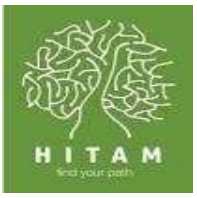
A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Innovation &creativity in teaching learning

ECE-Department

AY:2019-20

Pedagogy	**Implemented by faculty**
Poster presentation	S. Hanumandlu
Animation Video	K. Usha
Jigsaw	P. Kondala Rao,Vinod Ahuja
Peer learning	DR. S.V. Devika
Webinar	V. MosheRani
Flipped class	DR. R.V. Purohit, P. Kondala Rao
Demonstration	DR. R.V. Purohit
Think Pair Share	DR. R.V. Purohit, P. Kondala Rao
Seminar	P.Kondala Rao



A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

<Poster Presentation>

<Microprocessors & Microcontrollers >

<8086 Architecture>

<III-II Semester, A Section>
<8-1-2020,10-1-2020,10-1-2020>

<AY:2019-2020>

Prepared by:
S.Hanmandlu

Assoc.Professor FIETE, LMISTE

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

Students prepared posters on 8086 architecture and presented to fellow students. They explained in detail about each and every block in the architecture like a class room topic delivery.

IMPLEMENTATION:

Students prepared posters on 8086 architecture and presented to fellow students on 08-January, 10-January(two hours). One student explains while others hold the poster and they divide presentation among themselves.

PROOFS:

Above pictures shows the implementation of this pedagogy. As said above it is seen in pictures that one student is explaining while two others are holding the poster.

OUTCOME:

The outcome of this pedagogy is students will remember the concept perfectly; here they are delivery the lecture on that topic as a group. Other outcome of this activity is students will learn how to face audience, stage fear will be no more for them.

E-RESOURCES/ Texbooks Referred :

Link1:
https://books.google.co.in/books/about/The_8051_Microcontroller.html?id=l6lveWkWqFoC

Text books:

The 8051 Microcontroller and Embedded Systems: Using Assembly and C - Mazidi & Mazidi

ICT USAGE:

NIL

CONTENTS OUT OF SYLLABUS:

NIL

RUBRICS (if followed):

Three lecture hours

BEST Performer: **A. Prashanthi Sri**

Slow performer: **ALUVALA ROHAN KUMAR**

Suggestions given to Slow Learner:

- Content need to be delivered slowly by maintaining eye contact with audience
- Preparation should be adequate for the time planned to deliver the content
- Body language
- Board work

CHALLENGES:

1. Time consuming process

2. Not possible to give chance to all students in the class

3. Students find it difficult to draw bigger architecture (few of them)

NO.OF STUDENTS PARTICIPATED: 18, 25, 25

NO.OF BATCHES MADE: 07

STUDENT FEEDBACK:

1. Good activity we learnt how to prepare and teach to peers – CH Varaprasad
2. We learnt how to draw the diagram of 8086 architecture and presented with ease, thank you giving this opportunity to give presentation. – D . Gayathri

MODE OF FEEDBACK:

Kind of oral , enthusiastic student shared it through WhatsApp .

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Name Of Activity : ANIMATION VIDEO

Course : ANALOG ELECTRONICS

Name Of Topic: formation of depletion layer in p-n diode

Year/Branch : II B.Tech I Semester EEE

AY:2019-20

Prepared by: **K.USHA M.Tech**
Assistant Professor (ECE)

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

ANIMATION VIDEO will give the clear picture of the process will happen in any electronic device.

IMPLEMENTATION:

.I shared one animated video to the students through the whtsapp group.

. Students watch that video in the class

.The video clearly demonstrate the movement of electrons and holes in a diode

PROOFS:

OUTCOME:

If the students watch the video then they will understand the concept of formation of depletion region and also the current direction in detail.instead of imagine through wind it gives the clear understanding about the diode.

