/A
5		NANDITHA A	4AD18EC035	5/A
6		NAVANEETH M	4AD18EC037	5/A
7		NEHA D R	4AD18EC039	5/A
8		P BALAKRISHNA	4AD18EC041	5/A
9		POOJA V	4AD18EC043	5/A
10		PRASHANTH Y S	4AD18EC047	5/A
11		RAMYA K	4AD18EC049	5/A
12		RIYANKA K	4AD18EC051	5/A
13		SANGEETHA K S	4AD18EC053	5/A
14		SARA SIMRAN	4AD18EC055	5/A
15		SHEETAL K ATHREYA	4AD18EC057	5/A
16		SOMASHEKAR M N	4AD18EC059	5/A
17		SUMAN S	4AD18EC061	5/A
18		SUSHMITHA P	4AD18EC063	5/A
19		TEJASWINI E	4AD18EC065	5/A
20		THANUSHREE D	4AD18EC067	5/A
21		THEJASWINI P	4AD18EC069	5/A

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mr. Manjunath K, Assistant Professor	VAISHNAVI G	4AD18EC071	5/A
2		VARUN R S	4AD18EC073	5/A
3		BHAVANKUMAR N	4AD19EC401	5/A
4		CHINMAYI R	4AD19EC403	5/A
5		DARSHAN K S	4AD19EC405	5/A
6		HEMANTHKUMAR G V	4AD19EC407	5/A
7		KIRAN A	4AD19EC409	5/A
8		KUPENDRA	4AD19EC411	5/A
9		MAMATHA M B	4AD19EC413	5/A
10		MANOJ L	4AD19EC415	5/A
11		MONISHA S	4AD19EC417	5/A
12		NITHINGOWDA A M	4AD19EC419	5/A
13		PAVAN S M	4AD19EC421	5/A
14		PRAJWALGOWDA G K	4AD19EC423	5/A
15		RAMYA N	4AD19EC425	5/A
16		SOUGANDHA G	4AD19EC428	5/A
17		SURAJ P	4AD19EC430	5/A
18		SYED MOHAMED ZUBAIR	4AD19EC431	5/A
19		YASHWANTH B	4AD19EC434	5/A
20		NIKSHEPA SM	4AD16EC043	5/B
21		DARSHAN KUMAR C B	4AD17EC022	5/B

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mr. Girish M, Assistant Professor	ANANDA H K	4AD18EC002	5/B
2		ANNAPOORNA D	4AD18EC004	5/B
3		ANUSHA B	4AD18EC006	5/B
4		BHAVANI J	4AD18EC008	5/B
5		CHAITHRA H R	4AD18EC010	5/B
6		CHANDANA R	4AD18EC012	5/B
7		CHETHAN P	4AD18EC014	5/B
8		CHIRAG C N	4AD18EC016	5/B
9		DHANUSH H V	4AD18EC018	5/B
10		HARSHAVARDHAN B M	4AD18EC020	5/B
11		HARSHITHA M	4AD18EC022	5/B
12		JOSNIJOSEPH	4AD18EC024	5/B
13		KAVYA C	4AD18EC026	5/B
14		LEELASHREE J	4AD18EC028	5/B
15		MAHADEVDEEPAK P	4AD18EC030	5/B
16		MANU R K	4AD18EC032	5/B
17		NAGASHREE M	4AD18EC034	5/B
18		NARENDRA K R	4AD18EC036	5/B
19		NAVEEN RAJ	4AD18EC038	5/B
20		NIKHITH URS	4AD18EC040	5/B
21		POOJA VENKATESH	4AD18EC044	5/B

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mr. Prajwalasimha S N Assistant Professor	PRANEETH JAIN S S	4AD18EC046	5/B
2		ROHAN U	4AD18EC052	5/B
3		SANJANA R	4AD18EC054	5/B
4		SARIYA ANJUM	4AD18EC056	5/B
5		SINCHANA S	4AD18EC058	5/B
6		SOWJANYA	4AD18EC060	5/B
7		SUNIL K	4AD18EC062	5/B
8		SWATHI B	4AD18EC064	5/B
9		TEJUS KUMAR S D	4AD18EC066	5/B
10		THEJASWINI K	4AD18EC068	5/B
11		UDAY GOWDA H C	4AD18EC070	5/B
12		VAISHNAVI V	4AD18EC072	5/B
13		VIKAS M K	4AD18EC074	5/B
14		ACHUTHA	4AD19EC400	5/B
15		CHAITRA M L	4AD19EC402	5/B
16		DARSHAN H M	4AD19EC404	5/B
17		HARSHITH G	4AD19EC406	5/B
18		KAVERI K M	4AD19EC408	5/B
19		KRUTHI M J	4AD19EC410	5/B
20		MALIK REHAN S	4AD19EC412	5/B
21		MANASA K R	4AD19EC414	5/B

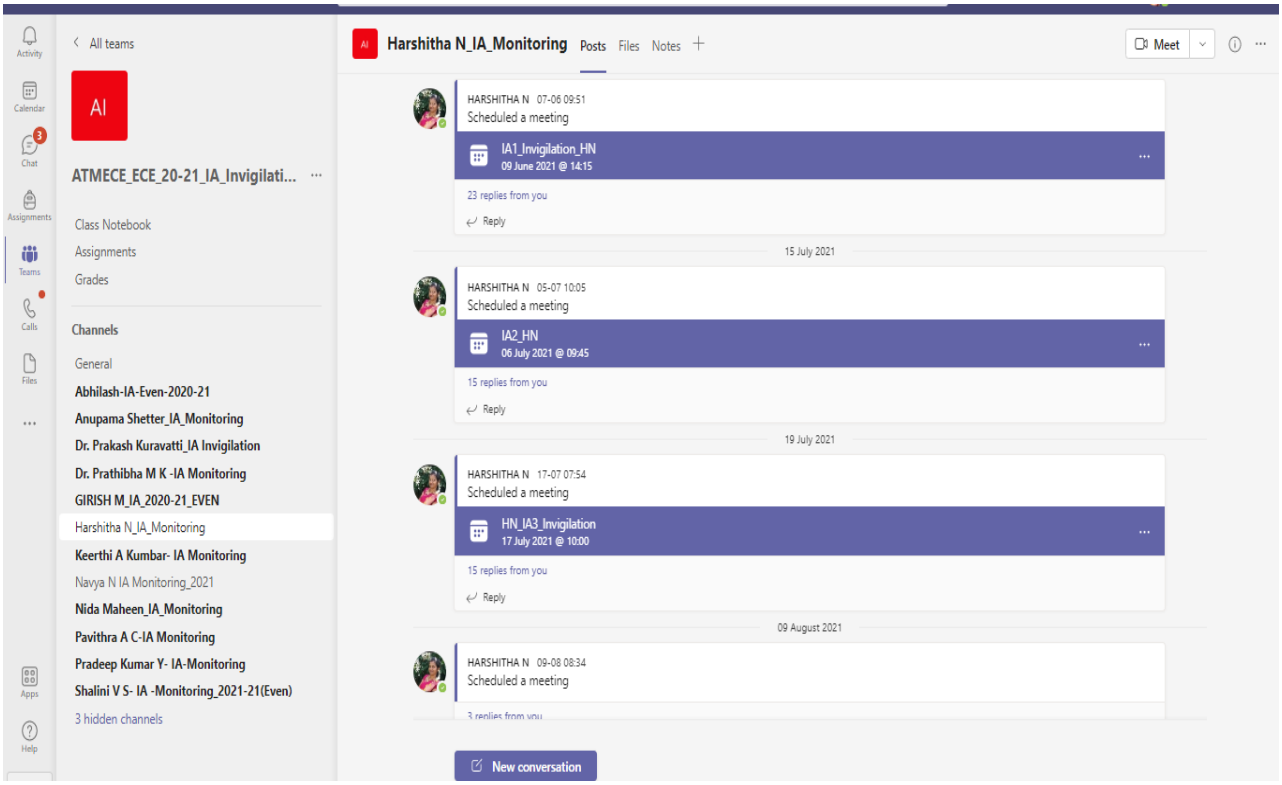
Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mrs. Darshini M B, Assistant Professor	MOHAMMED YOUNUS	4AD19EC416	5/B
2		NITHIN L	4AD19EC418	5/B
3		PAVAN H S	4AD19EC420	5/B
4		PRAJWAL R	4AD19EC422	5/B
5		RAJUMURTHY R	4AD19EC424	5/B
6		SHRIKANTH V	4AD19EC427	5/B
7		SUDEEP P	4AD19EC429	5/B
8		SYED MUZAMMIL	4AD19EC432	5/B
9		VINEETH GOWDA B K	4AD19EC433	5/B
10		YASHWANTH B	4AD19EC434	5/B
11		SUJITH S M	4AD13EC080	7/A
12		SAHANA G R	4AD14EC350	7/A
13		DEEPIKA S R	4AD16EC017	7/A
14		KARTHIK A H	4AD16EC027	7/A
15		POORVASHREE C V	4AD16EC047	7/A
16		JANARDHANKUMAR H S	4AD16EC413	7/A
17		AISHWARYA S Y	4AD17EC001	7/A
18		AJAY C	4AD17EC002	7/A
19		ANU R	4AD17EC004	7/A
20		APOORVA S	4AD17EC005	7/A
21		ARPITHA B	4AD17EC006	7/A

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mrs. Harshitha N, Assistant Professor	BASAVARAJ D K	4AD17EC008	7/A
2		BHANUPRIYA B	4AD17EC009	7/A
3		BHARATH H L	4AD17EC010	7/A
4		BHAVANA D C	4AD17EC011	7/A
5		BHOOMIKA G	4AD17EC012	7/A
6		BHUVANA M C	4AD17EC013	7/A
7		BHUVANESHWARI B V	4AD17EC014	7/A
8		CHAITHANYA D S	4AD17EC015	7/A
9		CHANDAN B	4AD17EC016	7/A
10		CHANDU D	4AD17EC017	7/A
11		CHANDU PRASAD T L	4AD17EC018	7/A
12		CHAYA R	4AD17EC019	7/A
13		CHINGAKHAM ROMITA CH	4AD17EC020	7/A
14		DANISH ALI KHAN	4AD17EC021	7/A
15		DHANANJAYA S	4AD17EC023	7/A
16		DHANUSHA T	4AD17EC024	7/A
17		DILIP N	4AD17EC025	7/A
18		GIRISH BABU C J	4AD17EC026	7/A
19		HARSHITH K	4AD17EC027	7/A
20		HARSHITH R	4AD17EC028	7/A
		JAYASURYA J	4AD17EC029	7/A

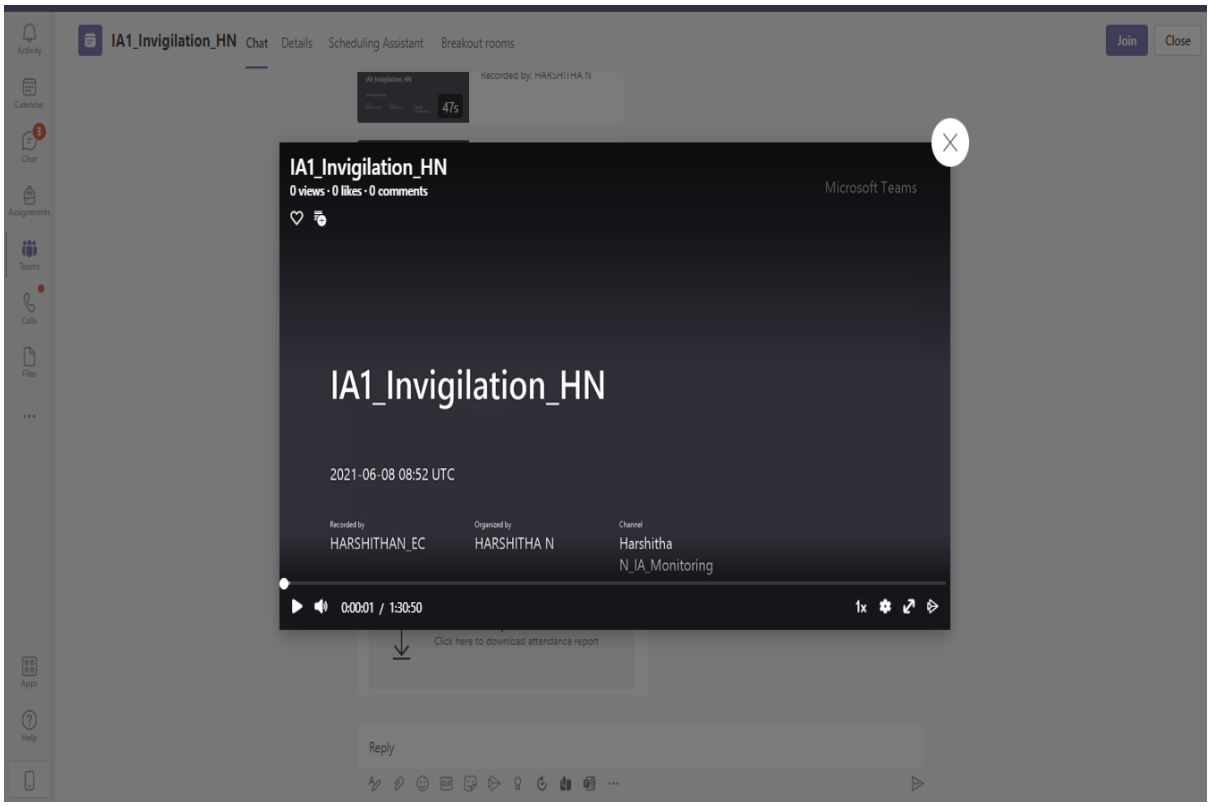
Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mrs. Keerthi A Kumbar Assistant Professor	K GOWTHAMI	4AD17EC030	7/A
2		KALPANA K	4AD17EC031	7/A
3		KRIPA GOYAL	4AD17EC032	7/A
4		KUSUMA M N	4AD17EC033	7/A
5		LAVANYA S	4AD17EC034	7/A
6		LIKHITH K S	4AD17EC035	7/A
7		MAHESHKUMAR U	4AD17EC036	7/A
8		CHETHAN RAO S	4AD17EC403	7/A
9		ASMA RAHAMANI	4AD18EC400	7/A
10		MAMATHA B	4AD18EC401	7/A
11		MANJUKUMAR M	4AD18EC402	7/A
12		MANOJ R	4AD18EC403	7/A
13		MONIKA M	4AD18EC404	7/A
14		POOJA	4AD18EC405	7/A
15		RANJAN R	4AD18EC406	7/A
16		RASHMI N P	4AD18EC407	7/A
17		PRABHATH KUMAR TRIPAT	4AD15EC053	7/B
18		RAJESH KRISHNA R	4AD16EC056	7/B
19		LIKITH MANEY	4AD16EC420	7/B
20		MEGHANA P	4AD17EC037	7/B
21		MOHAMMED ADNAN	4AD17EC038	7/B

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mrs. Shalini V S Assistant Professor	MOHAMMED MOIN	4AD17EC039	7/B
2		MOHAMMED UMAR	4AD17EC040	7/B
3		NAYANA N	4AD17EC041	7/B
4		NEHA N	4AD17EC042	7/B
5		NISHANTHA D K	4AD17EC043	7/B
6		POOJA M	4AD17EC044	7/B
7		POOJITHA J	4AD17EC045	7/B
8		POOJITHA M A	4AD17EC046	7/B
9		POORNIMA S	4AD17EC048	7/B
10		PRAJWAL R	4AD17EC049	7/B
11		PRAVEENKUMAR	4AD17EC050	7/B
12		PRAVEEN KUMAR M M	4AD17EC051	7/B
13		PREETHAM G B	4AD17EC052	7/B
14		PRIYANKA S	4AD17EC053	7/B
15		RAKSHITHA N	4AD17EC054	7/B
16		RAKSHITHA S	4AD17EC055	7/B
17		RASHMI V	4AD17EC056	7/B
18		REKHA S	4AD17EC057	7/B
19		ROHINI K K	4AD17EC058	7/B
20		ROHITH V	4AD17EC059	7/B
21		SOUNDARYA S G	4AD17EC061	7/B

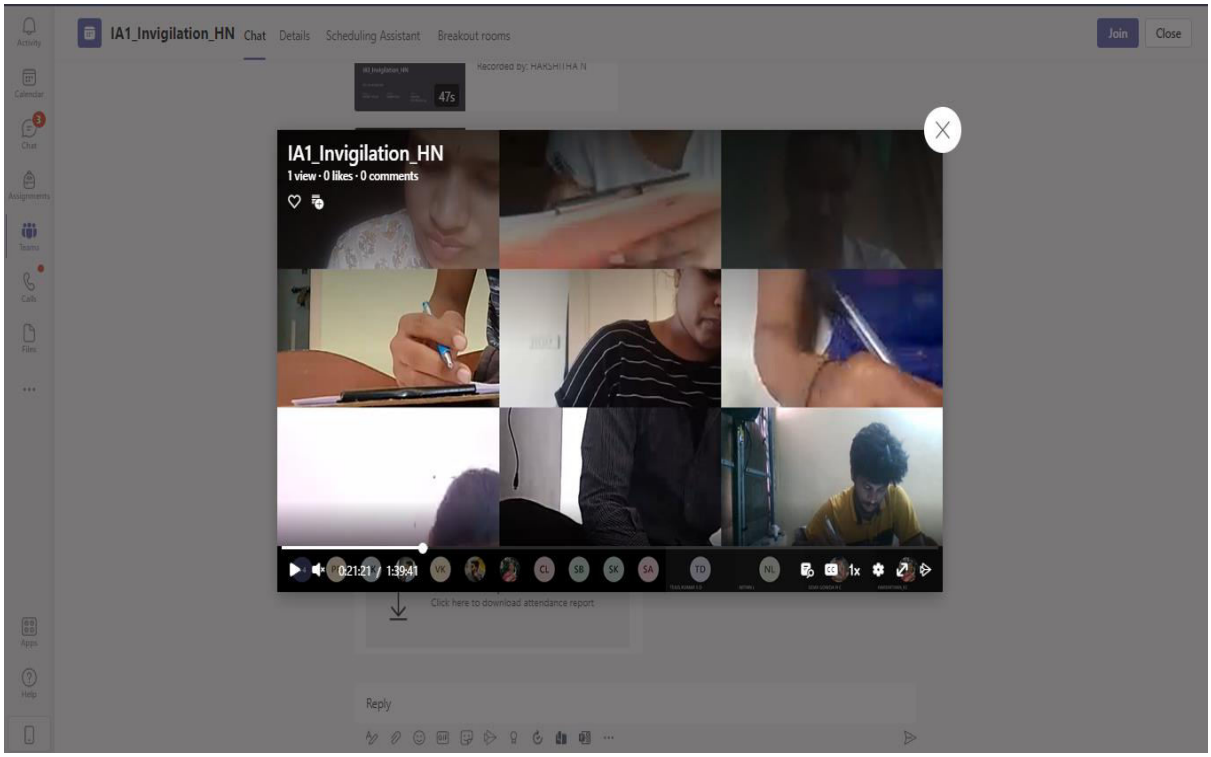
Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Ms. Anupama Shetter Assistant Professor	POORNIMA K	4AD17EC047	7/B
2		SAHANA N	4AD17EC062	7/B
3		SANTHOSH TIWARI C	4AD17EC063	7/B
4		SHALINI D	4AD17EC064	7/B
5		SHILPA R	4AD17EC065	7/B
6		SHRIVATHSA M	4AD17EC066	7/B
7		SINDHU R	4AD17EC067	7/B
8		SONALI L U	4AD17EC068	7/B
9		SUCHITRA R S	4AD17EC069	7/B
10		SUDARSHAN S	4AD17EC070	7/B
11		SUMA A M	4AD17EC071	7/B
12		SURYA SHANKARMURTHY	4AD17EC072	7/B
13		TARUN	4AD17EC073	7/B
14		VENUGOPAL A S	4AD17EC074	7/B
15		YASHASWINI M P	4AD17EC075	7/B
16		RUMANA A	4AD18EC408	7/B
17		SANJAY M	4AD18EC409	7/B
18		SHYAMALA P K	4AD18EC410	7/B
19		SUHAS P	4AD18EC411	7/B
20		SUPRITHA A P	4AD18EC413	7/B
21		SUPRITHA A S	4AD18EC414	7/B
22		SYED MOHAMMED ADNAN	4AD18EC415	7/B



Screenshots of the MS Teams Channel



Screenshots of the recordings of the Invigilation Video



HOD
Dept. of ECE
Professor & Head
Dept. of Electronics & Communication
ATME COLLEGE OF ENGINEERING
Mysuru - 570 028

SAMPLE IA QUESTION PAPER AND SCHEME

FIRST INTERNAL ASSESMENT

COURSE	:	**Electronic Devices**	**TIME**	:	**10.00 to 11.30 AM**
COURSE CODE	:	**18EC33**	**DATE**	:	**28-01-2021**
SEM/SEC	:	**3rd Semester 'C' Section**	**MAX. MARKS**	:	**50**

	PART-A-Answer any three full Questions	Marks	COs	BTL
01.	**1a)** Which of the following type is not included in the primary type of bonding in solids? a) Ionic Bonding b) Non-Metallic Bonding ✓ c) Metallic Bonding d) Covalent Bonding	2 M	1	L1
	1b). Explain the three primary types of bonding in solids.	8 M		L1, L2
02.	**2a)** The atomic number of Sodium (Na) and Chlorine (Cl) is a) 11 and 17 respectively ✓ b) 17 and 11 respectively c) 12 and 18 respectively d) 18 and 12 respectively	2 M	1	L1, L2
	2b) Define Hall Effect. With the help of neat diagram, prove that mobility is the ratio of Hall coefficient and resistivity.	8 M		L1, L2
03.	**3a)** Which of the following statement is true? a) Empty bands do not contain electrons b) Partially filled bands do contain electrons as well as available energy levels c) Completely filled bands do contain plenty of electrons d) All statements are correct ✓	2 M	1	L1, L2
	3b) Discuss the effects of Temperature and Doping on mobility. Elaborate your answer with the help of suitable diagrams.	8 M		L1
04.	**4a)** Which of the following is not a pentavalent impurity? a) Phosphorous b) Arsenic c) Gallium ✓ d) Antimony	2 M	1	L1, L2
	4b) Derive an expression for current density in terms of conductivity and electric field.	8 M		L1, L2

	PART-B-Answer any two full Questions	Marks	COs	BTL
01.	**1a)** In an n-type material a) Holes are the minority carriers and electrons are the majority carriers ✓ b) Holes are the majority carriers and electrons are the minority carriers c) Both electrons are holes are the majority carriers d) Both electrons are holes are the minority carriers	2 M	1, 2	L1, L2
	1b) Define a PN junction. Describe the phenomenon of current flow at a junction. Compare various parameters of a junction under equilibrium condition, forward bias, and reverse bias.	8 M		L1, L2
02.	**2a)** A pentavalent impurity introduces an energy level near to the conduction band. This level is called _____ a) Acceptor level b) Donor level ✓ c) Defect state d) None of the above	2 M	1, 2	L1, L2

	2b) Estimate the approximate energy required to excite the fifth electron of a donor atom into the conduction band in a silicon atom. Use $\varepsilon_r = 11.8$ for Silicon.	8 M		L1, L2
03.	**3a)** With respect to the impurity scattering, which of the following statement is true.? a) As kinetic energy increases, the velocity of electrons increases, impurity scattering increases, and mobility increases. b) As kinetic energy increases, the velocity of electrons decreases, impurity scattering decreases, and mobility increases. c) As kinetic energy increases, the velocity of electrons increases, impurity scattering decreases, and mobility increases. ✓ d) As kinetic energy increases, the velocity of electrons increases, impurity scattering decreases, and mobility decreases.	2 M	1, 2	L1, L2
	3b) With the help of energy band diagram, ***describe*** in brief, the concept of Zener breakdown in a PN junction.	8 M		L1, L2

CO1	Define the principles of semiconductor Physics
CO2	Outline the principles and characteristics of different types of semiconductor devices
CO3	Explain the fabrication process of semiconductor devices
CO4	Utilize the mathematical models of semiconductor junctions and MOS transistors for circuits and systems.

Bloom's Taxonomy Level	
L1	Remembering
L2	Understanding
L3	Applying
L4	Analyzing
L5	Synthesizing
L6	Creating

SCHEME AND SOLUTION

Subject Title: Electronic Devices **Subject Code:** 18EC33

CO1	Define the principles of semiconductor Physics
CO2	Outline the principles and characteristics of different types of semiconductor devices
CO3	Explain the fabrication process of semiconductor devices
CO4	Utilize the mathematical models of semiconductor junctions and MOS transistors for circuits and systems.

Bloom's Taxonomy Levels

L1: Remembering **L2:** Understanding **L3:** Applying **L4:** Analyzing **L5:** Evaluating **L6:** Creating

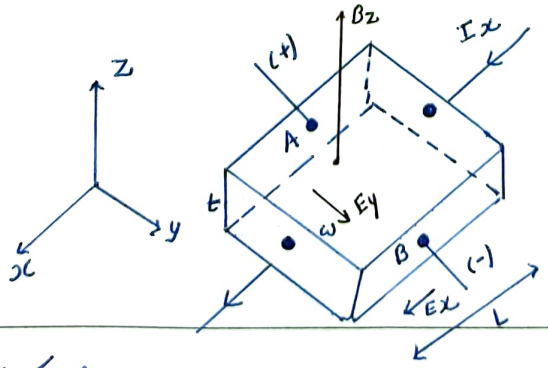
Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
1 a)	option (b) Non - Metallic Bonding	02		L1
1 b)	Following are the three types of bonding 1. Ionic bonding 2. Metallic bonding 3. Covalent bonding Ionic Bonding It involves the transfer of electrons from an electropositive atom to an electronegative atom. one of the species of atoms donate electrons to another species so that each of the atoms may become more stable. eg. $Na \rightarrow 11 \Rightarrow 1s^2\ 2s^2\ 2p^6\ 3s^1$ $Cl \rightarrow 17 \Rightarrow 1s^2\ 2s^2\ 2p^6\ 3s^2\ 3p^5$ $Na + Cl \rightarrow Na^+ Cl^-$ Metallic Bonding It is characterized by free electrons which move freely through the crystal being bonded to different atoms at different times.	01 01 01 01	CO1	L1, L2

Signature of Faculty

H.O.D.

SCHEME AND SOLUTION

Subject Title: Electronic Devices **Subject Code:** 18EC33

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
	It occurs among metal atoms. A big pool of electrons → Sea of electrons Covalent bonding It is based on the true sharing of electrons between different atoms. observed in 14th group elements. eg. Carbon $Z = 6 \rightarrow 1s^2\ 2s^2\ 2p^2$ Silicon $Z = 14 \rightarrow 1s^2\ 2s^2\ 2p^6\ 3s^2\ 3p^2$ The bonding forces that arises from a mechanical interaction between the shared electrons is known as covalent bonding.	01 01 01 01	CO1	L1, L2
2 a)	Option (a) 11 and 17 respectively	02	CO1	L1, L2
2 b)	Hall Effect The establishment of electric field and production of a potential difference across an electrical conductor when a magnetic field is applied in a direction perpendicular to that of flow of current is called Hall Effect.  	02 02	CO1	L1, L2

Signature of Faculty

H.O.D.

SCHEME AND SOLUTION

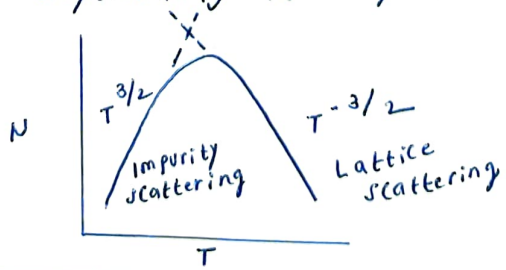
Subject Title: Electronic Devices **Subject Code:** 18EC33

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
	TWO types of forces 1. Magnetic force $\vec{F_B} = q.\vec{v} \times \vec{B}$ 2. Electric force $\vec{F_E} = q.\vec{E}$	01		
	The Net force $F = q(E + v \times B)$ in the y-direction $F_y = q(E_y - v_x B_z)$ To maintain steady state $E_y = v_x B_z$ Hall voltage $V_{AB} = E_y . \omega$	01	CO1	L1, L2
	From the current density equation $J_x = -nq v_x$ For holes, $J_x = q p_0 v_x$ $E_y = R_H J_x B_z$ Where $R_H = \frac{1}{q p_0}$ is proportionality constant.	01		
	Hole concentration $p_0 = \frac{I_x B_z}{q t V_{AB}}$ Resistance of the material $R = \frac{\rho L}{\omega t}$ Resistivity $\rho = \frac{R \omega t}{L} = \frac{V_{CD}/I_x}{L/\omega t}$ Mobility $\mu_p = \frac{\sigma}{q p_0} = \frac{R_H}{\rho}$ Thus mobility is the ratio of Hall coefficient and resistivity.	01		

Signature of Faculty **H.O.D**

SCHEME AND SOLUTION

Subject Title: Electronic Devices **Subject Code:** 18EC33

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
3(a)	option (d) All statements are correct	2M	CO1	L1
3(b)	There are two basic types of scattering mechanisms that influence electron and hole mobility. Impurity scattering Scattering of the electrons in a semiconductor due to crystal defects and introduction of impurities into the lattice. As kinetic energy increases, velocity of electron v_e increases and impurity scattering decreases and mobility μ increases. Temperature dependancy is $T^{3/2}$ Lattice scattering In lattice scattering, a carrier moving through the crystal is scattered by a vibration of the lattice, resulting from the temperature. As Kinetic energy reduces, v_e reduces and lattice scattering increases and mobility μ decreases. Temperature dependancy is $T^{-3/2}$  	01 01 01 01 01 01 02	CO1	L1

Signature of Faculty

H.O.D

SCHEME AND SOLUTION

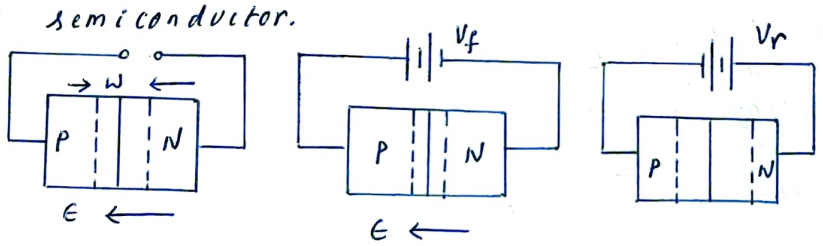
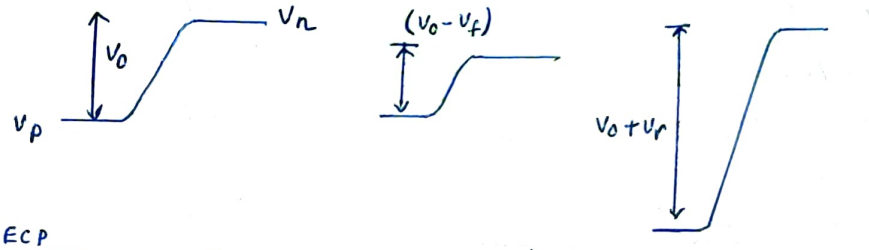
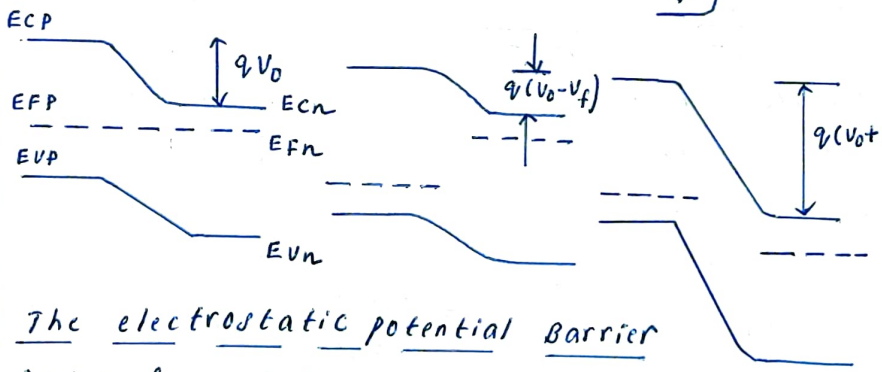
Subject Title: ELECTRONIC DEVICES **Subject Code:** 18EC33

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
4(a)	option (c) Gallium	02	CO1	L1, L2
4(b)	The force on the field is $-nq\mathcal{E}_x = \left.\frac{dp_x}{dt}\right\vert_{field}$ Due to decelerating effect $\left.\frac{dp_x}{dt}\right\vert_{collisions} = \frac{-p_x}{\bar{t}}$ $-nq\mathcal{E}_x - \frac{p_x}{\bar{t}} = 0$ Average momentum $\langle p_x \rangle = \frac{p_x}{n} = -q\bar{t}\,\mathcal{E}_x$ Average Net velocity $\langle v_x \rangle = \frac{\langle p_x \rangle}{m_n^*} = \frac{-q\bar{t}\,\mathcal{E}_x}{m_n^*}$ The current density J_x is $J_x = -qn\langle v_x \rangle$ $J_x = \frac{nq^2\bar{t}\,\mathcal{E}_x}{m_n^*}$ $J_x = \sigma\mathcal{E}_x$ where $\sigma = \frac{nq^2\bar{t}}{m_n^*}$	01 01 01 01 01 01 01 01 01	CO1	L1, L2
	PART - B			
01(a)	In an n-type material option (a) Holes are minority carriers and electrons are the majority carriers	02	CO1, CO2	L1, L2

Signature of Faculty **H.O.D**

SCHEME AND SOLUTION

Subject Title: Electronic Devices **Subject Code:** 18EC33

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
1 6)	**A PN Junction:** it is a boundary or interface between two types of semiconductor materials, p-type and n-type inside a single crystal of semiconductor.	01		
		01		
		01	CO1 CO2	L1, L2
		01		
	The electrostatic potential Barrier During forward bias : $V_0 - V_f$ During Reverse bias : $V_0 + V_r$ under equillibrium : V_0	01		
	The Electric field Forward bias : Decreases Reverse bias : Increases	01		

Signature of Faculty

H.O.D

SCHEME AND SOLUTION

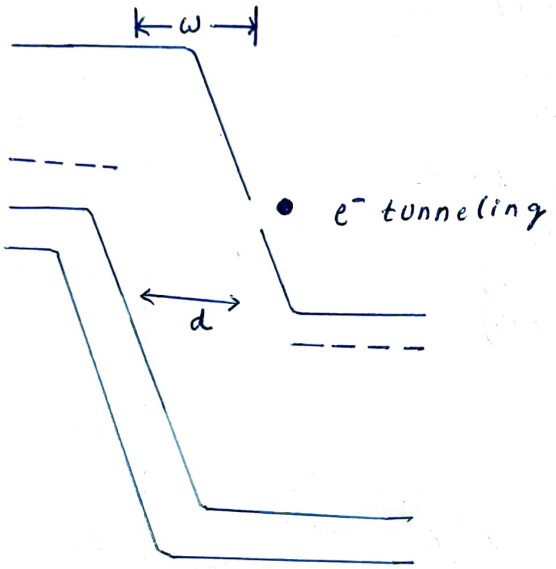
Subject Title: Electronic Devices **Subject Code:** 18EC33

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
	The transition region width W Forward Bias : Decreases Reverse Bias : Increases The separation of energy bands under equilibrium : qV_0 Forward Bias : $q(V_0 - V_f)$ Reverse Bias : $q(V_0 + V_f)$	01 01		
2(a)	option (b) Donor level	02	CO1 CO2	L1, L2
2(b)	Binding energy is given by $E = \frac{mq^4}{2K^2h^2}$ $K = 4\pi\epsilon_0\epsilon_r$ $= 4\pi \times 8.85 \times 10^{-12} \times 11.8$ $K = 1.312 \times 10^{-9}$ $E = \frac{9.11 \times 10^{-31} \times (1.602 \times 10^{-19})^4}{2 \times (1.312 \times 10^{-9})^2 \times (1.06 \times 10^{-34})^2}$ $E = 15.51 \times 10^{-21}$ J	02 02 02 02	CO1 CO2	L1 L2
3(a)	option (c) As kinetic energy increases, the velocity of electrons increases, impurity scattering decreases, and mobility increases.	02	CO1 CO2	L1 L2
3(b)	In reverse bias, the zener diode has a particular voltage known as breakdown voltage at which the diode breaks down. Basic principle : Zener breakdown.	01 01		

Signature of Faculty **H.O.D**

SCHEME AND SOLUTION

Subject Title: Electronic Devices **Subject Code:** 18EC33

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
		02	CO1	L1
	When a diode is heavily doped, its depletion region will be narrow. When a high reverse voltage is applied across the junction, there will be very strong electric field. $(E = \frac{V}{d})$.	02	CO2	L2
	The tunneling of electrons from the p-side valence band to n-side conduction band constitutes a reverse current from n to P and thus heavy current flows. This effect is called Zener effect.	02		

Signature of Faculty **H.O.D**

FIRST INTERNAL ASSESSMENT

COURSE	:	**Computer Organization and Architecture**	**TIME**	:	**10.00 am to 11.30 am**
COURSE CODE	:	**18EC35**	**DATE**	:	**12/10/2020**
SEM/SEC	:	**3rd /A/B**	**MAX. MARKS**	:	**50**

	PART-A-Answer any three full Questions	Marks	COs	BTL
01.	a) 1. Which of the following is an Input device A. Joystick B. Keyboard C. Mouse D. All the above 2. RISC stand for A. Reduced Instruction Set Computer B. Reform Information Set Computer C. Rejoin Instruction Set Computer D. Roman Instruction Set Computer	2 M	1	L1
	b) **Explain** the following addressing modes with example: Immediate, base with index, relative & auto increment	8 M		L2
02.	a) 1. The Mainframe is called as Big Iron, True/False. A. True B. False 2. The data/operands are stored in _____. A. Memory B. Control Unit C. ALU D. Monitor	2 M	1	L1
	b) **Explain** with necessary block diagram the basic functional unit of a computer	8 M		L2
03.	a) 1. Which of the following is TRUE? A. The processor contains ALU, control-circuitry and many registers. B. The control-unit generates the timing-signals that determine when a given action is to take place A. The MAR holds the address of the memory-location to be accessed B. All of the above 2. _____and _____ facilitates the communication with memory. A. IR & PC B. PC & ALU	2 M	1	L1

	C. MAR & MDR D. Control Unit & ALU			
	b) Mention four types of operations to be performed by instructions in a computer. **Explain** with basic types of instruction formats to carry out C = [A] + [B].	8 M		L2
04.	a) 1. A nibble is a group of __ bits a. 16 b. 8 c. 4 d. 2 2. The _____ contains the data to be written into or read out of the addressed location a. IR b. PC c. MDR d. Control Unit	2 M	1	L1
	b) **Explain** the different types of a computer.	8 M		L2

	PART-B-Answer any two full Questions	**Marks**	**COs**	**BTL**
05	a) 1. The given syntax refers to _____ addressing mode (Ri, Rj) A. Immediate addressing mode B. Register C. Base with Index D. Base with Index and offset 2. _____is a collection of programs that are executed as needed to perform functions such as functions such as A. Software B. Compiler C. Virus D. Device	2 M	1	L1
	b) With appropriate diagrams **Explain** the concept of straight line sequencing and looping	8 M		L2
06.	a) 1. ALU does perform A. Data Transfer B. Logic operation C. Arithmetic operation D. Both B & C 2. In Little-Endian assignment, lower byte-addresses are used for the less significant bytes of the word. True / False A. True B. False	2 M	1	
	b) **Explain** the basic input/output operation & memory mapped	8 M		L2

	operation with an example.			
07.	a) 1. Programs written in an assembly language can be automatically translated into a sequence of machine instructions by a program called an A. Assembler B. Source code C. Object code D. None of the above 2. Add A,B, C performs : A. Add the contents of memory-locations A & B. Then, place the result into location C. B. Add the contents o f memory-locations A & B. Then, place the result into location B C. Transfers the contents of memory-locations A to B. D. Copies the contents of memory-locations A to B. Then, place the Original data into location B.	2 M	1	L1
	b) **Solve** the following using 2s complement system. a. 8+(-4) b. (-4)-(-2) c. (+9)-(-3) d. (-2)-(-5)	8 M		L3

CO1	Explain the basic organization of a computer system.
CO2	Explain different ways of accessing an input / output device including interrupts.
CO3	Illustrate the organization of different types of semiconductor and other secondary storage memories.
CO4	Illustrate simple processor organization based on hardwired control and micro programmed control.

Bloom's Taxonomy Level	
L1	**Remembering**
L2	**Understanding**
L3	**Applying**
L4	**Analysing**
L5	**Evaluating**
L6	**Creating**

SCHEME AND SOLUTION

Subject Title: Computer Organization and Architecture **Subject Code: 18EC35**

CO1	Derive equations for entropy mutual information and channel capacity for all types of channels.
CO2	Distinguish between different types error correcting codes based on probability of error and bit Energy to noise ratio
CO3	Design a digital communication system by selecting an appropriate error correcting codes for a particular application and formulate the basic equations of linear block codes.
CO4	Explain various methods of generating and detecting different types of error correcting codes and compare the performance of system by evaluating the probability of error for different error correcting codes.

Revised Bloom's Taxonomy Levels

L1: *Remembering* L2: *Understanding* L3: *Applying*

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
1	a) 1. Which of the following is an Input device A. Joystick B. Keyboard C. Mouse **D. All the above** 2. RISC stand for A. **Reduced Instruction Set Computer** B. Reform Information Set Computer C. Rejoin Instruction Set Computer D. Roman Instruction Set Computer	2	CO1	L1,L2
	b) **Immediate Mode** • The operand is given explicitly in the instruction. • For example, the instruction *Move#200, R0*; Place the value 200 in registerR0. • Clearly, the immediate mode is only used to specify the value of a source-operand. **Base with Index Mode** • Another version of the Index mode uses 2 registers which can be denoted as (Ri,Rj) • Here, a second register may be used to contain the offset X. • The second register is usually called the *base register*. • The effective-address of the operand is given by EA=[Ri]+[Rj]. This form of indexed addressing provides more flexibility in accessing operands because both components of the effective-address can be changed.	8 2 2		

Signature of Faculty **H.O.D**

SCHEME AND SOLUTION

Subject Title: Computer Organization and Architecture **Subject Code: 18EC35**

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
	Relative mode • This is similar to index-mode with one difference: The effective-address is determined using the PC in place of the general purpose register Ri. • The operation is indicated as X(PC). • X(PC) denotes an effective-address of the operand which is X locations above or below the current contents of PC. • Since the addressed-location is identified "relative" to the PC, the name Relative mode is associated with this type of addressing. • This mode is used commonly in conditional branch instructions. • An instruction such as Branch >0 LOOP ; Causes program execution to go to the branch target location identified by name LOOP if branch condition is satisfied. **Auto Increment Mode** • Effective-address of operand is contents of a register specified in the instruction. • After accessing the operand, the contents of this register are automatically incremented to point to the next item in a list. • Implicitly, the increment amount is1. • This mode is denoted as (Ri)+; where Ri = pointer-register.	2 2		
2	a) 1. The Mainframe is called as Big Iron, True/False. **A. True** B. False 2. The data/operands are stored in _____. **A. Memory** B. Control Unit C. ALU D. Monitor	2	CO1	
	b) **Functional units** • A computer consists of 5 functionally independent main parts: 1) Input unit 2) Memory unit 3) ALU	8		

Signature of Faculty **H.O.D**

SCHEME AND SOLUTION

Subject Title: Computer Organization and Architecture **Subject Code: 18EC35**

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level

4) Output unit &
5) Control unit

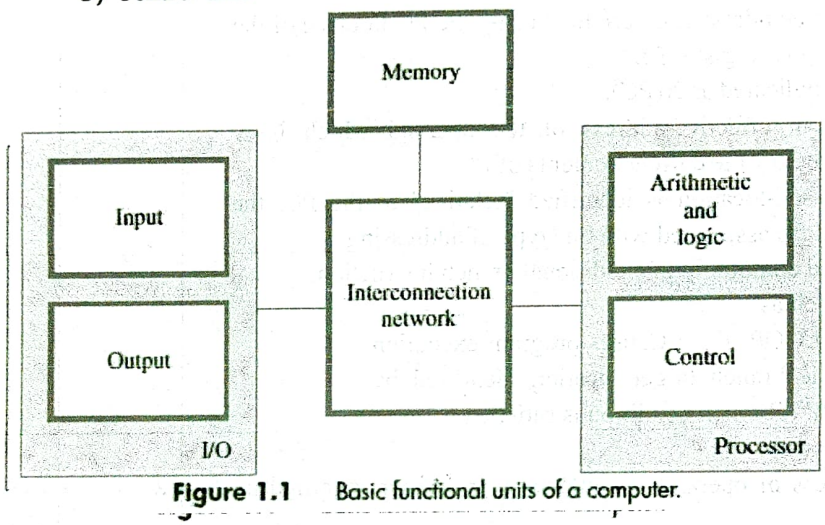


Figure 1.1 Basic functional units of a computer.

Input Unit: In computing, an input device is a piece of computer hardware equipment used to provide data and control signals to an information processing system such as a computer or information appliance. Examples of input devices include keyboards, mouse, scanners, digital cameras and joysticks.

Memory Unit: Memory unit is a component of a computer system. It is used to store data, instructions and information. It is actually a work area of computer, where the CPU stores the data and instruction. It is also known as a main/primary/internal memory.
There are two types of memory: -

1. Read only memory (ROM):- ROM is a part of the memory unit. This is read only memory. It cannot be used to written. ROM is used in situations where the data must be held permanently.
2. Random access memory (RAM):- RAM is also part of memory unit. It is used for temporary storage of program data. Its data is lost when power is turned off.

ALU: An arithmetic-logic unit (ALU) is the part of a computer processor (CPU) that carries out arithmetic and logic operations on the operands in computer instruction words. In some processors, the ALU is divided into two units, an arithmetic unit (AU) and a logic unit (LU).

Signature of Faculty **H.O.D**

SCHEME AND SOLUTION

Subject Title: Computer Organization and Architecture **Subject Code: 18EC35**

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
3	**Output unit:** An output device is any piece of computer hardware equipment which converts information into human-readable form. It can be text, graphics, tactile, audio, and video. Some of the output devices are Visual Display Units i.e. a Monitor, Printer, Graphic Output devices, Plotters, Speakers etc. **Control unit:** The control unit is a component of a computer's central processing unit that directs the operation of the processor. It tells the computer's memory, arithmetic and logic unit and input and output devices how to respond to the instructions that have been sent to the processor. a) 1. Which of the following is TRUE? a. The processor contains ALU, control-circuitry and many registers. b. The control-unit generates the timing-signals that determine when a given action is to take place c. The MAR holds the address of the memory-location to be accessed **d. All of the above** 2. _____ and _____ facilitates the communication with memory. **a.** IR & PC **b.** PC & ALU **c. MAR & MDR** **d.** Control Unit & ALU **b)** A computer must have instructions capable of performing 4 types of operations: 1) Data transfers between the memory and the registers (MOV, PUSH, POP, and XCHG). 2) Arithmetic and logic operations on data (ADD, SUB, MUL, DIV, AND, OR, NOT). 3) Program sequencing and control (CALL.RET, LOOP, INT). 4) I/0 transfers (IN, OUT).	2 8	CO1	L1, L2

Signature of Faculty

H.O.D

SCHEME AND SOLUTION

Subject Title: Computer Organization and Architecture **Subject Code: 18EC35**

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
	1. Three Address: Syntax: Opcode Source1,Source2,Destination **Example:** Add A,B,C - Add the contents of memory-locations A & B. Then, place the result into location C. **2. Two Address** Syntax: Opcode Source, Destination **Example:** Add A,B - Add the contents of memory-locations A & B. Then, place the result into location B, replacing the original contents of this location. Operand B is both a source and a destination. **Instructions for Operation C<-[A]+[B]:** Move B, C Add A, C **3. One Address** Syntax: Opcode Source/Destination **Example** Load A - Copy contents of memory- location A into accumulator. Add B - Add contents of memory- location B to contents of accumulator register & place sum back into accumulator. Store C - Copy the contents of the accumulator into location C. **Instructions for Operation C<-[A]+[B]:** Load A Add B Store C **1. Zero address** **Syntax:** Opcode [no Source/Destination] **Example:** Push - Locations of all operands are defined implicitly. The operands are stored in a push down stack.			
4	a) 1. A nibble is a group of __ bits a. 16 b. 8 **c. 4** d. 2 2. The _____ contains the data to be written into or read out of the addressed location a. IR b. PC **c. MDR** d. Control Unit	2	CO1	L1,L2

Signature of Faculty **H.O.D**

SCHEME AND SOLUTION

Subject Title: Computer Organization and Architecture **Subject Code: 18EC35**

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
	b) Computers can be broadly classified by their speed and computing power. 1. PC (Personal Computer): It is a single user computer system having moderately powerful microprocessor. A PC can be defined as a small, relatively inexpensive computer designed for an individual user. PCs are based on the microprocessor technology that enables manufacturers to put an entire CPU on one chip. Businesses use personal computers for word processing, accounting, desktop publishing, and for running spreadsheet and database management applications. At home, the most popular use for personal computers is playing games and surfing the Internet. 2. Workstation: It is also a single user computer system, similar to personal computer however a more powerful microprocessor has. Workstation is a computer used for engineering applications (CAD/CAM), desktop publishing, software development, and other such types of applications which require a moderate amount of computing power and relatively high quality graphics capabilities. Workstations generally come with a large, high-resolution graphics screen, large amount of RAM, inbuilt network support, and a graphical user interface. Most workstations also have mass storage device such as a disk drive, but a special type of workstation, called diskless workstation, comes without a disk drive. Common operating systems for workstations are UNIX and Windows NT. Like PC, workstations are also single-user computers like PC but are typically linked together to form a local-area network, although they can also be used as stand-alone systems. 3. Mini Computer: It is a multi-user computer system, capable of supporting hundreds of users simultaneously. It is a midsize multi-processing system capable of supporting up to 250 users simultaneously 4. Main Frame: It is a multi-user computer system, capable of supporting hundreds of users simultaneously. Software technology is different from minicomputer. Mainframe is very large in size and is an expensive computer capable of supporting hundreds or even thousands of users simultaneously. Mainframe executes many programs concurrently and supports much simultaneous execution of programs.	8		

Signature of Faculty **H.O.D**

SCHEME AND SOLUTION

Subject Title: Computer Organization and Architecture **Subject Code: 18EC35**

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
5	5. Supercomputer: It is an extremely fast computer, which can execute hundreds of millions of instructions per second. Supercomputers are one of the fastest computers currently available. Supercomputers are very expensive and are employed for specialized applications that require immense amount of mathematical calculations (number crunching). For example, weather forecasting, scientific simulations, (animated) graphics, fluid dynamic calculations, nuclear energy research, electronic design, and analysis of geological data (e.g. in petrochemical prospecting). a) 1. a) The given syntax refers to _____ addressing mode (Ri, Rj) A. Immediate addressing mode B. Register C. **Base with Index** D. Base with Index and offset 2. _____is a collection of programs that are executed as needed to perform functions such as **A. Software** B. Compiler C. Virus D. Device b) The program is executed as follows: 1) Initially, the address of the first instruction is loaded into PC (Figure2.8). **2)** Then, the processor control circuits use the information in the PC to fetch and execute instructions, one at a time, in the order of increasing addresses. This is called **Straight-Line sequencing.** 3) During the execution of each instruction, PC is incremented by 4 to point to next instruction. • There are 2 phases for Instruction Execution: **1) Fetch Phase:** The instruction is fetched from the memory-location and placed in the IR. **2) Execute Phase:** The contents of IR are examined to determine	2 8	CO1	L1,L2

Signature of Faculty **H.O.D**

SCHEME AND SOLUTION

Subject Title: Computer Organization and Architecture **Subject Code: 18EC35**

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level

which operation is to be performed. The specified-operation is then performed by the processor.

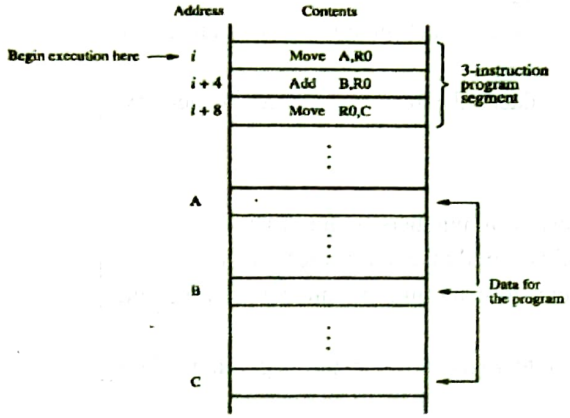


Figure 2.8 A program for C ← [A] + [B].

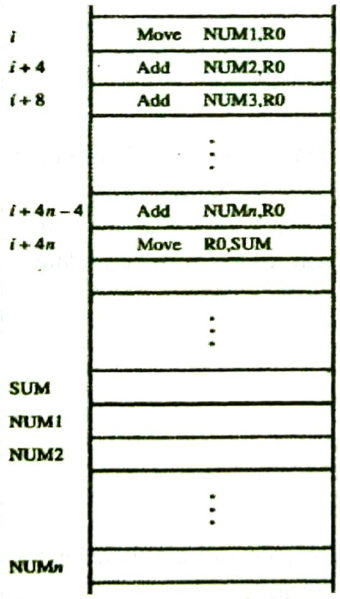


Figure 2.9 A straight-line program for adding *n* numbers.

Signature of Faculty

H.O.D

SCHEME AND SOLUTION

Subject Title: Computer Organization and Architecture **Subject Code: 18EC35**

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
	• Consider the program for adding a list of n numbers (Figure2.9). • The Address of the memory-locations containing the n numbers are symbolically given as NUM1, NUM2…..NUMn. • Separate Add instruction is used to add each number to the contents of registerR0. After all the numbers have been added, the result is placed in memory-location SUM. **Branching** • Consider the task of adding a list of 'n' numbers (Figure2.10). • Number of entries in the list 'n' is stored in memory-location **N**. • Register **R1** is used as a counter to determine the number of times the loop is executed. • Content-location N is loaded into register R1 at the beginning of the program. • The Loop is a straight line sequence of instructions executed as many times as needed. The loop starts at location LOOP and ends at the instruction Branch>0. • During each pass, → address of the next list entry is determined and → that entry is fetched and added to R0. • The instruction Decrement R1 reduces the contents of R1 by 1 each time through the loop. Then Branch Instruction loads a new value into the program counter. As a result, the processor fetches and executes the instruction at this new address called the Branch Target.			
6	a) 1. ALU does perform a. Data Transfer b. Logic operation c. Arithmetic operation **d. Both B & C** 2. In Little-Endian assignment, lower byte-addresses are used for the less significant bytes of the word. True / False **a. True** b. False	2	CO1	L1,L2

Signature of Faculty **H.O.D**

SCHEME AND SOLUTION

Subject Title: Computer Organization and Architecture **Subject Code: 18EC35**

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
	b)	8		

BASIC INPUT/OUTPUT OPERATIONS

- Consider the problem of moving a character-code from the keyboard to the processor (Figure:2.19). For this transfer, buffer-register DATAIN & a status control flags (SIN) are used.
- When a key is pressed, the corresponding ASCII code is stored in a **DATAIN** register associated with the keyboard.
  - **SIN=1** When a character is typed in the keyboard. This informs the processor that a valid character is in DATAIN.
  - **SIN=0** When the character is transferred to the processor.
- An analogous process takes place when characters are transferred from the processor to the display. For this transfer, buffer-register DATAOUT & a status control flag SOUT are used.
  - **SOUT=1** When the display is ready to receive a character.
  - **SOUT=0** When the character is being transferred to DATAOUT.
- The buffer registers DATAIN and DATAOUT and the status flags SIN and SOUT are part of circuitry commonly known as a **device interface**.

MEMORY-MAPPED I/O

- Some address values are used to refer to peripheral device buffer-registers such as DATAIN & DATAOUT.
- No special instructions are needed to access the contents of the registers; data can be transferred between these registers and the processor using instructions such as Move, Load or Store.
- For example, contents of the keyboard character buffer DATAIN can be transferred to register R1 in the processor by the instruction

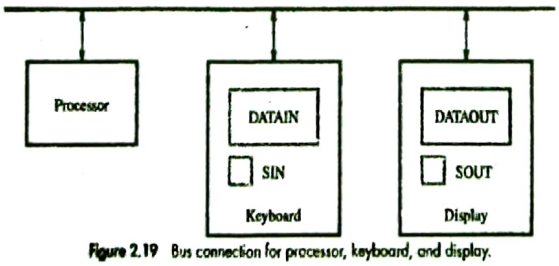


Figure 2.19 Bus connection for processor, keyboard, and display.

Signature of Faculty

H.O.D

SCHEME AND SOLUTION

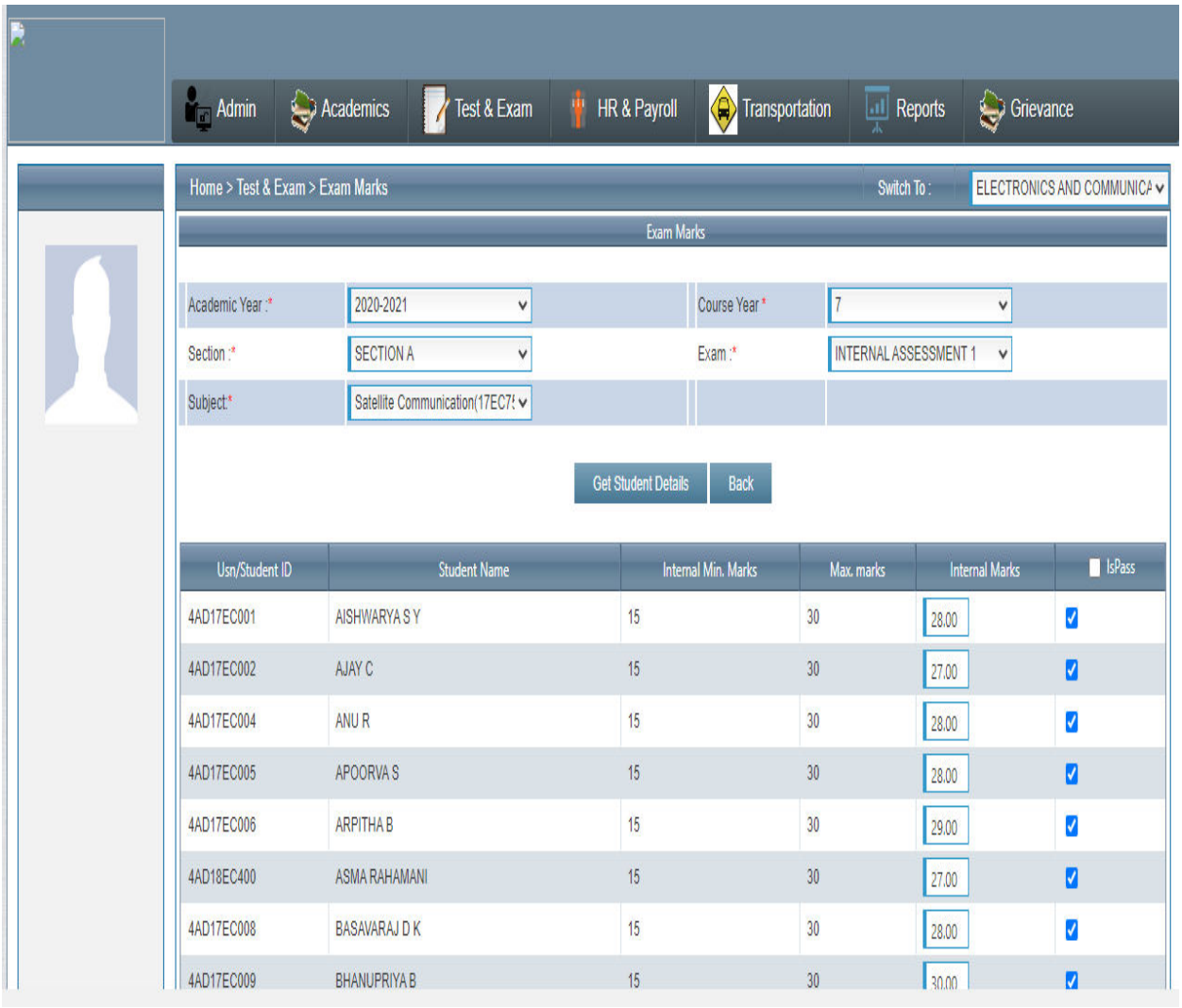
Subject Title: Computer Organization and Architecture **Subject Code: 18EC35**

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
7	a) 1. Programs written in an assembly language can be automatically translated into a sequence of machine instructions by a program called an **1. Assembler** 2. Source code 3. Object code 4. None of the above 2. Add A,B, C performs : **a. Add the contents of memory-locations A & B. Then, place the result into location C.** b. Add the contents of memory-locations A & B. Then, place the result into location B c. Transfers the contents of memory-locations A to B. d. Copies the contents of memory-locations A to B. Then, place the Original data into location B. b) **Solve** the following using 2s complement system. a. 8+(-4) = 4 b. (-4)-(-2) = -2 c. (+9)-(-3) = 12 d. (-2)-(-5) = 3	2 2 2 2	CO1	L1,L3

Signature of Faculty

H.O.D

CERP Screenshots of Test Marks



Usn/Student ID	Student Name	Internal Min. Marks	Max. marks	Internal Marks	IsPass
4AD17EC001	AISHWARYA S Y	15	30	28.00	☑
4AD17EC002	AJAY C	15	30	27.00	☑
4AD17EC004	ANU R	15	30	28.00	☑
4AD17EC005	APOORVA S	15	30	28.00	☑
4AD17EC006	ARPITHA B	15	30	29.00	☑
4AD18EC400	ASMA RAHAMANI	15	30	27.00	☑
4AD17EC008	BASAVARAJ D K	15	30	28.00	☑
4AD17EC009	BHANUPRIYA B	15	30	30.00	☑

HOD
Dept. of ECE
Professor & Head
Dept. of Electronics & Communication
ATME COLLEGE OF ENGINEERING
Mysuru - 570 028

ACADEMIC CALENDAR AND ADHERENCE

Adherence for the AY:2020-21 Even Sem

Sl. No.	Activity	Planned Date	Implemented Date	Remarks
1	Commencement of Even Semester	19th April 2021	19th April 2021	As planned
2	First IA	24th , 25th& 26th of May 2021	7th , 8th& 9th of June 2021	Postponed due to pandemic
3	Second IA	1st, 2nd& 3rd July 2021	5th to 8th July 2021	Postponed due to pandemic
4	Third IA	29th, 30th, 31st July 2021	29th, 30th, 31st July 2021	As planned
5	Last Working Day	7th Aug 2021	7th Aug 2021	As planned

HOD
Dept. of ECE
Professor & Head
Dept. of Electronics & Communication
ATME COLLEGE OF ENGINEERING
Mysuru - 570 028

ATME COLLEGE OF ENGINEERING, MYSURU

Revised Academic Calendar (ODD SEMESTER, 2020-21)

WEEK	MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	HOLIDAY (H)	COLLEGE EVENTS
1	SEPTEMBER			1	2	3	4	5		3rd , 5th & 7th Semster : commencement of Online Classes
2		6	7	8	9	10	11	12		
3		13	14	15	16	17	18	19	Mahalaya Amavasya	
4		20	21	22	23	24	25	26		
5		27	28	29	30					
5	OCTOBER					1	2	3	Gandhi Jayanthi	
6		4	5	6	7	8	9	10		First I A for 3rd , 5th and 7th Semester
7		11	12	13	14	15	16	17		
8		18	19	20	21	22	23	24		
9		25	26	27	28	29	30	31	Ayudha Pooja, Vijaya Dashami, Eid-Milad , Valmiki Jayanthi	
10	NOVEMBER	1	2	3	4	5	6	7	Kannada Rajyotsava	
11		8	9	10	11	12	13	14	Naraka Chaturdashi	Second IA for 3rd , 5th and 7th Semester
12		15	16	17	18	19	20	21	Balipadyami	Commencement of On-Campus Classes for Semseter 7.
13		22	23	24	25	26	27	28		
14		29	30							

Non Working Saturdays

ATME COLLEGE OF ENGINEERING, MYSURU

Revised Academic Calendar (ODD SEMESTER, 2020-21)

WEEK	MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	HOLIDAY (H)	COLLEGE EVENTS
14	DECEMBER			1	2	3	4	5	Kanakadasa Jayanthi	
15		6	7	8	9	10	11	12		
16		13	14	15	16	17	18	19		
17		20	21	22	23	24	25	26	Christmas	
18		27	28	29	30	31				Third IA for Semesters 3, 5 and 7
18	JANUARY						1	2		
19		3	4	5	6	7	8	9		LAB Interenals for Semesters 3,5 and 7
20		10	11	12	13	14	15	16	Makra Sankranthi	Improvement IA for Semesters 3,5 and 7, LAST working day for ODD Sem 2020-21
21		17	18	19	20	21	22	23		Comencement of Odd Semester Practical Exams
22		24	25	26	27	28	29	30	Republic Day	
23		31								
23	FEBRUARY		1	2	3	4	5	6		End of Odd Semester Practical Exams
24		7	8	9	10	11	12	13		Commencement of Odd Semester Theory Exams
25		14	15	16	17	18	19	20		
26		21	22	23	24	25	26	27		
27		28								

Non Working Saturdays

No. Of Working Days	17	20	20	17	17	9	Total No. Of Working Days	100

ATME COLLEGE OF ENGINEERING, MYSURU

Revised Academic Calendar (ODD SEMESTER, 2020-21)

WEEK	MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	HOLIDAY (H)	COLLEGE EVENTS
14	MARCH		1	2	3	4	5	6		
15		7	8	9	10	11	12	13	Mahashivaratri	
16		14	15	16	17	18	19	20		
17		21	22	23	24	25	26	27		25th End of odd semester Theory exams, 26th Mar 2021 Commencement of Even Semester
18		28	29	30	31					
18	APRIL					1	2	3	Good Friday	
19		4	5	6	7	8	9	10		
20		11	12	13	14	15	16	17	Chadramana Yugadi, Ambedkar Jayanthi	
21		18	19	20	21	22	23	24		
22		25	26	27	28	29	30		Mahavir Jayanthi	
23	MAY							1	May Day (Labour Day)	
23		2	3	4	5	6	7	8		
24		9	10	11	12	13	14	15	Idul-Fitr, Basava Jayathi	
25		16	17	18	19	20	21	22		
26		23	24	25	26	27	28	29		
27		30	31							

Non Working Saturdays

Sd-
Dr. L Basavaraj
Principal

\

ONLINE TEST PROCESS

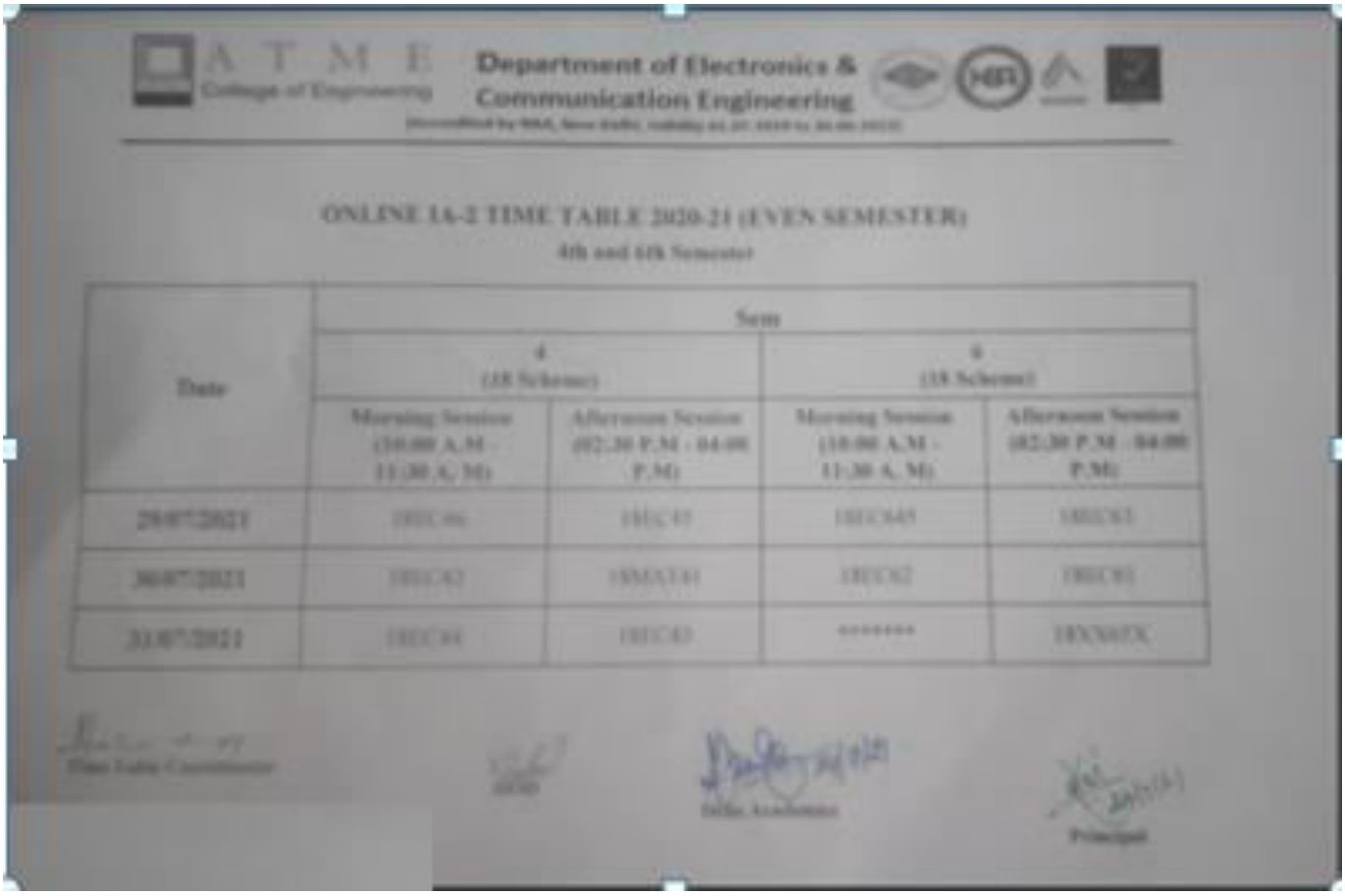
Academic Year 2020-21 (Even Semester)

Due to COVID pandemic the internal assessment during the academic 2020-21 Even Semester was conducted in **ONLINE MODE using Microsoft Teams Platform**. The IA process for the same is as follows:

1. The test schedule was intimated to both faculty and students.
2. The question paper scrutiny was done as earlier.
3. The test was conducted through MS Teams.
4. Each Invigilator was allotted with maximum of 20 students to monitor.
5. Invigilators have to create a separate channel and the allotted students have to join the respective channel.
6. Question Papers were posted in MS Teams at the start of the test.
7. Students were instructed to turn on the video for complete duration of the test without fail.
8. The test invigilation was recorded by each invigilator.
9. Also, the test was monitored by the Head of the Department, Dean(Academics) and Online IA Squad Committee.
10. After completion students were instructed to upload the scripts in the MS Teams only with the file name as **USN_Name**.

HOD
Dept. of ECE
Professor & Head
Dept. of Electronics & Communication
ATME COLLEGE OF ENGINEERING
Mysuru - 570 028

IA Time Table



A T M E
College of Engineering

Department of Electronics & Communication Engineering

ONLINE IA-2 TIME TABLE 2020-21 (EVEN SEMESTER)

4th and 6th Semester

Date	Sem			
	4 (18 Scheme)		6 (18 Scheme)	
	Morning Session (10:00 A.M - 11:30 A. M)	Afternoon Session (02:30 P.M - 04:00 P.M)	Morning Session (10:00 A.M - 11:30 A. M)	Afternoon Session (02:30 P.M - 04:00 P.M)
29/07/2021	18EC46	18EC45	18EC645	18EC63
30/07/2021	18EC42	18MAT41	18EC62	18EC61
31/07/2021	18EC44	18EC43	*******	18XX65X

Time Table Coordinator

HOD

Dean Academics

Principal

ONLINE IA-2 TIME TABLE 2020-21(EVEN SEMESTER)

Date	Sem			
	8 (17 Scheme)		8 (15 Scheme)	
	Morning Session (10:00 A.M - 11:30 A. M)	Afternoon Session (02:30 P.M - 04:10 P.M)	Morning Session (10:00 A.M - 11:30 A. M)	Afternoon Session (02:30 P.M - 04:10 P.M)
05/07/2021	17EC81	17EC82	15EC81	15EC82
06/07/2021	17EC835	******	15EC835	******

Time Table Coordinator

HOD

02/7/21.
Dean Academics

2/7/21
Principal

IA Circular

Date: 02/07/2021

IA CIRCULAR

This is to inform all the students of 8th semester that Second Online Internal Assessment for Even semester 2020-21 is scheduled from 05th July 2021 till 07th July 2021. The Time Table is attached for your reference. The platform is MS Teams. The student should login to the channel, 10 minutes before the commencement of test and adhere to the instructions provided by the invigilators.

Examination Committee

Mr. Pradeepkumar Y

Mr. Manjunath K

Mrs. Harshitha N

HOD

Date: 17/07/2021

IA CIRCULAR

This is to inform all that the Second Online Internal Assessment for Even semester 2020-21for 4th and 6th Semester is scheduled from 22nd July 2021 till 24th July 2021. The faculty members handling subjects for 4th and 6th Semeter are here by informed to set internal assessment question papers and mail the same to eceiaqpatmece@gmail.com on or before 21st July 2021. The guideline to set question paper is as follows

1. The faculty should prepare 2 different sets of question paper for respective subjects without any repetitions and should be same for both the sections.
2. The question paper pattern and time table are attached for your reference.
3. The Head of the Department will select any one among 2 sets of question paper and the same will be issued during the internal assessment.

Examination Committee

Mr. Pradeepkumar Y

Mr. Manjunath K

Mrs. Harshitha N

HOD

Date: 17/07/2021

IA CIRCULAR

This is to inform all the students that Second Online Internal Assessment for Even semester 2020-21 is scheduled from 22nd July 2021 till 24th July 2021. The Time Table is attached for your reference. The platform is MS Teams. The student should login to the channel, 10 minutes before the commencement of test and adhere to the instructions provided by the invigilators.

Examination Committee

Mr. Pradeepkumar Y

Mr. Manjunath K

Mrs. Harshitha N

HOD

Date: 17/07/2021

IA CIRCULAR

This is to inform all the lateral entry students that Second Online Internal Assessment (Even semester 2020-21) for Additional Mathematics – II (18MATDIP41) is scheduled on 26th July 2021 from 09.00 am to 10.00 am. The platform is MS Teams. The student should login to meeting, 10 minutes before the commencement of test and adhere to the instructions provided by the invigilator.

Examination Committee

Mr. Pradeepkumar Y

Mr. Manjunath K

Mrs. Harshitha N

HOD

Sample Student Group and Invigilators Allotment in the Microsoft Teams Channel

Online IA-2 Invigilation Allotment

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Dr. Prakash Kuravatti, Associate Professor	ABHILASH M B	4AD19EC001	3/A
2		AISHWARYA R	4AD19EC003	3/A
3		ANANYA C	4AD19EC005	3/A
4		ANUSHA Y R	4AD19EC007	3/A
5		ARJUN M	4AD19EC009	3/A
6		AWAIZ MANSOOR	4AD19EC011	3/A
7		BHAVANASHREE N	4AD19EC013	3/A
8		CHAITRA B	4AD19EC015	3/A
9		D RAJKUMAR	4AD19EC017	3/A
10		DHANUSH M C	4AD19EC019	3/A
11		DUSHYANTH M P	4AD19EC021	3/A
12		GOWTHAM A R	4AD19EC023	3/A
13		HARSHITHA R M	4AD19EC025	3/A
14		HEMANTH J	4AD19EC027	3/A
15		JASHWINI K	4AD19EC029	3/A
16		KEERTHI KHATAVKAR R	4AD19EC031	3/A
17		KOUSHIK D KUMAR	4AD19EC033	3/A
18		MAHADEVA PRASAD G S	4AD19EC035	3/A
19		MANOJ K T	4AD19EC037	3/A
20		MANOJKUMAR P	4AD19EC039	3/A
21		MOHAMMED NAWAZ	4AD19EC041	3/A

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Dr. Prathibha M K, Associate Professor	MOHAMMED USMAN	4AD19EC043	3/A
2		NIJAGUNA SWAMY B S	4AD19EC045	3/A
3		NITISH B D GUPTHA	4AD19EC047	3/A
4		PAVAN KUMAR R	4AD19EC049	3/A
5		POOJA D B	4AD19EC051	3/A
6		PRABHUSWAMY B N	4AD19EC053	3/A
7		PRAJWAL C	4AD19EC055	3/A
8		PRATHEEK P S	4AD19EC057	3/A
9		PRIYANKA BAI J G	4AD19EC059	3/A
10		R V CHANDAN	4AD19EC061	3/A
11		RAGASHREE P	4AD19EC063	3/A
12		RAKSHA N R	4AD19EC065	3/A
13		REETHU K M	4AD19EC067	3/A
14		ROHITH S	4AD19EC069	3/A
15		SAMRIN	4AD19EC071	3/A
16		SANJANA R	4AD19EC073	3/A
17		SPARSHA K M	4AD19EC075	3/A
18		STALLAN A	4AD19EC077	3/A
19		SUSHMITHA B	4AD19EC079	3/A
20		SYED ADNAN AHAMED	4AD19EC081	3/A
21		THANYA M	4AD19EC083	3/A

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mrs. Pavithara A C, Assistant Professor	VAISHNAVI N	4AD19EC085	3/A
2		VEDASWI P V	4AD19EC087	3/A
3		YASHASWINI R S	4AD19EC089	3/A
4		YASHWANTH Y P	4AD19EC091	3/A
5		AISHWARYA C J	4AD19EC002	3/B
6		AKASHLUTHER B	4AD19EC004	3/B
7		ANISH B	4AD19EC006	3/B
8		APOORVA VISHWANATH	4AD19EC008	3/B
9		ASFIYA TABASSUM	4AD19EC010	3/B
10		BHARATH M	4AD19EC012	3/B
11		BINDU EDEN	4AD19EC014	3/B
12		CHANDANA L	4AD19EC016	3/B
13		DEEKSHA M	4AD19EC018	3/B
14		DHANYASHREEE S R	4AD19EC020	3/B
15		FAWAZ AHMED KHAN	4AD19EC022	3/B
16		HARSHA M	4AD19EC024	3/B
17		HEERA N	4AD19EC026	3/B
18		HIBA MAHIN	4AD19EC028	3/B
19		JAYANTH S	4AD19EC030	3/B
20		KIRAN S	4AD19EC032	3/B
21		LIKHITHA M	4AD19EC034	3/B

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mr. Abhilash G, Assistant Professor	MANJUNATHA	4AD19EC036	3/B
2		MANOJKUMAR N S	4AD19EC038	3/B
3		MOHAMMED ADNAN HADI	4AD19EC040	3/B
4		MOHAMMED SULAIMAN	4AD19EC042	3/B
5		NAGRAJ S	4AD19EC044	3/B
6		NISHCHITHVARDHAN S	4AD19EC046	3/B
7		NOMAN SABIT	4AD19EC048	3/B
8		POOJA B J	4AD19EC050	3/B
9		POORNA CHANDRA R	4AD19EC052	3/B
10		PRAJWAL B R	4AD19EC054	3/B
11		PRASHANTH L	4AD19EC056	3/B
12		PRERITHA B P	4AD19EC058	3/B
13		PUNEETH B S	4AD19EC060	3/B
14		RACHANA H M	4AD19EC062	3/B
15		RAJAT NARAYAN HEGDE	4AD19EC064	3/B
16		RAVINDRA S HUNDEKAR	4AD19EC066	3/B
17		ROHITH KUMAR K	4AD19EC068	3/B
18		SAHANA C	4AD19EC070	3/B
19		SANIKA C R	4AD19EC072	3/B
20		SHWETHA L	4AD19EC074	3/B
21		SPOORTHY M C	4AD19EC076	3/B

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mr. Guruprasad K N, Assistant Professor	SUPRITH D S	4AD19EC078	3/B
2		SUSHMITHA M S	4AD19EC080	3/B
3		TANYA S	4AD19EC082	3/B
4		THRIPTHI B S	4AD19EC084	3/B
5		VANITHA B	4AD19EC086	3/B
6		Y N GOWTHAMI	4AD19EC088	3/B
7		YASHWANTH K	4AD19EC090	3/B
8		AKSHAY	4AD17EC003	5/A
9		B BERNICE MATTENAI	4AD17EC007	5/A
10		AISHWARYA B	4AD18EC001	5/A
11		ANEES FATHIMA A B	4AD18EC003	5/A
12		ANUSHA A R	4AD18EC005	5/A
13		APOORVA H S	4AD18EC007	5/A
14		CAROLINE SYMPHONY S	4AD18EC009	5/A
15		CHANDANA M D	4AD18EC011	5/A
16		CHETHAN S	4AD18EC015	5/A
17		DASHARATHA A M	4AD18EC017	5/A
18		HAJIRA SIMRAN	4AD18EC019	5/A
19		HARSHITHA H J	4AD18EC021	5/A
20		HITHASHREE S G	4AD18EC023	5/A
21		KARTHIK R	4AD18EC025	5/A

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mr. Pradeep Kumar Y, Assistant Professor	LAKSHITH GOWDA J K	4AD18EC027	5/A
2		LIKHITH V KUMAR GOWDA	4AD18EC029	5/A
3		MANSOOR FATHAK	4AD18EC031	5/A
4		MEGHANA S	4AD18EC033	5/A
5		NANDITHA A	4AD18EC035	5/A
6		NAVANEETH M	4AD18EC037	5/A
7		NEHA D R	4AD18EC039	5/A
8		P BALAKRISHNA	4AD18EC041	5/A
9		POOJA V	4AD18EC043	5/A
10		PRASHANTH Y S	4AD18EC047	5/A
11		RAMYA K	4AD18EC049	5/A
12		RIYANKA K	4AD18EC051	5/A
13		SANGEETHA K S	4AD18EC053	5/A
14		SARA SIMRAN	4AD18EC055	5/A
15		SHEETAL K ATHREYA	4AD18EC057	5/A
16		SOMASHEKAR M N	4AD18EC059	5/A
17		SUMAN S	4AD18EC061	5/A
18		SUSHMITHA P	4AD18EC063	5/A
19		TEJASWINI E	4AD18EC065	5/A
20		THANUSHREE D	4AD18EC067	5/A
21		THEJASWINI P	4AD18EC069	5/A

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mr. Manjunath K, Assistant Professor	VAISHNAVI G	4AD18EC071	5/A
2		VARUN R S	4AD18EC073	5/A
3		BHAVANKUMAR N	4AD19EC401	5/A
4		CHINMAYI R	4AD19EC403	5/A
5		DARSHAN K S	4AD19EC405	5/A
6		HEMANTHKUMAR G V	4AD19EC407	5/A
7		KIRAN A	4AD19EC409	5/A
8		KUPENDRA	4AD19EC411	5/A
9		MAMATHA M B	4AD19EC413	5/A
10		MANOJ L	4AD19EC415	5/A
11		MONISHA S	4AD19EC417	5/A
12		NITHINGOWDA A M	4AD19EC419	5/A
13		PAVAN S M	4AD19EC421	5/A
14		PRAJWALGOWDA G K	4AD19EC423	5/A
15		RAMYA N	4AD19EC425	5/A
16		SOUGANDHA G	4AD19EC428	5/A
17		SURAJ P	4AD19EC430	5/A
18		SYED MOHAMED ZUBAIR	4AD19EC431	5/A
19		YASHWANTH B	4AD19EC434	5/A
20		NIKSHEPA SM	4AD16EC043	5/B
21		DARSHAN KUMAR C B	4AD17EC022	5/B

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mr. Girish M, Assistant Professor	ANANDA H K	4AD18EC002	5/B
2		ANNAPOORNA D	4AD18EC004	5/B
3		ANUSHA B	4AD18EC006	5/B
4		BHAVANI J	4AD18EC008	5/B
5		CHAITHRA H R	4AD18EC010	5/B
6		CHANDANA R	4AD18EC012	5/B
7		CHETHAN P	4AD18EC014	5/B
8		CHIRAG C N	4AD18EC016	5/B
9		DHANUSH H V	4AD18EC018	5/B
10		HARSHAVARDHAN B M	4AD18EC020	5/B
11		HARSHITHA M	4AD18EC022	5/B
12		JOSNIJOSEPH	4AD18EC024	5/B
13		KAVYA C	4AD18EC026	5/B
14		LEELASHREE J	4AD18EC028	5/B
15		MAHADEVDEEPAK P	4AD18EC030	5/B
16		MANU R K	4AD18EC032	5/B
17		NAGASHREE M	4AD18EC034	5/B
18		NARENDRA K R	4AD18EC036	5/B
19		NAVEEN RAJ	4AD18EC038	5/B
20		NIKHITH URS	4AD18EC040	5/B
21		POOJA VENKATESH	4AD18EC044	5/B

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mrs. Harshitha N, Assistant Professor	PRANEETH JAIN S S	4AD18EC046	5/B
2		ROHAN U	4AD18EC052	5/B
3		SANJANA R	4AD18EC054	5/B
4		SARIYA ANJUM	4AD18EC056	5/B
5		SINCHANA S	4AD18EC058	5/B
6		SOWJANYA	4AD18EC060	5/B
7		SUNIL K	4AD18EC062	5/B
8		SWATHI B	4AD18EC064	5/B
9		TEJUS KUMAR S D	4AD18EC066	5/B
10		THEJASWINI K	4AD18EC068	5/B
11		UDAY GOWDA H C	4AD18EC070	5/B
12		VAISHNAVI V	4AD18EC072	5/B
13		VIKAS M K	4AD18EC074	5/B
14		ACHUTHA	4AD19EC400	5/B
15		CHAITRA M L	4AD19EC402	5/B
16		DARSHAN H M	4AD19EC404	5/B
17		HARSHITH G	4AD19EC406	5/B
18		KAVERI K M	4AD19EC408	5/B
19		KRUTHI M J	4AD19EC410	5/B
20		MALIK REHAN S	4AD19EC412	5/B
21		MANASA K R	4AD19EC414	5/B

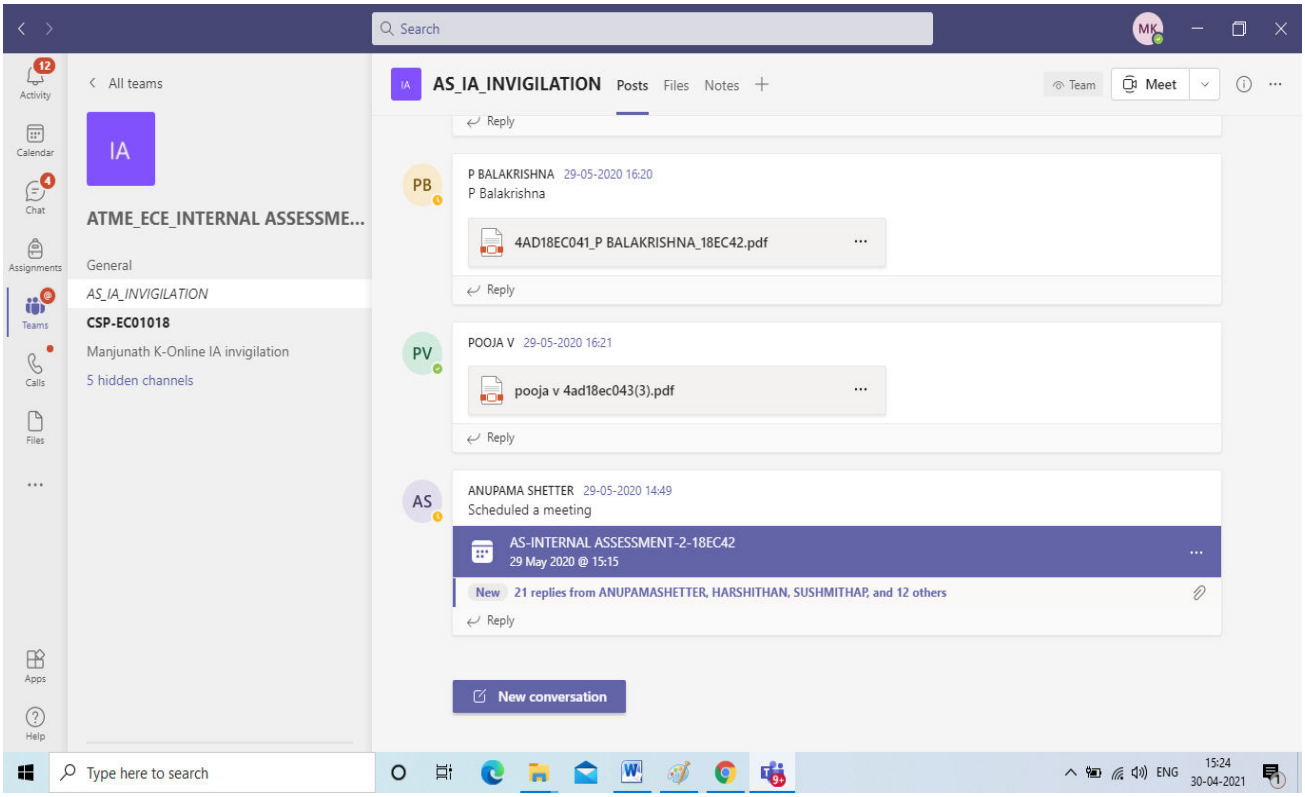
Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mrs. Keerthi A Kumbar Assistant Professor	MOHAMMED YOUNUS	4AD19EC416	5/B
2		NITHIN L	4AD19EC418	5/B
3		PAVAN H S	4AD19EC420	5/B
4		PRAJWAL R	4AD19EC422	5/B
5		RAJUMURTHY R	4AD19EC424	5/B
6		SHRIKANTH V	4AD19EC427	5/B
7		SUDEEP P	4AD19EC429	5/B
8		SYED MUZAMMIL	4AD19EC432	5/B
9		VINEETH GOWDA B K	4AD19EC433	5/B
10		YASHWANTH B	4AD19EC434	5/B
11		SUJITH S M	4AD13EC080	7/A
12		SAHANA G R	4AD14EC350	7/A
13		DEEPIKA S R	4AD16EC017	7/A
14		KARTHIK A H	4AD16EC027	7/A
15		POORVASHREE C V	4AD16EC047	7/A
16		JANARDHANKUMAR H S	4AD16EC413	7/A
17		AISHWARYA S Y	4AD17EC001	7/A
18		AJAY C	4AD17EC002	7/A
19		ANU R	4AD17EC004	7/A
20		APOORVA S	4AD17EC005	7/A
21		ARPITHA B	4AD17EC006	7/A

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mrs. Shalini V S Assistant Professor	BASAVARAJ D K	4AD17EC008	7/A
2		BHANUPRIYA B	4AD17EC009	7/A
3		BHARATH H L	4AD17EC010	7/A
4		BHAVANA D C	4AD17EC011	7/A
5		BHOOMIKA G	4AD17EC012	7/A
6		BHUVANA M C	4AD17EC013	7/A
7		BHUVANESHWARI B V	4AD17EC014	7/A
8		CHAITHANYA D S	4AD17EC015	7/A
9		CHANDAN B	4AD17EC016	7/A
10		CHANDU D	4AD17EC017	7/A
11		CHANDU PRASAD T L	4AD17EC018	7/A
12		CHAYA R	4AD17EC019	7/A
13		CHINGAKHAM ROMITA CH	4AD17EC020	7/A
14		DANISH ALI KHAN	4AD17EC021	7/A
15		DHANANJAYA S	4AD17EC023	7/A
16		DHANUSHA T	4AD17EC024	7/A
17		DILIP N	4AD17EC025	7/A
18		GIRISH BABU C J	4AD17EC026	7/A
19		HARSHITH K	4AD17EC027	7/A
20		HARSHITH R	4AD17EC028	7/A
		JAYASURYA J	4AD17EC029	7/A

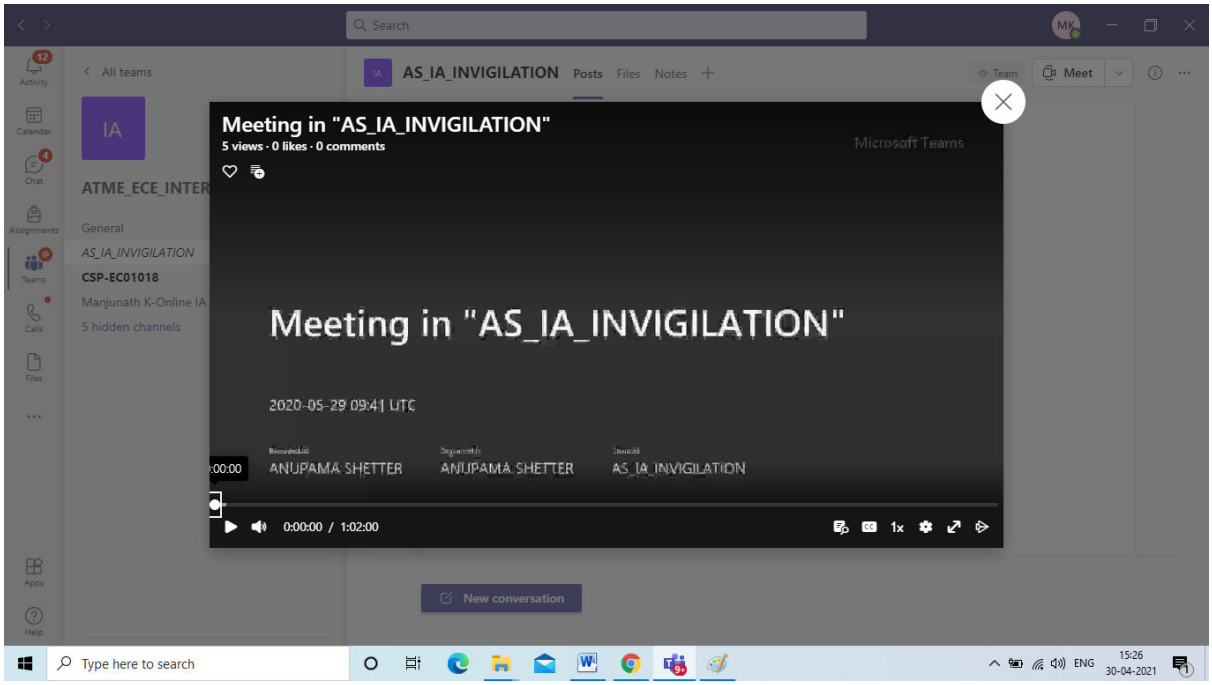
Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Ms. Anupama Shetter Assistant Professor	K GOWTHAMI	4AD17EC030	7/A
2		KALPANA K	4AD17EC031	7/A
3		KRIPA GOYAL	4AD17EC032	7/A
4		KUSUMA M N	4AD17EC033	7/A
5		LAVANYA S	4AD17EC034	7/A
6		LIKHITH K S	4AD17EC035	7/A
7		MAHESHKUMAR U	4AD17EC036	7/A
8		CHETHAN RAO S	4AD17EC403	7/A
9		ASMA RAHAMANI	4AD18EC400	7/A
10		MAMATHA B	4AD18EC401	7/A
11		MANJUKUMAR M	4AD18EC402	7/A
12		MANOJ R	4AD18EC403	7/A
13		MONIKA M	4AD18EC404	7/A
14		POOJA	4AD18EC405	7/A
15		RANJAN R	4AD18EC406	7/A
16		RASHMI N P	4AD18EC407	7/A
17		PRABHATH KUMAR TRIPAT	4AD15EC053	7/B
18		RAJESH KRISHNA R	4AD16EC056	7/B
19		LIKITH MANEY	4AD16EC420	7/B
20		MEGHANA P	4AD17EC037	7/B
21		MOHAMMED ADNAN	4AD17EC038	7/B

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Ms. Navya N Assistant Professor	MOHAMMED MOIN	4AD17EC039	7/B
2		MOHAMMED UMAR	4AD17EC040	7/B
3		NAYANA N	4AD17EC041	7/B
4		NEHA N	4AD17EC042	7/B
5		NISHANTHA D K	4AD17EC043	7/B
6		POOJA M	4AD17EC044	7/B
7		POOJITHA J	4AD17EC045	7/B
8		POOJITHA M A	4AD17EC046	7/B
9		POORNIMA S	4AD17EC048	7/B
10		PRAJWAL R	4AD17EC049	7/B
11		PRAVEENKUMAR	4AD17EC050	7/B
12		PRAVEEN KUMAR M M	4AD17EC051	7/B
13		PREETHAM G B	4AD17EC052	7/B
14		PRIYANKA S	4AD17EC053	7/B
15		RAKSHITHA N	4AD17EC054	7/B
16		RAKSHITHA S	4AD17EC055	7/B
17		RASHMI V	4AD17EC056	7/B
18		REKHA S	4AD17EC057	7/B
19		ROHINI K K	4AD17EC058	7/B
20		ROHITH V	4AD17EC059	7/B
21		SOUNDARYA S G	4AD17EC061	7/B