Text books: ANALOG ELECTRONICS BY SALIVAHANA

ICT USAGE: MOBILE

TIME TAKEN TO COMPLETE THE ACTIVITY: 60 min

BEST Performer: AKHIL

Slow performer: abhishek

Suggestions given to Slow Learner: counseling given to student how to mingle with their classmates to share their points.

CHALLENGES:

1. Time not sufficient

2. Require support of another faculty.

NO.OF STUDENTS PARTICIPATED: 42

STUDENT FEEDBACK:

1. More active to participate in the activity

2. feels more satisfactory with outcome of activity

MODE OF FEEDBACK: ORAL

Name Of Activity : Laboratory demonstration

Course : ANALOG ELECTRONICS

Name Of Topic: Feedback Amplifier

Year/Branch : II B.Tech I Semester EEE

INTRODUCTION ON PEDAGOGY:

Laboratory demonstration helps to understand the concept in a better way .instead of explaining through black board if we choose this activity to explain the topic then slow learnersare also actively participated and motivated.

IMPLEMENTATION:

.In AE lab I asked the students to connect the circuit without feedback.

.Then they are able to observe the output ,that is gain and bandwidth of the amplifier without feedback.

.After that I asked the students connect the circuit with feedback. Now observe the difference between gain and bandwidth of the amplifier with and without feedback.

Proof

OUTCOME:

If the students watch the video then they will understand the concept of formation of depletion region and also the current direction in detail.instead of imagine through wind it gives the clear understanding about the diode.

Text book: **ANALOG ELECTRONICS BY SALIVAHANA**

TIME TAKEN TO COMPLETE THE ACTIVITY: 120 min

BEST Performer: **Bindu**

Slow performer: **gayathri**

CHALLENGES:

1. Time not sufficient

2. Require support of another faculty.

NO.OF STUDENTS PARTICIPATED: **42**

STUDENT FEEDBACK:

1. More active to participate in the activity

2. feels more satisfactory with outcome of activity

MODE OF FEEDBACK: ORAL

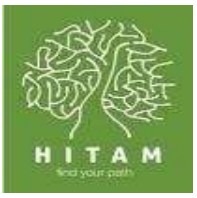
Notes:

<note:please attach question paper (open book exam) /PPT/any notes utilized to implement the activity,list of students if batches are made>

Please attach marks if it is assessed like open book exam.

If guest lecture please include the details of resource person,feeback of students

If industry visit ,please attach list of students and report writing should be given by any three students.



A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Operating System

All units

III B.Tech ECE II sem, 2019

<July-Dec 2019 >

AY:2019-20

Prepared by:

Vinod Ahuja

Asst. Prof

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

The course handled is Operating system I have conducted various activities in operating system course as mention below.

IMPLEMENTATION: Classroom activity for topic is well planned and executed as per schedule. Rubric designed to assist students performance.

PROOFS:

Topic: CPU scheduling algorithms

Pedagogies : Jigsaw


Observation:

Almost all students participated in jigsaw activity. I could see for the first time 18-05 participated and explained the concept to other students.

Impact: I conducted activity in 6th hour and almost all students actively participated. I have asked 1 question in mid 1 from same topic, approximately 75 % of the students answered correctly.

Topic: Virtual Memory

Pedagogies : Group Discussion


Observations: Virtual memory concept is little difficult to understand. Group discussion helped me to make this concept clear especially to academically week students.

Impact: A part from making concept clear , I could not find any much impact which can be shared.

Topic: IPC

Pedagogies : Students presentation


Observation: Students actively involved in the class and taught to their friends. However academically week student learned but when it came to delivery on board most of them hesitated.

Impact: Approximately 70 % of the students prepared well to teach on the board. Students took responsibility to prepare material for assigned topic and share in the group

Topic: Deadlock, D/L avoidance

Pedagogies : Animation Video, lecture video


Observation: Students watched video individually and shared understanding about deadlock.

Impact: This activity helped me to make students understand what is deadlock avoidance, ignorance, prevention, recovery. In mid 2 more then 90 % students attempted deadlock. Entire unit 5 first half concept got clear due to this activity

Topic: Dining Philosopher

Activity: Demonstration


Observation: Students and me enjoyed when I was teaching this concept. I took the students to lab and made them seat according to concept (Dining Philosopher) where students act like Philosopher and I kept my lunch box and forks.

Impact: Live demo besides coding helped students to understand complicated concept easily .I could see students laughing and learning at the same time.

Topic: Disk Scheduling Algorithm

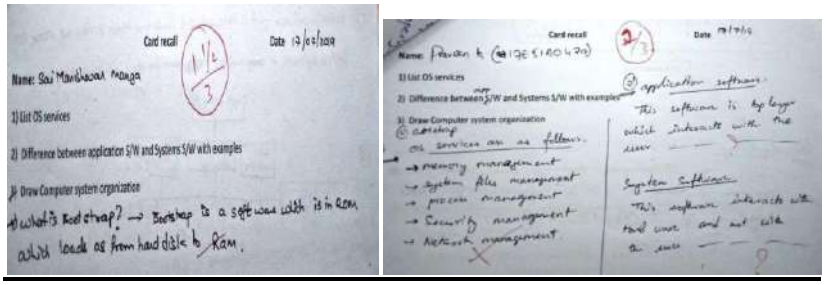
Pedagogies : Flipped Classroom

Observation: Flipped classroom helped me to complete my syllabus 4 days ahead.

Impact: It helped students learn the content and increased self-efficacy in their ability to learn independently. As informed by three students many students attempted disk scheduling question in external exam.

Topic: Card recall

Activity: Minute paper



Observation: This activity helped me to check how many students understood topic clearly.

Impact:

a) It helped the students to understand what is my expectation when they write answer.

b) It helped the students to score better marks in the mid exams.

c) Approximately 15 % of students including academically strong students missed vital points when asked them to write a few points about topic.

Topic: All five units overview

Pedagogies : Concept mapping

Observation: I conducted concept mapping activity after completion of portion to make the students understand how each and every unit is interlinked.

Impact: After activity students came to know how each and every unit and topic are interlinked which helped them for mid 2 and external exam. I shared 24 Long questions and 37 short questions. I could see 8 short questions and 9 long questions appeared in JNTU-H external paper

Conducted Edmodo exam two times

Observation: As planned in lesson plan conducted Edmodo before mid 1 and 2.

Impact: Especially in mid 2 , three questions related protection concept 90 % of students did mistake. I taught this concept again especially access matrix class. Same question students faced in JNTU-H external exam

E-RESOURCES/Texbooks Referred :

Link1:

Text books: Java Complete reference

ICT USAGE:

COMPUTERS

CONTENTS OUT OF SYLLABUS:

NIL

RUBRICS (if followed):

TIME TAKEN TO COMPLETE THE ACTIVITY: Regularly in the class after explaining the topic

BEST Performer: Akhila

Slow performer: Shivam

Suggestions given to Slow Learner:

CHALLENGES:

1. Irregularity of students

2.

3.

NO.OF STUDENTS PARTICIPATED: 28

NO.OF BATCHES MADE: Individual

STUDENT FEEDBACK:

1. Helped to understand the topic clearly

MODE OF FEEDBACK:

ORAL

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Name Of Activities :

1)Course projects

2)Presentation through animation videos

3)Peer learning

4)Quiz & Open book exam every unit

5)Online classes using PPT's

Course: Analog and Digital Communication

Name of Topic: Amplitude modulation, Angle Modulation, Digital modulation Techniques

Year/Branch: II B. Tech II Semester ECE

AY:2019-20

Prepared by: Dr. Devika SV, M. Tech, PhD

Professor of ECE

Hyderabad Institute of Technology and Management

Gowdavelli, village Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

For the subject Analog and Digital Communications, Various pedagogies like Presentation through animation videos, Peer learning, Quiz & Open book exam every unit were implemented. Apart from these course projects were done by the students to get hands on experience on various topics.