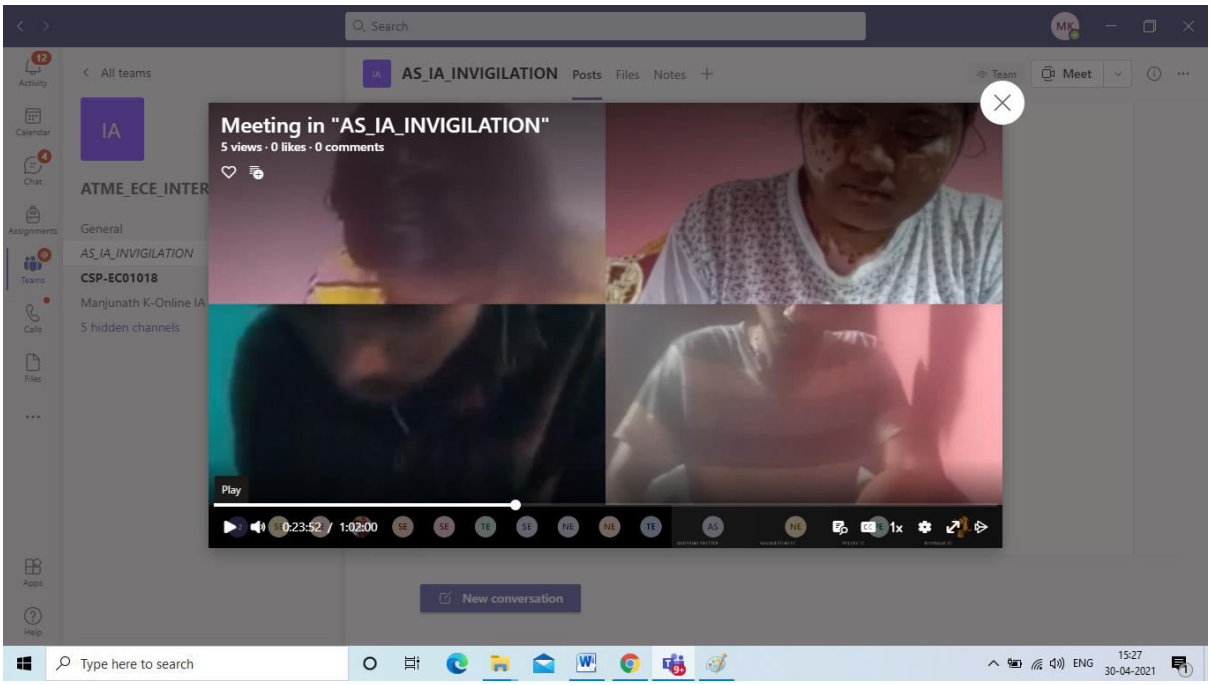
Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mrs. Nida Maheen Assistant Professor	POORNIMA K	4AD17EC047	7/B
2		SAHANA N	4AD17EC062	7/B
3		SANTHOSH TIWARI C	4AD17EC063	7/B
4		SHALINI D	4AD17EC064	7/B
5		SHILPA R	4AD17EC065	7/B
6		SHRIVATHSA M	4AD17EC066	7/B
7		SINDHU R	4AD17EC067	7/B
8		SONALI L U	4AD17EC068	7/B
9		SUCHITRA R S	4AD17EC069	7/B
10		SUDARSHAN S	4AD17EC070	7/B
11		SUMA A M	4AD17EC071	7/B
12		SURYA SHANKARMURTHY	4AD17EC072	7/B
13		TARUN	4AD17EC073	7/B
14		VENUGOPAL A S	4AD17EC074	7/B
15		YASHASWINI M P	4AD17EC075	7/B
16		RUMANA A	4AD18EC408	7/B
17		SANJAY M	4AD18EC409	7/B
18		SHYAMALA P K	4AD18EC410	7/B
19		SUHAS P	4AD18EC411	7/B
20		SUPRITHA A P	4AD18EC413	7/B
21		SUPRITHA A S	4AD18EC414	7/B
22		SYED MOHAMMED ADNAN	4AD18EC415	7/B



Screenshots of the MS Teams Channel



Screenshots of the recordings of the Invigilation Video

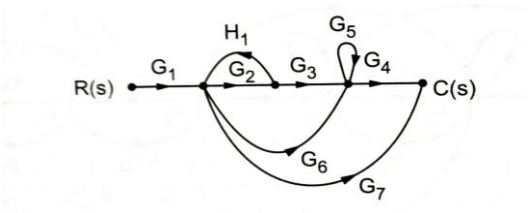
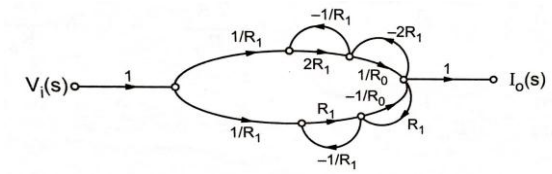
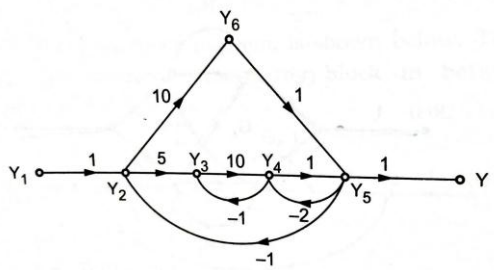


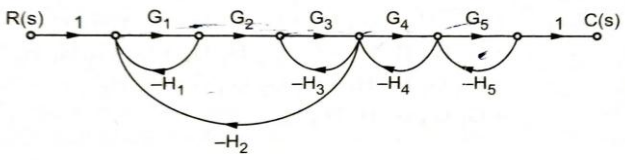
HOD
Dept. of ECE
Professor & Head
Dept. of Electronics & Communication
ATME COLLEGE OF ENGINEERING
Mysuru - 570 028

SAMPLE IA QUESTION PAPER AND SCHEME

SECOND INTERNAL ASSESMENT

COURSE	**:**	**Control System**	**TIME**	**:**	**10AM-11:30AM**
COURSE CODE	**:**	**18EC43**	**DATE**	**:**	**30-7-2021**
SEM/SEC	**:**	**IV Sem A/B**	**MAX. MARKS**	**:**	**50**

	PART-A-Answer any three full Questions	**Marks**	**COs**	**BTL**
01.	A). A node having only outgoing branches. a) Input node b) Output node c) Incoming node d) Outgoing node	2 M	CO1	L1
	B). Find C(s)/R(s) using Mason's Gain Formula. 	8 M		L1, L2, L3
02.	A). Loop which do not possess any common node are said to be _____ loops. a) Forward gain b) Touching loops c) Non touching loops d) Feedback gain	2 M	CO1	L1
	B) Find $I_0(s)/Vi(s)$ using Mason's Gain Formula. 	8 M		L1, L2, L3
03.	A) .Signal flow graphs: a) They apply to linear systems b) The equation obtained may or may not be in the form of cause or effect c) Arrows are not important in the graph d) They cannot be converted back to block diagram	2 M	CO1	L1
	B) Find Y/Y1 using Mason's Gain Formula 	8 M		L1, L2, L3
04.	A).The relationship between an input and output variable of a signal flow graph is given by the net gain between the input and output node is known as the overall_____ a) Overall gain of the system b) Stability c) Bandwidth d) Speed	2 M	CO1	L1

	B) Find C(s)/R(s) using Mason's Gain Formula.  	8 M		L1, L2, L3

	PART-B-Answer any two full Questions	Marks	COs	BTL
05.	A) .Benefits of feedback: a) Performance of system is greater. b) Need for system much larger path gain and system instability. c) Controlled variable accurately follows the desired value d) Affected by parameter variations	2 M	CO1, CO2	L1
	B) For G(s)H(s)=K(S+2)/S(S+4)(S^2+2S+2) ,Calculate angles of departure at complex conjugate poles.	8 M		L1, L2, L3
06.	A) .Effect of feedback on sensitivity is minimum in: a) Open loop control system b) Closed loop control system c) None of the mentioned d) Both of the mentioned	2 M	CO1, CO2	L1
	B) Write the general steps to solve the problem on Root Locus.	8 M		L1,L2
07.	A) .Feedback control systems are: a) Insensitive to both forward and feedback path parameter changes b) Less sensitive to feedback path parameter changes than to forward path parameter changes c) Less sensitive to forward path parameter changes that to feedback path parameter changes d) Equally sensitive to forward feedback path parameter changes	2 M	CO1, CO2	L1
	B) For G(s)H(s)=K/S(S+1)(S+4),determine the co-ordinates of valid Breakaway points.	8 M		L1, L2

CO1	Develop the mathematical model of mechanical and electrical systems and to obtain the transfer function using block diagram reduction rules and mason's gain formula
CO2	Understand time domain specifications for first and second order systems
CO3	Determine the stability of a system in the time domain using Route Hurwitz criteria and root locus technique in the frequency domain using Nyquist and bode plots.
CO4	Model a control system in continuous and discrete time using state variable techniques

Bloom's Taxonomy Level	
L1	**Remembering**
L2	**Understanding**
L3	**Applying**
L4	**Analyzing**
L5	**Evaluating**
L6	**Creating**

SCHEME AND SOLUTION

Subject Title: Control system **Subject Code:** 18EC43

CO1	Develop mathematical model of mechanical & electrical system
CO2	Understand time domain specification
CO3	Determine the stability of a system in time domain.
CO4	Model a CS in continous & discreate time using state variable technique.
~~CO5~~	
~~CO6~~	

Bloom's Taxonomy Levels

L1: Remembering **L2:** Understanding **L3:** Applying **L4:** Analyzing **L5:** Evaluating **L6:** Creating

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
1 a	Input node	2M	CO1	L1
b	$T_1 = G_1G_2G_3G_4$ $T_2 = G_1G_6G_4$ $T_3 = G_1G_7$ individual feedback loop gains. 2M $L_1 = G_2H_1$ $L_2 = G_5$ Both L_1L_2 are non touching $L_1L_2 = G_2G_5H_1$ 4M $\Delta = 1 - G_2H_1 - G_5 + G_2G_5H_1$ $\Delta_1 = 1$ with sentence. $\Delta_2 = 1$ $\Delta_3 = 1 - G_5$	8M	CO1	L1, L2 L3

Signature of Faculty

H.O.D

SCHEME AND SOLUTION

Subject Title: CS **Subject Code:** 18EC43

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
	$\frac{C(s)}{R(s)} = \frac{G_1G_2G_3G_4 + G_1G_6G_4 + G_1G_7(1-G_5)}{1 - G_2H_1 - G_5 + G_2G_5H_1}$ 2M			
2 c)	Non touching loops	2M	L1	CO1.
b)	$T_1 = \frac{2}{R_0}$ $T_2 = \frac{-1}{R_0}$	8M	L1, L2, L3	
	Loops are $L_1 = -2$ $L_2 = \frac{-2R_1}{R_0}$ $L_3 = -1$ $L_4 = \frac{-R_1}{R_0}$ 2M			
	Non touching loops, $L_1L_3 = 2$ $L_1L_4 = \frac{2R_1}{R_0}$ $L_2L_3 = \frac{2R_1}{R_0}$ $\Delta = 6 + \frac{7R_1}{R_0}$ $\Delta_1 = 1 - L_3 = 2$ $\Delta_2 = 3$ 4 8M $\frac{I_0(s)}{V_i(s)} = \frac{T_1\Delta_1 + T_2\Delta_2}{\Delta} = \frac{1}{6R_0 + 7R_1}$ 2M			

Signature of Faculty

H.O.D

SCHEME AND SOLUTION

Subject Title: Control system **Subject Code:** 18EC43

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
3	a) They apply to linear systems.	2M	CO1	L1
b	f/w path gains $T_1 = 50$ $T_2 = 10$ $L_1 = -10$ $L_4 = -10$ $L_2 = -2$ $L_3 = -50$ 2M non touching loops. $L_1L_4 = 100$ $\Delta = 1 - [L_1 + L_2 + L_3 + L_4] + [L_1 + L_4]$ $= 173$ 4M $\Delta_1 = 1$ $\Delta_2 = 1 - L_1 = 11$ $\frac{C(s)}{R(s)} = \frac{\sum T_k \Delta_k}{\Delta} = \frac{160}{173}$ 2M	8M	CO1	L1

Signature of Faculty

H.O.D

SCHEME AND SOLUTION

Subject Title: CS **Subject Code:** 18EC43

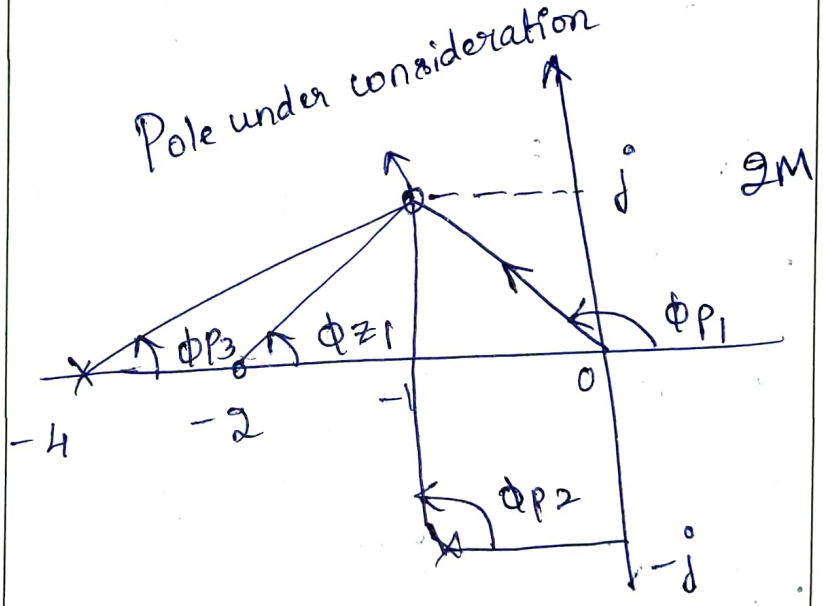
Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
4 a)	Overall gain of the system.	2M	CO1	L1
b	$T_1 = G_1G_2G_3G_4G_5$ $L_1 = G_1H_1$ $\quad L_4 = -G_4H_4$ $L_2 = -G_3H_3$ $\quad L_5 = -G_5H_5$ $L_3 = -G_1G_2G_3H_2$ 2 Non touching loops L_1L_2 | L_2L_5 L_1L_5 | L_3L_5 L_1L_4 | 2M 3 Non touching loops. 4M $L_1, L_2 \& L_5$ 8 $\Delta = 1 - [L_1+L_2+L_3+L_4+L_5] +$ $[L_1L_2 + L_1L_5 + L_1L_4 + L_2L_5 + L_3L_5]$ $-[L_1L_2L_5]$ Substitute the values 2M	8M	CO1	L1, L2

Signature of Faculty

H.O.D

SCHEME AND SOLUTION

Subject Title: CS **Subject Code:** 18EC43

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
	$\Delta_1 = 1$ $\frac{C(s)}{R(s)} = \frac{G_1G_2G_3G_4G_5}{\Delta}$ 2M			
5. a)	affected by parameter variations.	2M	CO1	L1
			CO2	L1
b)	$P=4, Z=1$ Poles are $s=0, -4, -1 \pm j$ Zeros at $s=-2$	8M		L2
	Pole under consideration  2M Join all zeros to this pole & Calculate ϕ_{Z_1}.			

Signature of Faculty

H.O.D

SCHEME AND SOLUTION

Subject Title: CS **Subject Code:** 18EC43

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level

Then $\sum \phi_p = \phi_{p1} + \phi_{p2} + \phi_{p3}$

while

$\sum \phi_z = \phi_{z1}$

$\phi_{p1} = 135^\circ$, $\phi_{p2} = 90^\circ$, $\phi_{p3} = 18.43^\circ$

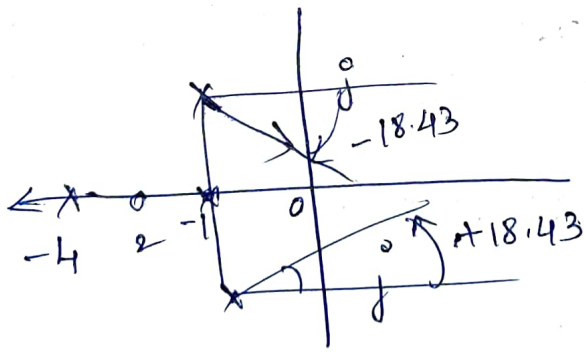
$\sum \phi_p = 243.43$

$\sum \phi_z = \phi_{z1} = 45^\circ$ 4M

$\phi = \sum \phi_p - \sum \phi_z$

$= 198.43^\circ$

$\phi_d = -18.43$.



2M

Signature of Faculty

H.O.D

SCHEME AND SOLUTION

Subject Title: **Subject Code:**

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
6	b) closed loop control system	2M	CO1	L1
b	① get the general information about number of open loop poles, zeros, number of branches etc.	8M	CO2	L1, L2
	② Draw the pole-zero plot. Identify sections of real axis for existance of root locus			
	③ Calculate angle of asymptotes			
	④ Determine the centroid. Sketch a separate sketch for step 3 & 4			
	⑤ Calculate the breakaway points & break in points.			
	⑥ calculate the intersection points with imaginary axis			
	⑦ Calculate angle of departures or arrivals as applicable			
	⑧ Combine step 1 to 7 & draw			
	⑨ predict the stability.			

Signature of Faculty

H.O.D

SCHEME AND SOLUTION

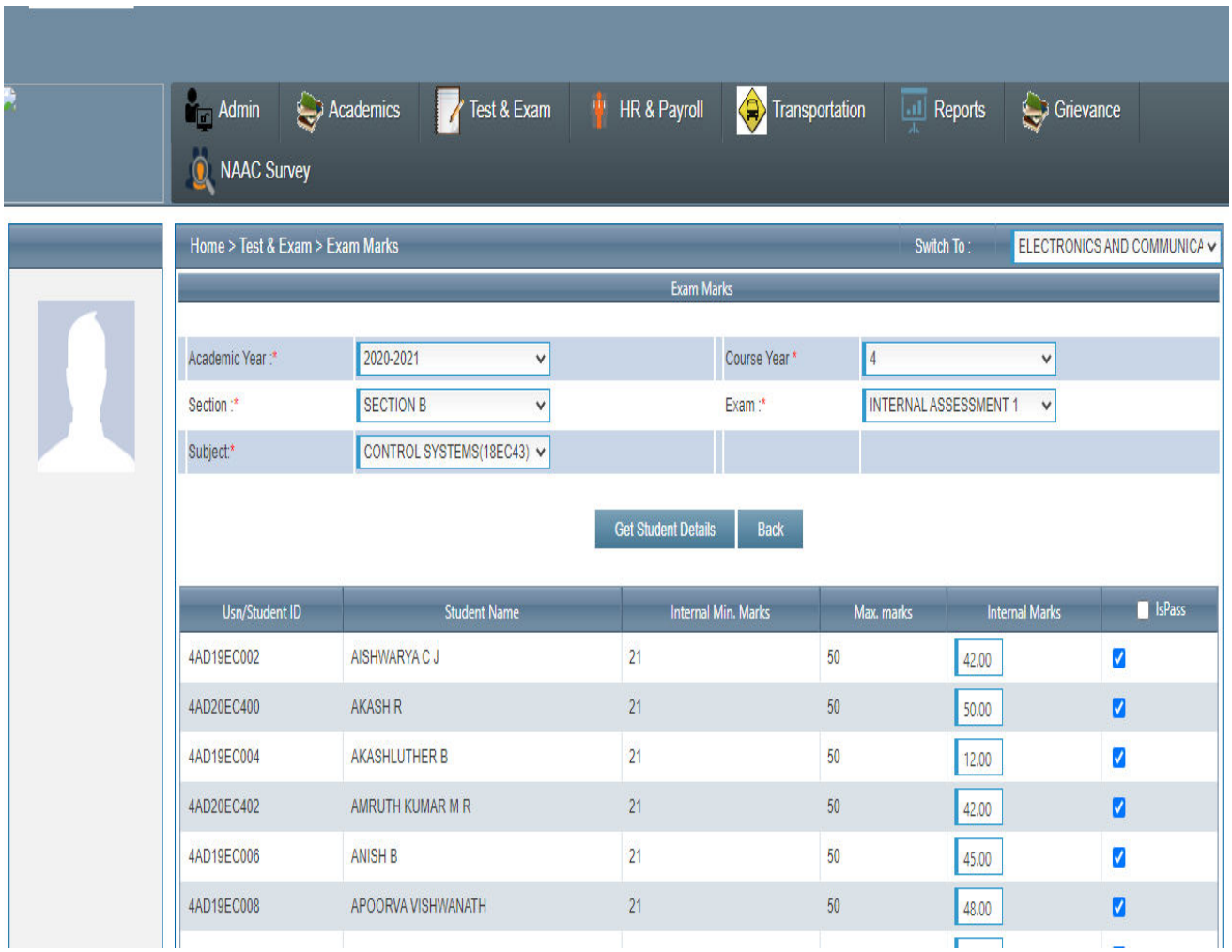
Subject Title: CS **Subject Code:** 18EC43

Question No.	Solution	Marks Allotted	Mapped COs	Bloom's Taxonomy level
7 a)	c) less sensitive to f/w path parameter changes that to feedback path parameter changes.	2M	CO1	L1
b)	$1+\frac{K}{S(S+1)(S+4)}=0$	8M	CO2	L1, L2, L3.
	$S^3+5S^2+4S+K=0$	2M		
	$K=-S^3-5S^2-4S$			
	$\frac{dK}{dS}=-3S^2-10S-4=0$	2M		
	$3S^2+10S+4=0$			
	Breakaway points $=-0.46, -2.86$			
	$S=-0.46$, $K=+0.8793$	4M		
	$S=-2.86$, $K=-6.06$			
	For $S=-0.46$ is a valid breakaway points.			

Signature of Faculty

H.O.D

CERP Screenshots of Test Marks



HOD
Dept. of ECE
Professor & Head
Dept. of Electronics & Communication
ATME COLLEGE OF ENGINEERING
Mysuru - 570 028

Mechanism of internal assessment is transparent and robust in terms of frequency and mode

The Department conducts three internal assessment tests at approximately 6th, 12th and 14th week respectively. The faculties are informed about the test schedule and instructed to set two sets of Question paper. HOD will select the Question paper and for that scheme of valuation will be written by the faculty

Each test is intended to cover approximately one third of the syllabus. On completion of the Valuation, Scheme of valuation is discussed and Results are announced by Faculty members in their class session. The IA Test marks is uploaded in AIMS portal

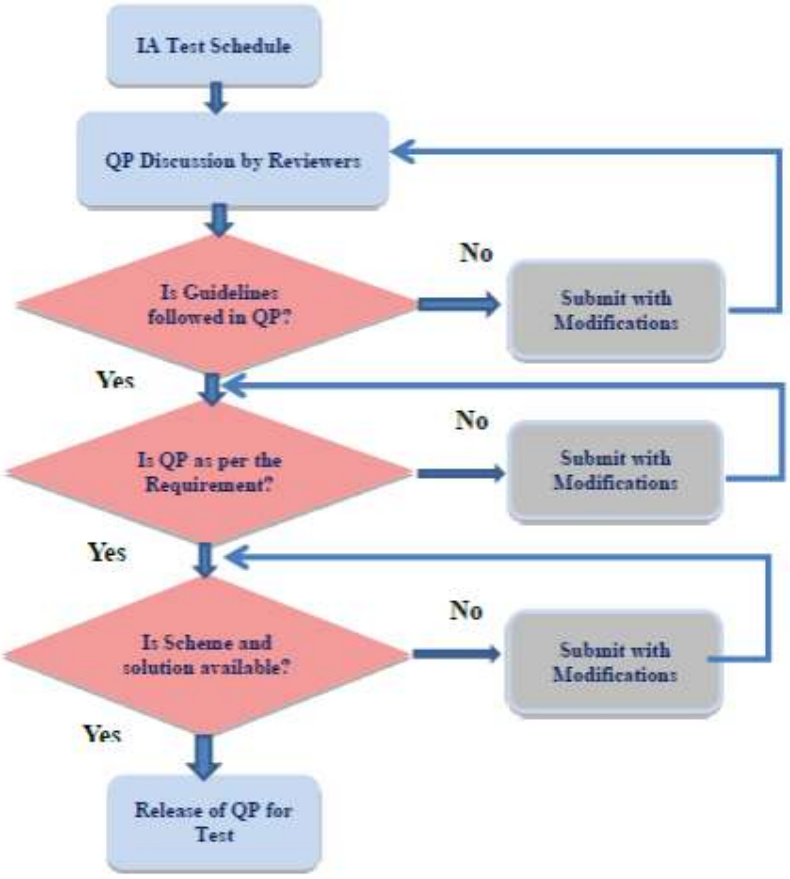


Fig:Test Process

ATME College of Engineering

DEPARTMENT OF CIVIL ENGINEERING

ACADEMIC CALENDER

ATME College of Engineering

DEPARTMENT OF CIVIL ENGINEERING

Adherence for the Academic Year 2020-21

Particulars	Date as Planned on	Date Done on
Commencement Of Online Classes	Sept 1st 2020	As Planned
Commencement Of Offline Classes	Oct 1st 2020	Continuation of Online Classes
Commencement Of On – Campus Offline Classes for 7th Semester	17th Nov 2020	As Planned
Technical Talk	(Online)	22nd Oct 2020 19th Nov 2020
Webinar Series	(Online)	14th – 18th July 2020 21st – 22nd July 2020 3rd - 6th Aug 2020
Industrial Visit	(Online – Virtual Tour Plant)	17th Oct 2020
Parents Teacher Meeting	*****	14 Oct 2020 Online for 7th Sem Regarding Placements TCS
Ist Internal Test (Online)	8 , 9 & 10 Oct 2020	10 Oct 20 - IA postponed to 12 Oct 20 due to College 10th Anniversary
IInd Internal Test (Online)	11 , 12 & 13 Nov 2020	11 Oct 20 – IA postponed to 17 Oct 20 due to ATMECE-FDP on Importance of NAAC in HEI
IIIrd Internal Test (Online)	28, 29 & 30 Dec 2020	As Planned
Lab Internal Test (Offline)	04 – 09 Jan 2021 (5,7) 26/02/21 to 03/03/21 (3)	Conducted from 13th – 16th Jan 2021 for 5th & 7th Sem Conducted from 26th Feb to 02th Mar 2021 for 3rd Sem
Improvement IA (Online)	11 – 15 Jan 2021	Conducted from 11th – 16th Jan 2021 for 5th & 7th Sem
Last Working Day	Jan 16th 2021 Mar 10th 2021	As Planned for 5th and 7th Sem As Planned for 3rd Sem

HOD

HOD
Department of Civil Engineering
ATME College of Engineering
Mysore-570 028

ATME College of Engineering

DEPARTMENT OF CIVIL ENGINEERING

SAMPLE TEST PROCESS: 2020-21

ONLINE TEST PROCESS

AY:2020-21

During the pandemic steps was taken to keep the Test process robust are as follows

1. Test Schedule announcement to students through circular

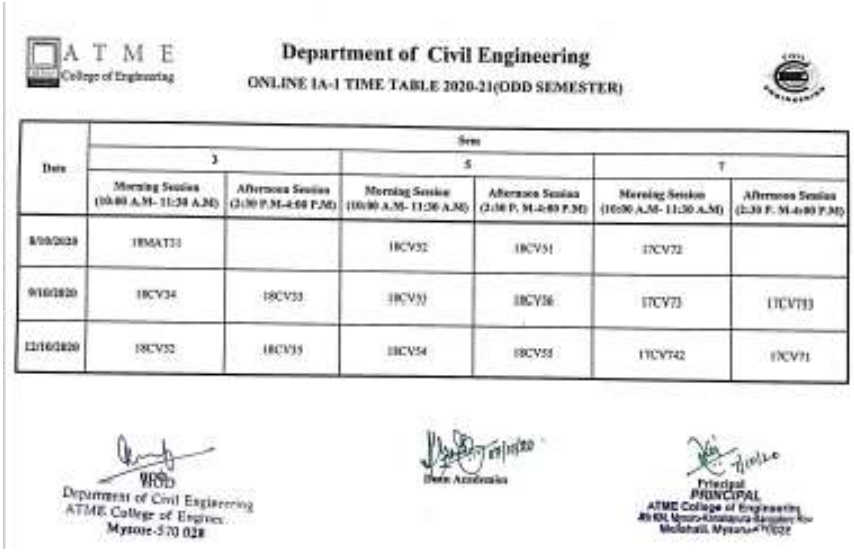
2. Test paper was deployed using MS Team Form/ Channel created by faculty for each individual subjects

3. Students entered their Name, USN, Signature in every sheet and uploaded the Test script in the submission form provided

DEPARTMENT OF CIVIL ENGINEERING

IA TEST I PROCESS

❖ TIME TABLE



ATME College of Engineering

Department of Civil Engineering

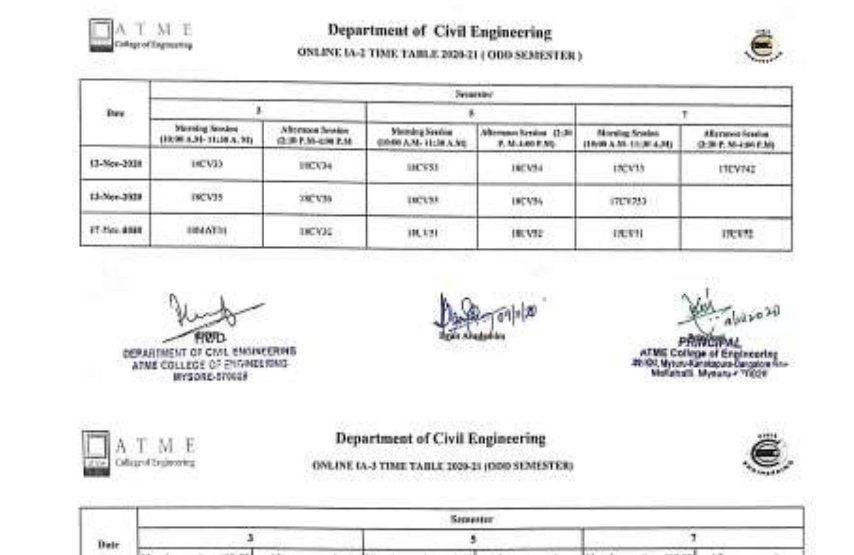
ONLINE IA-1 TIME TABLE 2020-21(ODD SEMESTER)

Date	Sem					
	3		5		7	
	Morning Session (10:00 A.M.- 11:30 A.M)	Afternoon Session (2:30 P.M.-4:00 P.M)	Morning Session (10:00 A.M.- 11:30 A.M)	Afternoon Session (2:30 P. M.-4:00 P.M)	Morning Session (10:00 A.M.- 11:30 A.M)	Afternoon Session (2:30 P. M.-4:00 P.M)
8/10/2020	18MAT31		18CV52	18CV51	17CV72	
9/10/2020	18CV34	18CV33	18CV53	18CV56	17CV73	17CV733
12/10/2020	18CV32	18CV35	18CV54	18CV55	17CV742	17CV71

HOD
Department of Civil Engineering
ATME College of Engineering
Mysore-570 028

Dean Academics

Principal
PRINCIPAL
ATME College of Engineering



ATME College of Engineering

Department of Civil Engineering

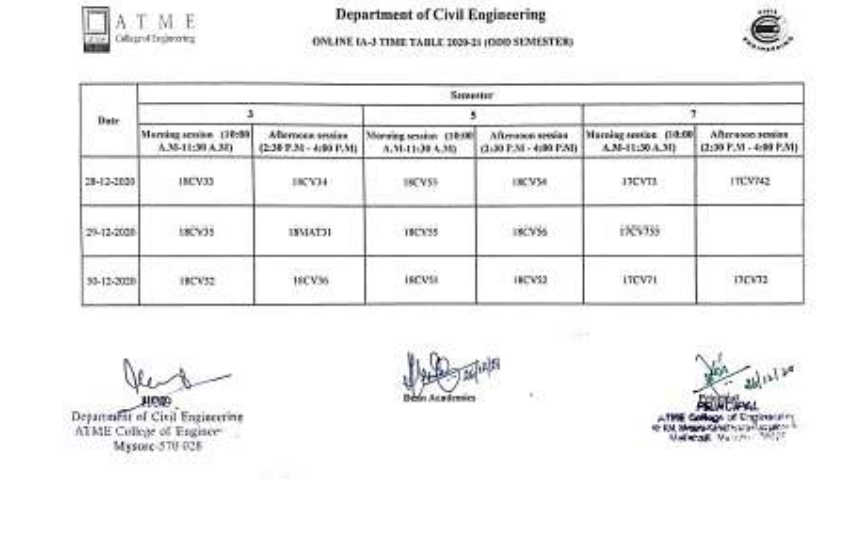
ONLINE IA-2 TIME TABLE 2020-21 (ODD SEMESTER)

Date	Semester					
	3		5		7	
	Morning Session (10:00 A.M- 11:30 A.M)	Afternoon Session (2:30 P.M-4:00 P.M)	Morning Session (10:00 A.M- 11:30 A.M)	Afternoon Session (2:30 P. M-4:00 P.M)	Morning Session (10:00 A.M- 11:30 A.M)	Afternoon Session (2:30 P. M-4:00 P.M)
12-Nov-2020	18CV33	18CV34	18CV53	18CV54	17CV73	17CV742
13-Nov-2020	18CV35	18CV36	18CV55	18CV56	17CV733	
17-Nov-2020	18MAT31	18CV32	18CV51	18CV52	17CV71	17CV72

HOD
DEPARTMENT OF CIVIL ENGINEERING
ATME COLLEGE OF ENGINEERING
MYSORE-570028

Dean Academics

PRINCIPAL
ATME College of Engineering



ATME College of Engineering

Department of Civil Engineering

ONLINE IA-3 TIME TABLE 2020-21 (ODD SEMESTER)

Date	Semester					
	3		5		7	
	Morning session (10:00 A.M-11:30 A.M)	Afternoon session (2:30 P.M - 4:00 P.M)	Morning session (10:00 A.M-11:30 A.M)	Afternoon session (2:30 P.M - 4:00 P.M)	Morning session (10:00 A.M-11:30 A.M)	Afternoon session (2:30 P.M - 4:00 P.M)
28-12-2020	18CV33	18CV34	18CV53	18CV54	17CV73	17CV742
29-12-2020	18CV35	18MAT31	18CV55	18CV56	17CV733	
30-12-2020	18CV32	18CV36	18CV51	18CV52	17CV71	17CV72

HOD
Department of Civil Engineering
ATME College of Engineering
Mysore-570 028

Dean Academics

PRINCIPAL
ATME College of Engineering

DEPARTMENT OF CIVIL ENGINEERING

❖ IA INVIGILATOR ALLOTMENT

ATME College of Engineering

Department of Civil Engineering

Online IA-2 Invigilation Allotment

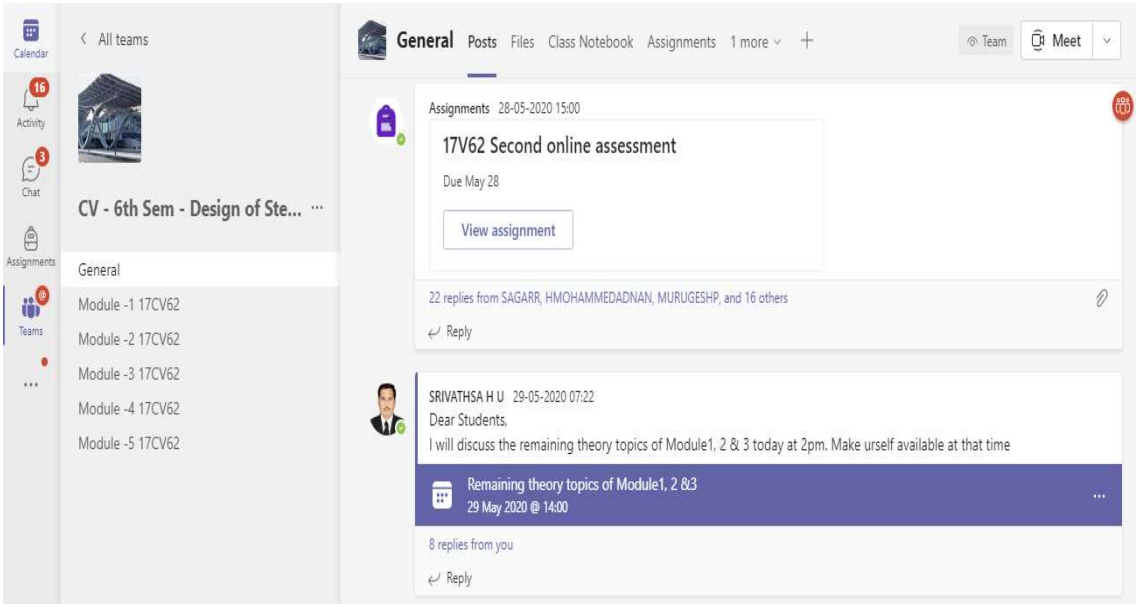
Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mrs. Jyothi D N Assistant professor	BHARATH G GOWDA	4AD17CV005	3rd Sem A-Section
2		ADNAN AHMED KHAN	4AD19CV001	
3		CHARAN P	4AD19CV003	
4		GOWTHAM RANNA	4AD18CV011	
5		MANU MAHADEVA SHETTY	4AD18CV018	
6		NIKHITHA PRAKASH	4AD19CV025	
7		SINDHU SOMA	4AD18CV042	
8		SUMANTH UTHAPPA B	4AD19CV043	
9		SUSMITHA C	4AD18CV044	
10		ABHISHEK K	4AD19CV001	
11		AFAQ AHMED KHAN	4AD19CV002	
12		AMITH YASHAS R G	4AD19CV005	
13		ANANYA S P	4AD19CV004	
14		ANI GOWDA B	4AD19CV003	
15		ARPITHA ASHOK BELLI	4AD19CV006	
16		BHANUPRIYA M	4AD19CV007	
17		BHARGAVA P V	4AD19CV008	
18		CHIRAG N	4AD19CV009	
19		DHANUSH V	4AD19CV010	
20		DHEERAJ D	4AD19CV011	
21		DINAKAR K DEV	4AD19CV012	
22		DIVISHA K B	4AD19CV013	
23		GOVARDHAN NAYAKA S J	4AD19CV014	
24		GURUPRASAD K M	4AD19CV015	
25		HARSHAVARDHAN H S	4AD19CV016	
26		HARSHITHA B	4AD19CV017	
27		HARSHITHA N	4AD19CV018	
28		HRUTHIK R	4AD19CV019	
29		HUNKARE O	4AD19CV020	
30		JUNAID AHMED	4AD19CV021	
31		KEERTHAN H S	4AD19CV022	
32		KEERTHAN PRABHU	4AD19CV023	
33		KUSHAL D	4AD19CV024	
34		LAKSHMI PRIYA T U	4AD19CV025	

HOD
HOD
Department of Civil Engineering
ATME College of Engineering
Mysore-570 028

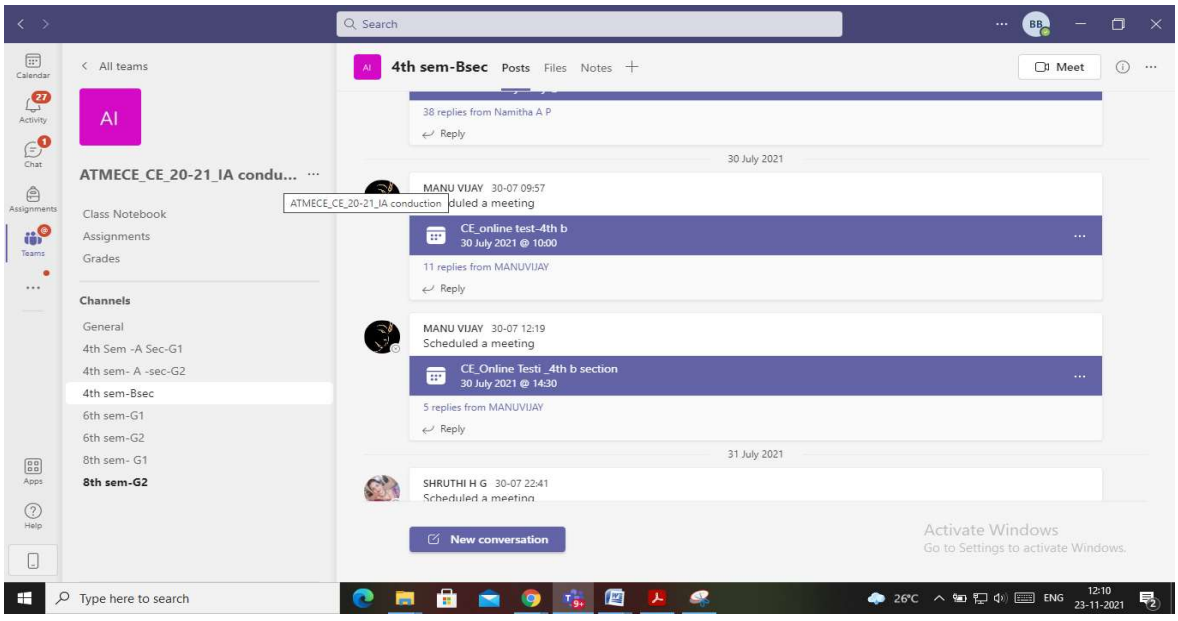
DEPARTMENT OF CIVIL ENGINEERING

Online Internals through MS Teams

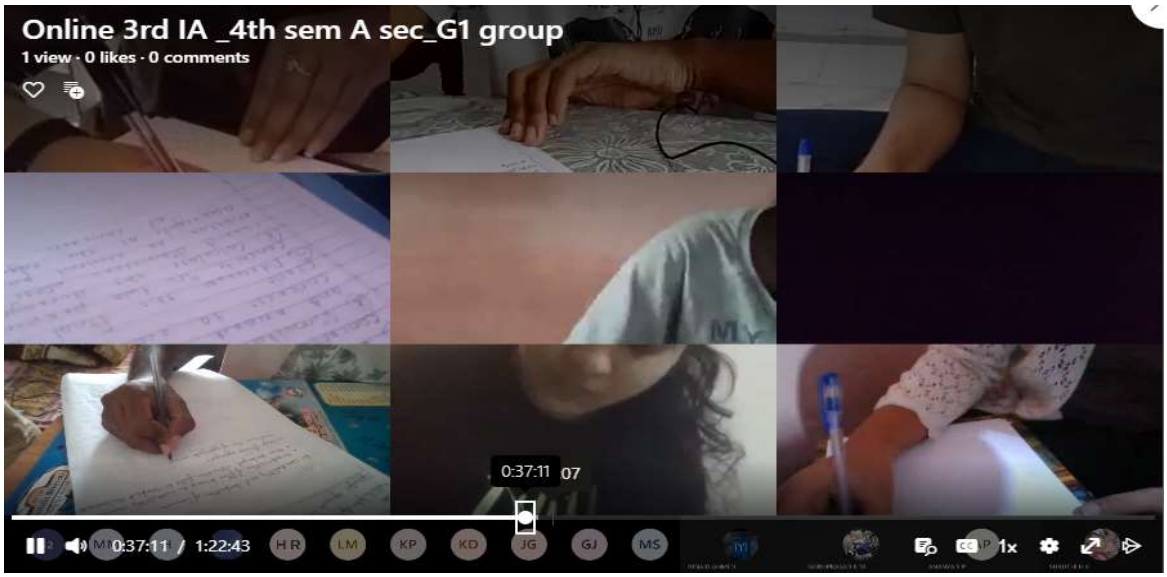
a) Test Paper deployment and submission form in MS Teams



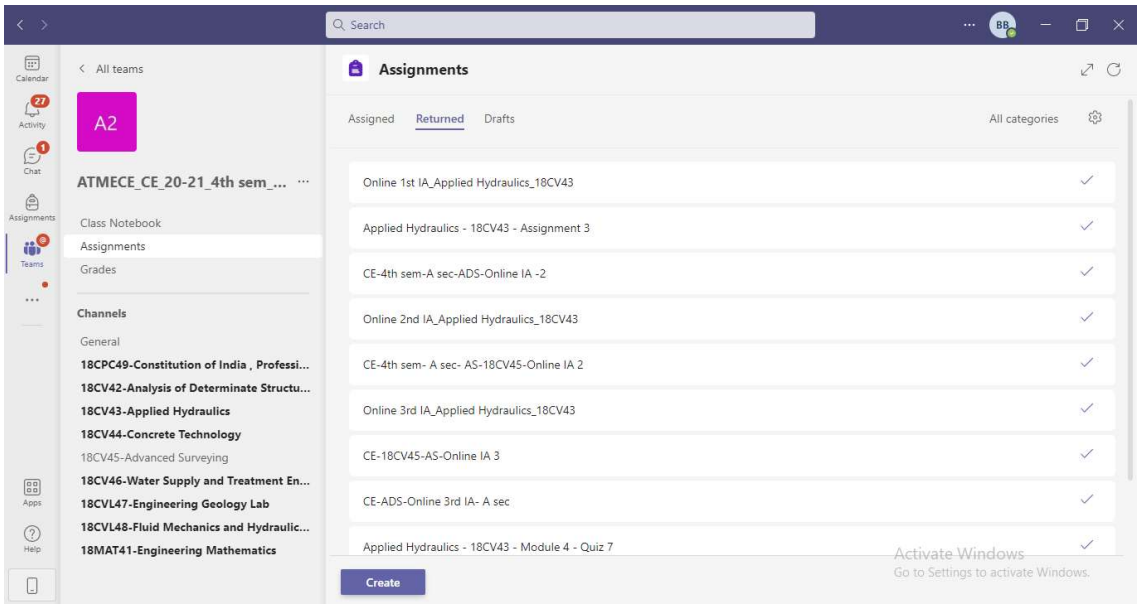
b) Channel for Conduction of IA

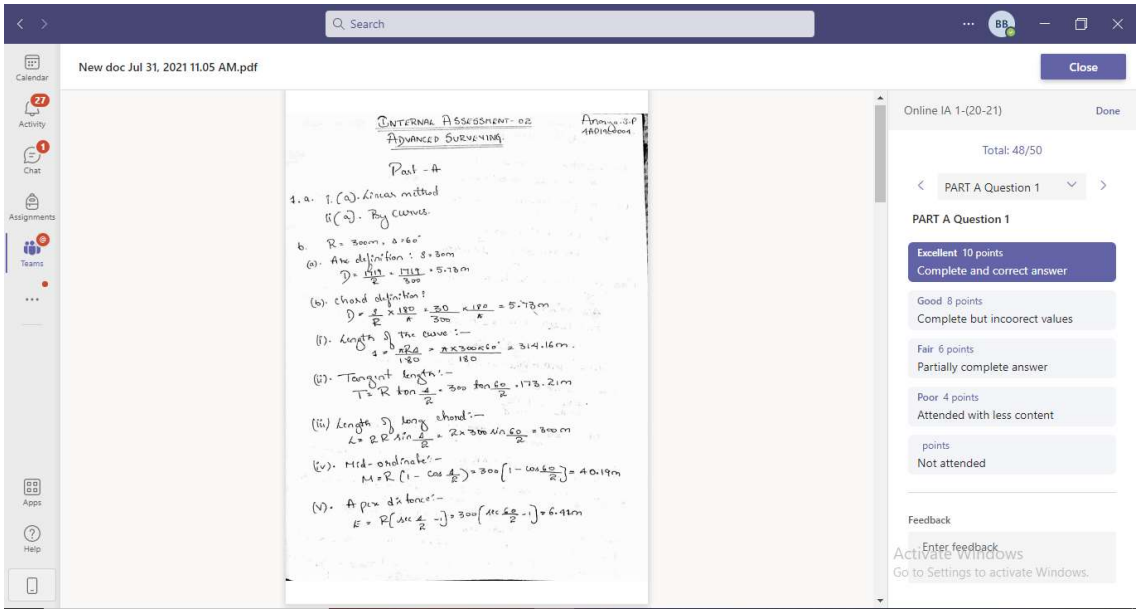


c) Conduction of IA

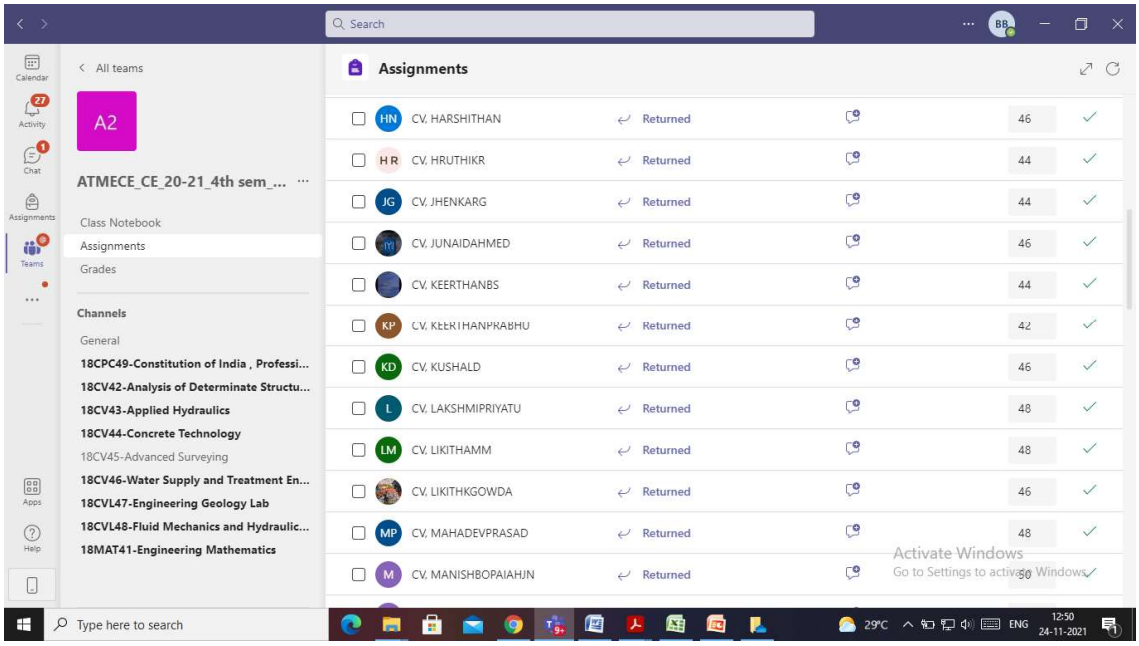


d) Evaluation of Answer scripts





e) Returning of answer scripts



❖ SAMPLE IA QP & SCHEME

ATME College of Engineering
Department of Civil Engineering

Online IA - I

SUB CODE	:	18CV34	TIME	:	10am to 11.30am
SUBJECT	:	Building Materials & Construction	DATE	:	09/10/2020
SEM/SEC	:	3rd Sem/A sec	MAX. MARKS	:	50

	PART-A-Answer any three full Questions	Marks	COs	BTL
01	a) Answer the following multiple choice questions and each carries 1mark i. For a good building stone how much is the required crushing strength? a) Less than 50 N/mm^2 b) Greater than 100 N/mm^2 c) 155 N/mm^2 d) 10 N/mm^2 ii. A 1st class brick immersed in water for 24 hours, should not absorb water (by weight) more than a) 10% b) 15% c) 20% d) 25%	2 M	1	L1
	b) Explain any Eight requirements of good building stones	8 M		L2
02	a) Answer the following multiple choice questions and each carries 1mark i. What is the required specific gravity for a good building stone? a) Greater than 2.7 b) Less than 3 c) Greater than 3 d) Less than 2.7 ii. What should be observed ideally when two bricks are struck together? a) Dull sound b) Sides shatter c) Clear ringing sound d) Brick breaks	2 M	1	L1
	b) Describe the manufacturing process of Brick in details	8 M		L2
03	a) Answer the following multiple choice questions and each carries 1 mark i. Light weight mortar is prepared by using a) Lime b) Surkhi c) Wood chips d) Flyash ii. What is the size of fine aggregates? a) 4.75mm b) <4.75mm c) > 4.75mm d) 12mm	2 M	1	L1
	b) Explain the classification of mortar based on binding materials	8 M		L2
04	a) Answer the following multiple choice questions and each carries 1 marks i. Packing mortars are used to pack a) Oil wells b) Retaining walls c) Bricks d) Cracks in masonry ii. What is the fineness modulus value of a fine sand? a) <2.2 b) 2.2-2.6 c) <1 d) 1-2	2 M	1	L1
	b) Describe the method of determining specific gravity and bulking of fine aggregates	8 M		L2

	PART-B-Answer any two full Questions	Marks	COs	BTL
01	a) Answer the following multiple choice questions and each carries 1 marks i. The type of boring, used for making deep excavations in a) Cylindrical augers b) Percussion boring c) Rotary boring d) Wash boring ii. When two column loads are unequal, which of the possible footing can be provided a) Strap footing b) Raft footing c) Trapezoidal combined footing d) Mat footing	2 M	2	L1
	b) Explain any four methods of Site exploration in details with a neat sketch	8 M		L2
02	a) Answer the following multiple choice questions and each carries 1 marks i. The plate load test is essentially a a) Laboratory test b) Field test c) Graphical method analysis d) None of the above	2 M	2	L1

	ii. The part of a building constructed below ground level is known as a) Plinth b) Superstructure c) Basement d) Foundation			
	b) Describe the method of loading test for determining the SBC of soil with a neat sketch	8 M		L2
03	a) Answer the following multiple choice questions and each carries 1 marks i. The foundations are placed below ground level to increase a) Strength b) Workability c) Stability of structure d) All the above ii. Which of the below is not a preliminary consideration for building a foundation? a) Bearing capacity of soil b) Ground water condition c) Settlement control d) Soil organisms	2 M	2	L1
	b) Expalin Isolated column footing and Combined footing in detail with a neat sketch	8 M		L2

CO1	Select suitable materials for buildings and adopt suitable construction techniques.
CO2	Decide suitable type of foundation based on soil parameters
CO3	Supervise the construction of different building elements based on suitability
CO4	Exhibit the knowledge of building finishes and form work requirements

Bloom's Taxonomy Level	
L1	Remembering
L2	Understanding
L3	Applying
L4	Analyzing
L5	Synthesizing
L6	Creating

Name & Signature of Course Coordinator

HOD Signature

ATME College of Engineering
Department of Civil Engineering

Subject Name: Building materials & Construction
Faculty Name: Srivathsa. H.U
Subject Code: 18CV34
IA Number: 1

CO1	Select suitable materials for buildings & adopt suitable construction techniques
CO2	Decide suitable type of foundation based on soil parameters
CO3	Supervise the construction of different building elements based on suitability
CO4	Exhibit the knowledge of building finishes & formwork requirements.
CO5	
CO6	

Revised Bloom's Taxonomy Levels
L1: Remembering L2: Understanding L3: Applying L4: Analyzing L5: Synthesizing L6: Evaluating

No	Solution	Marks	COs	BTL
1.	a) i) Greater than 100N/mm² ii) 20% 2×1 = → 2M	2M	1	L1
	b) Crushing strength :- For good building stone, crushing strength should be more than 100N/mm² Appearance :- Stone should have decent appearance. Durability :- It should be durable in nature Facility of dressing :- Should be easily to cut, carve, mould & dressed. Fracture :- For good building stone, fracture should be sharp, even bright & clear. Hardness :- For good building stone, hardness should be greater than 17. If it is in between 14 & 17 it is said to be medium & if it is between less than 14, it is said to be poor. Percentage wear :- For a good building stone, percentage wear should be less than 3% Specific gravity :- For a good building stone, specific gravity should be greater than 2.4 8×1 = → 8M	8M	1	L2

Srivathsa
Signature of Faculty

Signature of the HOD

ATME College of Engineering
Department of Civil Engineering

No	Solution	Marks	CO	BTL
2.	a) i) Specific gravity should be greater than 2.4 → 1×1 = 1M ii) Clear ringing sound.	2M	1	L1
	b) Manufacturing process of bricks	8M	1	L2
	i) Preparation of clay includes 4 operations Unearthing Digging Cleaning & weathering, Tempering			
	ii) Moulding :- The clay which is prepared on the above is sent for the moulding. Hand moulding :- If bricks are moulded manually & bricks manufactured is of small quantity hand moulding is adopted. iii) Machine moulding :- If bricks are moulded using machines & bricks manufactured is of large quantity machine moulding is adopted.			
	iii) Drying :- Bricks which are moulded needs to dried properly. If it is burnt directly without drying, cracks may appear on the surface. Different types of drying are Artificial drying, Circulation of air, drying yard, Tunnel.			
	iv) Burning :- In order to impart hardness & strength to the bricks, bricks have to be burnt properly which is carried out either by clamps or kilns. → 4×2 = 8M			

Signature of Faculty

Signature of the HOD

ATME College of Engineering
Department of Civil Engineering

No	Solution	Marks	COs	BTL

* Fill the remaining portion of aggregate with water & note down the weight (W_3) gms

* Empty the pycnometer & fill the pycnometer with water & note down the weight (W_4) gms.

Specific gravity = $\frac{(W_2 - W_1)}{(W_3 - W_1) - (W_2 - W_4)}$

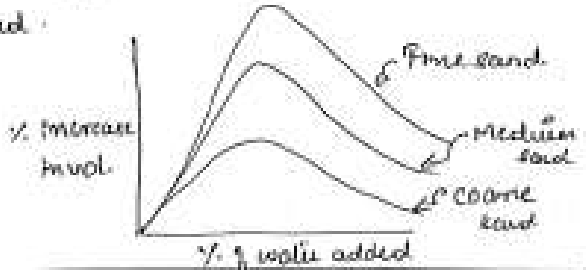
Bulking of sand is defined as the property by which of water it expands in volume when it is wet.

* Take about 200gms of dry sand & transfer to measuring jar & note down the initial volume.

* Transfer the same to a tray and add 1% of water by weight to the sample. Mix it thoroughly & again transfer the sample to measuring jar. note down the volume.

* Repeat the procedure by increasing the water content at the rate of 1% upto 3, 4, 5, 6% and so on until volume starts decreasing is observed

* Plot a graph of % increase in volume Vs % of water added.



Signature of Faculty

Signature of the HOD

ATME College of Engineering
Department of Civil Engineering

No	Solution	Marks	COs	BTL
3.	a) i) wood chips ii) < 4.75mm	8M	1	L1
	b) Classification of mortar based on binding materials Lime mortar :- If lime is a binding material used for preparing mortar mix it is called lime mortar. Lime may be of fat lime or hydrated lime. Surkhi mortar :- This type of mortar is prepared by using full surkhi material of sand in lime mortar is called surkhi mortar Cement mortar :- In this type of mortar, cement is used as a binding material. Various proportions of cement & sand in the range of 1:2 to 1:6 is used for the buildings. Guaged mortar :- To improve the quality of lime mortar, cement is mixed sometime added to it this process is called guaging. Gypsum mortar :- These mortars are prepared from gypsum binding materials such as building gypsum & anhydrate binding materials. → 4 x 2 = 8M	8M	1	L2
4.	a) i) Oil bottle ii) 2.2-2.6	2M	1	L1
	b) Specific gravity of an aggregate is the ratio of mass of solid to a given volume to the mass of equal volume of water at same temperature * Find the empty weight of pycnometer (W1) gms * Fill 1/3rd portion of pycnometer with the fine aggregate & note down the weight (W2) gms			

Signature of Faculty

Signature of the HOD

ATME College of Engineering
Department of Civil Engineering

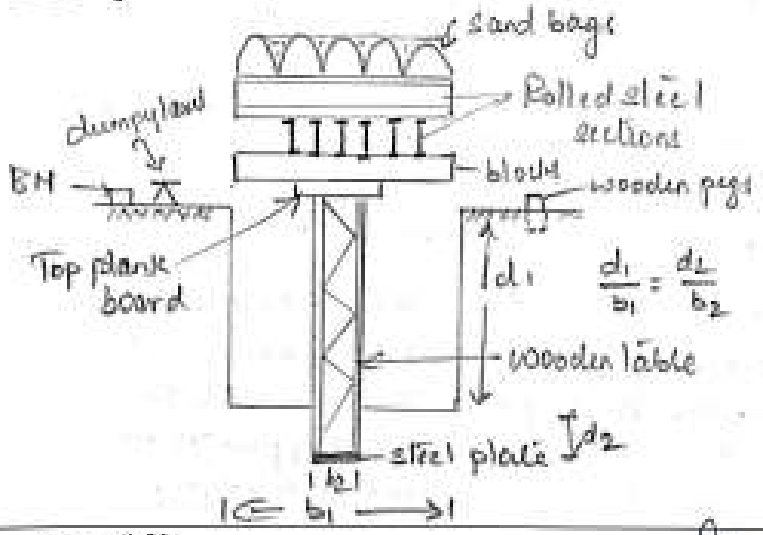
No	Solution	Marks	COs	BTL
	Part-B			
1.	a) i) Percussion boring ii) Trapezoidal combined footing 2:1:2	8M	2	L1
	b) Methods of exploration			
	i) Test pits :- A square pit, known as trial pit with side equal to 1.5m is excavated upto a depth at which hard soil is available & test pit is observed and each layer of soil is classified based on the type along with the depth	8M	2	L2
	ii) Probing :- It consists of driving 50mm & 60mm either a hollow tube or steel rod into the ground. A hollow tube consists of slit at the bottom. when the hollow tube is driven into the ground the material will stuck in that slit & hollow tube is withdrawn back. The material which is stucked in the slit is collected for testing. In case of steel rod, when it is inserted inside the ground, the material which is stucked at the top of rod is collected and tested.			
	iii) Sub surface sounding :- In that method, the resistance of soil with the depth is measured by means of a tool known as penetrometer. The penetrometer is driven into the ground with the help of weight 650N falling from 750mm No of blows required to drive the penetrometer to a depth of			

Signature of Faculty

Signature of the HOD

ATME College of Engineering
Department of Civil Engineering

No	Solution	Marks	COs	BTL
	300mm will be penetration resistance of soil.			
	iv) Test piles :- Some times test piles are driven into the ground to obtain the information of solid strata. 4x2 = 8m			
2	a) i) Field test ii) Foundation 2x1 = 2m	2M	2	L1
	b) Method of loading for determining the SBC of soil	8M	2	L2
	a. Steel plate — Size ranges from 3000 to 7500mm² & minimum thickness of 25mm			
	b. Platform — Consists of wooden table with four legs & a top plank			
	c. Wooden pegs — Used to maintain level of trench mark			
	d. Dumpy level — Levelling instrument			
	e. Rolled steel sections - Arranged in two layers			
	f. Sand bags :- Used for incremental loading			



Signature of Faculty

Signature of the HOD

ATME College of Engineering
ATME College of Engineering
Department of Civil Engineering

No	Solution	Marks	COs	BTL

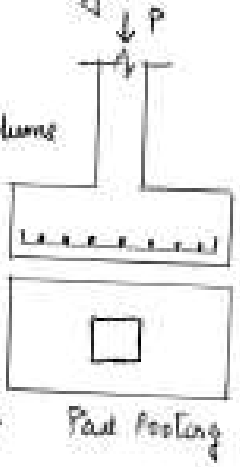
* A square pit is excavated with a side equal to 5 time width of square plate
* At the centre of pit, a square hole is made with dimensions same as square plate & steel plate is placed along with the platform.
* The amount of initial load is decided based on the soil.
* A dumpy level is used to record the settlement of steel plate
* Once the settlement ceases, load is increased by 5KN & corresponding settlement is recorded.
* A graph of settlement - load curve is plotted.

Bearing capacity = Max^M load / area of steel plate

SBC of soil = Bearing capacity / FOS.

8. a) i) Stability of structure ii) Soil organisms. 2x1 = 2M | 2M | 2 | L2

b) Isolated Column footing | 8M | 2 | L2



* Commonly used footing for RC columns
* Simple & economical
* Footing supports individual column.
* Adopted when column spacing is more
* Load on the footing is less &
* Soil has high SBC.

→ 4mm

Signature of Faculty

Signature of the HOD

ATME College of Engineering
Department of Civil Engineering

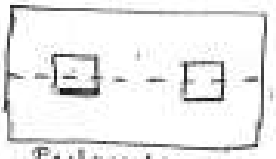
No	Solution	Marks	COs	BTL

Combined footing

A footing supports 2 or more columns & called combined footing. They are of 3 types

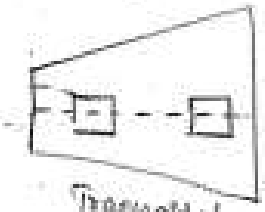
a) Rectangular combined footing
b) Trapezoidal combined footing
c) Combined column wall footing

If column carries equal loads, rectangular combined footing is adopted



Rectangular

If column carries unequal loads, Trapezoidal combined footing is adopted.



Trapezoidal

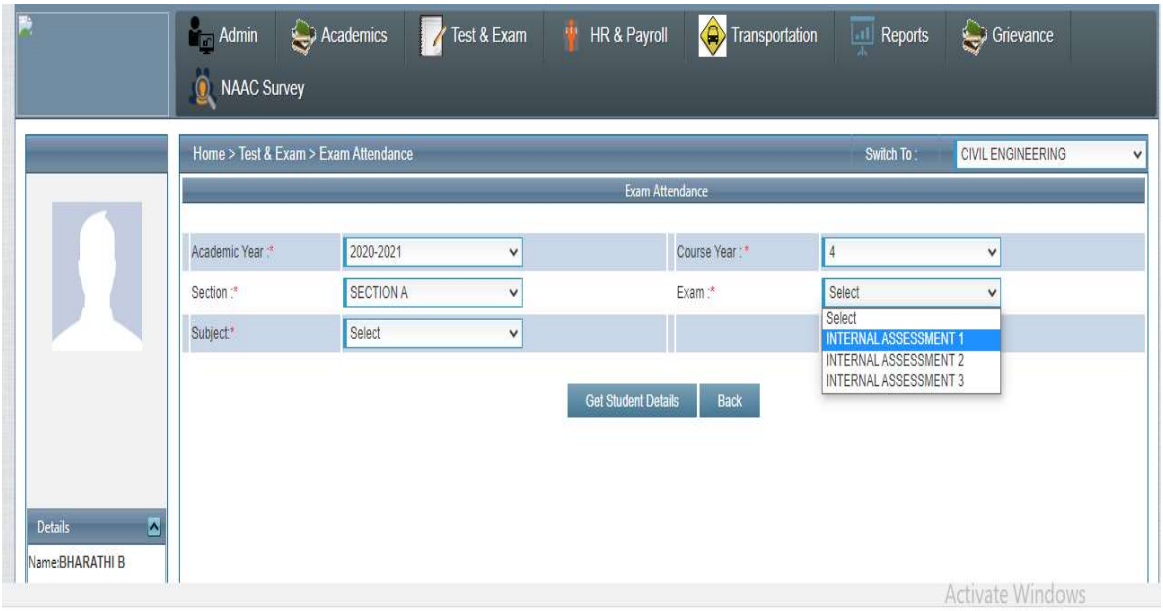
Signature of Faculty

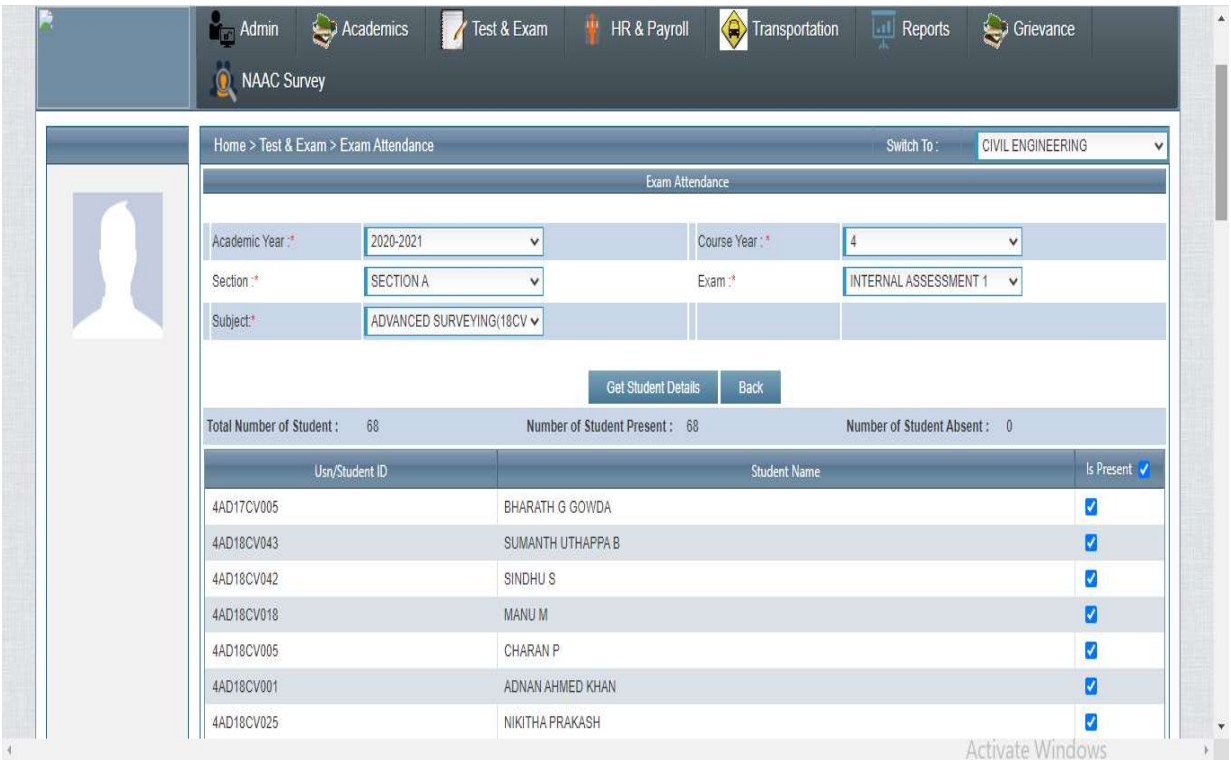
Signature of the HOD

❖ AIMS Screenshots of Test Marks

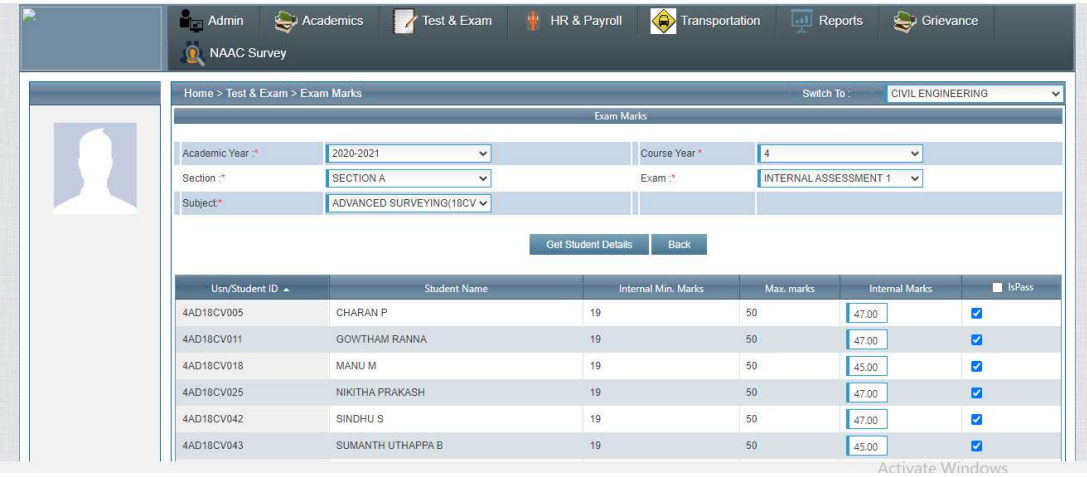
Scheme of Valuation is discussed with students and blue books are distributed to students.

Test marks is uploaded in AIMS Portal





DEPARTMENT OF CIVIL ENGINEERING



HOD

HOD
Department of Civil Engineering
ATME College of Engineering
Mysuru-570028

2.5 Evaluation Process and Reforms

Continuous Internal Evaluation (CIE) System

Department of Computer Science and Engineering

Mechanism of internal assessment is transparent and robust in terms of frequency and mode

The Department conducts three internal assessment tests at approximately 6 th, 12th and 14th week respectively.

- In 2017 scheme and 2018 schemes of VTU under CBCS, the weightage on Continuous Internal Evaluation (CIE) and Semester End Exams (SEE) is assigned as 40:60 ratios. The CIE is to be evaluated for 40 marks, in which CIE Test carries 30 marks and the remaining 10 marks will be awarded based on other parameters like assignments, quizzes, class tests etc as stipulated by VTU Regulation 18OB8.2.

- In a semester, three CIE Tests i.e. Test-1, Test-2 and Test-3 will be conducted for 50 marks each and average of three tests will be reduced to 30 marks to consider it as final CIE component.

- Test papers are set, evaluated and assessed by course teachers and the marks so obtained are share with students.

- Process for setting/selection of the question paper:

a. For each CIE Test, Minimum 02 sets of question papers shall be set for each course by the respective course teacher(s) along with scheme of evaluation and solution. The portions/syllabus to be covered will be decided at the beginning of the semester for the First test, and similarly the portion for the Second and Third Internal tests soon after the completion of Test-1 and Test-2 respectively.

b. HOD will pick 01 set and hand over to Test coordinator for printing. The Department EMS coordinator has to submit the selected question paper with scheme (approved by HOD) in sealed cover to the COE before three days of the commencement of the Internals Assessment. The EMS coordinator will further assist the exam cell for taking care of number of copies to be printed and the distribution to the allotted rooms.

c. While setting the question paper the course coordinator should take care to cover all COs and the RBT levels up to level-3 at least.

- Seating plan and table marking is followed even for internal assessment tests and it is displayed on the notice board along with the internal assessment time table.
- Immediately after the test, the course coordinator shall discuss the test paper in the class. The scheme and solution of the course to be evaluated is required to be displayed for student's notice.
- The evaluated blue books shall be made available to students to enable students to gauge their performance in the test.
- The marks to be updated if any changes. If there is a grievance from the student with regard to the marks awarded, the HOD can get it verified/valued by the second/subject expert to guarantee the justice. A final mark of each test is finally entered to AIMS for further needful.
- Within one week of completion of CIE Test, the Department Test Coordinators has to submit the CIE marks along with CIE Result Analysis to COE.

Department of Computer Science and Engineering

UNIVERSITY CALENDAR

Visvesvaraya Technological University

"Jnana Sangama" Belagavi-590018, Karnataka State, India

Dr. A. S. Deshpande B.E., M.Tech., Ph.D.
Registrar

Phone: (0831) 2498100
Fax: (0831) 2405467

Ref: VTU/BGM/SO7/2020-21/ 4162

Dated: 4 DEC 2020

NOTIFICATION

Subject: Revised Academic Calendar for ODD semester 2020-21(Tentative) regarding...

Reference: Hon'ble Vice-Chancellor Approval dated 02.12.2020

Revised Academic Calendar for III, V, and VII semesters of B.E./B.Tech./B.Plan./B.Arch., and IX semester of B.Arch., III & V semester of MCA, III semesters of MBA, M.Tech., and M.Arch., for the academic Year 2020-21 is hereby notified as enclosed.

The Principals of Affiliated, Constituent, and Autonomous Engineering Colleges are hereby informed to bring the contents of this Notification to the notice of all the concerned.

Sd/-

REGISTRAR

Encl: Revised Academic Calendar for odd semester of 2020-21 (Tentative)

To,

1. The Principals of all affiliated/ constituent /Autonomous Engineering Colleges under the ambit of VTU Belagavi.
2. The Chairpersons of all Departments, Centres for PG Studies in Belagavi, Kalaburgi, Muddenahalli, and Mysore.

Copy to:

1. To the Hon'ble Vice-Chancellor through the secretary to VC, VTU Belagavi for information
2. The Registrar (Evaluation), VTU Belagavi for information.
3. The Regional Directors (I/c) of all the regional offices of VTU for circulation.
4. The Special Officer CNC VTU Belagavi for uploading on VTU website
5. PS to Registrar VTU Belagavi
6. All the concerned Special Officer/s and Caseworker/s of the academic section, VTU, Belagavi

04.12.2020

REGISTRAR

Department of Computer Science and Engineering

Revised Academic Calendar of VTU, Belagavi for ODD Semester of 2020-21 (Tentative)

	I Sem B. E. / B. Tech. / B. Arch./B.Plan	I sem M.Tech./MBA /MCA/M.Arch.	III, V B. E. /B. Tech./B.Plan/ B.Arch & VII sem BPlan /BArch & IX Sem B. Arch.	VII Sem B. E. /B. Tech	III & V Sem MCA	III Sem MBA	III Sem M. Tech.	III Sem M. Arch.
Commencement of ODD Semester	14.12.2020	Will be announced later	01.09.2020	01.09.2020	01.09.2020	01.09.2020	01.09.2020	01.09.2020
Last Working day of ODD Semester	25.03.2021		16.01.2021	16.01.2021	16.01.2021	16.01.2021	16.01.2021	16.01.2021
Practical Examinations	29.03.2021 Onwards#		21.01.2021 Onwards#	21.01.2021 Onwards#	08.02.2021 Onwards#	--	21.01.2021 Onwards#	--
Theory Examinations	12.04.2021 To 30.04.2021		08.02.2021 To 27.03.2021	08.02.2021 To 27.03.2021	21.01.2021 To 06.02.2021	21.01.2021 To 19.02.2021	28.01.2021 To 13.02.2021	21.01.2021 To 06.02.2021
Internship			---	29.03.2021 To 10.04.2021	---	---	---	---
Internship Viva-Voce			---	---	---	---	15.02.2021 To 22.02.2021	---
Professional training / Organization study			---	---	---	22.02.2021 To 03.04.2021	---	---
Commencement of EVEN Semester	03.05.2021		29.03.2021	12.04.2021	15.02.2021	05.04.2021	23.02.2021	08.02.2021

NOTE:

- VII Semester B. E. / B. Tech. students shall have to undergo **Internship** as per circular of University **VTU/Aca/2019-20/85, dated 12.05.2020.**
- I Semester B. E/ B. Tech / B. Arch Students shall compulsorily undergo **Induction Program** for 01 Weeks.
- The classroom sessions for all the semesters would be in **ONLINE mode/blended mode** until further orders.
- The Institute needs to function for **six days** a week with additional hours **(Saturday is a full working day).**
- The faculty/staff shall be available to undertake any work assigned by the university.
- If any of the above dates are declared to be a holiday then the corresponding event will come into effect on the next working day.
- (#) Notification regarding the Calendar of Events relating to the conduct of **University Examinations** will be issued by the Registrar (Evaluation) from time to time.
- Academic Calendar may be modified based on guidelines/directions issued in the future by MHRD/UGC/AICTE/State Government.
- Revised Academic Calendar is also applicable for **Autonomous Colleges.**
- The MBA students are permitted to carry out **project work** in blended mode (ONLINE/OFFLINE). More emphasis on OFFLINE mode wherever feasible.

04-12-2020
REGISTRAR

ACADEMIC CALENDER

ACADEMIC CALENDER AND ADHERENCE

ATME College of Engineering — Department of Computer Science & Engineering

Adherence to Academic Calendar 2020 – 2021 (ODD SEM)

Month	Sl. No	Planned Date	Event/Activities	Executed Date	Remarks
September	1	01-09-2020	3rd , 5th & 7th Semster : commencement of Online Classes	01-09-2020	EXECUTED
October	2	05-10-2020	Project Phase-I Project Batch Formation	05-10-2020	EXECUTED
	3	8-10-2020, 9-10-2020, 12-10-2020	First Internals for 3rd, 5th and 7th Semester	8-10-2020, 9-10-2020, 12-10-2020	EXECUTED
November	4	11-11-2020, 12-11-2020, 13-11-2020	Second Internals for 3rd, 5th and 7th Semester	11-11-2020, 12-11-2020, 13-11-2020	EXECUTED
	5	19-11-2020	Technical Talk on "Pervasive Computing"	19-11-2020	EXECUTED
	6	26-11-2020, 27-11-2020	Workshop on " Front end and Database Design"	23-11-2020 , 24-11-2020	preponed and was executed
	7	28-11-2020	Webinar on " Natural Language Processing"	28-11-2020	EXECUTED
December	8	28-12-2020, 29-12-2020, 30-12-2020	Third Internals for 3rd, 5th and 7th Semester	28-12-2020, 29-12-2020, 30-12-2020	EXECUTED
January	9	5-01-2021 to 8-01-2021	Project Phase-I Project Synopsis Review Presentation	5-01-2021 to 8-01-2021	EXECUTED
	10	11-01-2021 to 13-01-2021	Improvement IA for 3rd, 5th and 7th Semester	11-01-2021 to 13-01-2021	EXECUTED

	11	15-01-2021, 16-01-2021	Laboratory Internals for 5th and 7th Semester	15-01-2021, 16-01-2021	EXECUTED
	12	27-01-2021 to 30-01-2021	First Internals for Lateral Entry	27-01-2021 to 30-01-2021	EXECUTED
February	13	17-02-2021 to 19-02-2021	Second Internals for Lateral Entry Students	17-02-2021 to 19-02-2021	EXECUTED
	14	25-02-2021 to 27-02-2021	Laboratory Internals for 3rd Semester	25-02-2021 to 27-02-2021	EXECUTED
	15	25-02-2021 to 27-02-2021	Third Internals for Lateral Entry Students	25-02-2021 to 27-02-2021	EXECUTED

HOD

HOD
Dept. of Computer Science & Engg
ATME College of Engineering
Mysuru-570028

SAMPLE TEST PROCESS: 2020-2021

Department of Computer Science and Engineering

During the pandemic, IA Test was conducted through virtual platform in Microsoft Teams

AY: 2020-2021 [Odd and Even Semester]

During the pandemic special care was taken to keep the Test process robust.

Invigilators were allotted who monitored the entire process of test conduction.

1. Test Schedule announcement to students through circular
2. Scrutiny of IA-QP as previously followed.
3. Student Group allotment in the Microsoft Teams channel.
4. Invigilators allotment in MS Team Group
5. During the entire Test process, Students have to keep the camera on.
6. Test paper will be deployed in MS Teams Channel using MS Teams Form
7. Test process was video documented and monitored by Invigilator with the assistance of Test coordinator. Dean Academics, Head of the Department, Test coordinator monitored the process by visiting all the MS Teams channels. Instructors were allotted in every group to monitor any technical issues
8. Students entered Name, USN, Signature in every sheet and uploaded the Test script in the submission form provided.

Online Test Process

AY: 2020-2021[ODD Semester]

A. Vertical Heads and Course List mapped

ATME College of Engineering
Department of Computer Science & Engineering

List of Vertical Head for the AY: 2020-21

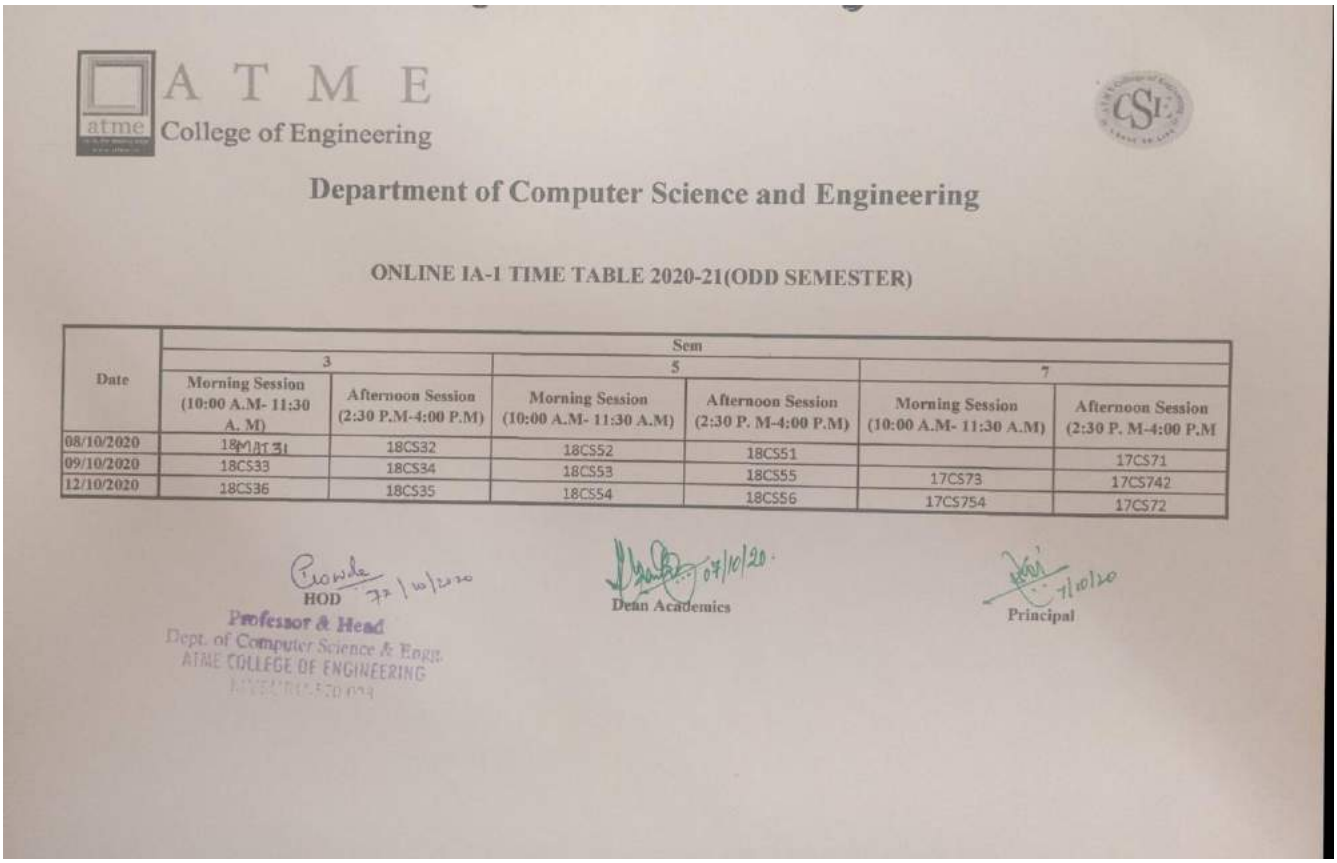
SL. No.	Domains	Subjects	Vertical heads
1.	Programming	18CPS13(CPS), 18CS55(PYTHON), 18CS45(OOC),17CS71(WEB), 18CS651(MAD)	Mr. Anil Kumar B H
2.	Professional Core-I	18CS32(DS), 18CS53(DBMS), 18CS54(ATC), 18CS61(SS & CD), 18CS62(CG), 18CS641(DM), 17CS72(ACA), 17CS82(BIG DATA),	Mr. Anil Kumar C J
3.	Professional Core-II	18CS35(SE), 18CS42(DAA), 18CS43(OS), 18CS56(UNIX), 17CS73(ML), 17CS742(CCA), 17CS754(SAN), 17CS833(NM)	Dr. J V Gorabal
4.	Multidisciplinary	18CS33(ADE), 18CS44(MC), 18CS52(CN), 18CS46(DC), 17CS81(IOT), 17CS743(INS), 18CS51(ME), 18CS36(DMS)	Mrs. Nasreen Fathima

Roles:

1) Reviewing the Course Outcomes
2) Reviewing of CO-PO and CO-PSO correlation
3) Scrutinizing the Test Question paper

HOD
HOD
Dept. of Computer Science & Engg
ATME College of Engineering
Mysuru-570028

B. IA-1 Time Table



ATME College of Engineering

Department of Computer Science and Engineering

ONLINE IA-1 TIME TABLE 2020-21(ODD SEMESTER)

Date	Sem					
	3		5		7	
	Morning Session (10:00 A.M- 11:30 A. M)	Afternoon Session (2:30 P.M-4:00 P.M)	Morning Session (10:00 A.M- 11:30 A.M)	Afternoon Session (2:30 P. M-4:00 P.M)	Morning Session (10:00 A.M- 11:30 A.M)	Afternoon Session (2:30 P. M-4:00 P.M
08/10/2020	18MAT31	18CS32	18CS52	18CS51		17CS71
09/10/2020	18CS33	18CS34	18CS53	18CS55	17CS73	17CS742
12/10/2020	18CS36	18CS35	18CS54	18CS56	17CS754	17CS72

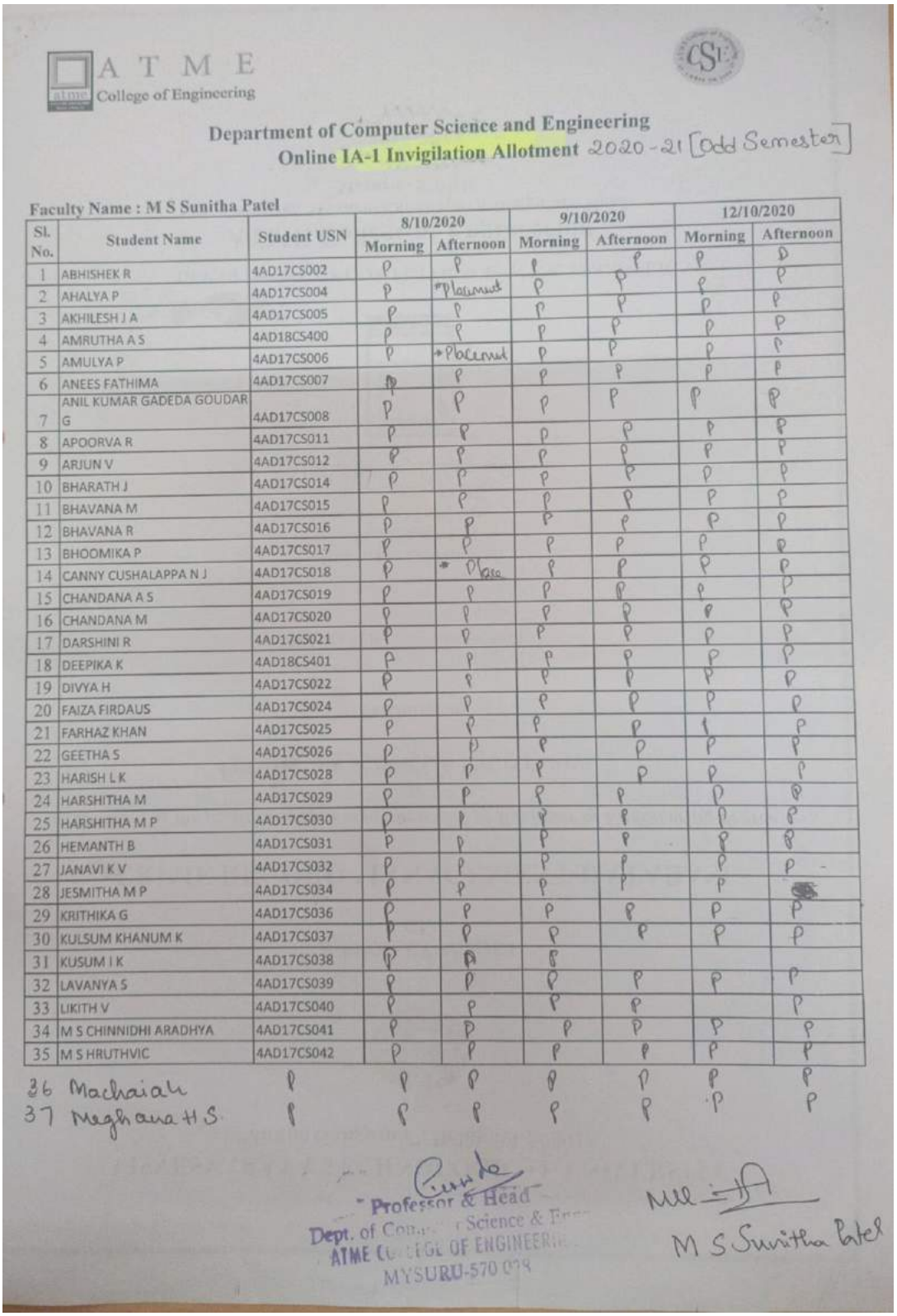
HOD 7/10/2020

Professor & Head
Dept. of Computer Science & Engg.
ATME COLLEGE OF ENGINEERING

Dean Academics 07/10/20

Principal 7/10/20

C. IA INVIGILATION ALLOTMENT & STUDENT ATTENDANCE SHEET



ATME College of Engineering

Department of Computer Science and Engineering

Online IA-1 Invigilation Allotment 2020-21 [Odd Semester]

Faculty Name : M S Sunitha Patel

Sl. No.	Student Name	Student USN	8/10/2020		9/10/2020		12/10/2020	
			Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
1	ABHISHEK R	4AD17CS002	P	P	P	P	P	P
2	AHALYA P	4AD17CS004	P	*Placement	P	P	P	P
3	AKHILESH J A	4AD17CS005	P	P	P	P	P	P
4	AMRUTHA A S	4AD18CS400	P	P	P	P	P	P
5	AMULYA P	4AD17CS006	P	*Placement	P	P	P	P
6	ANEES FATHIMA	4AD17CS007	P	P	P	P	P	P
7	ANIL KUMAR GADEDA GOUDAR G	4AD17CS008	P	P	P	P	P	P
8	APOORVA R	4AD17CS011	P	P	P	P	P	P
9	ARJUN V	4AD17CS012	P	P	P	P	P	P
10	BHARATH J	4AD17CS014	P	P	P	P	P	P
11	BHAVANA M	4AD17CS015	P	P	P	P	P	P
12	BHAVANA R	4AD17CS016	P	P	P	P	P	P
13	BHOOMIKA P	4AD17CS017	P	P	P	P	P	P
14	CANNY CUSHALAPPA N J	4AD17CS018	P	* Place	P	P	P	P
15	CHANDANA A S	4AD17CS019	P	P	P	P	P	P
16	CHANDANA M	4AD17CS020	P	P	P	P	P	P
17	DARSHINI R	4AD17CS021	P	P	P	P	P	P
18	DEEPIKA K	4AD18CS401	P	P	P	P	P	P
19	DIVYA H	4AD17CS022	P	P	P	P	P	P
20	FAIZA FIRDAUS	4AD17CS024	P	P	P	P	P	P
21	FARHAZ KHAN	4AD17CS025	P	P	P	P	P	P
22	GEETHA S	4AD17CS026	P	P	P	P	P	P
23	HARISH L K	4AD17CS028	P	P	P	P	P	P
24	HARSHITHA M	4AD17CS029	P	P	P	P	P	P
25	HARSHITHA M P	4AD17CS030	P	P	P	P	P	P
26	HEMANTH B	4AD17CS031	P	P	P	P	P	P
27	JANAVI K V	4AD17CS032	P	P	P	P	P	P
28	JESMITHA M P	4AD17CS034	P	P	P	P	P	P
29	KRITHIKA G	4AD17CS036	P	P	P	P	P	P
30	KULSUM KHANUM K	4AD17CS037	P	P	P	P	P	P
31	KUSUM I K	4AD17CS038	P	A	P			
32	LAVANYA S	4AD17CS039	P	P	P	P	P	P
33	LIKITH V	4AD17CS040	P	P	P	P		P
34	M S CHINNIDHI ARADHYA	4AD17CS041	P	P	P	P	P	P
35	M S HRUTHVIC	4AD17CS042	P	P	P	P	P	P
36	Machaiah		P	P	P	P	P	P
37	Meghana H S		P	P	P	P	P	P

Professor & Head
Dept. of Computer Science & Engg.
ATME College of Engineering
MYSURU-570 028

M S Sunitha Patel

D. SAMPLE IA QUESTION PAPER

ATME College of Engineering

Department of Computer Science and Engineering

FIRST INTERNALASSESMENT

COURSE	:	Machine Learning	TIME	:	10.00- 11.30
COURSE CODE	:	17CS73	DATE	:	09-10-2020
SEM/SEC	:	VII A & B	MAX. MARKS	:	50

	PART-A-Answer any three full Questions	Marks	COs	BTL
01.	**a) Multiple Choice Questions**	1M		
	(I) ML is a field of AI consisting of learning algorithms that _____ A. Improve their performance B. At executing some task C. Over time with experience D. All of the above			
	(II) From the picture, what kind of programming is it? A. Traditional Programming B. Machine Learning C. Modern Programming D. Traditional Learning	1 M	1	1
	b) Explain in detail all the steps involved in designing a learning system.	8 M		2
02.	**a) Multiple Choice Questions**	1M		
	(I) A computer program is said to learn from experience E with respect to some task T and some performance measure P if its performance on T, as measured by P, improves with experience E. Suppose we feed a learning algorithm a lot of historical weather data, and have it learn to predict weather. In this setting, **what is T?** A. The weather prediction task. B. None of these. C. The probability of it correctly predicting a future date's weather. D. The process of the algorithm examining a large amount of historical weather data.		1	1
	(II) Final design of the Learning system consists of A. Experiment Generator B. Generalizer C. Critic D. Performance System	1M		

ATME College of Engineering

Department of Computer Science and Engineering

	E. All of the above			
	b) Illustrate Candidate-Elimination algorithm on the following data *Origin* | *Manufacturer* | *Color* | *Decade* | *Type* | *Example Type* Japan | Honda | Blue | 1980 | Economy | Positive Japan | Toyota | Green | 1970 | Sports | Negative Japan | Toyota | Blue | 1990 | Economy | Positive USA | Chrysler | Red | 1980 | Economy | Negative Japan | Honda | White | 1980 | Economy | Positive	8 M		2
03.	**a) Multiple Choice Questions** (I) Find-S Algorithm is guaranteed to output the_____ hypothesis A. Specific B. General C. Consistent D. Inonsistent (II) The applications of Machine Learning are _____ A. Learning to recognize spoken words B. Learning to play world-class backgammon C. Learning to classify new astronomical structures D. All of the above.	1M 1M	1	1
	b) Explain the inductive biased hypothesis space, unbiased learner and the futility of Bias Free Learning. Describe the three types of learner.	8 M		2
04.	**a) Multiple Choice Questions** (I) Version space consists of _____ A. subset of hypotheses from H B. Specific hypothesis C. General Hypothesis D. All of the above (II) The '?' in Candidate Elimination Algorithm reperesents _____ A. No value B. All values C. Any value D. Specific Value	1 M 1M	1	1
	b) Outline Concept learning as search with respect to General to specific ordering of hypothesis.	8 M		2

ATME College of Engineering

Department of Computer Science and Engineering

	PART-B-Answer any two full Questions	Marks	COs	BTL
05.	**a) Multiple Choice Questions** (I)The decision tree reaches its decision by _____ a) Single test b) Two test c) Sequence of test d) No test (II) Decision trees are an algorithm for which machine learning task? a) clustering b) dimensionality reduction c) classification d) regression	2 M	2	1
	b) What do you mean by Gain and Entropy? How is it used to build the Decision tree in algorithm? Illustrate using an example.	8 M		1
06.	**a) Multiple Choice Questions** (I) What is Decision Tree? A. Flow-Chart B. Structure in which internal node represents test on an attribute, each branch represents outcome of test and each leaf node represents class label C. Flow-Chart & Structure in which internal node represents test on an attribute, each branch represents outcome of test and each leaf node represents class label D. None of the mentioned (II)_____ are the Decision Tree Learning Algorithms A. ID3 B. C4.5 C. ASSISTANT D. All of the above	2 M	2	1
	b) (I) What are appropriate problems for Decision tree learning? (II) Explain the following with examples: Decision Tree and Decision Tree Representation.	5M 3M		2
07.	**a) Multiple Choice Questions** (I)Which of the following are the advantage/s of Decision Trees? A. Possible Scenarios can be added B. Use a white box model, If given result is provided by a model C. Worst, best and expected values can be determined for different scenarios D. All of the mentioned	2 M	2	1

A T M E
atme College of Engineering

Department of Computer Science and Engineering

(II) The entropy is 0 if all members of S belong _____

A. to the same class

B. when the collection contains an equal number of positive and negative examples

C. If the collection contains unequal numbers of positive and negative examples

D. None of the above

b) Consider the following set of training examples: 8 M

Instance	Classification	A1	A2
1	+	T	T
2	+	T	T
3	-	T	F
4	+	F	F
5	-	F	T
6	-	F	T

What is the entropy of this collection of training examples with respect to the target function classification?

What is the information gain of a2 relative to these training examples? 2

CO1	Discuss basics of machine learning and concept learning.
CO2	Gain the knowledge on decision tree learning.
CO3	Explain neural networks for problems that appear in machine learning.
CO4	Understand theory of probability and statistics related to machine learning and Illustrate Bayes classifier
CO5	Recall the problems for machine learning. And select the either supervised, unsupervised or reinforcement learning.

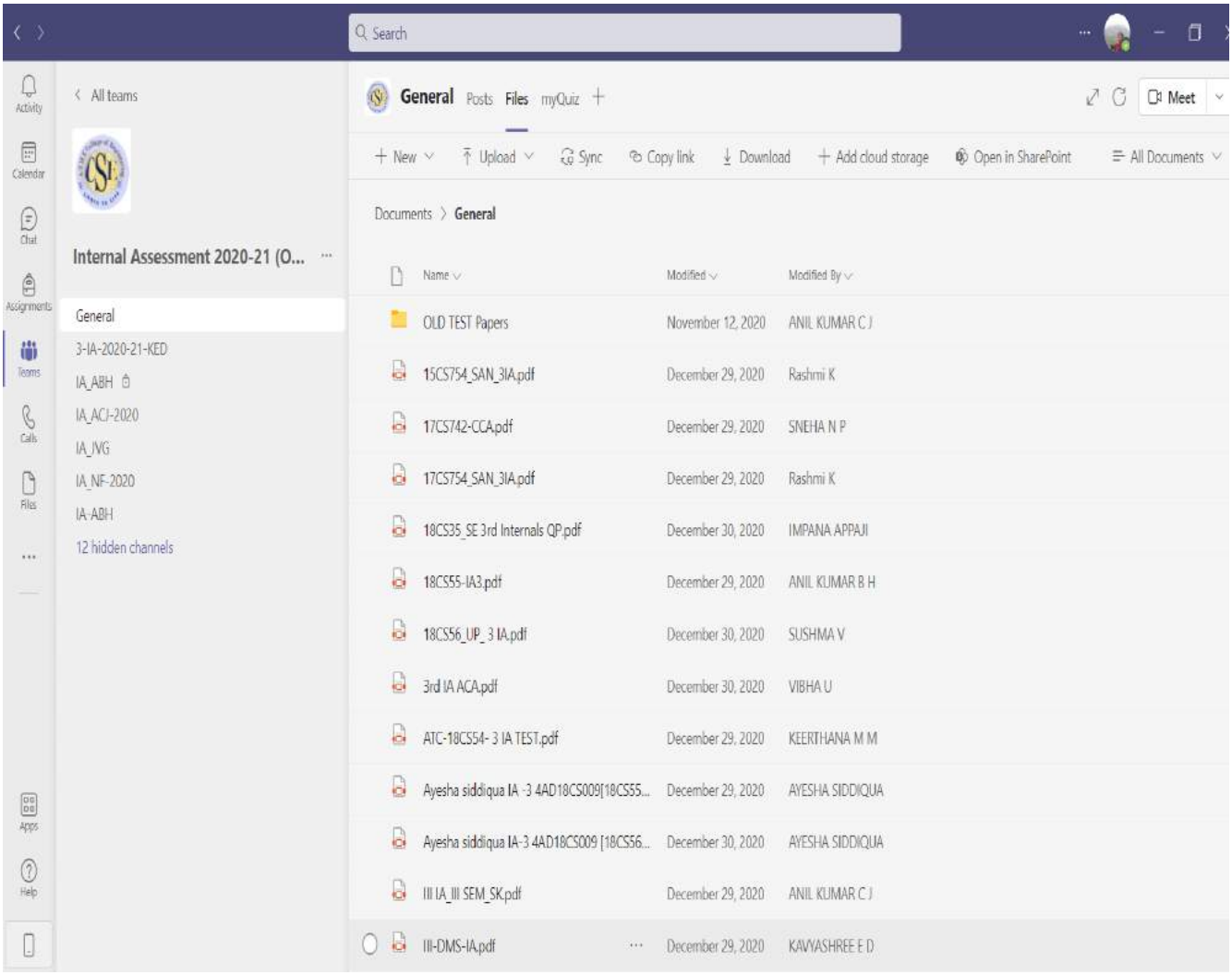
Name & Signature of Course Coordinator
M S SUNITHA PATEL

HoD Signature 8/10/2020

Bloom's Taxonomy Level	
L1	Remembering
L2	Understanding
L3	Applying
L4	Analyzing
L5	Evaluating
L6	Creating

Department of Computer Science and Engineering

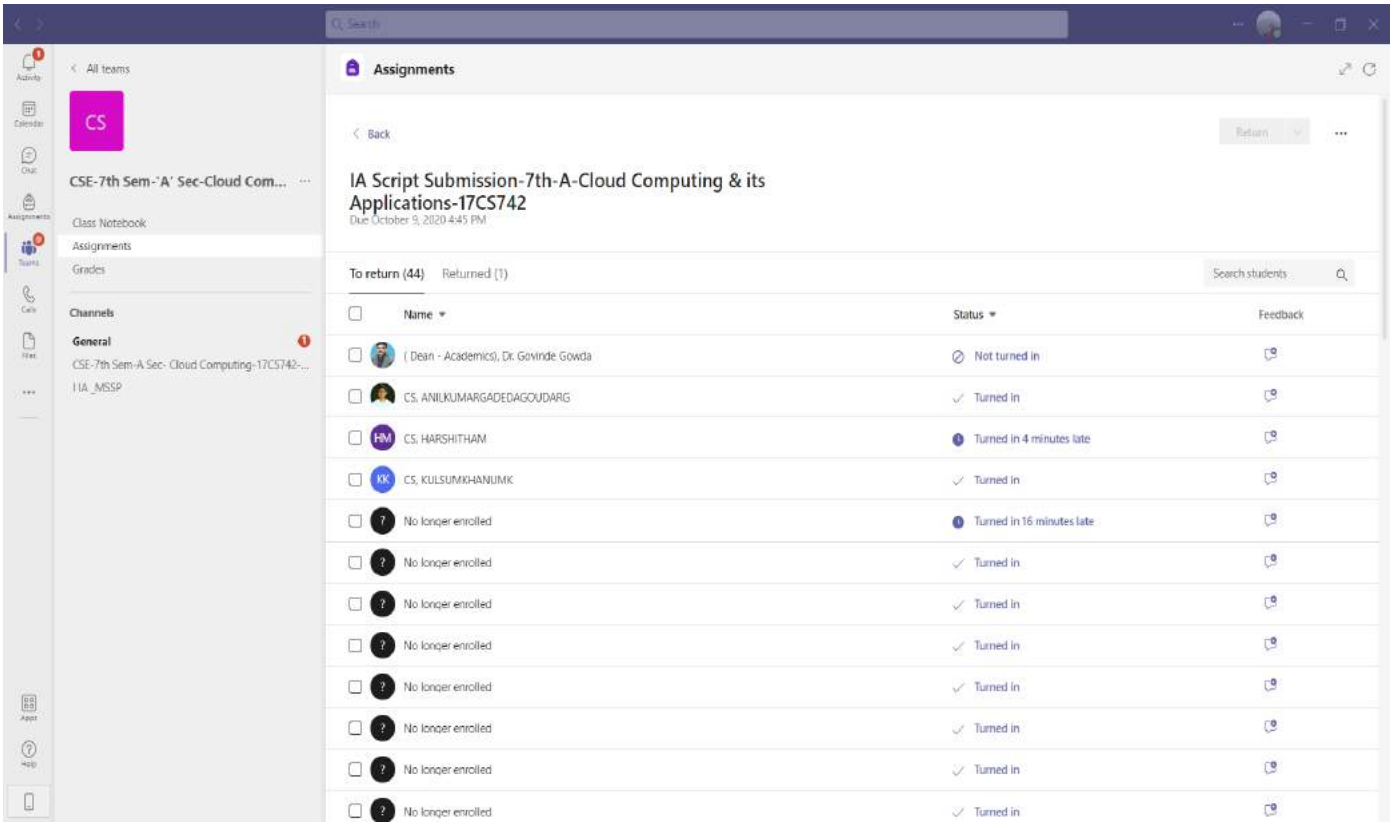
E. The IA co-ordinator will deploy the selected IA question paper out of Pattern A and B by Dept. Head in the Online IA platform



HOD

HOD
Dept. of Computer Science & Engg
ATME College of Engineering
Mysuru-570028

F. The respective course co-ordinator will share the path to students for uploading the scanned copy of IA answer scripts



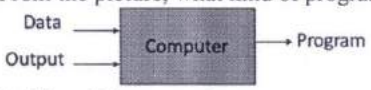
G. IA QP and Scheme

ATME College of Engineering

Department of Computer Science and Engineering

FIRST INTERNALASSESMENT

COURSE	:	Machine Learning	TIME	:	10.00- 11.30
COURSE CODE	:	17CS73	DATE	:	09-10-2020
SEM/SEC	:	VII A & B	MAX. MARKS	:	50

	PART-A-Answer any three full Questions	Marks	COs	BTL
01.	**a) Multiple Choice Questions**	1M		
	(I) ML is a field of AI consisting of learning algorithms that _____ A. Improve their performance B. At executing some task C. Over time with experience D. All of the above			
	(II) From the picture, what kind of programming is it?  A. Traditional Programming B. Machine Learning C. Modern Programming D. Traditional Learning	1 M	1	1
	b) Explain in detail all the steps involved in designing a learning system.	8 M		2
02.	**a) Multiple Choice Questions**	1M		
	(I) A computer program is said to learn from experience E with respect to some task T and some performance measure P if its performance on T, as measured by P, improves with experience E. Suppose we feed a learning algorithm a lot of historical weather data, and have it learn to predict weather. In this setting, **what is T?** A. The weather prediction task. B. None of these. C. The probability of it correctly predicting a future date's weather. D. The process of the algorithm examining a large amount of historical weather data.		1	1
	(II) Final design of the Learning system consists of A. Experiment Generator B. Generalizer C. Critic D. Performance System	1M		

ATME College of Engineering

Department of Computer Science and Engineering

	E. All of the above			
	b) Illustrate Candidate-Elimination algorithm on the following data *Origin* | *Manufacturer* | *Color* | *Decade* | *Type* | *Example Type* Japan | Honda | Blue | 1980 | Economy | Positive Japan | Toyota | Green | 1970 | Sports | Negative Japan | Toyota | Blue | 1990 | Economy | Positive USA | Chrysler | Red | 1980 | Economy | Negative Japan | Honda | White | 1980 | Economy | Positive	8 M		2
03.	**a) Multiple Choice Questions** (I) Find-S Algorithm is guaranteed to output the_____ hypothesis A. Specific B. General C. Consistent D. Inonsistent (II) The applications of Machine Learning are _____ A. Learning to recognize spoken words B. Learning to play world-class backgammon C. Learning to classify new astronomical structures D. All of the above.	1M 1M	1	1
	b) Explain the inductive biased hypothesis space, unbiased learner and the futility of Bias Free Learning. Describe the three types of learner.	8 M		2
04.	**a) Multiple Choice Questions** (I) Version space consists of _____ A. subset of hypotheses from H B. Specific hypothesis C. General Hypothesis D. All of the above (II) The '?' in Candidate Elimination Algorithm reperesents _____ A. No value B. All values C. Any value D. Specific Value	1 M 1M	1	1
	b) Outline Concept learning as search with respect to General to specific ordering of hypothesis.	8 M		2

A T M E
atme College of Engineering

Department of Computer Science and Engineering

	PART-B-Answer any two full Questions	Marks	COs	BTL
05.	**a) Multiple Choice Questions** (I)The decision tree reaches its decision by _____ a) Single test b) Two test c) Sequence of test d) No test (II) Decision trees are an algorithm for which machine learning task? a) clustering b) dimensionality reduction c) classification d) regression	2 M	2	1
	b) What do you mean by Gain and Entropy? How is it used to build the Decision tree in algorithm? Illustrate using an example.	8 M		1
06.	**a) Multiple Choice Questions** (I) What is Decision Tree? A. Flow-Chart B. Structure in which internal node represents test on an attribute, each branch represents outcome of test and each leaf node represents class label C. Flow-Chart & Structure in which internal node represents test on an attribute, each branch represents outcome of test and each leaf node represents class label D. None of the mentioned (II)_____ are the Decision Tree Learning Algorithms A. ID3 B. C4.5 C. ASSISTANT D. All of the above	2 M	2	1
	b) (I) What are appropriate problems for Decision tree learning? (II) Explain the following with examples: Decision Tree and Decision Tree Representation.	5M 3M		2
07.	**a) Multiple Choice Questions** (I)Which of the following are the advantage/s of Decision Trees? A. Possible Scenarios can be added B. Use a white box model, If given result is provided by a model C. Worst, best and expected values can be determined for different scenarios D. All of the mentioned	2 M	2	1

A T M E
atme College of Engineering

Department of Computer Science and Engineering

(II) The entropy is 0 if all members of S belong _____

A. to the same class

B. when the collection contains an equal number of positive and negative examples

C. If the collection contains unequal numbers of positive and negative examples

D. None of the above

b) Consider the following set of training examples: 8 M

Instance	Classification	A1	A2
1	+	T	T
2	+	T	T
3	-	T	F
4	+	F	F
5	-	F	T
6	-	F	T

What is the entropy of this collection of training examples with respect to the target function classification?

What is the information gain of a2 relative to these training examples? 2

CO1	Discuss basics of machine learning and concept learning.
CO2	Gain the knowledge on decision tree learning.
CO3	Explain neural networks for problems that appear in machine learning.
CO4	Understand theory of probability and statistics related to machine learning and Illustrate Bayes classifier
CO5	Recall the problems for machine learning. And select the either supervised, unsupervised or reinforcement learning.

Name & Signature of Course Coordinator
M S SUNITHA PATEL

HoD Signature 8/10/2020

Bloom's Taxonomy Level	
L1	Remembering
L2	Understanding
L3	Applying
L4	Analyzing
L5	Evaluating
L6	Creating

ATME College of Engineering

Department of Computer Science & Engineering

SCHEME AND SOLUTION
ACADEMIC YEAR 2020-2021 (ODD SEM)
INTERNAL ASSESSMENT –I

Subject: Machine Learning **Subject Code:** 17CS73 **Sem:** 7 A

CO1	Understand Machine learning and problems that can be handled by ML
CO2	Outline the concepts of Decision Tree learning
CO3	Illustrate Artificial Neural Networks and its issues
CO4	Analyze theory of probability & Statics related to Bayes classifier, Bayesian Belief Networks, etc
CO5	Explain/Evaluate instance based and reinforcement learning algorithms and compare learning algorithms

Bloom's Taxonomy Levels
L1: Remembering L2: Understanding L3: Applying L4: Analyzing L5: Evaluating L6: Creating

Question No	Solution	Marks Allotted	Mapped CO's	BTL
1a.	i) ALL of the Above ii) Traditional Programming.	2m		1
1b	Steps involved in Designing a Learning system. (a) Choosing the training experience. (b) Choosing the target function. (c) Choosing a representation for the target function. (d) Choosing the function approximation algorithm. (e) final design. (a) Choosing the training experience • This type of training experience will decide on success or failure of the learner • First key attribute is weather the training experience provides direct or indirect feedback.		1	

Question No	Solution	Marks Allotted	Mapped CO's	BTL
	• Direct: Individual checkers board states and correct move for each. • Indirect: Final out comes for games Played. • Credit assignment: Determines the degree to which each move in the Sequence deserve credit Second attribute. of the training example is learner controlling the sequence of training examples. (a) Learner waits for teacher (b) Learner asks the teacher (c) Learner learns itself with no teacher Third attribute. How well the distribution of examples is made, how is the Performace measured over this. Checkers game { Performance TOSK - T P: Percent of games system wins. Experience E : games played to itself (2) Choosing target experience. • The next design choice is to determine exactly what type of knowledge will be learned and how this will be used by the performance program.	2m		

Question No	Solution	Marks Allotted	Mapped CO's	BTL
	In checkers program.			
	1) Let us begin with a checkers playing program that can generate the legal moves from any boardstate			
	2) The program needs only to learn how to choose the best move from these legal move.			
	3) Choosing of best move, for any given board state.			
	4) choose move.	2m		
	5) choose move $B \rightarrow M$ to indicate that this function accepts as input any board from the set of legal board states B and produces as output some move from set of legal move M.			
	6) An alternative target function is the evolution that assigns a numerical score to any given board state. target function $V \rightarrow B \rightarrow R$ V maps any legal board state from the set B to some real value			
	7) choosing Representation of target function			
	let us choose a simple representation			
	For any given board state, Function V will be calculated as Linear Combination			

Question No	Solution	Marks Allotted	Mapped CO's	BTL

x_1: the number of black pieces on the board.

x_2: Red pieces on board

x_3: black pieces on board

x_4: red kings on board

x_5: the number of black pieces threatened by red.

x_6: red pieces threatened by black.

$V : B \rightarrow R$: Target function.

$V'(b) : w_0 + w_1 x_1 + w_2 x_2 + w_3 x_3 + w_4 x_4 + w_5 x_5 + w_6 x_6$

Choosing the function approximation Algorithm — 3m

$\langle b, V_{train}(b) \rangle$

$V_{train}(b)$ training value to

$\langle b, V_{train}(b) \rangle = \langle \langle x_1 = 3, x_2 = 0, x_3 = 1, x_4 = 0, x_5 = 0, x_6 = 0 \rangle +100 \rangle$

Estimating values.

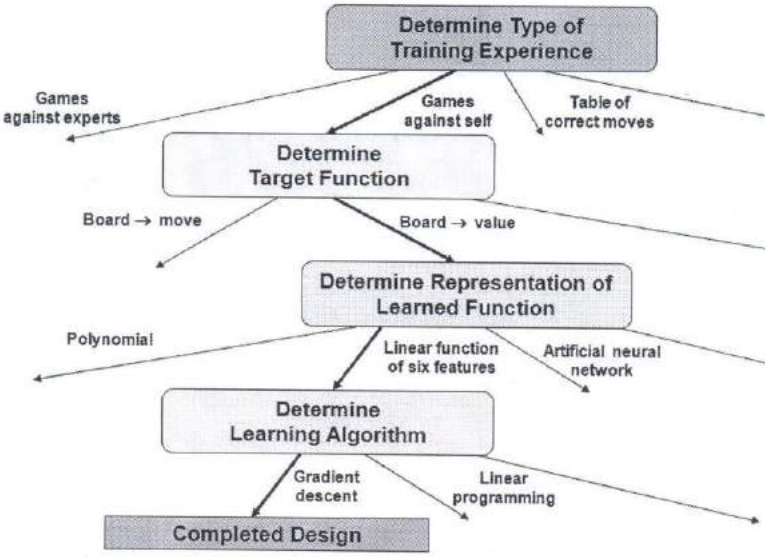
$V_{train}(b) \leftarrow \hat{V}(Successor(b))$

Adjusting weights

$E = \sum_{\langle b, V_{train}(b) \rangle} (V_{train}(b) - \hat{V}(b))^2$

Question No	Solution	Marks Allotted	Mapped CO's	Mapped PO's	BTL
5	Final Design.				

Design Choices for Learning to Play Checkers



1M

10M

Question No	Solution	Marks Allotted	Mapped CO's	BTL
2	a i) The weather prediction task ii) All of the above	2m		
	b) candidate Elimination Algorithm.			
	① Positive example <Japan, Honda, Blue, 1980, Economy> S = {<Japan, Honda, Blue, 1980, Economy> Initialize G to Singleton G = {<?, ?, ?, ?, ?>}	2m		1
	② Negative example <Japan, Toyota, Green, 1970, Sports> S = {<Japan, Honda, Blue, 1980, Economy>		1	
	G = {<?, Honda, ?, ??>, <?, ? Blue, ??> <??? 1980> <???? economy>	2m		
	G = <{?, ?, ?, ?, ?, ?}>			
	③ Positive example <Japan, Toyota, Blue, 1990, economy> S = {<Japan, ?, Blue, ?, Economy>	2m		
	G → {<?, ?, Blue, ?, ?> <???? economy>			

Question No	Solution	Marks Allotted	Mapped CO's	BTL
	(4) Negative example <USA, Chrysler, Red, 1980, Economy> S = {<Japan, ?, Blue, ?, Economy>} G = {<?, ?, Blue, ?, ?>, <Japan, ?, ?, ?, ?>}			
	(5) Positive example. <Japan, Honda, White, 1980, Economy> S = {<Japan, ?, ?, ?, Economy>} 2m G = {<Japan, ?, ?, ?, ?>}	10m		
3a	i) Specific ii) All of the above.	2m		
3b	A Biased Hypothesis Space. • Suppose we wish to assure that the hypothesis space contains the unknown target concept. • The obvious solution is to enrich the hypothesis space to include every possible hypothesis. • The enjoy sport example in which we restricted the hypothesis space to include only attribute value. • Because of this disjunction was not used Sky = Sunny or Sky = Cloudy	2m	1	2

Question No	Solution	Marks Allotted	Mapped CO's	BTL
	Similarly G boundary will consist of the hypothesis that rules out only observed negative example $G: \{\neg(x_4 \vee x_5)\}$. iii) Futility of Bias-Free Learning. The above discussion illustrates a fundamental property of inductive inference. a learner that makes no a priori assumption regarding the identity of target concept has no rational basis for classifying any unseen instances. • In fact the only reason that candidate Elimination algorithm was able to generalize beyond the observed training examples in our original formulation of the Enjoy Sport task is that it was biased by the implicit assumption that the target concept could be represented by conjunction of attribute values. ⇒ In cases where this assumption is correct its classification of new instances will also be correct.	4m		

Question No	Solution	Marks Allotted	Mapped CO's	BTL
	Consider the general setting in which an arbitrary learning algorithm L is provided an arbitrary set of training data $D_c = \{x, c(x)\}$ of some arbitrary target concept c. After training, L is asked to classify a new instance x_i. Let $L(x_i, D_c)$ denote the classification that L assigns to x_i, after learning from the training data D_c. $(D_c \wedge x_i) > L(x_i, D_c)$ $y > z$ indicates that z is inductively inferred from y. L → Candidate elimination Algorithm D_c → training Data. x_i → new instance need to be classified. $L(x_i, D_c)$ = EnjoySport (Yes)	10M		

Question No	Solution	Marks Allotted	Mapped CO's	BTL
4a	i) Subset of hypothesis from H. ii) Any value.	2m		
b	Generic to Specific Ordering of Hypothesis • Many algorithms for concept learning organize the search through the hypothesis space by relying on a very useful structure that exist for any concept learning problem. Consider two hypothesis. h_1 = <Sunny, ?, ?, Strong, ?, ?> h_2 = <Sunny, ?, ?, ?, ?, ?> h_2 → is more generic h_1 → is more specific Instance classified positive by h_1, will also be classified positive by h_2 First for any instance x in X Hypothesis h in H We say that x satisfies h if and only if h(x)=1 $(x, x)\ [h_k(x)=1) \rightarrow (h_j(x)=1]$ x_1 = <Sunny, Warm, High, Cool, Same> x_2 = <Sunny, Warm, High, Light, Warm, Same>	4m	1	2

Question No	Solution	Marks Allotted	Mapped CO's	BTL

Given collection of S, containing positive and Negative examples

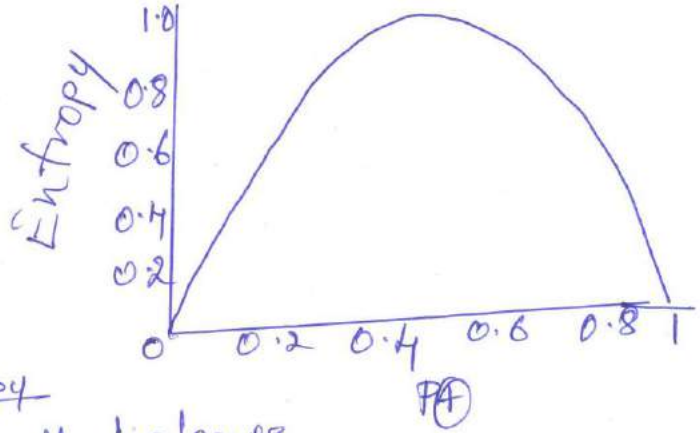
Entropy (S) $= -P_{\oplus} \log P_{\oplus} - P_{\ominus} \log P_{\ominus}$

If 9 yes or 5 NO.

Entropy $= -9/14 \log_2 9/14 - (5/14) \log_2 5/14$

$= 0.940$.

2m



Entropy

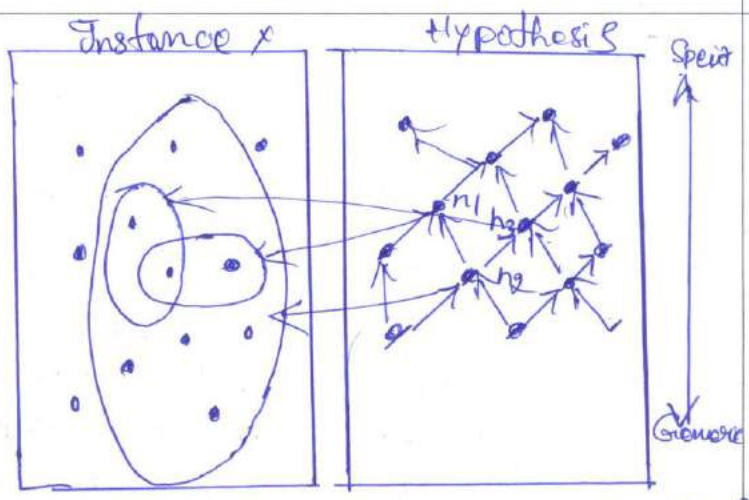
0 if all belongs to same class.

Entropy = 1 if the is equidistributed

4m

Gain (S, A) = Entropy (S) $- \sum_{v \in values(A)} \frac{|S_v|}{|S|}$ Entropy (S)

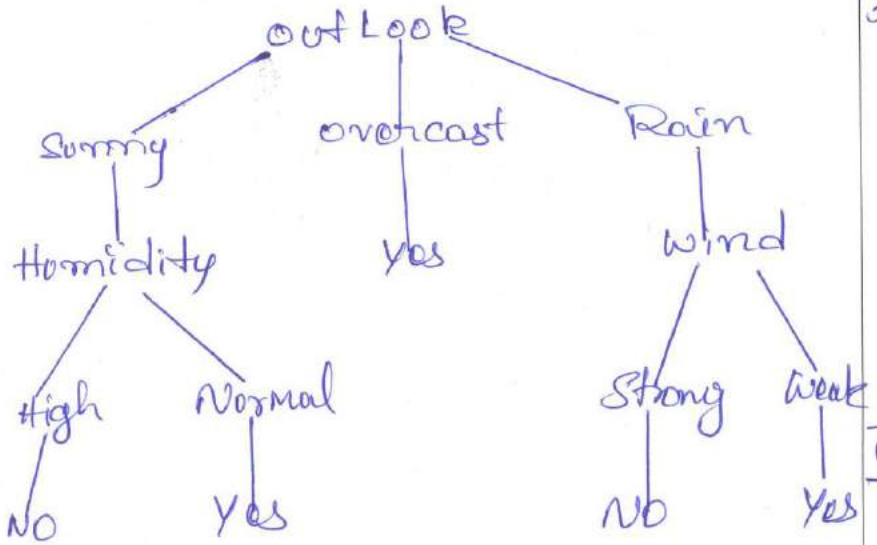
10m

Question No	Solution	Marks Allotted	Mapped CO's	BTL
	 x_1 = <sunny, warm, high, strong, cool, same> h_1 = <Sunny?, ?strong??> x_2 = <sunny warm, high, light, warm, same> h_2 = <Sunny?????> h_3 = <sunny??? cool?>	4M 10M		
5a	i) Sequence of test ii) classification.	2m		
5b	What is good quantitative measure of worth of an attribute? we will define a statistical property called information gain. Information gain measures how well a given attribute seperates the training example according to their target classification. Entropy In order to define information gain precicely, we begin by defining a measure commonly used in information theory called entropy	2m	2	1

Question No	Solution	Marks Allotted	Mapped CO's	BTL
6a	i) C. Flowchart & structure ii) All of the above.	2m		
6b	i Appropriate problems for decision tree. • ID_3 - Search complete hypothesis Space • ID_3 - Searches incompletely. • ID_3 - Preference Bias • How deeply to grow Decicsiontree • Handling continuous attributes. • Choosing appropriate attributs • Handling training data with Missing attributes values • Efficiency • Avoiding overfitting of Data.	5m	2	1
6b	ii) Decision tree learning is a method for approximation discrete valued target function in which the learned function is represented by a decision tree.			

Question No	Solution	Marks Allotted	Mapped CO's	BTL

Decision trees classify instances by sorting them down the tree from the root to some leaf node, which provides the classification of the instance. Each node in the tree specifies a test of some attributes of the instance, and each branch descending from that node corresponds to one of the possible values for this attribute. An instance is classified by starting at the root node of the tree, testing the attribute specified by this node, then moving down the tree branch corresponding to the value of the attribute in the given example. below.



3m

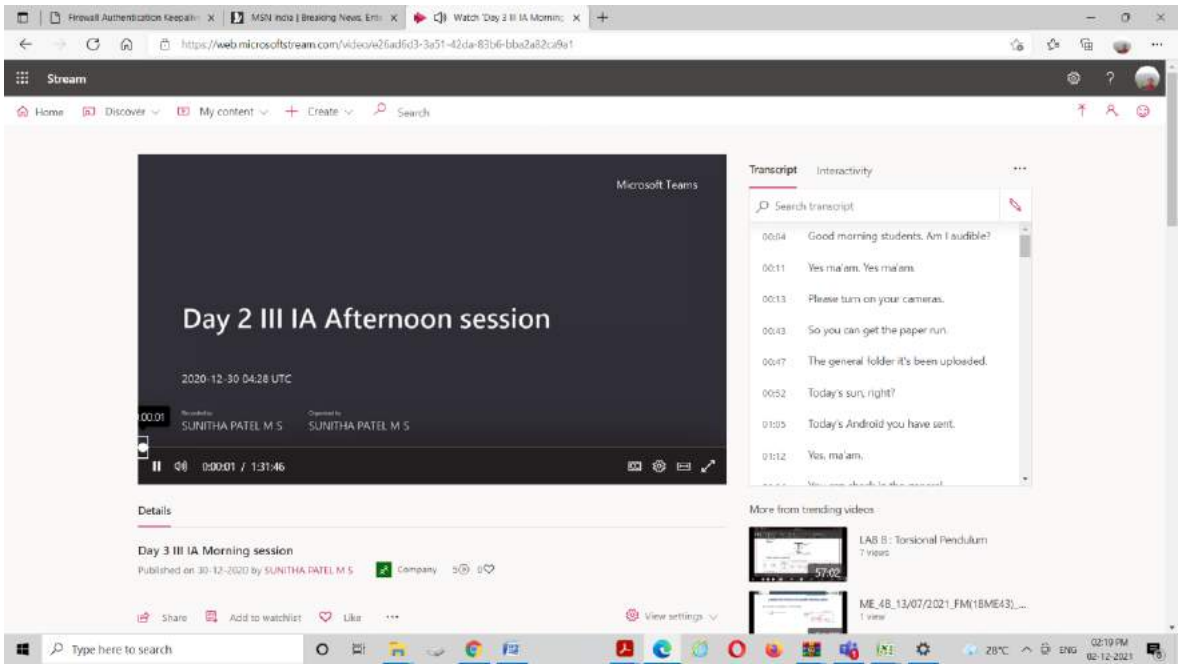
10m

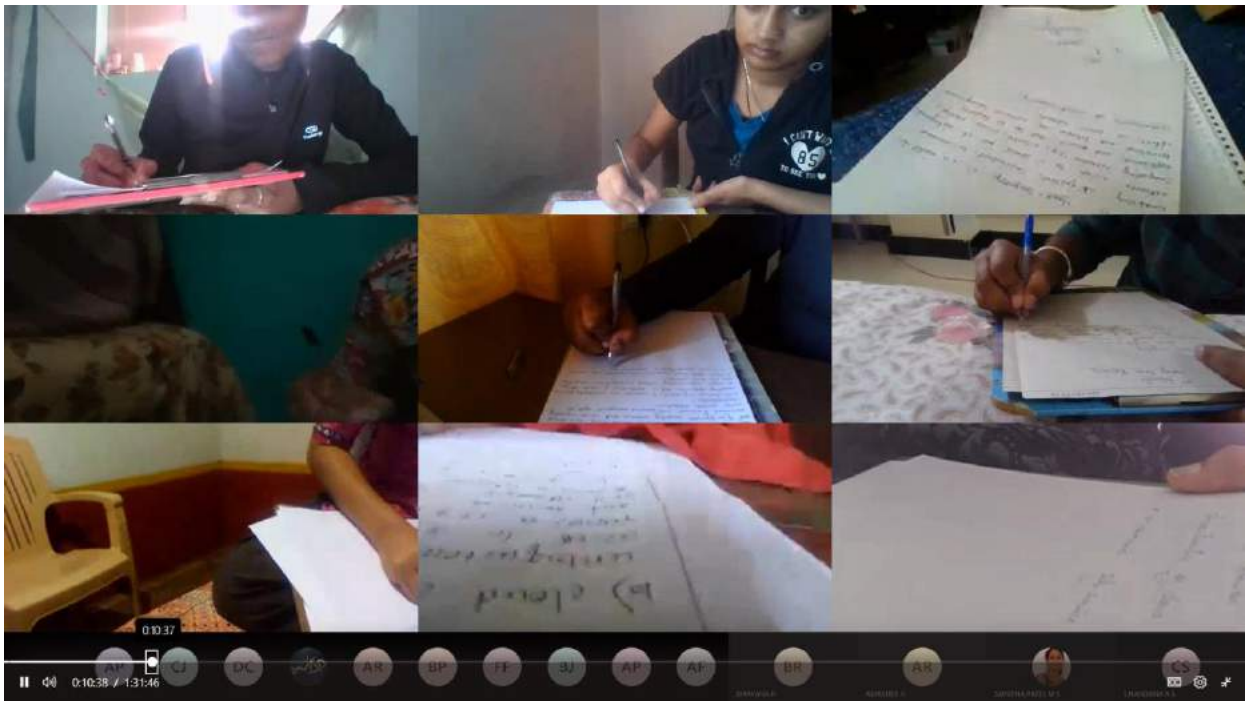
Question No	Solution	Marks Allotted	Mapped CO's	BTL
7a	i) All of the Mentioned ii) to the Same class	2m		
7b	What is the entropy of this collection of training examples. Soln: P = 3 N = 3 Total = 6 $Entropy(S) = -\frac{3}{6}\log_2\left(\frac{3}{6}\right) - \frac{3}{6}\log_2\left(\frac{3}{6}\right)$ $= 1$	1m		1
	what is the information gain of a2 relative to these training examples? For Attribute A2 - Calculate Entropy for each values i.e, '+' and '-'		2	
	A2 | P | N | Entropy True | 2 | 2 | 1 False | 1 | 1 | 1	3m		
	$E(A2 = True) = -\frac{2}{6}\log\left(\frac{2}{6}\right) - \frac{2}{6}\log\left(\frac{2}{6}\right) = 1$ $E(A2 = False) = -\frac{1}{6}\log\left(\frac{1}{6}\right) - \frac{1}{6}\log\left(\frac{1}{6}\right) = 1$ $I(A2) = \frac{P_{True}+N_{True}}{P+N} Entropy(A2 = True) + \frac{P_{False}+N_{False}}{P+N} Entropy(A2 = False)$ $= \frac{2+2}{3+3} * 1 + \frac{1+1}{3+3} * 1 = \frac{4}{6} \times 1 + \frac{2}{6} \times 1 = 1.332$	4M		
	$Gain = Entropy(S) - I(A2) = 1 - 1.332$ $= 0.332$	10M		

Name & Signature of Course Coordinator
M S SUNITHA PATEL

HoD Signature

H. IA Recording Screenshot



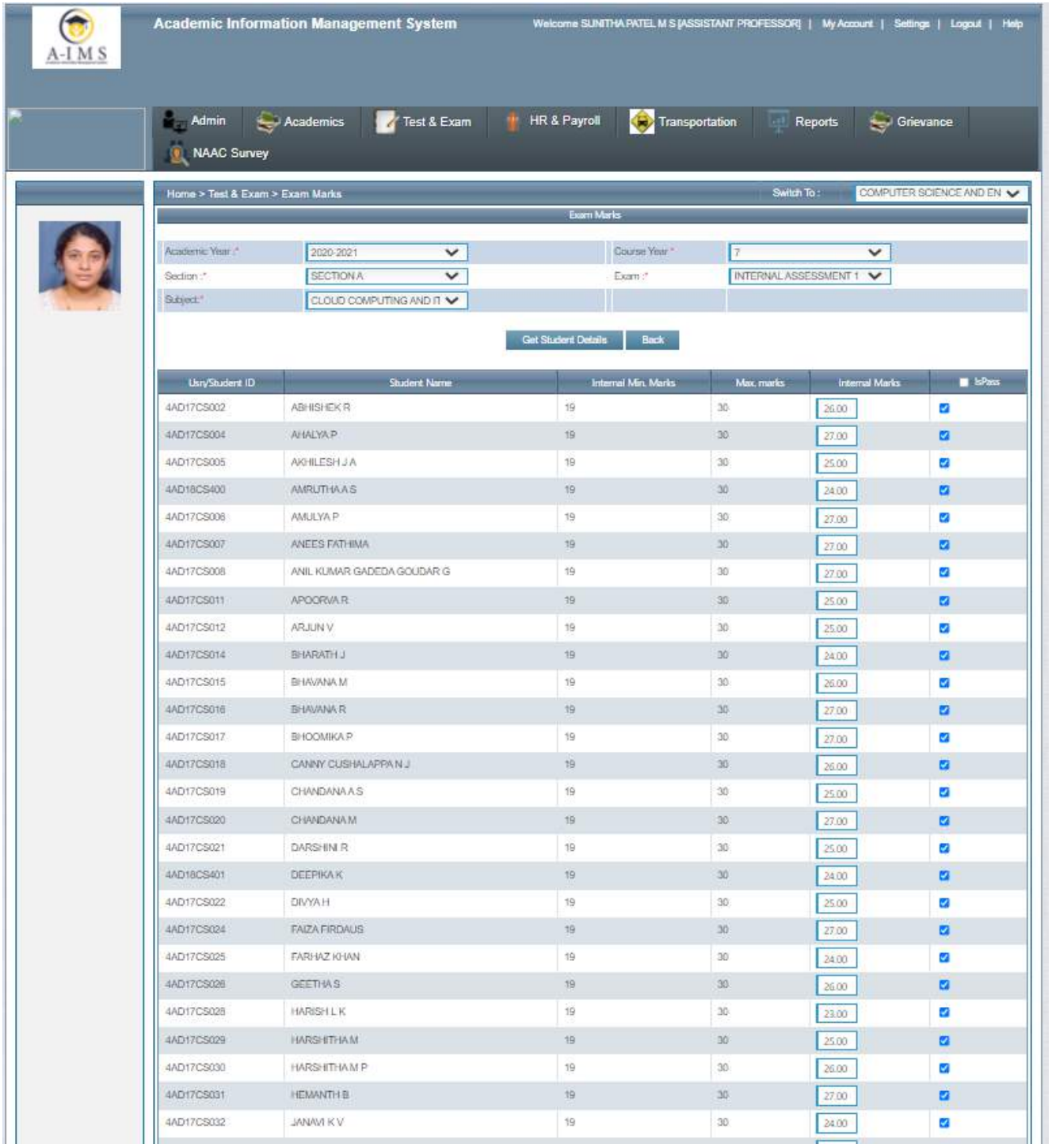


HOD

HOD
Dept. of Computer Science & Engg
ATME College of Engineering
Mysuru-570028

I. CERP SCREENSHOTS OF IA MARKS

Scheme of Valuation is discussed with students and Test marks is uploaded in CERP Portal



Academic Information Management System

Welcome SUNITHA PATEL M S [ASSISTANT PROFESSOR] | My Account | Settings | Logout | Help

Admin | Academics | Test & Exam | HR & Payroll | Transportation | Reports | Grievance | NAAC Survey

Home > Test & Exam > Exam Marks

Switch To : COMPUTER SCIENCE AND EN

Exam Marks

Academic Year :*	2020-2021	Course Year :*	7
Section :*	SECTION A	Exam :*	INTERNAL ASSESSMENT 1
Subject :*	CLOUD COMPUTING AND IT		

Get Student Details | Back

Usn/Student ID	Student Name	Internal Min. Marks	Max. marks	Internal Marks	IsPass
4AD17CS002	ABHISHEK R	19	30	26.00	☑
4AD17CS004	AHALYA P	19	30	27.00	☑
4AD17CS005	AKHILESH J A	19	30	25.00	☑
4AD18CS400	AMRUTHA A S	19	30	24.00	☑
4AD17CS006	AMULYA P	19	30	27.00	☑
4AD17CS007	ANEES FATHIMA	19	30	27.00	☑
4AD17CS008	ANIL KUMAR GADEDA GOUDAR G	19	30	27.00	☑
4AD17CS011	APOORVA R	19	30	25.00	☑
4AD17CS012	ARJUN V	19	30	25.00	☑
4AD17CS014	BHARATH J	19	30	24.00	☑
4AD17CS015	BHAVANA M	19	30	26.00	☑
4AD17CS016	BHAVANA R	19	30	27.00	☑
4AD17CS017	BHOOMIKA P	19	30	27.00	☑
4AD17CS018	CANNY CUSHALAPPA N J	19	30	26.00	☑
4AD17CS019	CHANDANA A S	19	30	25.00	☑
4AD17CS020	CHANDANA M	19	30	27.00	☑
4AD17CS021	DARSHINI R	19	30	25.00	☑
4AD18CS401	DEEPIKA K	19	30	24.00	☑
4AD17CS022	DIVYA H	19	30	25.00	☑
4AD17CS024	FAIZA FIRDAUS	19	30	27.00	☑
4AD17CS025	FARHAZ KHAN	19	30	24.00	☑
4AD17CS026	GEETHA S	19	30	26.00	☑
4AD17CS028	HARISH L K	19	30	23.00	☑
4AD17CS029	HARSHITHA M	19	30	25.00	☑
4AD17CS030	HARSHITHA M P	19	30	26.00	☑
4AD17CS031	HEMANTH B	19	30	27.00	☑
4AD17CS032	JANAVI K V	19	30	24.00	☑

HOD

HOD
Dept. of Computer Science & Engg.
ATME College of Engineering
Mysuru-570028

ASSIGNMENT

Department of Computer Science and Engineering

AY: 2020-2021

The Department follows the following components for the evaluation of **Assignments (10 Marks/Course).**

The components below can be considered for 6Marks under Component A. Remaining 4 marks is assigned for skill enhancement through MOOC Certification under Component B

Component A: Assignment

1. Quiz on the topics relevant to the syllabus or beyond syllabus. (Weightage of 6 Marks)

Component B: MOOC Certification

- For registration of the course (Weightage of 2 Marks)
- Completion of the course (Weightage of 2 Marks)

HOD

HOD
Dept. of Computer Science & Engg.
ATME College of Engineering
Mysuru-570028

Department of Computer Science and Engineering

QUIZ

Course: Cloud Computing and its Applications

Engineering Course Code:
17CS742

Course Outcome: CO-1

Questions | Responses 42

17CS742-CCA-Assignment 03-7th A Section (CSE/2020-21/7A)

42	9.8	Active
Responses	Average Score	Status

Review answers | Post scores | Open in Excel

Questions | Responses 42

1. Which of the following is not a phase of cloud lifecycle management? (1 point)

100% of respondents (42 of 42) answered this question correctly.

More Details | Insights

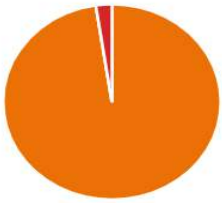
- a) The definition of the service... 0
- b) Client interactions with the ... 0
- c) Management of the operati... 0
- d) None of the mentioned 42 ✓

2. Point out the wrong statement. (1 point)

98% of respondents (41 of 42) answered this question correctly.

More Details | Insights

- a) Google App Engine lets you... 0
- b) From the standpoint of the ... 41 ✓
- c) The full range of network m... 0
- d) All of the mentioned 1



3. Which type of Hypervisor is shown in the following figure? (1 point)

98% of respondents (41 of 42) answered this question correctly.

More Details Insights

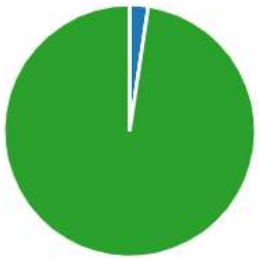
a) Type 1	41	✓
b) Type 2	0	
c) Type 3	1	
d) All of the mentioned	0	

4. Which of the following is Type 2 VM? (1 point)

98% of respondents (41 of 42) answered this question correctly.

More Details Insights

a) VirtualLogix VLX	1	
b) VMware ESX	0	
c) Xen	41	✓
d) LynxSecure	0	

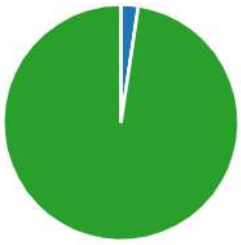


5. Which of the following is an edge-storage or content-delivery system that caches data in different physical locations? (1 point)

98% of respondents (41 of 42) answered this question correctly.

More Details Insights

a) Amazon Relational Databas...	1	
b) Amazon SimpleDB	0	
c) Amazon Cloudfront	41	✓
d) Amazon Associates Web Se...	0	

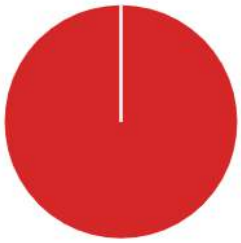


6. Which of the following Google Application can be found in Android? (1 point)

100% of respondents (42 of 42) answered this question correctly.

More Details Insights

a) Google Translate	0	
b) Google Shopper	0	
c) My Tracks	0	
d) All of the mentioned	42	✓

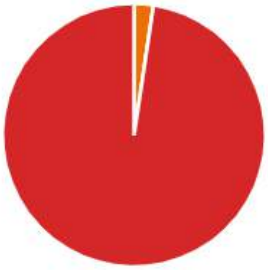


7. Which of the following applications are processed locally on the phone? (1 point)

98% of respondents (41 of 42) answered this question correctly.

More Details Insights

a) Google Earth	0	
b) Google Maps	1	
c) Google Voice	0	
d) None of the mentioned	41	✓

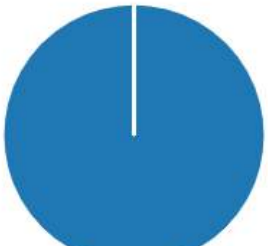


8. Applications using managed cloud storage are _____ as a Service Web service. (1 point)

100% of respondents (42 of 42) answered this question correctly.

More Details

a) Infrastructure	42	✓
b) Platform	0	
c) Service	0	
d) All of the mentioned	0	

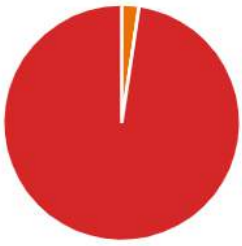


9. Which of the following web applications can be deployed with Azure? (1 point)

98% of respondents (41 of 42) answered this question correctly.

More Details Insights

a) ASP.NET	0	
b) PHP	1	
c) WCF	0	
d) All of the mentioned	41	✓

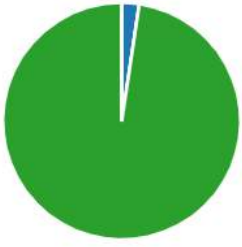


10. Amazon _____ cloud-based storage system allows you to store data objects ranging in size from 1 byte up to 5GB. (1 point)

98% of respondents (41 of 42) answered this question correctly.

More Details Insights

a) S1	1	
b) S2	0	
c) S3	41	✓
d) S4	0	



Grades: 17CS742-CCA-Assignment 03-7th A Section (CSE/2020-21/7A)

Post scores

Not yet posted

Name		Status	Points
CHANDANAAS CS	Preview	Graded	10 (100%)
BHOOMIKAP CS (1)	Preview	Graded	10 (100%)
KRITHIKAG CS (2)	Preview	Graded	10 (100%)
MALAVIKATM CS (3)	Preview	Graded	10 (100%)
LIKITHV CS (4)	Preview	Graded	10 (100%)
MANISHKUMARS CS (5)	Preview	Graded	10 (100%)
HEMANTHB CS (6)	Preview	Graded	10 (100%)
JANAVIKV CS (7)	Preview	Graded	10 (100%)
BHAVANAR CS (8)	Preview	Graded	10 (100%)
MEGHANAHS CS (9)	Preview	Graded	10 (100%)
MACHAIAHME CS (10)	Preview	Graded	10 (100%)
KULSUMKHANUMK CS (11)	Preview	Graded	10 (100%)

CC	CHANDANAM CS (12)	Preview	Graded	10 (100%)
HC	HARSHITHAM CS (13)	Preview	Graded	9 (90%)
DC	DEEPIKAK CS (14)	Preview	Graded	10 (100%)
PC	PALLAVIKM CS (15)	Preview	Graded	10 (100%)
GC	GEETHAS CS (16)	Preview	Graded	10 (100%)
NC	NIVEDITHASN CS (17)	Preview	Graded	10 (100%)
AC	AKHILESHJA CS (18)	Preview	Graded	10 (100%)
AC	ARJUNV CS (19)	Preview	Graded	10 (100%)
BC	BHAVANAM CS (20)	Preview	Graded	8 (80%)
HC	HARSHITHAMP CS (21)	Preview	Graded	10 (100%)
AC	APOORVAR CS (22)	Preview	Graded	10 (100%)
AC	ANILKUMARGADEDAGOUDARG CS (23)	Preview	Graded	10 (100%)
HC	HARISHLK CS (24)	Preview	Graded	10 (100%)
AC	AHALYAP CS (25)	Preview	Graded	10 (100%)
AC	ANEESFATHIMA CS (26)	Preview	Graded	10 (100%)
AC	AMULYAP CS (27)	Preview	Graded	10 (100%)
FC	FAIZAFIRDAUS CS (28)	Preview	Graded	10 (100%)
MC	MSCHINNIDHIARADHYA CS (29)	Preview	Graded	10 (100%)
BC	BHARATHJ CS (30)	Preview	Graded	10 (100%)
AC	ABHISHEKR CS (31)	Preview	Graded	10 (100%)
CC	CANNYCUSHALAPPANJ CS (32)	Preview	Graded	10 (100%)

Department of Computer Science and Engineering

MOOC Certification

a. Online Course Details from students are collected through google form

Student Name	Upload Certificate	Registered	Course Name	Course Platform	Course Progress
Bhoomika P	https://drive.google.com/open?id=18RgcfMVvzbR9YnfwlgLhwHgdEXZKwjKB	Yes	Introduction to HTML5	Coursera	Completed
Meghana H S	https://drive.google.com/open?id=1FBl80yeGVi_VQTQzy-_zk97UCJUNJXD8	Yes			
AHALYA P	https://drive.google.com/open?id=1kvFKdHBEPjfZ_mszQ4HFAm1iVpUQlwcw	Yes	HTML 5	Coursera	Completed
MALAVIKA T M	https://drive.google.com/open?id=1KrCJJuHA-HW7alsDol4V0V0_hsnPZ1zU	Yes	Css3	Coursera	Completed
AMULYA P	https://drive.google.com/open?id=1ehEs3udVz42yUs4PnT13INi-kdtmVk-N	Yes	Machine Learning	Coursera	Completed
Geetha s	https://drive.google.com/open?id=1RHoEPdUJPV9Xn_wI377dxsICZkYmf8cY	Yes	tables and forms	cousera	Completed
Chandana A S	https://drive.google.com/open?id=1-byMfnwOi2MoEJljYr-wu4nNkE_vMCUu	Yes	Programming for everybody	Coresera	Completed
Jesmitha M P	https://drive.google.com/open?id=1ooQXctV5eYF_ldyZbMvK9KCi1zMpaVOz	Yes	Big data Artificial intelligence and ethics	Coursera	Completed
FAIZA FIRDAUS	https://drive.google.com/open?id=1KoBPCXAY8zlKMReqaVUVhhntgLM6PccB	Yes	C++ COURSE	SOLOLEARN	Completed
Anil Kumar Gad	https://drive.google.com/open?id=1HiCkwB002bWEfT2nvUF8cvtmh3cD1cMl	Yes	Interactivity with Javascript	CourseEra	Completed
KRITHIKA G	https://drive.google.com/open?id=1MlO8nPDP05oiAMkv_8ls72Wib11YAS_1	Yes	Machine Learning for Python	UDEMY	Progress
BHARATH J	https://drive.google.com/open?id=1ANDXYCAFE4gJlKV10VSlQmoovvOrqwTV	Yes	HTML COURSE	SOLO LEARN	Completed
Deepika K	https://drive.google.com/open?id=1ub9CccvlkXqrLaABTGRXAn3KUMpGLEhT	Yes	HTML5	Coursera	Completed

b. Sample online course certificates of students

Jesmitha M P	4AD17CS033

Department of Computer Science and Engineering

Faiza Firadus	4AD17CS024

UNIVERSITY OF LONDON

COURSE CERTIFICATE

30.09.2020

Faiza Firdaus

has successfully completed

Machine Learning for All

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

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Dr Marco Gillies
Computing Department,
Goldsmiths, University of London

Verify at coursera.org/verify/GJJR55C67ATH
Coursera has confirmed the identity of this individual and their participation in the course.

HOD

HOD
Dept. of Computer Science & Engg
ATME College of Engineering

Mechanism of internal assessment is transparent and robust in terms of frequency and mode

The Department conducts **three internal assessment tests** at approximately 6th, 12th and 14th week respectively. The faculties are informed on the test schedule, question paper review date and reviewers. The evaluation scheme and solutions during question paper review are to be present during the meeting with the reviewers.

The question paper, solutions and the evaluation scheme are reviewed and corrections are offered by the reviewers before the final approval by the Head and reviewers allotted to the respective courses. From AY:2020-2021 Vertical Heads are assigned course QP review. Each test is intended to cover approximately one third of the syllabus. On completion of the Valuation, Scheme of valuation is discussed and Results are announced by Faculty members in their class session. The IA Test marks are uploaded in CERP portal.

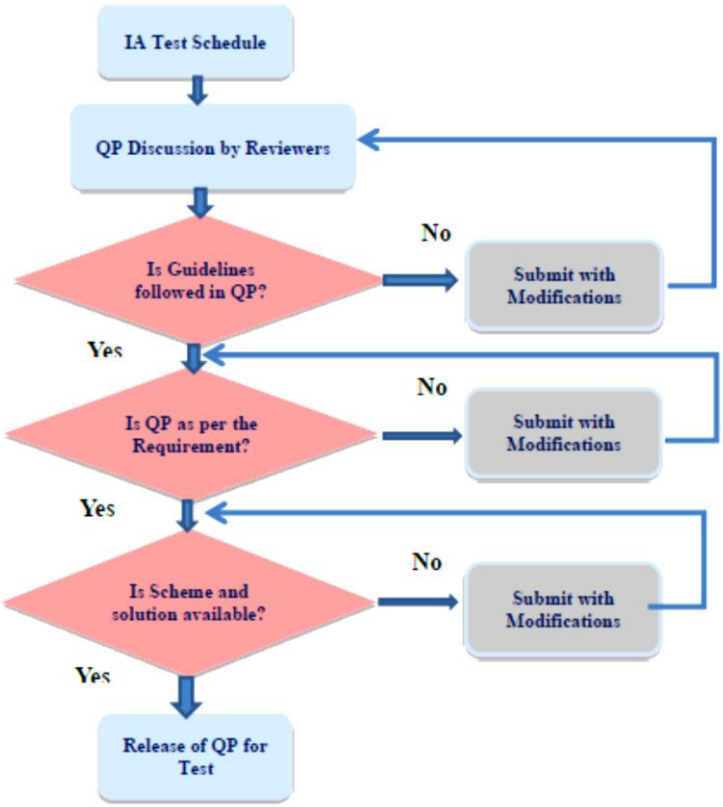


Fig: Test Process

ACADEMIC CALENDER

ACADEMIC CALENDER AND ADHERENCE

Sl No.	Name of the event	Date Planned	Date Conducted	Remarks
01	Commencement of ODD Sem III, V and VII	29-07-2019	29-07-2019	As planned
02	Induction Programme for I-year	09/08/2019 to 24/08/2019	09/08/2019 to 24/08/2019	As planned
03	Industrial visit	3rd Week	17/08/2019	As planned
04	Industrial visit	4th Week	24/08/2019	As planned
05	Commencement of I-Year classes	26-08-2019	26-08-2019	As planned
06	Industrial visit	4th Week	31/08/2019	Postponed due to permission from the industry
07	Attendance status update	03-09-2019	03-09-2019	As planned
08	First IA Test for 3rd, 5th and 7th sem	12-09-2019 to 14-09-2019	12-09-2019 to 14-09-2019	As Planned
09	Industrial Visit to GTTC, Mysuru,	8th Week	18/09/2019	As planned
10	Finalization of first IA marks	20/09/2019	20/09/2019	As planned
11	Teacher's Day & Engineer's day Celebration.	8th Week	25-09-2020	Postponed due to availability of guest
12	Parents-Teachers Meeting	25/09/2019	09/10/2019	Postponed due to Teacher's Day & Engineer's day Celebration.
13	Industrial Visit	9th Week	28-09-2020	As planned
14	Attendance status update	01/10/2019	01/10/2019	As planned
15	First IA test for 1st semester	3/10/2019 to 5/10/2019	3/10/2019 to 5/10/2019	As planned
16	Guest Lecturer	12th Week	15/10/2019	As planned
17	Second IA test for Higher semester (III,V&VII)	18/10/2019 to 22/10/2019	18/10/2019 to 22/10/2019	As planned
18	Finalization of second IA marks	25/10/2019	25/10/2019	As planned

19	Workshop	13th Week	26/10/2019	As planned
20	Attendance status update	4/11/2019	4/11/2019	As planned
21	World science day	11/11/2019	11/11/2019	As planned
22	Second IA test for 1st semester	12/11/2019 to 14/11/2019	12/11/2019 to 14/11/2019	As planned
23	Third IA test for Higher semester (III,V&VII)	22/11/2019 to 25/11/2019	22/11/2019 to 25/11/2019	As planned
24	Lab IA for higher semester (III,V&VII sem)	27/11/2019 to 29/11/2019	27/11/2019 to 29/11/2019	As planned
25	Last working day for higher semester	30/11/2019	30/11/2019	As planned
26	IA Marks Finalization	07-12-2019	07-12-2019	As planned
27	Science Fiesta	21th Week	20-12-2019	As planned

HOD

SAMPLE TEST PROCESS: 2019-2020

IA TEST II PROCESS

A. TIME TABLE

A T M E
College of Engineering

Department of Mechanical Engineering
Accredited by NBA 2019-20 to 2021-22

Date: 14/10/2019

Circular

All the Staff members of the Department are here by informed to prepare **Two sets** of question papers of their respective subjects for the **Second-Internal Assessment** and the same has to be submitted to HOD before **17-10-2019**. HOD will select one question paper and faculty has to prepare detailed scheme for the selected question paper after the test. Later question paper and detailed scheme are to be submitted to the test committee.

The following faculty members are identified as stream wise subject experts for the academic year **2019-20** to scrutinize the question papers to validate **CO mapping, blooms Taxonomy Level, syllabus and marks allotted.**

1) Design Stream Subjects : Mr.Suresh Kumar S
2) Thermal Stream Subjects : Mr.Ravikumar S
3) Manufacturing Subjects : Mr. Devaraj M R
4) Management : Mr. Niranjan Kumar V S

Odd Semester Subjects

Design Stream Subjects	Thermal Stream Subjects	Manufacturing Subjects	Management and Automation
18ME34 Mechanics of Materials	18ME33 Basic Thermodynamics	18ME34 Material Science	17ME51 Management and Engineering Economics
17ME52 Dynamics of Machinery	17ME562 Energy and Environment	18ME35A Metal Cutting & Forming	15ME753 Mechatronics
17ME54 Design of Machine Elements-I	17ME53 Turbo Machines	18ME35B Meta casting & Welding	
15ME73 Control Engineering	15ME71 Energy Engineering	18ME36B Mechanical Measurements & Metrology	
15ME742 Tribology	15ME72 Fluid Power Systems	17ME554 Non Traditional Machining	

Test coordinator 14/10

HOD

B. STUDENT ATTENDANCE SHEET:

ATME College of Engineering

Department of Mechanical Engineering

Room no-M-101

B-form- 5th Sem A

Date& Time			18/10/2019		21/10/2019		22/10/2019	
USN/Name			9.30AM to 11.00 AM	3.00 pm to 4.30 PM	9.30AM to 11.00 AM	3.00 pm to 4.30 PM	9.30AM to 11.00 AM	3.00 pm to 4.30 PM
			17ME52 Dynamics of Machinery	17ME562 Energy and Environment	17ME53 Turbo Machines	17ME554 Non Traditional Machining	17ME54 Design of Machine Elements-I	17ME51 Management and Engineering Economics
1	AD16ME012	Bhanuprakash P						
2	4AD17ME001	Abhilash S						
3	4AD17ME002	Adarsh Gowda M		AB				
4	4AD17ME005	Ajith Kumar R						
5	4AD17ME006	Akhilesh B						
6	4AD17ME009	Akshay R Bharadwaj		AB				
7	4AD17ME011	Amit Thulsidass		AB				
8	4AD17ME013	Arjun V		AB				
9	4AD17ME014	Chandan Kumar D M						
10	4AD17ME015	Chandan Y		AB				
11	4AD17ME016	Chayasiddesh K S						
12	4AD17ME017	Darshan R						
13	4AD17ME018	Deekshith Gowda C K		AB				
14	4AD17ME024	Jeevan P B		AB				
15	4AD17ME026	Kishore M		AB				
16	4AD17ME027	M B Karthik Aiyappa		AB				
17	4AD17ME028	Madhu K B		AB				
18	4AD17ME029	Mahadevaprasad N						
19	4AD17ME030	Mahadevaswamy H L						
20	4AD17ME031	Manjunath						
Number of Absentees			- Nil -	10	- Nil -	- Nil -	- Nil -	- Nil -
Number of Students Present			20	10	20	20	20	20
Signature of the faculty								

ATME College of Engineering

Department of Mechanical Engineering

Room no-M-102

B-form- 5th Sem A

	USN/Name		Date& Time	18/10/2019		21/10/2019		22/10/2019	
				9.30AM to 11.00 AM	3.00 pm to 4.30 PM	9.30AM to 11.00 AM	3.00 pm to 4.30 PM	9.30AM to 11.00 AM	3.00 pm to 4.30 PM
				17ME52 Dynamics of Machinery	17ME562 Energy and Environment	17ME53 Turbo Machines	17ME554 Non Traditional Machining	17ME54 Design of Machine Elements-I	17ME51 Management and Engineering Economics
1	4AD17ME032	Manoj Kumar N S							
2	4AD17ME034	Mohammed Afnan							
3	4AD17ME035	Mohammed Arbaz							
4	4AD17ME037	Mohammed Furkhan							
5	4AD17ME038	Mohammed Ibrahim							
6	4AD17ME039	Md Khasim Usaid							
7	4AD17ME041	Md Umar Farooq							
8	4AD17ME042	Md Usman Shariff							
9	4AD17ME043	Mohammed Zain							
10	4AD17ME044	Mohanganesh							
11	4AD17ME046	N Abhishek		N. Abhishek		N. Abhishek	N. Abhishek	N. Abhishek	N. Abhishek
12	4AD17ME071	Shreyas Y		Shreyas. Y.	Shreyas. Y.	Shreyas. Y.	Shreyas. Y.	Shreyas. S.	Shreyas.
13	4AD18ME400	Abhijith							
14	4AD18ME402	Abhishek S							
15	4AD18ME404	Akashmohan							
16	4AD18ME405	Avinash B A		B.A	B.A	B.A	B.A	B.A	B.A
17	4AD18ME407	Chanakya S		Chanakya S	Chanakya S	Chanakya S	Chanakya	Chanakya	Chanakya
18	4AD18ME408	Charan N A		Charan N A	Charan N A	Charan N A	Charan N A	Charan N A	Charan N A
19	4AD18ME410	Darshan P		Darshan	Darshan	Darshan	Darshan	Darshan	Darshan
20	4AD18ME411	Furhan Khan		AB	AB	AB	AB	AB	AB
	Number of Absentees			01	02	01	01	02	01
	Number of Students Present			19	18	19	19	18	19
	Signature of the faculty								

HOD

C. SAMPLE IA QP & SCHEME

ATME College of Engineering

Department of Mechanical Engineering

SECOND INTERNAL ASSESMENT

SUB CODE	:	17ME52	TIME: 9.30 AM-11.00 AM
SUBJECT	:	Dynamics of Machinery	DATE: 18-10-2019
SEM	:	5th Sem	MAX. MARKS:30

	PART-A Answer any two Questions (12 MARKS EACH)	CO's	Bloom's Taxonomy Level
01.	A four wheel trolley car of total mass 3000Kg. Each axle with its two wheels and gears has total Moment of inertia MI 32Kg-m^2. Each wheel is of 450mm radius. The centre distance between two wheels is 1.4m. Each axle is driven by a motor with speed ratio of 3:1.Each motor along with its gear has a moment of Inertia 16Kg-m^2 and rotaes in the opposite direction to that of axle.The center of mass of the car is 1m above the rails.**Determine** the limiting speed of the car when it has to travel around a curve of 250m radius with out the wheels leaving the rails.	3	L 5
02.	The rotor of the turbine of a ship has a mass of 2500kg and rotates at a speed of 3200rpm counter clockwise viewed from aft(rear). The rotor has radius of gyration of 0.4mt. Determine the gyroscopic couple and its effect when, i) steers to the left in a curve of 80mt radius at a speed of 15 knots ii) The ship pitches ± 5 degrees up and down with bow descending with time period 40 seconds. (1Knot=1860Mt/hr)	3	L 5
03	Add the SHM analytically and **Analyze** it by Graphically. $X_1 = 2 \cos(\omega t + 0.5)$ $X_2 = 5 \sin(\omega t + 1.0)$	4	L 4
	PART B-Answer any one Questions (6 MARKS)		
04	**Explain** the effect of gyroscopic couple on naval ship.	3	L 2
05	**List** and **Explain** Different Types of Vibrations.	4	L 2

CO 1	Determine the forces and couples for static and dynamic conditions of four bar and slider crank mechanisms to keep the system in equilibrium.
CO 2	Analyze static and Dynamic balancing for Rotating and Reciprocating masses.
CO 3	Determine equilibrium speed, sensitiveness, isochronism, effort and power of porter and hartnell governors. Also gyroscopic couple and effects related to 2, 4 wheeler, plane disc, ship and aero planes.
CO 4	Understand types of vibration,equation of motion and determine frequency and its behavior of Single degree Damped, Undamped and Forced Vibrations.

Bloom's Taxonomy Level	
L1	Remembering
L2	Understanding
L3	Applying
L4	Analyzing
L5	Synthesizing
L6	Evaluating

Approved
H.O.D.
Department of Mechanical Engineering
ATME College of Engineering, Mysuru

Scrutinized by
16/10/19

ATME College of Engineering — Department of Mechanical Engineering

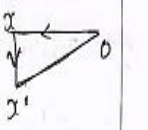
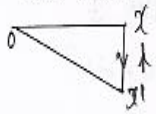
II - Internal Assessment Scheme & Solution

Faculty Name: Suresh Kumar C & Sharma K Ram Date of I.A: 18/10/19

Subject with Code: Dynamics of Machinery Class: 5th A&E B

Q. No	Scheme & Solution	Marks Allotted	CO/ RBT
01	$\frac{W}{4} = 7357.5\,N$ (2) $C_W = 4 I_W \omega_W \omega_p$ $= 0.5688 V^2$ (1) $C_E = C_W - C_E$ $C_E = 2 I_E \omega_E \omega_p$ $C_0 = \frac{mv^2 R}{h}$ $= 0.0948 V^2$ (1) $C = C_W - C_E = 0.474 V^2$ $\frac{P}{2} = \frac{C}{2x} = 0.1692 V^2$ (2) $\frac{Q}{2} = \frac{C_0}{2x} = 4.285 V^2$ (2) $P_I = \frac{W}{4} - \frac{P}{2} - \frac{Q}{2}$ $= 7357.5 - 0.1692 V^2 - 4.285 V^2$ $V = 40.64$ mt/sec. (2)	12	3 L5

Department of Mechanical Engineering, ATMECE

Q. No	Scheme & Solution	Marks Allotted	CO. RBT
02	$V = 15$ knots $= 7.75$ Mt/sec. $\frac{15 \times 1860}{3600}$ Mt/hr (2) $h_S = I \omega \omega_p$ $\omega_n = \frac{2\pi N}{60} = 335.10$ (1) $= 12.98 \times 10^3$ N-M (4) $\omega_p = \frac{V}{R} = 0.09$ (1) Effect: Tends to dip the bow & Raise stern.  $h_p = I \omega \omega_{pmax}$ $\omega_{pmax} = \omega_{10} = \frac{2\pi}{t} \times$ $= 1.837 \times 10^3$ N-M (4) $= 0.137$ Effect: Tends to move the ship toward portside / Left side. 	12	3 L5
03	$X_1 = 2\cos(\omega t + 0.5)$ $X_2 = 5\sin(\omega t + 1.0)$ Analytical Solution $X = X_1 + X_2$ $A\sin(\omega t + \theta) = 2\cos(\omega t + 0.5) + \sin(\omega t + 1.0)$ $= 2[\cos\omega t \cos 0.5 - \sin\omega t \sin 0.5] +$ $5[\sin\omega t \cos 1.0 + \cos\omega t \sin 1.0]$	12	4 L4

Department of Mechanical Engineering, ATMECE

Q. No	Scheme & Solution	Marks Allotted	CO/ RBT
	$\sin\omega t\cos\theta + \cos\omega t\sin\theta = 5.9625\cos\omega t + 1.7427\sin\omega t$		
	$A\cos\theta = 1.7427$		
	$A\sin\theta = 5.9625$ (E)		
	$A^2\cos^2 + A^2\sin^2\theta = (1.7427)^2 + (5.9625)^2$		
	$A = 6.212$		
	$\tan\theta = \frac{5.9625}{1.7427}$ (B)		
	$\theta = 73.708^\circ = 1.2864$ radian.		
	Graphical Method (C)		
4.	Steering :- Turning ship towards left or right Pitching :- Up & down movement of ship Rolling :- Spin axis & pressure axis are parallel.	6	3 L2

Department of Mechanical Engineering, ATMECE

Q. No	Scheme & Solution	Marks Allotted	CO/ RBT
	Case 1 : Propellor Rotating cw direction viewed from astern & taking left turn Raise the bow & depress the stern.		
	Case 2 : Propellor Rotating cw direction viewed from stern & taking Right turn Depress bow & Raise the stern.		
	Pitching :- Pitching upward Pitching Downward		
5.	Free & forced vibration Damped & undamped vibration Longitudinal vibration Transverse vibration Torsional vibration Deterministic & Random vibration	6	4 L1

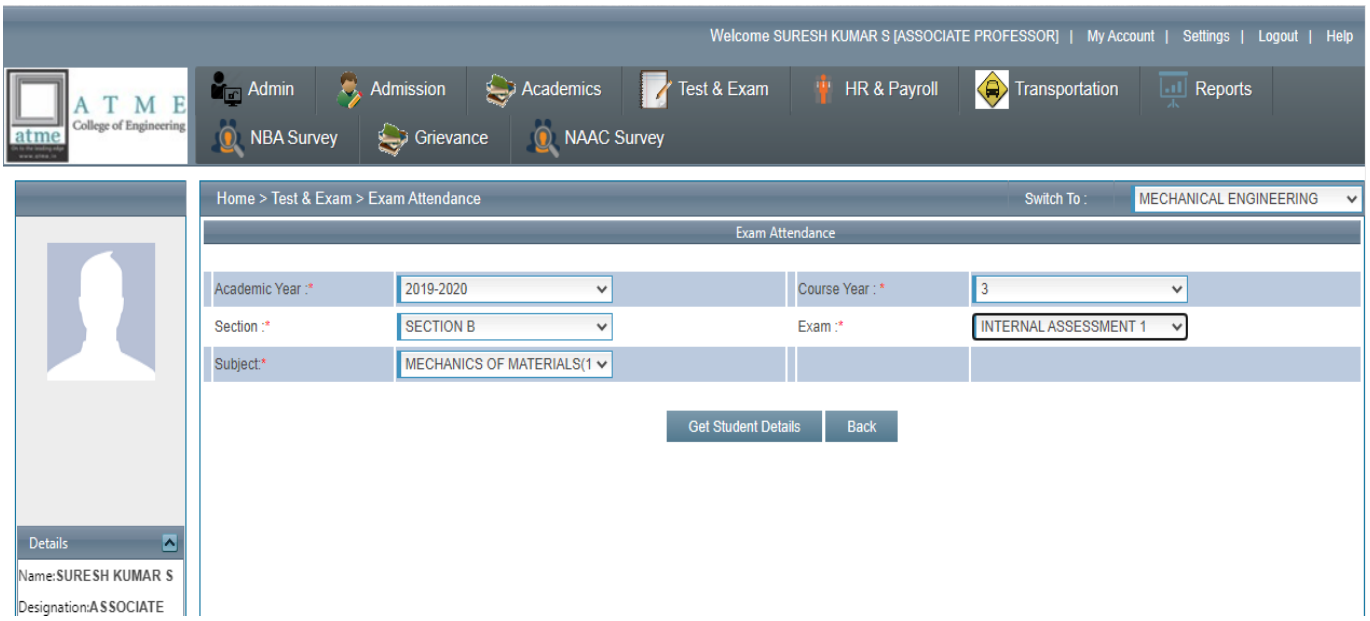
Department of Mechanical Engineering, ATMECE

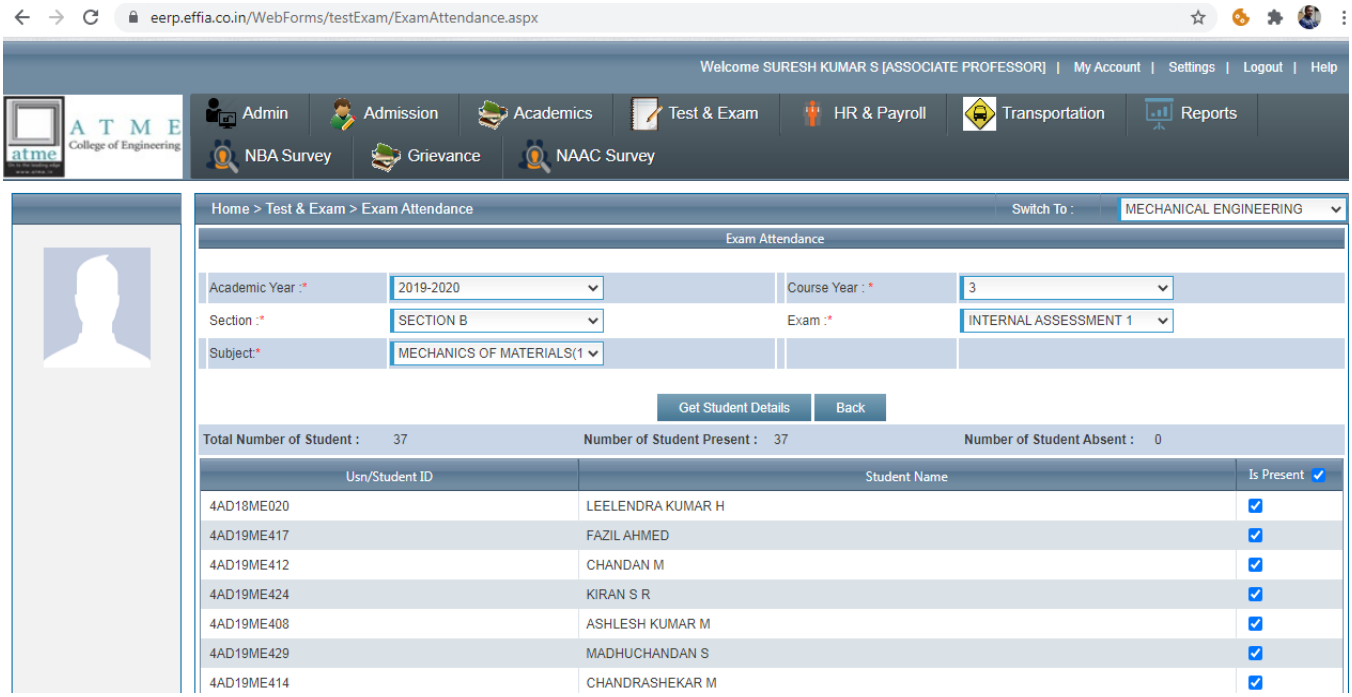
H.O.D.
Department of Mechanical Engg.

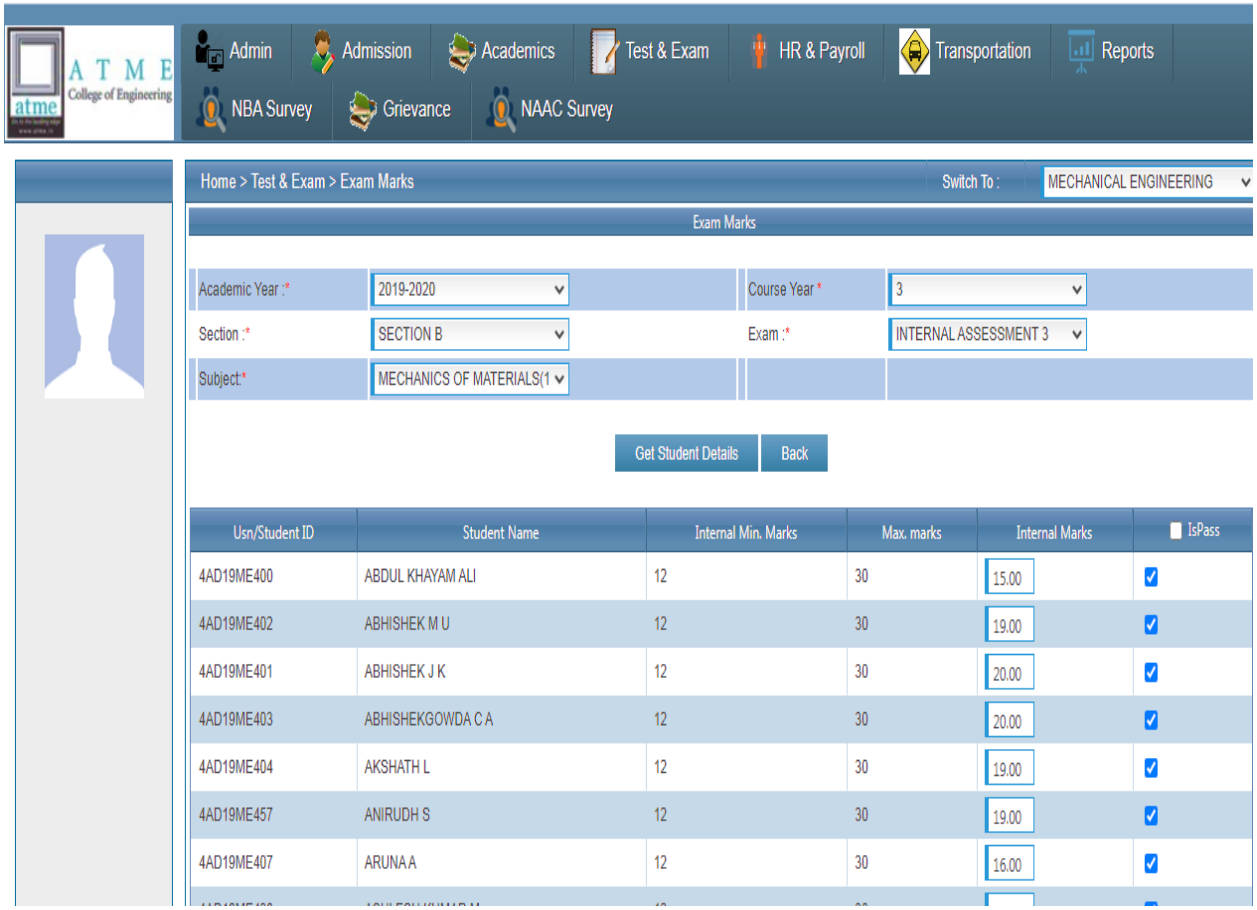
HOD

D.CERP Screenshots of Test Marks

After the test, Scheme of Valuation will be discussed with students and valued blue books are distributed to students. Test marks are uploaded in CERP Portal.






A T M E
College of Engineering
Admin
Admission
Academics
Test & Exam
HR & Payroll
Transportation
Reports
NBA Survey
Grievance
NAAC Survey
Home > Test & Exam > Exam Marks
Switch To :
MECHANICAL ENGINEERING
Exam Marks
Academic Year :*
2019-2020
Course Year *
3
Section :*
SECTION B
Exam :*
INTERNAL ASSESSMENT 3
Subject:*
MECHANICS OF MATERIALS(1
Get Student Details
Back
Usn/Student ID
Student Name
Internal Min. Marks
Max. marks
Internal Marks
IsPass
4AD19ME400 ABDUL KHAYAM ALI 12 30 15.00
4AD19ME402 ABHISHEK M U 12 30 19.00
4AD19ME401 ABHISHEK J K 12 30 20.00
4AD19ME403 ABHISHEKGOWDA C A 12 30 20.00
4AD19ME404 AKSHATH L 12 30 19.00
4AD19ME457 ANIRUDH S 12 30 19.00
4AD19ME407 ARUNA A 12 30 16.00

HOD

ONLINE TEST PROCESS

AY: 2019-2020 [Even Semester]

During the pandemic special care was taken to keep the Test process robust. Invigilators were allotted to monitor the entire process of test conduction.

1. Test Schedule was announced to students through circular

2. Scrutiny of papers was carried out as previously followed.

3. Student Group allotment was carried in the Microsoft Teams channel.

4. Invigilators allotment in MS Team Group

5. During the entire Test process, Students had to switch on their camera.

6. Test paper was deployed using MS Team Form/ Channel.

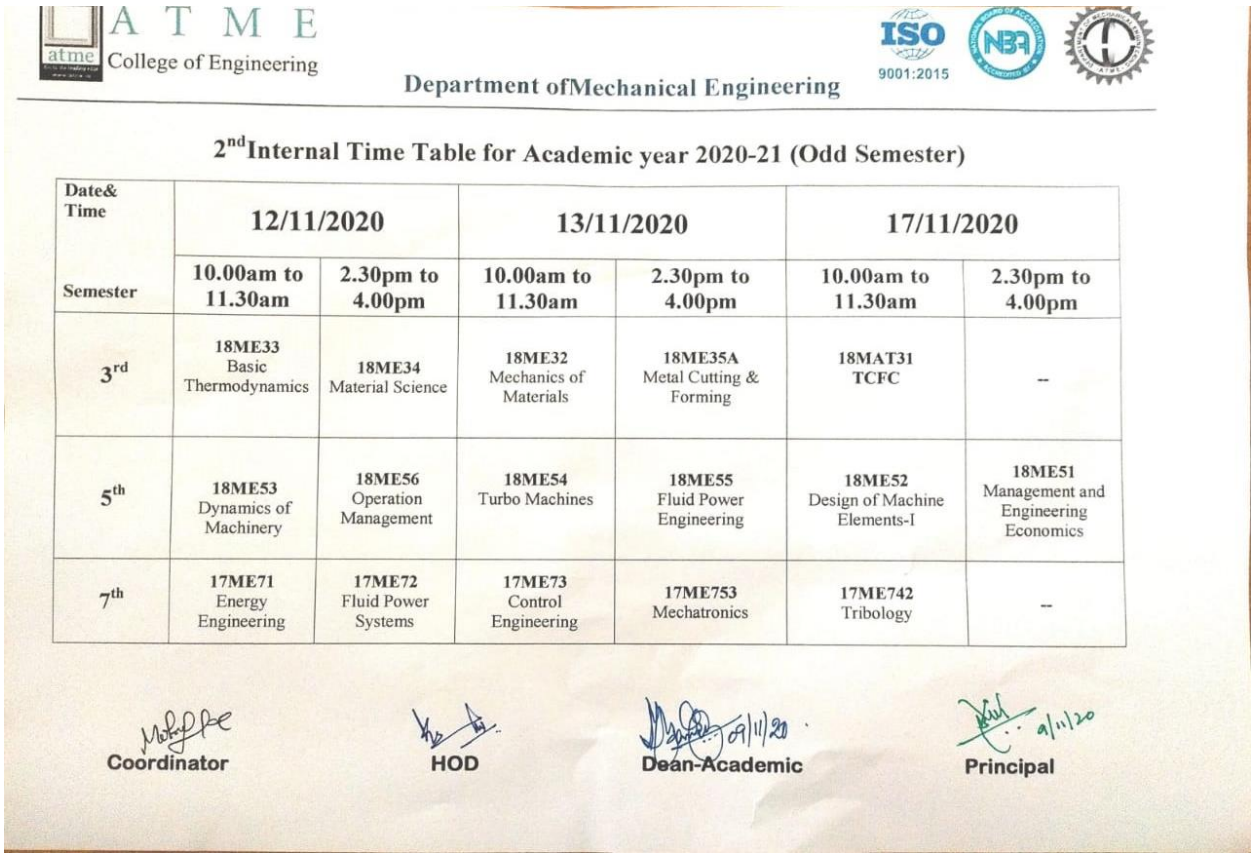
7. Test process video was documented and monitored by Invigilator with the assistance of Test coordinator. Head of the Department monitored the process by visiting all the MS Teams channels.

8. Students will enter their Name, USN, and Signature in every sheet and they will upload scanned copy of answer scripts to MS teams.

HOD

Online Test Process

A. Test Time Table



A T M E
College of Engineering
Department of Mechanical Engineering
ISO 9001:2015

2nd Internal Time Table for Academic year 2020-21 (Odd Semester)

Date& Time	12/11/2020		13/11/2020		17/11/2020	
Semester	10.00am to 11.30am	2.30pm to 4.00pm	10.00am to 11.30am	2.30pm to 4.00pm	10.00am to 11.30am	2.30pm to 4.00pm
3rd	18ME33 Basic Thermodynamics	18ME34 Material Science	18ME32 Mechanics of Materials	18ME35A Metal Cutting & Forming	18MAT31 TCFC	--
5th	18ME53 Dynamics of Machinery	18ME56 Operation Management	18ME54 Turbo Machines	18ME55 Fluid Power Engineering	18ME52 Design of Machine Elements-I	18ME51 Management and Engineering Economics
7th	17ME71 Energy Engineering	17ME72 Fluid Power Systems	17ME73 Control Engineering	17ME753 Mechatronics	17ME742 Tribology	--

Coordinator HOD Dean-Academic 9/11/20 Principal 9/11/20

B. Sample Student Group allotment in the Microsoft Teams channel.

Sl. No.	Faculty Name with Designation	Student Name	Student USN	Semester/Section
1	Mr.Rohith S	PRAJWAL A S	4AD17ME053	5B
2		SHAMANTH KUMAR M	4AD17ME070	5B
3		SUHAS CHAKRAVARTHY K J	4AD17ME072	5B
4		SUKRUTH U R	4AD17ME073	5B
5		VIVEK B K	4AD17ME080	5B
6		LIKHITHA S N	4AD18ME021	5B
7		NIKHILNAG R	4AD18ME036	5B
8		PARVEEZ AHMED	4AD18ME037	5B
9		PETER A X	4AD18ME038	5B
10		PRAJWALA S M	4AD18ME039	5B
11		PRASHAL POOVAIAH K B	4AD18ME040	5B
12		PRIYANKA S V	4AD18ME041	5B
13		Rithish B	4AD18ME042	5B
14		SAIF MADEEN	4AD18ME044	5B
15		SAQLAINULLA SHARIFF	4AD18ME045	5B
16		SHASHANK P	4AD18ME046	5B
17		SREEKANTH GOWDA G P	4AD18ME048	5B
18		SRINIVAS K N	4AD18ME049	5B
19		SRUJAN R	4AD18ME050	5B
20		SUJAY N RAJ	4AD18ME052	5B
21		Syed Ibad Hussain	4AD18ME054	5B
22		VAIBHAV G JAGANNATH	4AD18ME055	5B
23		YASHWANTH KUMAR K	4AD18ME056	5B

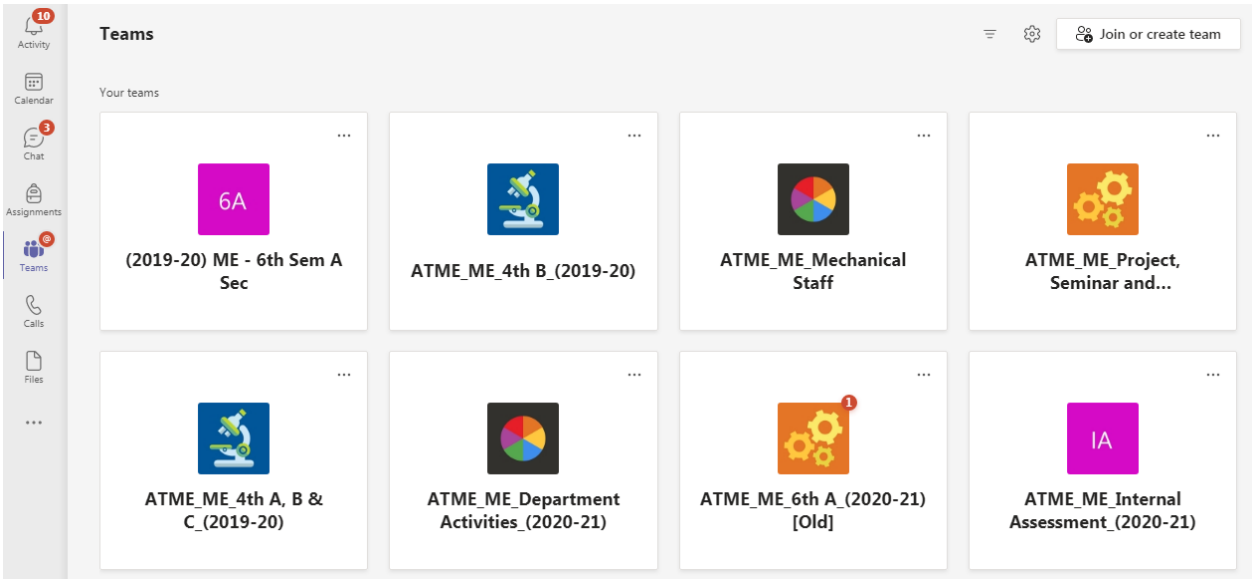
Sl. No.	Faculty Name with Desig	Student Name	Student USN	Semester/Section
1	Mr. Pavan Kumar K P	ANUSHREE A S	4AD19ME405	5B
2		ARPITHA K S	4AD19ME406	5B
3		MOHAMMED NOUMAN	4AD19ME437	5B
4		MOHAMMEDJAVEEDAHMED	4AD19ME438	5B
5		MONISH N S	4AD19ME439	5B
6		NARASIMHA S	4AD19ME440	5B
7		NAVEEN M	4AD19ME441	5B
8		NAVEENA H M	4AD19ME442	5B
9		NITHIN D R	4AD19ME443	5B
10		PAVAN KUMAR B	4AD19ME444	5B
11		PAVITHRA B J	4AD19ME445	5B
12		PRADVIN S G	4AD19ME446	5B
13		PRAJWAL R	4AD19ME447	5B
14		PRAJWAL V	4AD19ME448	5B
15		PRARTHANA B	4AD19ME449	5B
16		PRASHANTHA H J	4AD19ME450	5B
17		PRATHAPA K M	4AD19ME451	5B
18		PRAVEEN B M	4AD19ME452	5B
19		PRAVEEN S K	4AD19ME453	5B
20		RAJASHEKARA K P	4AD19ME454	5B
21		RAKESH B R	4AD19ME455	5B
22		RAKSHITH M S	4AD19ME456	5B
23		SACHIN S	4AD19ME458	5B

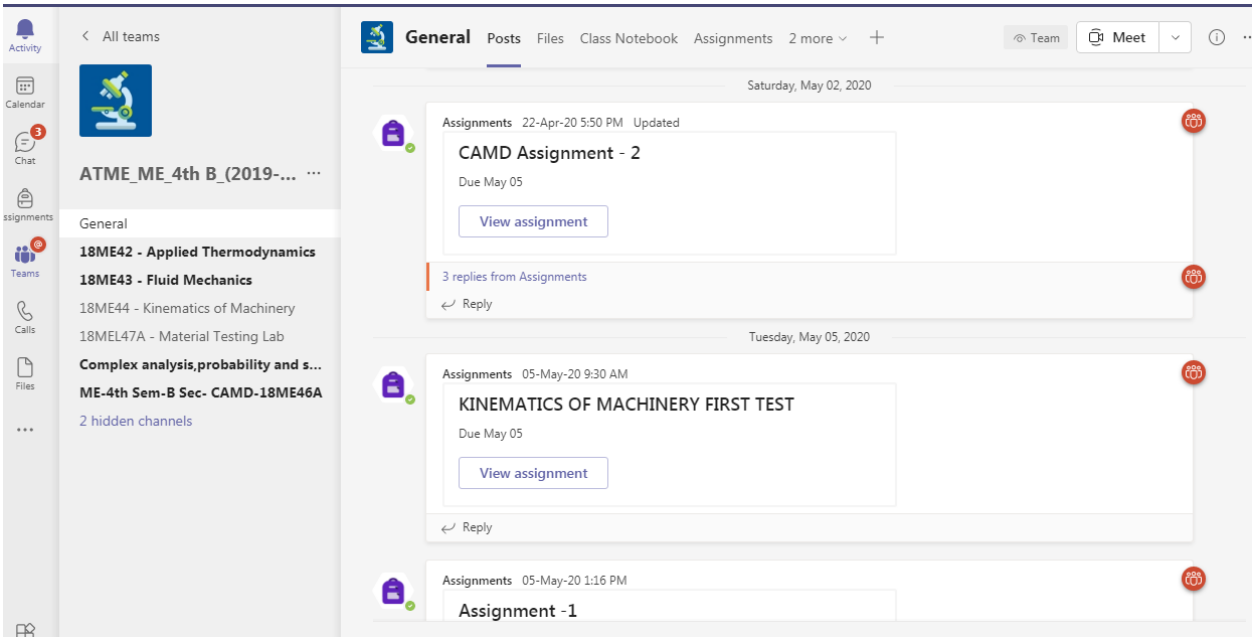
Department of Mechanical Engineering

Sl. No.	Faculty Name with Desig	Student Name	Student USN	Semester/Section
1	Mr. Yashwanth N	SACHIN S P	4AD19ME459	5B
2		SAHANA S	4AD19ME460	5B
3		SANJAY M	4AD19ME461	5B
4		SHARATH M	4AD19ME462	5B
5		SHARATHKUMAR K S	4AD19ME463	5B
6		SHILPA N	4AD19ME464	5B
7		SHIVAPRASAD K S	4AD19ME465	5B
8		SHREEJITH K M	4AD19ME466	5B
9		SRIKANTH J	4AD19ME467	5B
10		SRINIVAS S PAVAR	4AD19ME468	5B
11		SUDEEP D N	4AD19ME469	5B
12		SUDHARSHAN B R	4AD19ME470	5B
13		SUHAS RAO N S	4AD19ME471	5B
14		SUJAN UDUPA B P	4AD19ME472	5B
15		SUNIL J S	4AD19ME473	5B
16		SWATHI M V	4AD19ME474	5B
17		SYED MOHAMMED YOUNUS	4AD19ME475	5B
18		VIJAY KUMAR	4AD19ME476	5B
19		VISHNU PRASAD S	4AD19ME477	5B
20		YASHAS M	4AD19ME478	5B
21		sushan	4ad17me074	5B
22		chinthan v	4ad17me407	5B
23		preetham candy paul	4ad17me059	5B

HOD

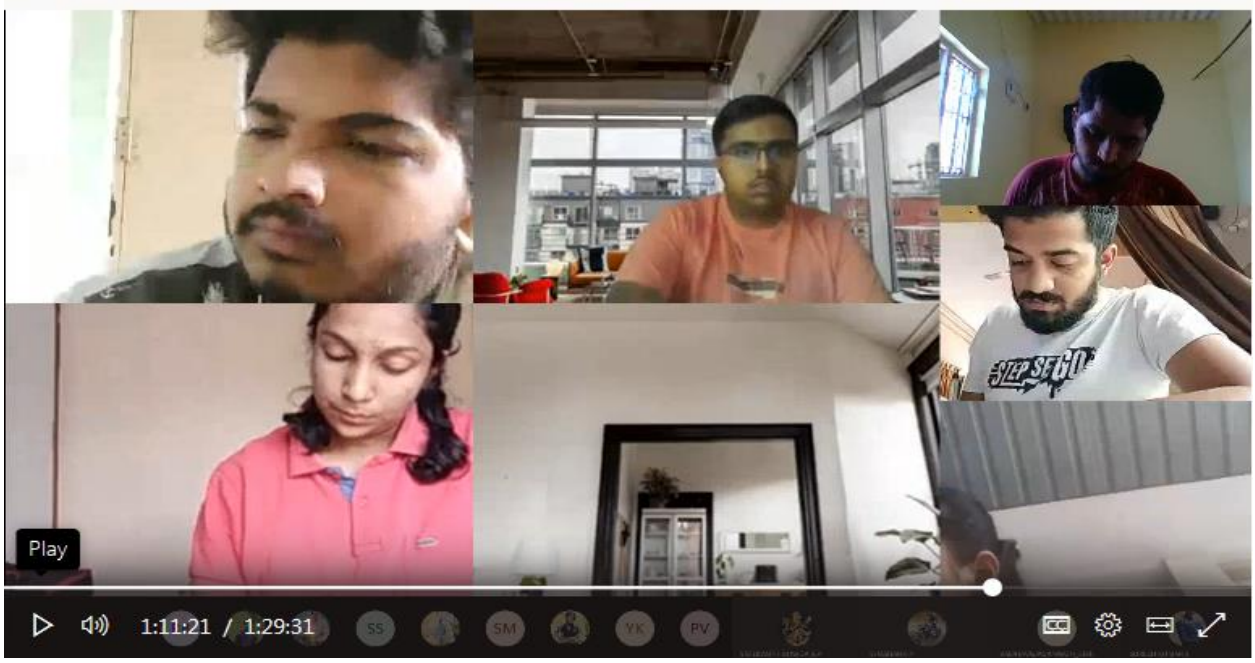
D.Test Paper deployment and submission form in MS Teams





HOD

E.Test Recording Screenshots



HOD

ASSIGNMENT

ODD Semester: 2019-2020

The Department follows the following components for the evaluation of **Assignments (10 Marks/Course).**

1. Solving the VTU question papers and other important questions.
2. Quiz on the topics relevant to the syllabus.

Based on the above components assignment marks will be finalized.

Even Semester: 2019-2020

In the Even semester revision in the policy was adopted. Any two components below can be considered for 6 Marks. Remaining 4 marks is assigned for skill enhancement through MOOC Certification.

1. Solving the VTU question papers and other important questions.

2. Quiz on the topics relevant to the syllabus.

MOOC Certification

- For registration of the course (Weightage of 2 Marks)
- Completion of the course (Weightage of 2 Marks)

Quiz on the topics relevant to the syllabus

Course: Fluid Power System
Course Code: 15ME72

Sample Quiz

Results Detail

Device ID	Student name	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Total Points		Score
Answer Key		A	D	C	C	A	C	C	A	D	B	10.00		100.00%
4AD18ME020	LEELENDRA KUMAR H	A	D	C	C	A	A	B	A	D	B	8.00		80.00%
4AD19ME400	ABDUL KHAYAM ALI	A	D	C	C	B	C	C	A	C	A	7.00		70.00%
4AD19ME401	ABHISHEK J K	A	D	C	D	A	C	C	A	C	A	7.00		70.00%
4AD19ME402	ABHISHEK M U	A	D	A	C	A	A	C	A	A	B	7.00		70.00%
4AD19ME403	ABHISHEKGOWDA C A	A	A	C	C	A	A	C	A	D	B	8.00		80.00%
4AD19ME404	AKSHATH L	B	D	C	C	A	A	C	A	D	B	7.00		80.00%
4AD19ME407	ARUNA A	A	A	D	C	A	A	C	A	D	B	7.00		70.00%
4AD19ME408	ASHLESH KUMAR M	A	D	C	C	A	C	C	A	D	B	8.00		80.00%
4AD19ME409	AVINASH P	A	C	C	C	A	C	B	A	D	A	7.00		70.00%
4AD19ME410	BHARATH S M	A	A	A	C	A	C	C	A	C	B	7.00		70.00%
4AD19ME411	CHANDAN G Y	A	B	A	C	A	C	C	A	A	B	7.00		70.00%
4AD19ME412	CHANDAN M	A	D	B	C	A	C	C	A	D	A	8.00		80.00%
4AD19ME413	CHANDAN N	A	B	A	C	A	C	C	A	A	A	6.00		60.00%
4AD19ME414	CHANDRASHEKAR M	A	-	B	C	A	C	C	A	A	A	6.00		60.00%
4AD19ME415	CHETHAN S	A	A	B	C	A	C	C	A	A	A	6.00		60.00%
4AD19ME416	DHANANJAYAKUMARA D R	A	A	C	C	B	C	C	A	D	B	8.00		80.00%
4AD19ME417	FAZIL AHMED	A	A	A	C	A	C	C	A	D	D	7.00		70.00%
4AD19ME418	GAJENDRA T S	C	B	C	C	A	C	B	A	B	B	7.00		70.00%
4AD19ME419	GOVINDARAJU V	A	A	A	C	B	A	C	A	D	B	8.00		80.00%

10/16/2019

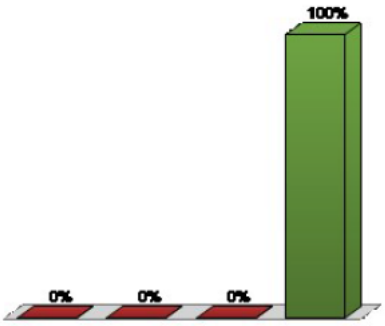
Session Name: Current Session

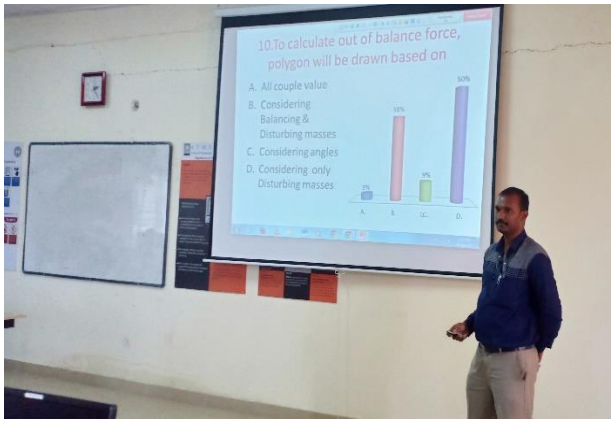
Date Created: 10/16/2019 10:20:32 AM **Active Participants:** 57 of 57
Average Score: 67.54% **Questions:** 20

Results by Question

1. 1) Fluid Power deals with (Multiple Choice)

	Responses	
	Percent	Count
Generation of Power	0%	0
Control of Power	0%	0
Transmission of Power	0%	0
All of the above *(c)*	100%	57
Totals	**100%**	**57**

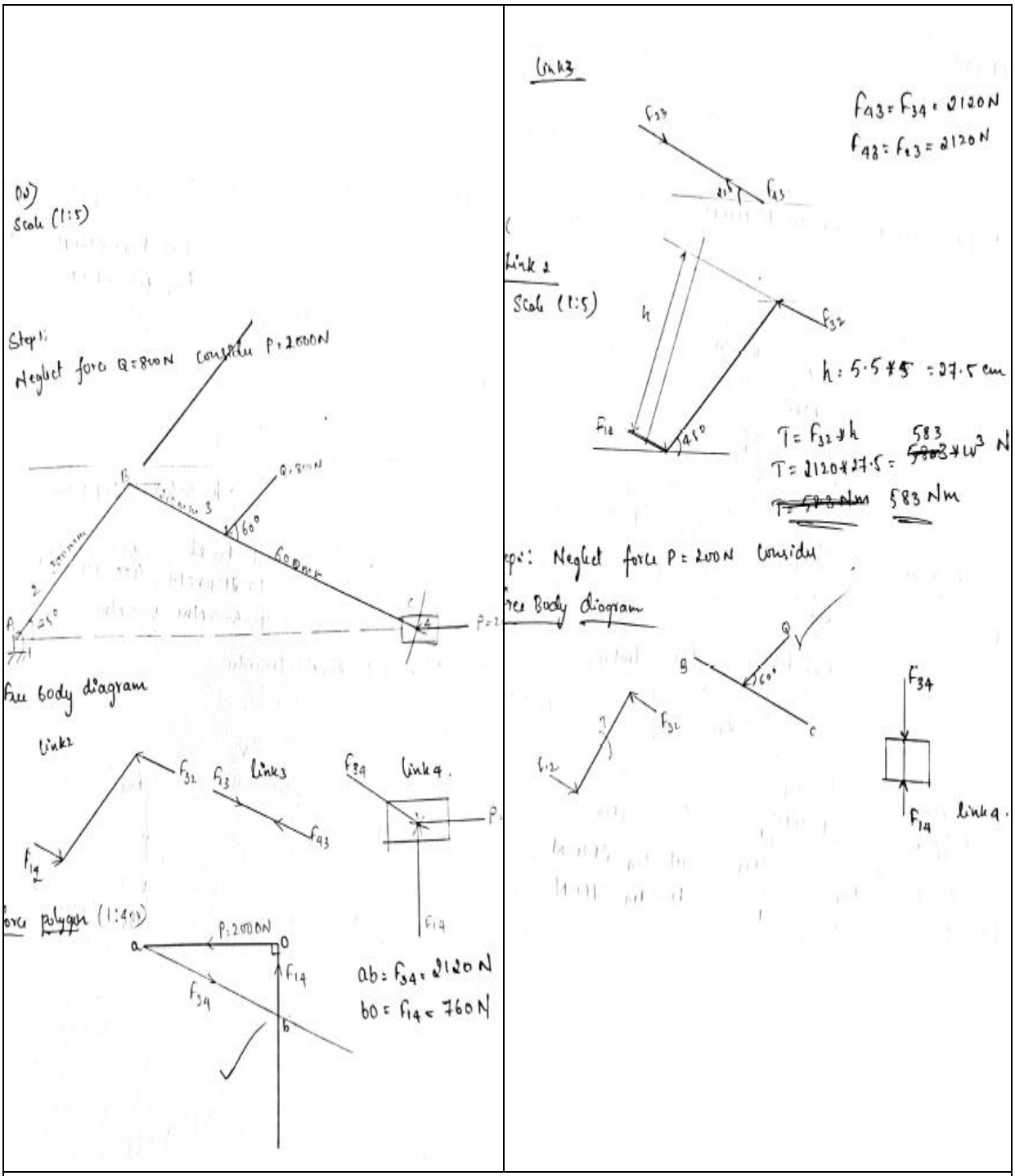




Sample screenshot

HOD

Solving the VTU question papers and other important questions



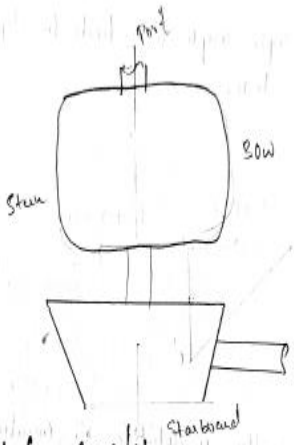
Sample Assignment

01) Effect of gyroscopic couple on naval ship

(a) Steering
(b) pitching
(c) Rolling

Steering.

Case 1:



When Viewed from rear / stern

front end of the ship is called Bow
rear end of the ship is called stern
Right side of the ship is called starboard
Left side of the ship is called port.

Case i

When viewed from rear and ship is ~~not~~ taking turn, the engine propeller is rotating in clock

effect of gyroscopic couple will tends to raise the bow and dips the stern.

Case 4

When engine propeller is rotating in Counter clock wise and the ship takes right turn when viewed from rear

- the effect of gyroscopic couple will tends to raise the stern and dips the Bow.

Pitching

the movement of ship either ~~upw~~ upwards or down wards is called pitching.

Case i

If the ship moves upward when viewed from rear ~~the prop~~ the effect of gyroscopic couple in pitching will tends to move the propeller towards Starboard ~~towards~~ or right ~~position~~ side

reactive gyroscopic couple

Case ii

If the ship moves downward when viewed from rear the effect of gyroscopic couple in pitching will Tends to move the propeller ~~to~~ towards port

10/10

Sample Assignment

HOD

Student MOOC Details - Mechanical Department

Sl.No	Student Name	USN	Course Enrolled	MOOC Platform
1	Aditya C	4AD17ME003	Advanced Machining Processes	Swayam NPTEL
2	Aditya C	4AD17ME003	Introduction to Aeronautical Engineering	edX
3	Anil Kumar B M	4ad17ME012	Fluid Machines	Swayam NPTEL
4	Harshavardhan N	4AD17ME020	Fluid Machines	Swayam NPTEL
5	MANOJ M	4AD17ME033	Fluid Machines	Swayam NPTEL
6	Prajwal A S	4AD17ME053	Advanced Machining Processes	Swayam NPTEL
7	Prajwal A S	4AD17ME053	Introduction to Aeronautical Engineering	edX
8	Shamanth Kumar M	4AD17ME070	Robotics	Swayam NPTEL
9	Azmathulla Khan	4AD18ME003	Advanced Machining Processes	Swayam NPTEL
10	Bharath kumar M	4AD18ME004	Material Science and Engineering	Swayam NPTEL
11	BHUVANESH M	4AD18ME005	Introduction to Aeronautical Engineering	edX
12	BHUVANESH M	4AD18ME005	Advanced Machining Processes	Swayam NPTEL
13	GOWTHAM G	4AD18ME010	Robotics	Swayam NPTEL
14	Kishor Y N	4AD18ME019	Robotics	Swayam NPTEL
15	LEELENDRA KUMAR	4AD18ME020	Introduction to Matlab	edX
16	Likhitha N S	4AD18ME021	Advanced Machining Processess	Swayam NPTEL
17	Madesh C M	4AD18ME022	Fluid Machines	Swayam NPTEL
18	Manoj C	4AD18ME023	Engineering Drawing and Computer Graphics	Swayam NPTEL
19	Manoj Kumar N	4AD18ME024	Robotics	Swayam NPTEL
20	Md Afan Jaleel	4AD18ME025	Advanced Machining Processess	Swayam NPTEL
21	Md Alfaz V I	4AD18ME026	Advanced Machining Processess	Swayam NPTEL
22	Md Jeelani H	4AD18ME027	Advanced Machining Processess	Swayam NPTEL
23	Md Naihan	4AD18ME028	Robotics	Swayam NPTEL
24	Md Rayan Khan	4AD18ME029	Robotics	Swayam

				NPTEL
25	Md Saqlain Ibrahim	4AD18ME030	Robotics	Swayam NPTEL
26	Nikhil Ramesh	4AD18ME035	Robotics	Swayam NPTEL
27	Nikhilnag R	4AD18ME036	Robotics	Swayam NPTEL
28	Parveez Ahmed	4AD18ME037	Engineering Drawing and Computer Graphics	Swayam NPTEL
29	Peter A X	4AD18ME038	Engineering Metrology	Swayam NPTEL
30	Prajwala S M	4AD18ME039	Introduction to Aeronautical Engineering	edX
31	Prajwala S M	4AD18ME039	Robotics	Swayam NPTEL
32	Prashal Poovaiah K B	4AD18ME040	Advanced Machining Processess	Swayam NPTEL
33	Priyanka V S	4AD18ME041	Advanced Machining Processess	Swayam NPTEL
34	Saif Madeen	4AD18ME044	Introduction to Aeronautics	edX
35	Saqlainulla shariff	4AD18ME045	Robotics	Swayam NPTEL
36	Sreekanth Gowda G P	4AD18ME048	Advanced Machining Process	Swayam NPTEL
37	Syed Ibad Hussain	4AD18ME054	Robotics	Swayam NPTEL
38	Vaibhav G Jagannath	4AD18ME055	Advanced Machining Process	Swayam NPTEL
39	Yashwanth kumar K	4AD18ME056	Advanced Machining Process	Swayam NPTEL
40	ABHISHEK P	4AD19ME001	Advanced Machining Processes	Swayam NPTEL
41	AISHWARYA S G	4AD19ME002	Robotics	Swayam NPTEL
42	AMAAN AFSAL	4AD19ME003	Robotics	Swayam NPTEL
43	GOVINDARAJ G	4AD19ME008	Robotics	Swayam NPTEL
44	HARISH N S	4AD19ME010	Robotics	Swayam NPTEL
45	KUSHAL SAGAR D	4AD19ME012	Engineering Drawing and Computer Graphics	Swayam NPTEL
46	MANOJ N PATEL	4AD19ME013	Robotics	Swayam NPTEL
47	MOHAMMED DAWOOD	4AD19ME016	Introduction to Aeronautical Engineering	edX
48	MUHAMMAD RAASHID	4AD19ME018	Introduction to Aeronautical Engineering	edX
49	NAVEEN RAJU P	4AD19ME021	Introduction to Aeronautical Engineering	edX
50	PADMANABHA K	4AD19ME022	Fundamentals of Manufacturing	Swayam NPTEL
51	PRAJWAL M Y	4AD19ME023	Robotics	Swayam

				NPTEL
52	PRAJWAL S	4AD19ME024	Introduction to Aeronautical Engineering	edX
53	PUNITH S	4AD19ME025	Introduction to Aeronautical Engineering	edX
54	RAJENDRA N	4AD19ME026	Robotics	Swayam NPTEL
55	RICHARD RAJ	4AD19ME027	Introduction to Aeronautical Engineering	edX
56	SHASHANK M	4AD19ME028	Introduction to Aeronautical Engineering	edX
57	SHIVALI S	4AD19ME029	Robotics Foundations I - Robot modelling	edX
58	SHREYAS K G	4AD19ME030	Engineering drawing & Computer graphics	Swayam NPTEL
59	SYED SAJJAD HUSSAIN	4AD19ME031	Introduction to Aeronautical Engineering	edX
60	VARSHITH S	4AD19ME033	Introduction to Aeronautical Engineering	edX
61	ABHISHEKGOWDA C A	4AD19ME403	Robotics	Swayam NPTEL
62	AKSHATH L	4AD19ME404	Advanced Machining Processes	Swayam NPTEL
63	ARUNA A	4AD19ME407	Advanced Machining Processes	Swayam NPTEL
64	AVINASH P	4AD19ME409	Robotics	Swayam NPTEL
65	CHANDAN M	4AD19ME412	Robotics foundations 1	edX
66	CHANDRASHEKAR M	4AD19ME414	Advanced Machining Processes	Swayam NPTEL
67	DHANANJAYAKUMARA D R	4AD19ME416	Thermodynamics	edX
68	FAZIL AHMED	4AD19ME417	Introduction to Matlab	edX
69	GAJENDRA T S	4AD19ME418	Introduction to Matlab	edX
70	GOVINDARAJU V	4AD19ME419	Introduction to Matlab	edX
71	JASWANTH S	4AD19ME420	Introduction to Matlab	edX
72	JAYANTH H I	4AD19ME421	Introduction to Matlab	edX
73	JAYANTH H R	4AD19ME422	Introduction to Matlab	edX
74	KARTHIK M	4AD19ME423	Introduction to Matlab	edX
75	KARTHIKA P	4AD19ME424	Introduction to Matlab	edX
76	KIRAN S R	4AD19ME425	Introduction to Matlab	edX
77	KIRANKUMAR S	4AD19ME426	Introduction to Matlab	edX
78	KISHORE R	4AD19ME427	Introduction to Matlab	edX
79	M C KARTHIK	4AD19ME428	Introduction to Matlab	edX
80	MADAN M N	4AD19ME429	Introduction to Matlab	edX
81	MADHUCHANDAN S	4AD19ME430	Introduction to Matlab	edX
82	MAHADEV D C	4AD19ME431	Introduction to Matlab	edX
83	MAHESH N	4AD19ME432	Introduction to Matlab	edX
84	MALLESH M	4AD19ME433	Introduction to Matlab	edX
85	MANOJ S V	4AD19ME434	Introduction to Matlab	edX

86	MANOJKUMAR S G	4AD19ME435	Introduction to Matlab	edX
87	MANOJKUMARA S L,	4AD19ME436 ,	Introduction to Matlab	edX
88	Md Nouman	4AD19ME437	Fundamentals of Manufacturing Process	Swayam NPTEL
89	Md Javeed Ahmed	4AD19ME438	Robotics	Swayam NPTEL
90	MONISH N S	4AD19ME439	Robotics	Swayam NPTEL
91	NARASIMHA S	4AD19ME440	Engineering Drawing and Computer graphics	Swayam NPTEL
92	NAVEEN M	4AD19ME441	Mechanical Behavior of material	edX
93	NAVEENA H M	4AD19ME442	Robotics	Swayam NPTEL
94	NITHIN D R	4AD19ME443	Robotics	Swayam NPTEL
95	PAVAN KUMAR B	4AD19ME444	Robotics	Swayam NPTEL
96	PAVITHRA B J	4AD19ME445	Robotics	Swayam NPTEL
97	PRADVIN S G	4AD19ME446	Introduction to Areonautical Engineering	edX
98	Prajwal R	4AD19ME447	Manufacturing Systems Technology I & II	edX
99	Prarthana Gowda	4AD19ME449	Advanced Machining Processes	Swayam NPTEL
100	Prashantha H J	4AD19ME450	Robotics	Swayam NPTEL
101	Praveen S K	4AD19ME453	Robotics	Swayam NPTEL
102	Rajashekara K P	4AD19ME454	Robotics	Swayam NPTEL
103	Rakesh B R	4AD19ME455	Mechanical Behaviour of Materials	edX
104	Rakshith M S	4AD19ME456	Robotics	Swayam NPTEL
105	Rakshith M S	4AD19ME456	Introduction to Aeronautical Engineering	edX
106	Sachin S	4AD19ME458	Mechanical Behaviour of Materials	edX
107	Sahana S	4AD19ME460	Advanced Machining Processes	Swayam NPTEL
108	Sanjay M Gowda	4AD19ME461	Fundamentals of Manufacturing Processes	Swayam NPTEL
109	Sharath M	4AD19ME462	Robotics	Swayam NPTEL
110	Sharath Kumar K S	4AD19ME463	Robotics	Swayam NPTEL
111	Shilpa N	4AD19ME464	Robotics	Swayam NPTEL
112	Shiva Prasad K S	4AD19ME465	Mechanical Behaviour of Materials	edX
113	Shreejith K M	4AD19ME466	Introduction to Aeronautical	edX

			Engineering	
114	Sreejith	4AD19ME466	Introduction to Areonautical Engineering	edX
115	SRIKANTH J	4AD19ME467	Powder Metalurgy	Swayam NPTEL
116	SUDEEP D N	4AD19ME469	Robotics Foundation I - Robot modelling	edX
117	SUDEEP D N	4AD19ME469	Fundamentals of Manufacturing Process	Swayam NPTEL
118	SUDHARSHAN B R	4AD19ME470	Robotics Foundation I - Robot modelling	edX
119	SUDHARSHAN B R	4AD19ME470	Fundamentals of Manufacturing Process	Swayam NPTEL
120	Suhas Rao N S	4AD19ME471	Mechanical Behaviour of Materials	edX
121	SUHAS RAO N S	4AD19ME471	Mechanical Behavior of material	edX
122	SUJAN UDUPA B P	4AD19ME472	Robotics Foundation I - Robot modelling	edX
123	SUNIL J S	4AD19ME473	Mechanical Behavior of material	edX
124	SWATHI M V	4AD19ME474	Product Design and development	edX
125	SYED MOHAMMED YOUNUS	4AD19ME475	Fundamentals of Manufacturing Process	Swayam NPTEL
126	VIJAY KUMAR	4AD19ME476	Advanced Machining Process	Swayam NPTEL
127	VISHNU PRASAD S	4AD19ME477	Mechanical Behavior of material	edX
128	YASHAS M	4AD19ME478	Mechanical Behavior of material	edX

HOD

Academic Calendar

A T M E College of Engineering

ATME COLLEGE OF ENGINEERING, MYSURU

Revised Academic Calendar (ODD SEMESTER, 2020-21)

WEEK	MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	HOLIDAY (H)	COLLEGE EVENTS
1	SEPTEMBER			1	2	3	4	5		3rd , 5th & 7th Semster : commencement of Online Classes
2		6	7	8	9	10	11	12		
3		13	14	15	16	17	18	19	Mahalaya Amavasya	
4		20	21	22	23	24	25	26		
5		27	28	29	30					
5	OCTOBER					1	2	3	Gandhi Jayanthi	
6		4	5	6	7	8	9	10		First I A for 3rd , 5th and 7th Semester
7		11	12	13	14	15	16	17		
8		18	19	20	21	22	23	24		
9		25	26	27	28	29	30	31	Ayudha Pooja, Vijaya Dashami, Eid-Milad , Valmiki Jayanthi	
10	NOVEMBER	1	2	3	4	5	6	7	Kannada Rajyotsava	
11		8	9	10	11	12	13	14	Naraka Chaturdashi	Second IA for 3rd , 5th and 7th Semester
12		15	16	17	18	19	20	21	Balipadyami	Commencement of On-Campus Classes for Semseter 7.
13		22	23	24	25	26	27	28		
14		29	30							

Non Working Saturdays

A T M E College of Engineering

ATME COLLEGE OF ENGINEERING, MYSURU

Revised Academic Calendar (ODD SEMESTER, 2020-21)

WEEK	MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	HOLIDAY (H)	COLLEGE EVENTS
14	DECEMBER			1	2	3	4	5	Kanakadasa Jayanthi	
15		6	7	8	9	10	11	12		
16		13	14	15	16	17	18	19		
17		20	21	22	23	24	25	26	Christmas	
18		27	28	29	30	31				Third IA for Semesters 3, 5 and 7
18	JANUARY						1	2		
19		3	4	5	6	7	8	9		LAB Interenals for Semesters 3,5 and 7
20		10	11	12	13	14	15	16	Makra Sankranthi	Improvement IA for Semesters 3,5 and 7, LAST working day for ODD Sem 2020-21
21		17	18	19	20	21	22	23		Comencement of Odd Semester Practical Exams
22		24	25	26	27	28	29	30	Republic Day	
23		31								
23	FEBRUARY		1	2	3	4	5	6		End of Odd Semester Practical Exams
24		7	8	9	10	11	12	13		Commencement of Odd Semester Theory Exams
25		14	15	16	17	18	19	20		
26		21	22	23	24	25	26	27		
27		28								
								Non Working Saturdays		
No. Of Working Days			17	20	20	17	17	9	Total No. Of Working Days	100

A T M E College of Engineering

ATME COLLEGE OF ENGINEERING, MYSURU

Revised Academic Calendar (ODD SEMESTER, 2020-21)

WEEK	MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	HOLIDAY (H)	COLLEGE EVENTS
14	MARCH		1	2	3	4	5	6		
15		7	8	9	10	11	12	13	Mahashivaratri	
16		14	15	16	17	18	19	20		
17		21	22	23	24	25	26	27		25th End of odd semester Theory exams, 26th Mar 2021 Commencement of Even Semester
18		28	29	30	31					
18	APRIL					1	2	3	Good Friday	
19		4	5	6	7	8	9	10		
20		11	12	13	14	15	16	17	Chadramana Yugadi, Ambedkar Jayanthi	
21		18	19	20	21	22	23	24		
22		25	26	27	28	29	30		Mahavir Jayanthi	
23	MAY							1	May Day (Labour Day)	
23		2	3	4	5	6	7	8		
24		9	10	11	12	13	14	15	Idul-Fitr, Basava Jayathi	
25		16	17	18	19	20	21	22		
26		23	24	25	26	27	28	29		
27		30	31							

Non Working Saturdays

Sd-
Dr. L Basavaraj
Principal

A T M E College of Engineering

ATME COLLEGE OF ENGINEERING, MYSURU

Academic Calendar (SECOND SEMESTER, 2020-21)

WEEK	MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	No. of Days	HOLIDAY (H)	COLLEGE EVENTS
	MAY							1		May Day	
		2	3	4	5	6	7	8			
		9	10	11	12	13	14	15		Basava Jayanthi	
1		16	17	18	19	20	21	22	4		Commencement of Second Sem
2		23	24	25	26	27	28	29	6		
3		30	31								
3	JUNE			1	2	3	4	5	6		
4		6	7	8	9	10	11	12	6		
5		13	14	15	16	17	18	19	6		End of First Session of Mentoring
6		20	21	22	23	24	25	26	6		
7		27	28	29	30						
7	JULY					1	2	3	6		First IA
8		4	5	6	7	8	9	10	6		First IA
9		11	12	13	14	15	16	17	6		Attendance and IA to Parents
10		18	19	20	21	22	23	24	5	Bakrid	End of Second Session of Mentoring
11		25	26	27	28	29	30	31	6		

A T M E College of Engineering

ATME COLLEGE OF ENGINEERING, MYSURU

Academic Calendar (SECOND SEMESTER, 2020-21)

WEEK	MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	No. of Days	HOLIDAY (H)	COLLEGE EVENTS
12	AUGUST	1	2	3	4	5	6	7	6		
13		8	9	10	11	12	13	14	6		
14		15	16	17	18	19	20	21	5	Last Day of Moharram	
15		22	23	24	25	26	27	28	6		
16		29	30	31							Attendance & IA to Parents
16	SEPTEMBER				1	2	3	4	6		Second IA
17		5	6	7	8	9	10	11	5	Genesh Chathurthi	Second IA
18		12	13	14	15	16	17	18	6		
19		19	20	21	22	23	24	25	5		End of Third Session of Mentoring
20		26	27	28	29	30			4		Third IA, Endt of Second Semeste,
	OCTOBER						1	2		Gandhi Jayanthi	Attendace & IA to Parents
		3	4	5	6	7	8	9		Mahalaya Amavasya	Commencement of Lab Exams for Second Sem
		10	11	12	13	14	15	16		Ayudhapooja, Vijaya Dashami	
		17	18	19	20	21	22	23		Valmiki Jayanthi, Eid-Milad	End of Lab Exams for Second Semester, Commencement of Theory Exams for 2nd Sem
		24	25	26	27	28	29	30			
		31									
TOTAL NUMBER OF WORKING DAYS IN THE SEMESTER											112

A T M E College of Engineering

ATME COLLEGE OF ENGINEERING, MYSURU

Academic Calendar (SECOND SEMESTER, 2020-21)

WEEK	MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	No. of Days	HOLIDAY (H)	COLLEGE EVENTS
	NOVEMBER		1	2	3	4	5	6		Kannada Rajyotsava Naraka Chaturdashi, Balipadyami	
		7	8	9	10	11	12	13			End of Theory Exams for 2nd Sem
		14	15	16	17	18	19	20			Commencement of 2021-22 First Semester
		21	22	23	24	25	26	27		Kanakadasa Jayanthi	
		28	29	30							

Sd/-
Dr. Govinde Gowda M S
Dean Academics

Sd/-
Dr. L Basavaraj
Principal

Sample Test Process

IA Process

Timetable

A T M E College of Engineering

Department of Basic Sciences and Humanities

Date: 25/01/2021

Circular

The first Internal assessment is scheduled as per Academic calendar 2021. The timetable for the respective IA is as follows,

First Internal Assessment Time Table

Date	Time	Physics Cycle	Chemistry Cycle
30-01-2021 Saturday	9:30 am to 11:00 am	18PHY12	18CHE12
	3:00 pm to 4:30 pm	18MAT11	
01-02-2021 Monday	9:30 am to 11:00 am	18ELE13	18ELN14
	3:00 pm to 4:30 pm	18CIV14	18CPS13
02/02/2021 Tuesday	9:30 am to 11:00 am	**	18ME15
	2.00 pm – 3.00 pm	18EGH18	

The same has been notified at Chemistry and Physics department Notice board. In this regard, it is informed to the students to bring Bluebooks directly to their allotted rooms on the day of first IA.

** P-Cycle students will have to attend EGDL classes on 02/02/2021 from 9.00am till 12.15am.

IA coordinator
(Dr. Avinash. K)

Forwarded to Dean Academics for further necessary action

- Approved -

27/01/21

Dean Academics
(Dr. Govinde Gowda M S)

Forwarded to Principal for approval

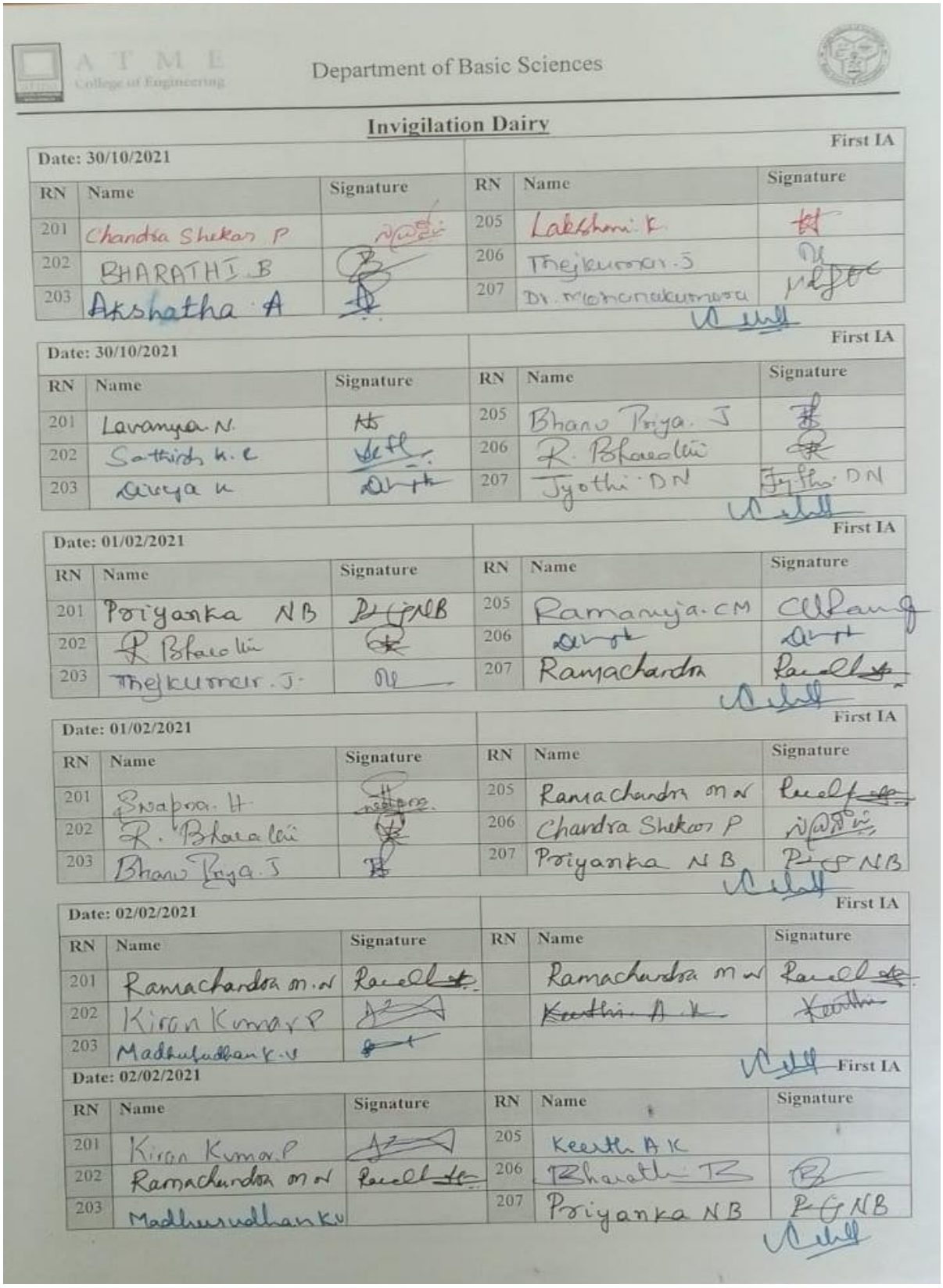
27/1/21

Principal
(Dr. Basavaraj L)

PRINCIPAL
ATME College of Engineering
13th KM, Mysuru-Kanakapura-Bangalore Road
Mellahalli Mysuru-570028

Copy to all departments for their reference

IA invigilation dairy



A T M E College of Engineering — Department of Basic Sciences

Invigilation Dairy

Date: 30/10/2021			First IA		
RN	Name	Signature	RN	Name	Signature
201	Chandra Shekar P		205	Lakshmi K	
202	BHARATHI B		206	Thejkumar.J	
203	Akshatha A		207	Dr. Mohankumara	

Date: 30/10/2021			First IA		
RN	Name	Signature	RN	Name	Signature
201	Lavanya N.		205	Bhanu Priya. J	
202	Sathish K.C		206	R. Bharathi	
203	Divya K		207	Jyothi DN	Jyothi DN

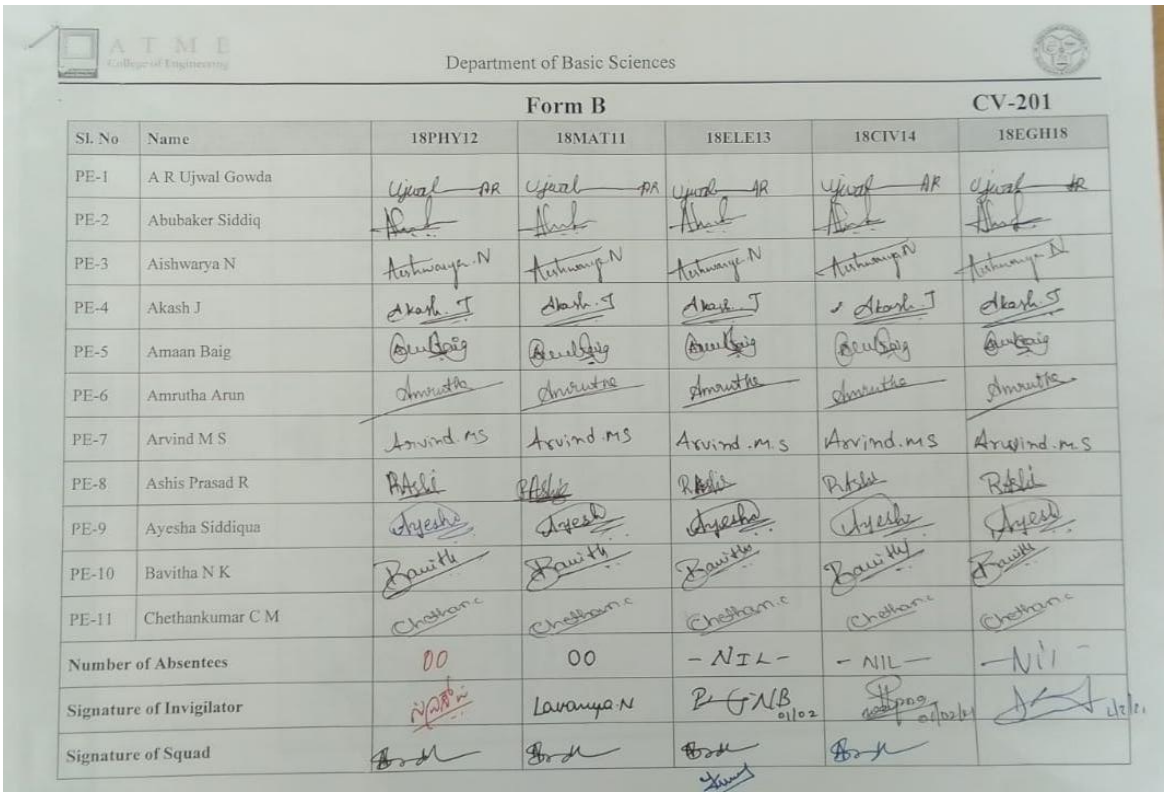
Date: 01/02/2021			First IA		
RN	Name	Signature	RN	Name	Signature
201	Priyanka NB	P G NB	205	Ramanjya.CM	
202	R Bharathi		206		
203	Thejkumar. J.		207	Ramachandra	

Date: 01/02/2021			First IA		
RN	Name	Signature	RN	Name	Signature
201	Swapna. H		205	Ramachandra m.v	
202	R. Bharathi		206	Chandra Shekar P	
203	Bhanu Priya. J		207	Priyanka NB	P G NB

Date: 02/02/2021			First IA		
RN	Name	Signature	RN	Name	Signature
201	Ramachandra m.v			Ramachandra m.v	
202	Kiran Kumar P			Keerthi A.K	
203	Madhusudhan K.V				

Date: 02/02/2021			First IA		
RN	Name	Signature	RN	Name	Signature
201	Kiran Kumar P		205	Keerthi A K	
202	Ramachandra m.v		206	Bharathi B	
203	Madhusudhan K.V		207	Priyanka NB	P G NB

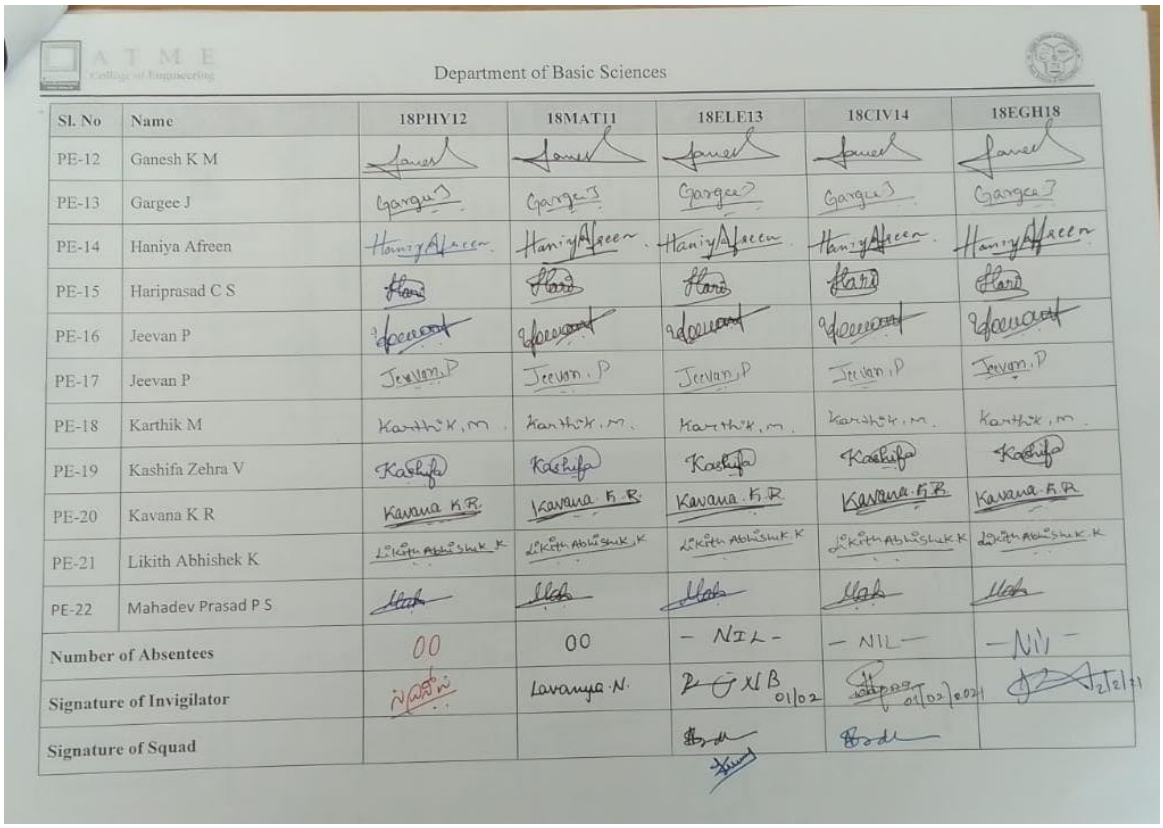
IA Attendance Sheet



Department of Basic Sciences

Form B — CV-201

Sl. No	Name	18PHY12	18MAT11	18ELE13	18CIV14	18EGH18
PE-1	A R Ujwal Gowda					
PE-2	Abubaker Siddiq					
PE-3	Aishwarya N					
PE-4	Akash J					
PE-5	Amaan Baig					
PE-6	Amrutha Arun					
PE-7	Arvind M S					
PE-8	Ashis Prasad R					
PE-9	Ayesha Siddiqua					
PE-10	Bavitha N K					
PE-11	Chethankumar C M					
Number of Absentees		00	00	- NIL -	- NIL -	- Nil -
Signature of Invigilator			Lavanya N			
Signature of Squad						



Department of Basic Sciences

Sl. No	Name	18PHY12	18MAT11	18ELE13	18CIV14	18EGH18
PE-12	Ganesh K M					
PE-13	Gargee J					
PE-14	Haniya Afreen					
PE-15	Hariprasad C S					
PE-16	Jeevan P					
PE-17	Jeevan P					
PE-18	Karthik M					
PE-19	Kashifa Zehra V					
PE-20	Kavana K R					
PE-21	Likith Abhishek K					
PE-22	Mahadev Prasad P S					
Number of Absentees		00	00	- NIL -	- NIL -	- Nil -
Signature of Invigilator			Lavanya N.			
Signature of Squad						

Sample Question paper and Scheme

A T M E College of Engineering
DEPARTMENT OF BASIC SCIENCES AND HUMANITIES
Approved by AICTE (New Delhi) and Affiliated to VTU (Belagavi).13th km Stone, Bannur Road, Mysuru - 570028

Department of Mathematics

FIRST INTERNAL ASSESMENT

COURSE	:	Advanced Calculus and Numerical Methods	TIME	:	2:30 PM-4:00 PM
COURSE CODE	:	18MAT21	DATE	:	03/07/2021
SEM/SEC	:	Second	MAX. MARKS	:	50

	PART-A Answer any **THREE** full Questions	Marks	COs	BTL
01.	**a)** **i)** A differential equation $x^n \frac{d^n y}{dx^n} + a_1 x^{n-1} \frac{d^{n-1} y}{dx^{n-1}} + \cdots + a_n y = 0$ can be transformed into a linear differential equation with constant coefficient by means of the substitution a) $z = logx$ b) $x = logz$ c) $x = e^{-x}$ d) $x = \frac{1}{z}$ **ii)** The general solution of $y''' - y'' + y' - y = 0$ is a) $y = c_1 e^t sin2t + c_2 e^t cos2t$ b) $y = e^t(c_1 + c_2 sin2t + c_3 cos2t)$ c) $y = c_1 e^t + c_2 sint + c_3 cost$ d) $y = c_1 e^{-t} + c_2 sint + c_3 cost$	2 M	2	L2
	b) Solve $\frac{d^3y}{dt^3} + 2\frac{d^2y}{dt^2} + \frac{dy}{dt} = e^{-t} + sin2t + t^2$	8 M		
02.	**a)** **i)** The wronskin of e^x and xe^x by the method of variation of parameters is a) e^{2x} b) xe^{2x} c) e^{-2x} d) x^2e^{2x} **ii)** The particular integral of the differential equation $(D^2 - 4)y = sin4x$ a) $y = \frac{xsin4x}{20}$ b) $y = \frac{-sin4x}{20}$ c) $y = \frac{-xsin4x}{8}$ d) $y = \frac{-xcos4x}{20}$	2 M	2	L3
	b) $x^3 \frac{d^3y}{dx^3} + 2x^2 \frac{d^2y}{dx^2} + 2y = 10\left(x + \frac{1}{x}\right)$	8 M		
03.	**a)** **i)**The complementary function of the differential equation $(2x+3)^2 \frac{d^2y}{dx^2} + (2x+3)\frac{dy}{dx} - 2y = x$ is a) $c_1(2x+3) + c_2(2x+3)^{-1/2}$ b) $c_1(2x+3) + c_2(2x+3)^{1/2}$ c) $c_1(2x+3) + c_2(2x+3)^{-3/2}$ d) $c_1(2x+3) + c_2(2x+3)^{3/2}$ **ii)**A differential equation of the type $x^n \frac{d^n y}{dx^n} + a_1 x^{n-1} \frac{d^{n-1} y}{dx^{n-1}} + \cdots + a_n y = X$ where $a_1, a_2, \ldots, a_n$ are constants and X is either a constant or a function of x, is also called	2 M	2	L2

A T M E College of Engineering
DEPARTMENT OF BASIC SCIENCES AND HUMANITIES
Approved by AICTE (New Delhi) and Affiliated to VTU (Belagavi).13th km Stone, Bannur Road, Mysuru - 570028

Department of Mathematics

	a)Lagrange's equation b)cauchy's equation c)bernoulli's equation d)legendre's equation			
	b)Solve $y'' + y = \frac{1}{1+sinx}$ by the method of variation of parameters	8 M		
04.	**a)** **i)** The roots of the homogeneous differential equation $\frac{d^2y}{dx^2} - 10\frac{dy}{dx} + 25y = 0$ is a) unique b) repeated c)complex d) none of these **ii)** If the roots of the A.E is $2 \pm 3i$, $2 \pm 3i$ then the complementary function is a) $e^{2x}(c_1 cos3x + c_2 sin3x)$ b) $e^{3x}(c_1 sin2x + c_2 cos2x)$ c) $e^{2x}[(c_1 + c_2x)cos3x + (c_3 + c_4x)sin3x]$ d) $e^{3x}[(c_1 + c_2x)cos2x + (c_3 + c_4x)sin2x]$	2 M	2	L2
	b)Solve $(3x+2)^2\frac{d^2y}{dx^2} + 3(3x+2)\frac{dy}{dx} - 36y = x^2 + x + 1$	8 M		

	PART-B Answer any **TWO** full Questions	**Marks**	**COs**	**BTL**
05.	**a)** **i)** The divergence of the vector field $\vec{f} = 3x^2\hat{\imath} + 5xy^2\hat{\jmath} + xyz^3\hat{k}$ at the point (1,2,3) a)89 b)80 c)124 d)100 **ii)** Mathematically the functions in Green's Theorem will be a) continuous derivatives b) discrete derivatives c) continuous partial derivatives d) discrete partial derivatives	2 M	1	L2
	b) Find the value of the constant 'a' such that the vector function $\vec{A} = y(ax^2 + z)\hat{\imath} + x(y^2 - z^2)\hat{\jmath} + 2xy(z - xy)\hat{k}$ is solenoidal. For this value of 'a', show that curl $\vec{A}$ is also solenoidal.	8 M		
06.	**a)** **i)**The gauss divergence theorem converts a) line to surface integral b) line to volume integral c) surface to line integral d) surface to volume integral **ii)**The curl of $\vec{f}(x,y,z) = x^2\hat{\imath} + xyz\hat{\jmath} - z\hat{k}$ at the point (2,1,-2) a)$2\hat{\imath} + 2\hat{\jmath}$ b) $-2\hat{\imath} - 2\hat{\jmath}$ c) $4\hat{\imath} - 4\hat{\jmath} + 2\hat{k}$ d) $-2\hat{\imath} - 2\hat{k}$	2 M	1	L2

A T M E College of Engineering
DEPARTMENT OF BASIC SCIENCES AND HUMANITIES
Approved by AICTE (New Delhi) and Affiliated to VTU (Belagavi).13th km Stone, Bannur Road, Mysuru - 570028

Department of Mathematics

	b) Using stoke's theorem, evaluate $\int_c xydx + xy^2dy$ where c is the square in the x-y plane with vertices (1,0), (-1,0), (0,1) and (0,-1)	8 M		
07.	**a)** **i)** A vector field which has a vanishing divergence is called as a)solenoidal field b) rotational field c)irrotational field d)none of these **ii)** A vector field with a vanishing curl is called as a)irrotational b)solenoidal c)rotational d)none of these	2 M	1	L2
	b) If $\vec{F} = (axy + z^3)\hat{\imath} + (3x^2 - z)\hat{\jmath} + (bxz^2 - y)\hat{k}$ is irrotational, find a and b. Also find scalar function ϕ such that $\vec{F} = \nabla\phi$	8 M		

CO1	Illustrate the application of multivariate calculus to understand the solenoidal and irrotational vectors and also exhibit the inter dependence of line, surface and volume integrals.
CO2	Demonstrate various physical models through higher order differential equations and solve such linear ordinary differential equations.
CO3	Construct a variety of partial differential equations and solution by exact methods/method of separation of variables.
CO4	Explain the applications of infinite series and obtain series solution of ordinary differential equations.
CO5	Apply the knowledge of numerical methods in the modeling of various physical and engineering phenomena.

Bloom's Taxonomy Level	
L1	**Remembering**
L2	**Understanding**
L3	**Applying**
L4	**Analyzing**
L5	**Synthesizing**
L6	**Creating**

Name & Signature of Course Coordinator

HoD Signature

A T M E College of Engineering
DEPARTMENTS OF BASIC SCIENCES AND HUMANITIES

SCHEME & SOLUTION

SUB: Advanced Calculus and Numerical Methods(18MAT21) Date: 06/07/2021

Qn	SCHEME	Marks	CO's	BTL
	Part-A:			
1.	a)		2	L2
	i) a) $z = \log x$	1		
	ii) c) $y = c_1 e^t + c_2 \sin t + c_3 \cos t$	1		
	b) A.E is $m^3+2m^2+m=0$			
	$\Rightarrow m = 0, -1, -1.$			
	$\therefore C.F = c_1 + (c_2 + c_3 t)e^{-t}$	1		
	$P.I = \frac{e^{-t}}{D^3+2D^2+D} + \frac{\sin 2t}{D^3+2D^2+D} + \frac{t^2}{D^3+2D^2+D}$. $D \to -1$ $\quad D^2 \to -2^2$			
	$P.I = -\frac{t^2 e^{-t}}{2} + \frac{6\cos 2t - 8\sin 2t}{100} + \frac{t^3 - 4t^2 + 8t}{2}$	6		
	$\therefore$ The general soln is			
	$y = C.F + P.I.$			
	$= c_1 + (c_2 + c_3 t)e^{-t} - \frac{t^2 e^{-t}}{2} + \frac{3\cos 2t - 4\sin 2t}{50}$ $+ \frac{t^3 - 4t^2 + 8t}{2}$.	1		
2.	a)			
	i) a) e^{2x}	1	2	L3
	ii) b) $y = -\frac{\sin 4x}{20}$.	1		

Qn	SCHEME	Marks	CO's	BTL
	b). put $x = e^z$ or $z = \log x$. $(D^3 - D^2 + 2)y = 10(e^z + e^{-z})$.	1	2	L3
	A.E. is $m^3 - m^2 + 2 = 0$ $\therefore m = -1, 1 \pm i$ $\therefore C.F = c_1 e^{-z} + e^z[c_2 \cos z + c_3 \sin z]$	3		
	$\therefore P.I = 10\left[\frac{e^z}{D^3 - D^2 + 2}\right]_{D \to 1} + \left[\frac{e^{-z}}{D^3 - D^2 + 2}\right]_{D \to -1}$ $= 10\left[\frac{e^z}{2} + \frac{z e^{-z}}{5}\right]$ $= 5e^z + 2z e^{-z}$	2		
	$\therefore$ The general sol^n is $y = C.F + P.I$ $= c_1 e^{-z} + e^z[c_2 \cos z + c_3 \sin z] + 5e^z + 2z e^{-z}$	1		
	$\therefore y = \frac{c_1}{x} + x\{c_2 \cos(\log x) + c_3 \sin(\log x)\} + 5x + \frac{2\log x}{x}$.	1		
3.	a)			
	i) a) $c_1(2x+3) + c_2(2x+3)^{-1/2}$	1	2	L2
	ii) b) cauchy equation.	1		

A T M E College of Engineering
DEPARTMENTS OF BASIC SCIENCES AND HUMANITIES

Qn	SCHEME	Marks	CO's	BTL

b) We have, $(D^2+1)y = \frac{1}{1+\sin x}$.

A.E.i $m^2+1=0$

$\Rightarrow m = \pm i$

$\therefore C.F = c_1\cos x + c_2 \sin x$ — 1

Let $y = Ay_1 + By_2$ be the complete solution of the given DE where A & B are to be found.

$\therefore y_1 = \cos x \quad y_2 = \sin x$

$y_1' = -\sin x \quad y_2' = \cos x$

$W = y_1y_2 - y_2y_1' = 1$ — 1

Also $\phi(x) = \frac{1}{1+\sin x}$.

$A = \int \frac{-y_2\phi(x)}{W}$ & $B = \int \frac{y_1\phi(x)}{W}$

$A = \int \frac{-\sin x}{1+\sin x}dx + k_1$ $\quad B = \int \frac{\cos x}{1+\sin x}dx + k_2$

$A = \int \left[1 + \frac{1}{1+\sin x}\right]dx + k_1$ $\quad B = \int \frac{1-\sin x}{\cos x}dx + k_2$ — 3+2

$A = -x + \tan x - \sec x + k_1$ $\quad B = \log(1+\sin x) + k_2$.

$\therefore y = \left[-x + \tan x - \sec x + k_1\right]\cos x + \left[\log(1+\sin x) + k_2\right]\sin x$

Thus,

$y = k_1\cos x + k_2 \sin x + \sin x - x\cos x - 1 + \sin x \log(1+\sin x)$ — 1

Dir H

PG NB

A T M E College of Engineering
DEPARTMENTS OF BASIC SCIENCES AND HUMANITIES

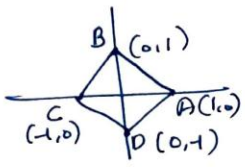
Qn	SCHEME	Marks	CO's	BTL
4	a)		2	L2
	i) b) repeated.	1		
	ii) c) $e^{2x}[(c_1+c_2x)\cos 3x + (c_3+c_4x)\sin 3x]$	1		
	b) put $t = \log(3x+2)$ or $e^t = 3x+2$			
	$(3x+2)y' = 3.Dy$, $(3x+2)^2 y'' = 3^2.D(D+1)y$ where $D=\frac{d}{dt}$.			
	Further, $x = \frac{e^t-2}{3}$.	1		
	Hence the given eqn becomes,			
	$9(D^2-4)y = \frac{e^{2t}-4e^t+4}{9} + \frac{e^t-2}{3} + 1$			
	$= \frac{e^{2t}-4e^t+4+3e^t-6+9}{9}$			
	$9(D^2-4)y = \frac{e^{2t}-e^t+7}{9}$.			
	$\therefore (D^2-4)y = \frac{e^{2t}-e^t+7}{81}$			
	AE is $m^2-4=0$			
	$\Rightarrow m = \pm 2$			
	$\therefore CF = c_1e^{2t} + c_2e^{-2t}$	3		
	$P.I = \frac{1}{81}\left[\frac{e^{2t}}{D^2-4} + \frac{e^t}{D^2-4} + \frac{7}{D^2-4}\right]$			
	$= \frac{1}{81}\left[\frac{2te^{2t}}{4} + \frac{e^t}{3} - \frac{7}{4}\right]$	2		

Qn 4
RJ NB

A T M E College of Engineering
DEPARTMENTS OF BASIC SCIENCES AND HUMANITIES

Qn	SCHEME	Marks	CO's	BTL
	∴The general solution is $y = C.F + P.I$ $\therefore y = C_1 e^{2x} + C_2 e^{-2x} + \frac{1}{81}\left[\frac{2x-e^{2x}}{4} + \frac{e^x}{3} - \frac{7}{4}\right]$	1		
	$\therefore y = C_1(3x+2)^2 + \frac{C_2}{(3x+2)^2} + \frac{1}{81}\left[\log(3x+2)(3x+2)^2 + \frac{3x+2}{3} - \frac{7}{4}\right]$	1		
	Part-B			
5.	a) i) b) 80	1	1	L2
	ii) c) Continuous partial derivatives	1		
	b) Given that, $\text{div}\,\vec{A} = 0$ ($\because \vec{A}$ is solenoidal) $\nabla\vec{A} = \text{div}\,\vec{A} = \left(\frac{\partial}{\partial x}\hat{i} + \frac{\partial}{\partial y}\hat{j} + \frac{\partial}{\partial z}\hat{k}\right)\left[y(ax^2+z)\hat{i} + x(y^2-z^2)\hat{j} + 2xy(z-xy)\hat{k}\right] = 0$ $\Rightarrow a = -2$			
	$\therefore \vec{A} = y(-2x^2+z)\hat{i} + x(y^2-z^2)\hat{j} + 2xy(z-xy)\hat{k}$	2		
	T.S.T. $\text{div}(\text{curl}\,\vec{A}) = 0$ $\text{curl}\,\vec{A} = \nabla\times\vec{A} = \begin{vmatrix} \hat{i} & \hat{j} & \hat{k} \\ \frac{\partial}{\partial x} & \frac{\partial}{\partial y} & \frac{\partial}{\partial z} \\ y(-2x^2+z) & x(y^2-z^2) & 2xy(z-xy) \end{vmatrix}$	2		

ATME College of Engineering
DEPARTMENTS OF BASIC SCIENCES AND HUMANITIES

Qn	SCHEME	Marks	CO's	BTL
	$\text{curl}\,\vec{A} = \hat{i}\left[2xz - 4x^2y - (-2xz)\right] - \hat{j}\left[(2yz - 4xy^2) - y\right] + \hat{k}\left[(y^2 - z^2) - (-2x^2 + z)\right]$			
	$= \hat{i}\left[4xz - 4x^2y\right] - \hat{j}\left[2yz - 4xy^2 - y\right] + \hat{k}\left[2x^2 + y^2 - z^2 - z\right]$	2		
	$\text{div}(\text{curl}\,\vec{A})$			
	$= \left(\frac{\partial}{\partial x}\hat{i} + \frac{\partial}{\partial y}\hat{j} + \frac{\partial}{\partial z}\hat{k}\right)\left[(4xz - 4x^2y)\hat{i} - (2yz - 4xy^2 - y)\hat{j} + (2x^2 + y^2 - z^2 - z)\hat{k}\right]$			
	$= 0$	2		
	$\therefore \text{div}(\text{curl}\,\vec{A}) = 0$			
	Hence curl $\vec{A}$ is solenoidal.			
6	a)			
	i) d) surface to volume integral.	1	1	L2
	ii) d) $-2\hat{i} - 2\hat{k}$	1		
	b) By stokes Theorem,			
	$\int_C \vec{F}\cdot d\vec{r} = \iint_S \text{curl}\,\vec{F}\cdot\hat{n}\,d\vec{s}$.			
				
	$\vec{F} = xy\hat{i} + xy^2\hat{j}$			
	$d\vec{r} = dx\hat{i} + dy\hat{j} + dz\hat{k}$			
	Hence, $\int_C \vec{F}\cdot d\vec{r} = \int_C xy\,dx + xy^2\,dy$	2		

Dept

NB

A T M E College of Engineering
DEPARTMENTS OF BASIC SCIENCES AND HUMANITIES

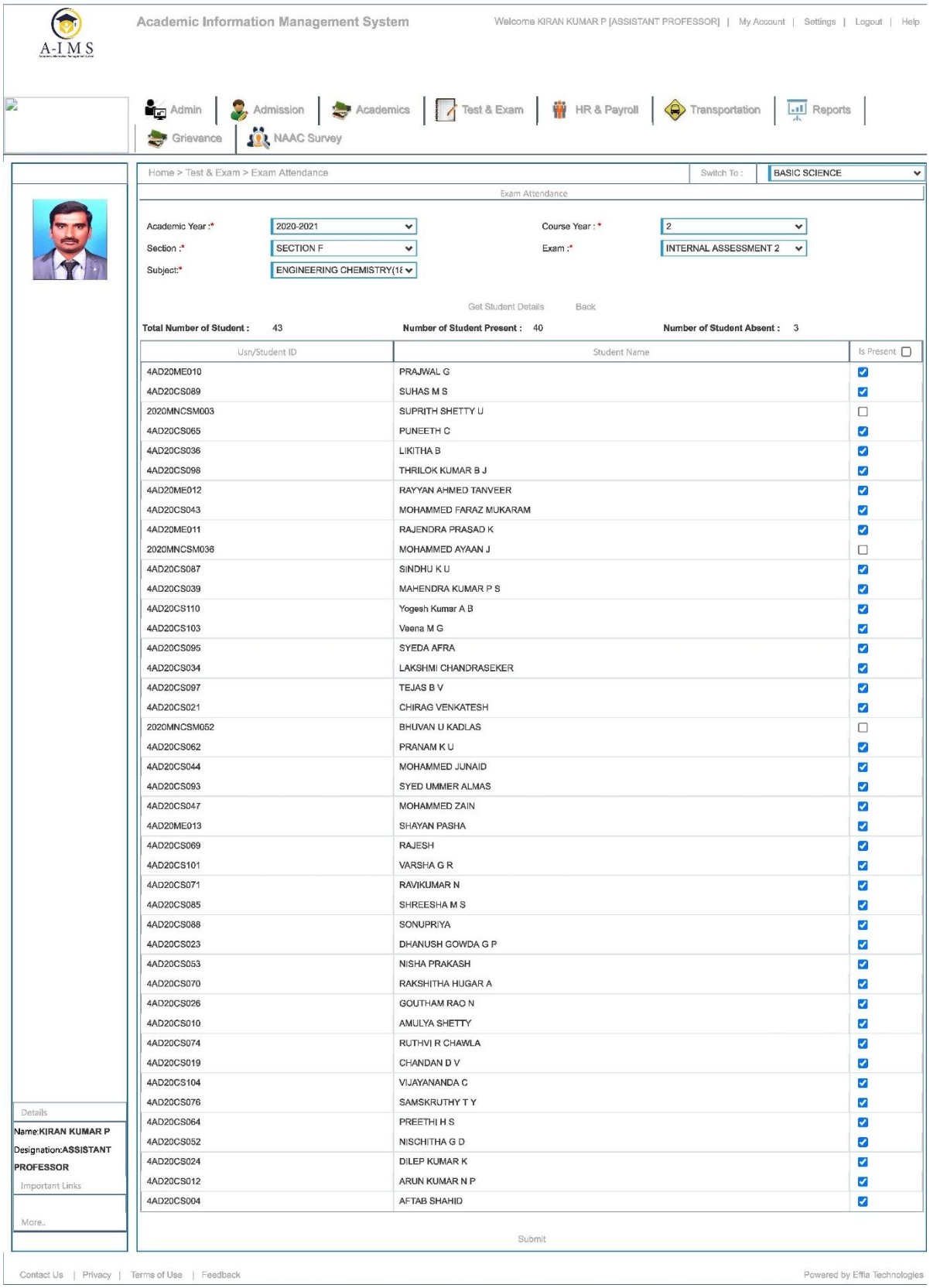
Qn	SCHEME	Marks	CO's	BTL
	$\text{curl}\,\vec{F} = \nabla \times \vec{F} = \begin{vmatrix} \hat{i} & \hat{j} & \hat{k} \\ \frac{\partial}{\partial x} & \frac{\partial}{\partial y} & \frac{\partial}{\partial z} \\ xy & xy^2 & 0 \end{vmatrix}$			
	$= \hat{i}(0-0) - \hat{j}(0-0) + \hat{k}(y^2 - x)$			
	$= (y^2 - x)\hat{k}$	3		
	$\hat{n}\,d\vec{s} = dy\,dz\,\hat{i} + dz\,dx\,\hat{j} + dx\,dy\,\hat{k}$			
	$\iint_S \text{curl}\,\vec{F}\cdot\hat{n}\,d\vec{s} = \iint (y^2 - x)\,dx\,dy \quad -1 \le x \le 1,\ -1 \le y \le 1$			
	$\therefore \iint_S \text{curl}\,\vec{F}\cdot\hat{n}\,d\vec{s} = \int_{x=-1}^{1}\int_{y=-1}^{1} (y^2 - x)\,dx\,dy.$			
	$= \int_{x=-1}^{1} \left(\frac{2}{3} - 2x\right) dx$			
	$= \frac{4}{3}$	3		
7	a)		1	L2
	i) a) Solenoidal field	1		
	ii) a) Irrotational	1		
	b) T.S.T. curl $\vec{F}$ is irrotational.			
	i.e., $\text{curl}\,\vec{F} = 0$			
	$\Rightarrow \text{curl}\,\vec{F} = \nabla \times \vec{F} = \begin{vmatrix} \hat{i} & \hat{j} & \hat{k} \\ \frac{\partial}{\partial x} & \frac{\partial}{\partial y} & \frac{\partial}{\partial z} \\ ayz + z^3 & 3x^2 - y & bxz^2 - y \end{vmatrix} = 0$	2		

ATME College of Engineering
DEPARTMENTS OF BASIC SCIENCES AND HUMANITIES

Qn	SCHEME	Marks	CO's	BTL
	$\Rightarrow \hat{i}\,[-1-(-1)] - \hat{j}\,[bz^2-3z^2] + \hat{k}\,[6x-ax] = 0$			
	ie ; $bz^2-3z^2=0$ & $6x-ax=0$			
	$\Rightarrow b=3$ $\Rightarrow a=6$	2		
	$\therefore \vec{F} = (6xy+z^3)\hat{i} + (3x^2-z)\hat{j} + (3xz^2-y)\hat{k}$			
	To find ϕ			
	Given that $\vec{F} = \nabla\phi$			
	$\frac{\partial\phi}{\partial x}\hat{i} + \frac{\partial\phi}{\partial y}\hat{j} + \frac{\partial\phi}{\partial z}\hat{k} = (6xy+z^3)\hat{i} + (3x^2-z)\hat{j} + (3xz^2-y)\hat{k}$			
	$\frac{\partial\phi}{\partial x} = 6xy+z^3$ $\frac{\partial\phi}{\partial y} = 3x^2-z$			
	$\Rightarrow \phi = 3x^2y + xz^3 + f(y,z)$ $\phi = 3x^2y - yz + f(x,z)$			
	$\frac{\partial\phi}{\partial z} = 3xz^2-y$			
	$\phi = xz^3 - yz + f(x,y)$	3		
	$\Rightarrow \phi = 3x^2y + xz^3 - yz$	1		

Dinesh,
RJNB

CERP Screen shots on IA Attendance and Marks entry



A-I M S — Academic Information Management System

Welcome KIRAN KUMAR P [ASSISTANT PROFESSOR] | My Account | Settings | Logout | Help

Admin | Admission | Academics | Test & Exam | HR & Payroll | Transportation | Reports | Grievance | NAAC Survey

Details

Name:KIRAN KUMAR P

Designation:ASSISTANT PROFESSOR

Important Links

More..

Home > Test & Exam > Exam Marks

Switch To : BASIC SCIENCE

Exam Marks

Academic Year :* 2020-2021

Course Year * 2

Section :* SECTION F

Exam :* INTERNAL ASSESSMENT 2

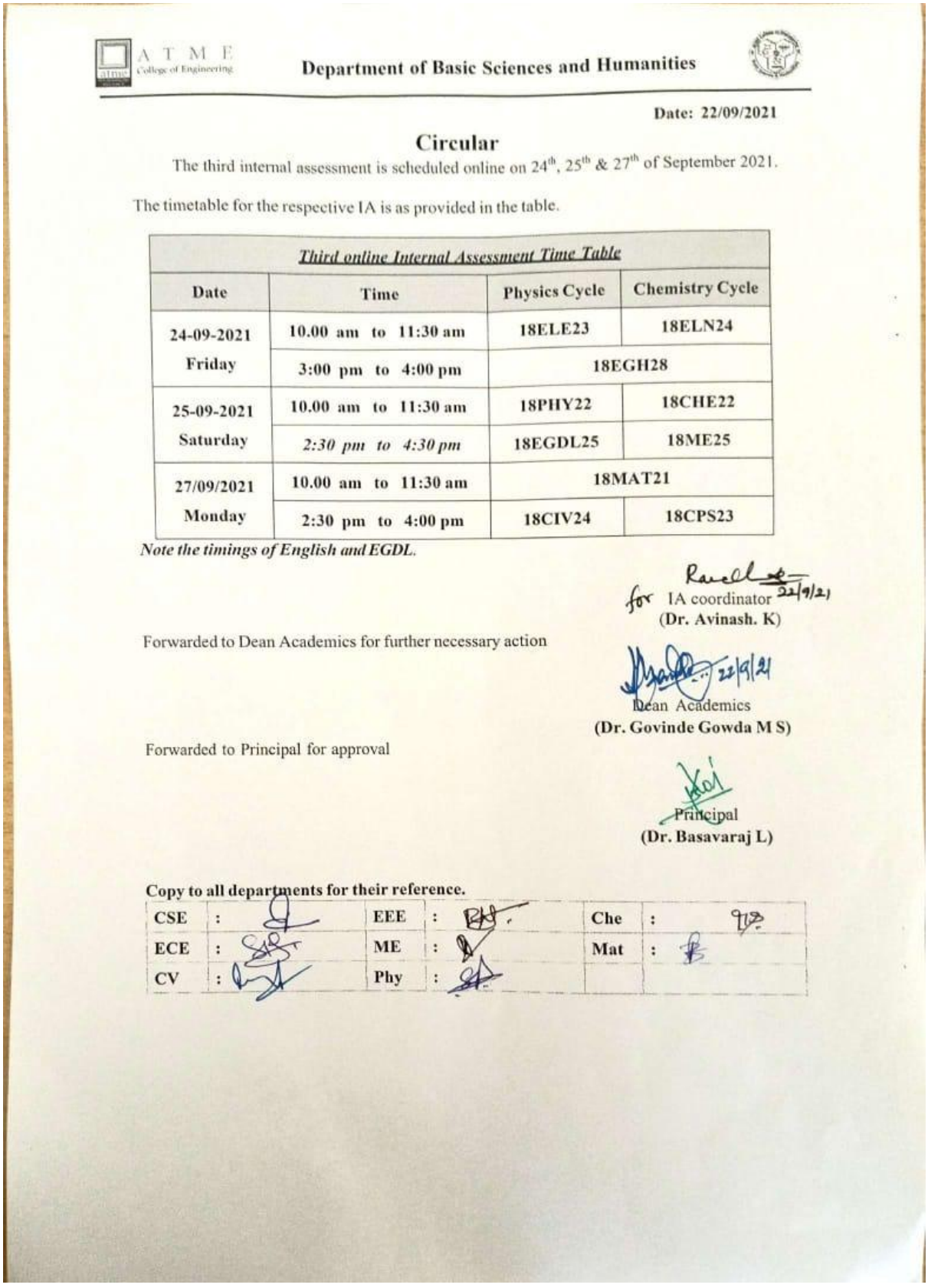
Subject:* ENGINEERING CHEMISTRY(18

Get Student Details Back

Usn/Student ID	Student Name	Internal Min. Marks	Max. marks	Internal Marks	IsPass
4AD20CS004	AFTAB SHAHID	20	50	46.00	☑
4AD20CS010	AMULYA SHETTY	20	50	47.00	☑
4AD20CS012	ARUN KUMAR N P	20	50	44.00	☑
2020MNCSM052	BHUVAN U KADLAS	20	50	Absent	☐
4AD20CS019	CHANDAN D V	20	50	49.00	☑
4AD20CS021	CHIRAG VENKATESH	20	50	37.00	☑
4AD20CS023	DHANUSH GOWDA G P	20	50	44.00	☑
4AD20CS024	DILEP KUMAR K	20	50	40.00	☑
4AD20CS026	GOUTHAM RAO N	20	50	48.00	☑
4AD20CS034	LAKSHMI CHANDRASEKER	20	50	49.00	☑
4AD20CS036	LIKITHA B	20	50	48.00	☑
4AD20CS039	MAHENDRA KUMAR P S	20	50	41.00	☑
4AD20CS047	MOHAMMED ZAIN	20	50	49.00	☑
2020MNCSM036	MOHAMMED AYAAN J	20	50	Absent	☐
4AD20CS043	MOHAMMED FARAZ MUKARAM	20	50	24.00	☑
4AD20CS044	MOHAMMED JUNAID	20	50	42.00	☑
4AD20CS052	NISCHITHA G D	20	50	49.00	☑
4AD20CS053	NISHA PRAKASH	20	50	49.00	☑
4AD20ME010	PRAJWAL G	20	50	45.00	☑
4AD20CS062	PRANAM K U	20	50	39.00	☑
4AD20CS064	PREETHI H S	20	50	49.00	☑
4AD20CS065	PUNEETH C	20	50	44.00	☑
4AD20ME011	RAJENDRA PRASAD K	20	50	44.00	☑
4AD20CS069	RAJESH	20	50	46.00	☑
4AD20CS070	RAKSHITHA HUGAR A	20	50	50.00	☑
4AD20CS071	RAVIKUMAR N	20	50	50.00	☑
4AD20ME012	RAYYAN AHMED TANVEER	20	50	26.00	☑
4AD20CS074	RUTHVI R CHAWLA	20	50	49.00	☑
4AD20CS076	SAMSKRUTHY T Y	20	50	50.00	☑
4AD20ME013	SHAYAN PASHA	20	50	41.00	☑
4AD20CS085	SHREESHA M S	20	50	49.00	☑
4AD20CS087	SINDHU K U	20	50	40.00	☑
4AD20CS088	SONUPRIYA	20	50	48.00	☑
4AD20CS089	SUHAS M S	20	50	44.00	☑
2020MNCSM003	SUPRITH SHETTY U	20	50	Absent	☐
4AD20CS093	SYED UMMER ALMAS	20	50	49.00	☑
4AD20CS095	SYEDA AFRA	20	50	49.00	☑
4AD20CS097	TEJAS B V	20	50	45.00	☑
4AD20CS098	THRILOK KUMAR B J	20	50	49.00	☑
4AD20CS101	VARSHA G R	20	50	50.00	☑
4AD20CS103	Veena M G	20	50	43.00	☑
4AD20CS104	VIJAYANANDA C	20	50	48.00	☑
4AD20CS110	Yogesh Kumar A B	20	50	45.00	☑

Online test process

Circular



A T M E College of Engineering

Department of Basic Sciences and Humanities

Date: 22/09/2021

Circular

The third internal assessment is scheduled online on 24th, 25th & 27th of September 2021.

The timetable for the respective IA is as provided in the table.

Third online Internal Assessment Time Table			
Date	**Time**	**Physics Cycle**	**Chemistry Cycle**
24-09-2021 Friday	**10.00 am to 11:30 am**	**18ELE23**	**18ELN24**
	3:00 pm to 4:00 pm	**18EGH28**	
25-09-2021 Saturday	**10.00 am to 11:30 am**	**18PHY22**	**18CHE22**
	2:30 pm to 4:30 pm	**18EGDL25**	**18ME25**
27/09/2021 Monday	**10.00 am to 11:30 am**	**18MAT21**	
	2:30 pm to 4:00 pm	**18CIV24**	**18CPS23**

Note the timings of English and EGDL.

for IA coordinator 22/9/21
(Dr. Avinash. K)

Forwarded to Dean Academics for further necessary action

22/9/21
Dean Academics
(Dr. Govinde Gowda M S)

Forwarded to Principal for approval

Principal
(Dr. Basavaraj L)

Copy to all departments for their reference.

CSE	:	**EEE**	:	**Che**	:
ECE	:	**ME**	:	**Mat**	:
CV	:	**Phy**	:		

Online channel allotment for invigilators

A T M E College of Engineering

Department of Basic Sciences and Humanities

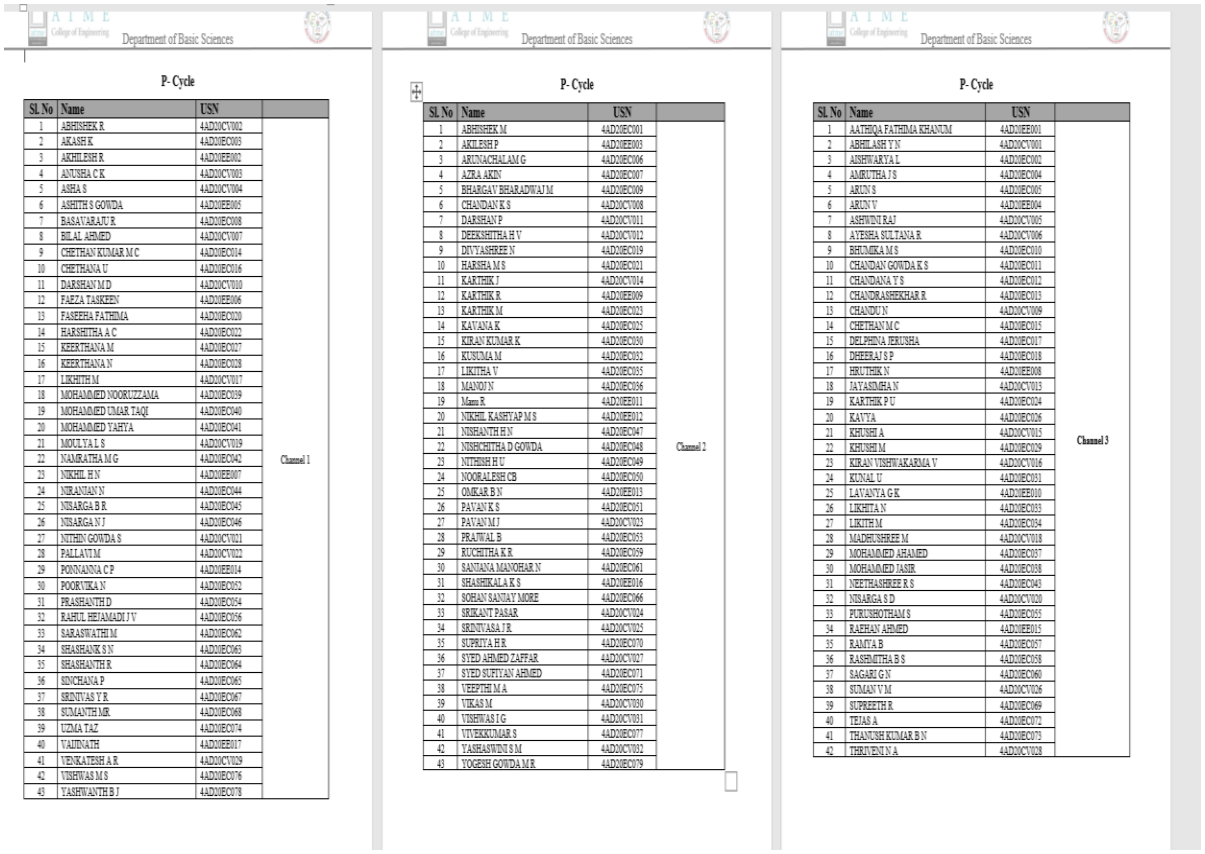
2nd Semester Third Internal Assessment (Online) 2020-21

Sl No	Name of the Invigilator		Duty allotment						Signature
			24/09/21		25/09/21		27/09/21		
			ELE/ELN	EGH	CHE/PHY	EME/EGDL	MAT	CIV/CPS	
1	Mr. Ramachandra M N	Phy	Channel 1	Channel 3					
2	Dr. Kirankumar P	Che	Channel 2	Channel 4					
3	Mrs. Priyanka N B	Mat	Channel 3	Channel 1					
4	Mrs. Divya K	Mat			Channel 4	Channel 5			
5	Dr. Madhusudhan K V	Mat	Channel 4	Channel 2					
6	Mrs. Bhanupriya	Mat	Channel 5		Channel 5				
7	Mrs. Sowmya	Mat			Channel 1			Channel 1	
8	Mrs. Bharathi R	Eng					Channel 2	Channel 2	
9	Ms. Bharathi B	CV			Channel 2				
10	Mrs. Jyothi D N	CV			Channel 3		Channel 4		
11	Mrs. Shalini V S	EC	Channel 6			-	Channel 1		
12	Mrs. Navya	EC			Channel 6		Channel 5		
13	Mr. Thejkumar J	ME				Channel 1			
14	Mr. Mohankumar K C	ME				Channel 2			
15	Devaraj M R	ME				Channel 3			
16	Ravikumar S	ME				Channel 4			
17	Mr. Shreeshayana R	EEE						Channel 3	
18	Mrs. Maria Sushma	EEE					Channel 6	Channel 4	
19	Ms. Sushma V	CS						Channel 5	
20	Ms. Kavya P O	CS					Channel 3	Channel 6	
21	Dr. Mohammed Eliyas	Che		Channel 5					
22	Dr. Mahesh Lohit	Phy		Channel 6					
23	Sudhakar M	Mat				Channel 6			

Any change in duty must be done on your own and must be intimated to the coordinator at the earliest.

IA Coordinator
(Dr. Avinash. K)

Online channel allotment for Students



Department of Basic Sciences

P- Cycle

Sl. No	Name	USN	
1	ABHISHEK R	4AD20CV002	
2	AKASH K	4AD20EC005	
3	AKHILESH R	4AD20EE002	
4	ANUSHA C K	4AD20CV003	
5	ASHA S	4AD20CV004	
6	ASHITH S GOWDA	4AD20EE005	
7	BASAVARAJU R	4AD20EC008	
8	BILAL AHMED	4AD20CV007	
9	CHETHAN KUMAR M C	4AD20EC014	
10	CHETHANA U	4AD20EC016	
11	DARSHAN M D	4AD20CV010	
12	FAEZA TASKEEN	4AD20EE006	
13	FASEEHA FATHIMA	4AD20EC020	
14	HARSHITHA A C	4AD20EC022	
15	KEERTHANA M	4AD20EC027	
16	KEERTHANA N	4AD20EC028	
17	LIKHITH M	4AD20CV017	
18	MOHAMMED NOORUZZAMA	4AD20EC039	
19	MOHAMMED UMAR TAQI	4AD20EC040	
20	MOHAMMED YAHYA	4AD20EC041	
21	MOULYA L S	4AD20CV019	
22	NAMRATHA M G	4AD20EC042	Channel 1
23	NIKHIL H N	4AD20EE007	
24	NIRANJAN N	4AD20EC044	
25	NISARGA B R	4AD20EC045	
26	NISARGA N J	4AD20EC046	
27	NITHIN GOWDA S	4AD20CV021	
28	PALLAVI M	4AD20CV022	
29	PONNANNA C P	4AD20EE014	
30	POORVIKA N	4AD20EC052	
31	PRASHANTH D	4AD20EC054	
32	RAHUL BEHAMADI J V	4AD20EC056	
33	SARASWATHI M	4AD20EC062	
34	SHASHANK S N	4AD20EC063	
35	SHASHANTH R	4AD20EC064	
36	SINCHANA P	4AD20EC065	
37	SRINIVAS Y R	4AD20EC067	
38	SUMANTH MR	4AD20EC068	
39	UZMA TAZ	4AD20EC074	
40	VAIJINATH	4AD20EE017	
41	VENKATESH A R	4AD20CV029	
42	VISHWAS M S	4AD20EC076	
43	YASHWANTH B J	4AD20EC078	

Department of Basic Sciences

P- Cycle

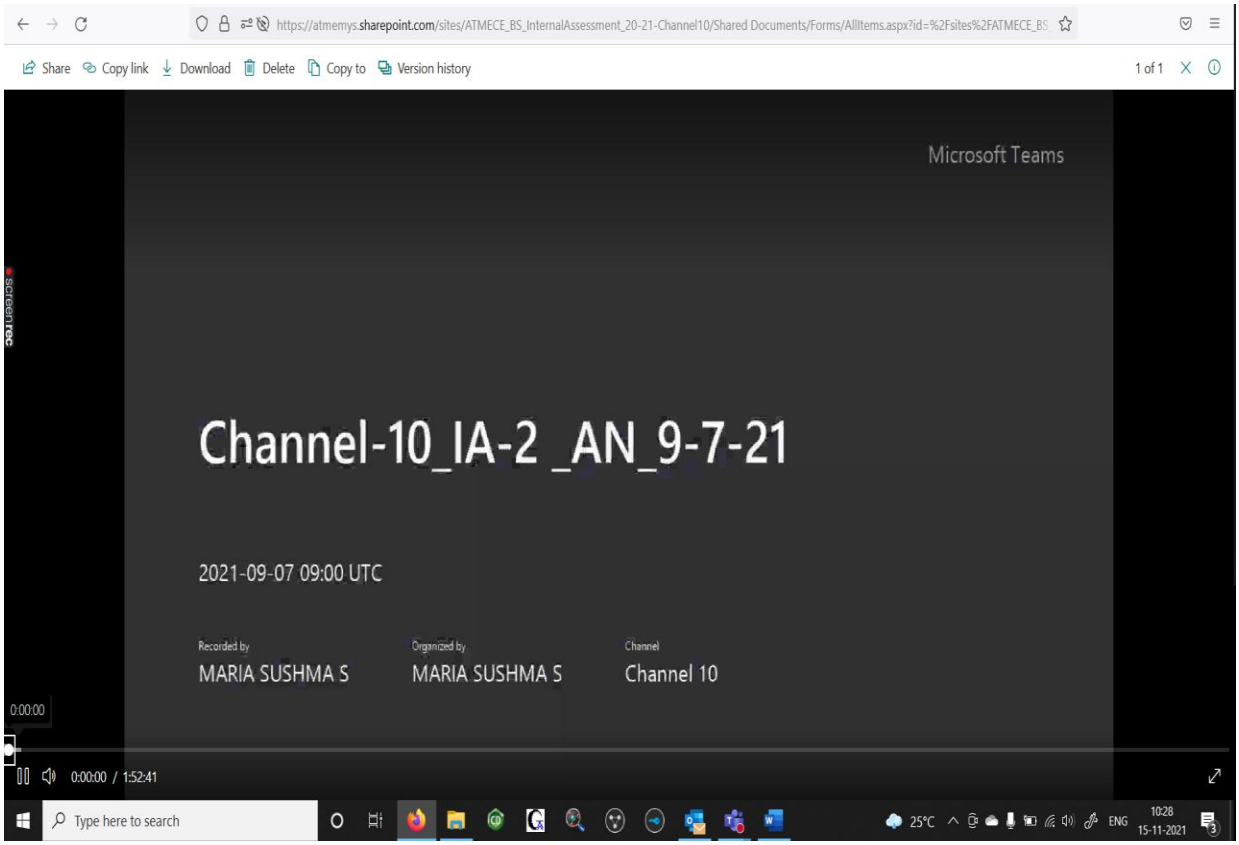
Sl. No	Name	USN	
1	ABHISHEK M	4AD20EC001	
2	AKILESH P	4AD20EE003	
3	ARUNACHALAM G	4AD20EC006	
4	AZRA AKIN	4AD20EC007	
5	BHARGAV BHARADWAJ M	4AD20EC009	
6	CHANDAN K S	4AD20CV008	
7	DARSHAN P	4AD20CV011	
8	DEEKSHITHA H V	4AD20CV012	
9	DIVYASHREE N	4AD20EC019	
10	HARSHA M S	4AD20EC021	
11	KARTHIK J	4AD20CV014	
12	KARTHIK R	4AD20EE009	
13	KARTHIK M	4AD20EC023	
14	KAVANA K	4AD20EC025	
15	KIRAN KUMAR K	4AD20EC030	
16	KUSUMA M	4AD20EC032	
17	LIKITHA V	4AD20EC035	
18	MANOJ N	4AD20EC036	
19	Manu R	4AD20EE011	
20	NIKHIL KASHYAP M S	4AD20EE012	
21	NISHANTH H N	4AD20EC047	
22	NISHCHITHA D GOWDA	4AD20EC048	Channel 2
23	NITHISH H U	4AD20EC049	
24	NOORALEESH CB	4AD20EC050	
25	OMKAR B N	4AD20EE013	
26	PAVAN K S	4AD20EC051	
27	PAVAN M J	4AD20CV023	
28	PRAJWAL B	4AD20EC053	
29	RUCHITHA K R	4AD20EC059	
30	SANJANA MANOHAR N	4AD20EC061	
31	SHASHIKALA K S	4AD20EE016	
32	SOHAN SANJAY MORE	4AD20EC066	
33	SRIKANT PAGAR	4AD20CV024	
34	SRINIVASA J R	4AD20CV025	
35	SUPRIYA H R	4AD20EC070	
36	SYED AHMED ZAFFAR	4AD20CV027	
37	SYED SUFIYAN AHMED	4AD20EC071	
38	VEEPSHI M A	4AD20EC075	
39	VIKAS M	4AD20CV030	
40	VISHWAS I G	4AD20CV031	
41	VIVEKKUMAR S	4AD20EC077	
42	YASHASWINI S M	4AD20CV032	
43	YOGESH GOWDA M R	4AD20EC079	

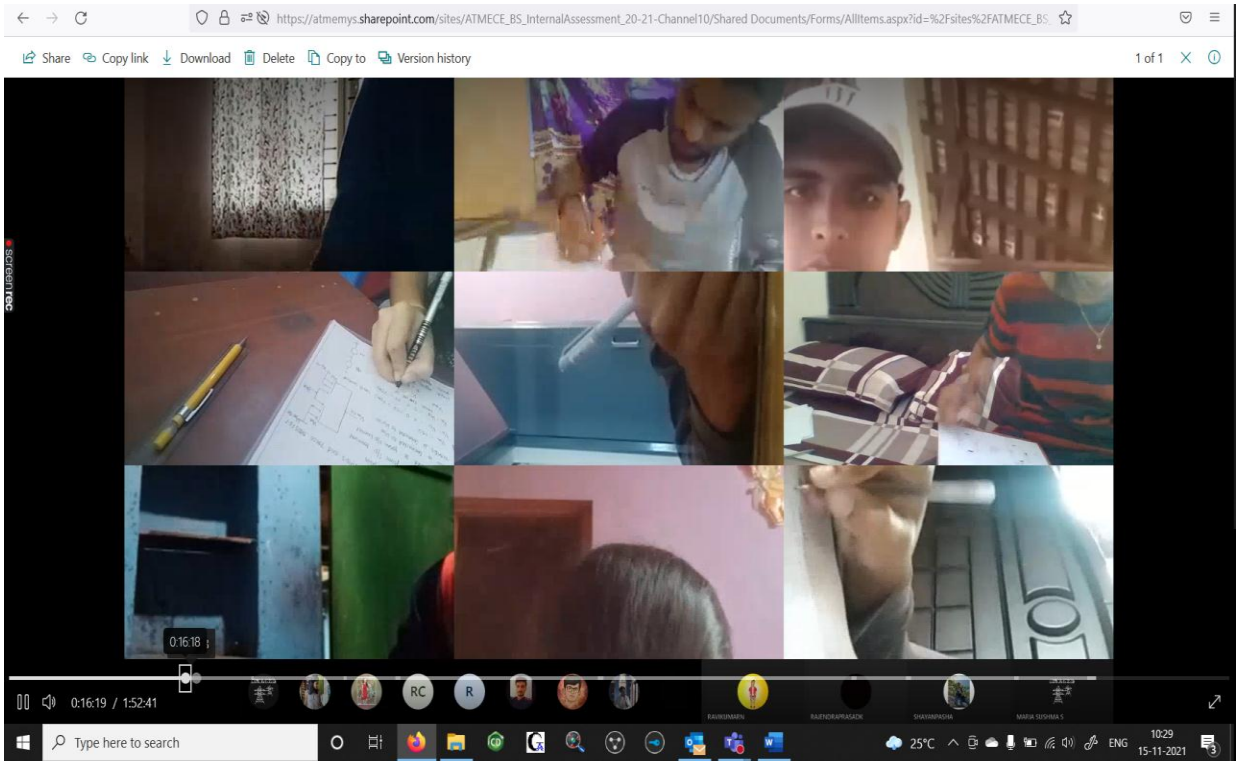
Department of Basic Sciences

P- Cycle

Sl. No	Name	USN	
1	AATHIQA FATHIMA KHANUM	4AD20EE001	
2	ABHILASH Y N	4AD20CV001	
3	AISHWARYA L	4AD20EC002	
4	AMRUTHA J S	4AD20EC004	
5	ARUN S	4AD20EC005	
6	ARUN V	4AD20EE004	
7	ASHWINI RAJ	4AD20CV005	
8	AYESHA SULTANA R	4AD20CV006	
9	BHUMIKA M S	4AD20EC010	
10	CHANDAN GOWDA K S	4AD20EC011	
11	CHANDANA Y S	4AD20EC012	
12	CHANDRASHEKHAR R	4AD20EC013	
13	CHANDU N	4AD20CV009	
14	CHETHAN M C	4AD20EC015	
15	DELPHINA JERUSHA	4AD20EC017	
16	DHEERAJ S P	4AD20EC018	
17	HRUTHIK N	4AD20EE008	
18	JAYASIMHA N	4AD20CV013	
19	KARTHIK P U	4AD20EC024	
20	KAVYA	4AD20EC026	
21	KHUSHI A	4AD20CV015	
22	KHUSHI M	4AD20EC029	Channel 3
23	KIRAN VISHWAKARMA V	4AD20CV016	
24	KUNAL U	4AD20EC031	
25	LAVANYA G K	4AD20EE010	
26	LIKHITA N	4AD20EC033	
27	LIKITH M	4AD20EC034	
28	MADHUSHREE M	4AD20CV018	
29	MOHAMMED AHAMED	4AD20EC037	
30	MOHAMMED JASIR	4AD20EC038	
31	NEETHASHREE R S	4AD20EC043	
32	NISARGA S D	4AD20CV020	
33	PURUSHOTHAM S	4AD20EC055	
34	RAEHAN AHMED	4AD20EE015	
35	RAMYA B	4AD20EC057	
36	RASHMITHA B S	4AD20EC058	
37	SAGARI G N	4AD20EC060	
38	SUMAN V M	4AD20CV026	
39	SUPREETH R	4AD20EE069	
40	TEJAS A	4AD20EC072	
41	THANUSH KUMAR B N	4AD20EC073	
42	THRUVENI N A	4AD20CV028	

Online test paper deployment and submission form in MS Teams





18CHE33 4AD20CS020

3(a) trans esterification

(b) anti knocking agent

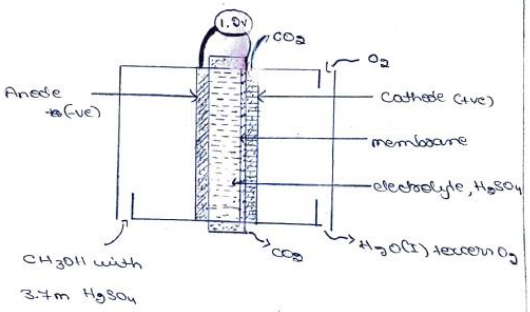
3(c) A fuel cell is a device which converts the ~~chemical~~ chemical energy of a conventional fuel & oxygen into electrical energy it is also known as electricity generator

$CH_3COOH-O_2$ fuel cell

construction:-

in this cell methanol is used as a fuel & oxygen as an oxidant, the anode is a porous nickel sheet on which platinum - palladium catalyst is deposited. the cathode is a silver impregnated porous nickel sheet

methanol containing some sulphuric acid is circulated through the anode chamber pure oxygen is passed through the cathode chamber & sulphuric acid is placed in the central chamber acts as electrolyte. A membrane is placed adjacent to the cathode on the inner side of to minimize diffusion of methanol into the cathode thereby reducing the concentration of methanol near the cathode other wise methanol diffuses through the electrolyte into cathode & undergoes oxidation



working:-

At the anode: $CH_3OH(l) + H_2O(l) \rightarrow CO_2(g) + 6H^+ + 6e^-$

at the cathode: $1\frac{1}{2}O_2(g) + 6H^+ + 6e^- \rightarrow 3H_2O(l)$

Net reaction: $CH_3OH(l) + 1\frac{1}{2}O_2(g) \rightarrow CO_2(g) + 2H_2O(l)$ + energy

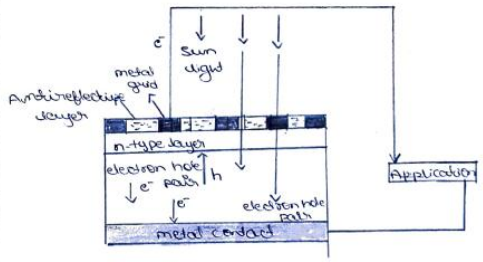
4ADZOCS020

3(a) Y_2O_3

(b) Avoid reflection

(c) PV (photo voltaic) cells are the devices which converts the solar energy into electrical energy

construction:-



→ A typical PV cell of silicon consists of thin wafer of thickness of around 300um of p-type silicon on one side of this, an ultra thin (0.5 um) layer of n type is placed on the other side of thin p-type silicon ~~for that it forms~~ completely wafer. metal electrode, made up of

4ADZOCS020

4 (a) PV cells are echofriendly

(b) Lower than

(c) production of solar grade silicon:-

the process involves the following steps

the hydrogenation of tetra chlorosilane through a bed of metallurgical silicon is carried out in a fluidized bed reactor

$3SiCl_4 + 2H_2 + Si \rightarrow 4SiHCl_3$ → (1)

the trichlorosilane is seperated by distillation while the un reacted tetrachlorosilane is recycled back to the hydrogenation reactor

the purified trichlorosilane is passed through a fixed bed column filled with quaternary ammonium ion exchange resin acting as catalyst trichlorosilane gets converted into dichlorosilane

$2HSiCl_3 \rightarrow H_2SiCl_2 + SiCl_4$ ... (2)