IMPLEMENTATION OF COURSE PROJECTS:

- **Students were formed into batches**
- **Each batch consists of minimum 1 student to maximum 4 students**
- **Projects were divided into 3 categories based on the student's potential**
- **Few teams identified their own problem statement, Few teams were given problems by faculty in charge**
- **3 reviews were scheduled and presentations were delivered by the students**
- **The results were submitted during final review**
- **Assessment was done based on the performance of the students**

PROOFS FOR VARIOUS ACTIVITIES:

Fig: Peer learning

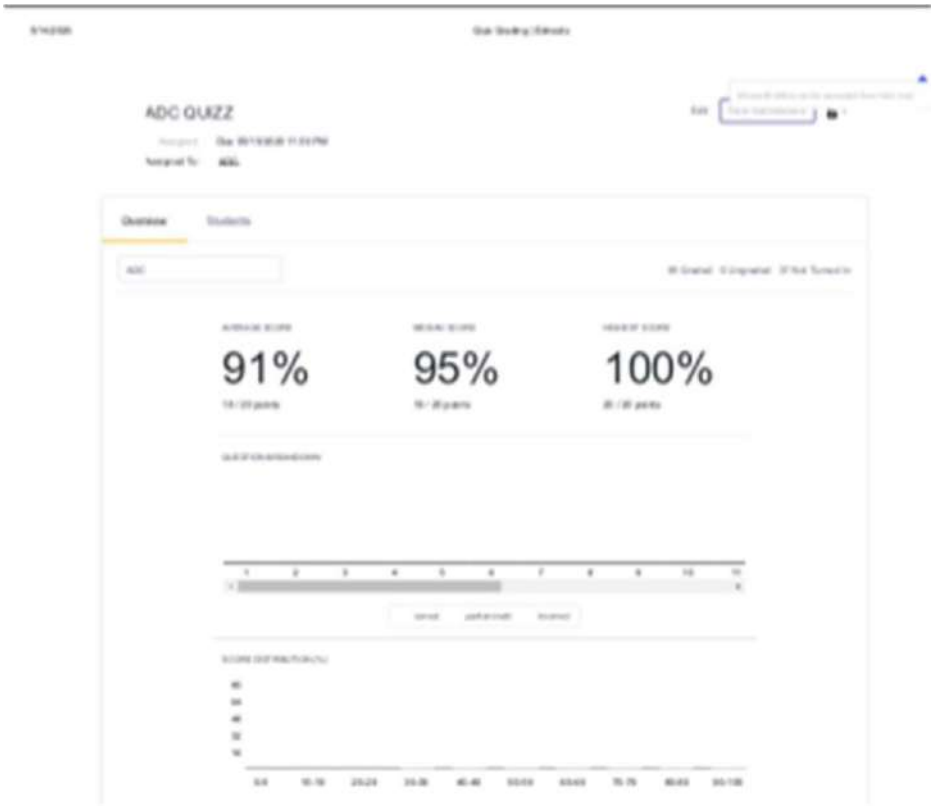


Fig: Edmodo Results

Proofs of Course Projects:

S. No	Batch Number	Student-1	Student-2	Student-3	Student4	Course project Problem Statement	CO	PO
1	Batch 1	18-402	403	431		Generate Amplitude Modulated and Demodulated waves	1	1,3,5, 9
2	Batch 2	18-404	415	436	442	Generate DSB-SC modulator and detector	1	1,3,5, 10
3	Batch 3	18-430	406	409	437	Generate SSB-SC modulator and detector	1	1,3,5, 11
4	Batch 4	18-432	434	435	Nil	Generate Frequency modulation and demodulation	1	1,3,5, 12
5	Batch 5	18-433	445	407	443	Generate Study of Spectrum Analyzer and Analysis of AM and FM Signals	1	1,3,5, 13
6	Batch 6	18-426	421	422	410	Study Pre-emphasis and de-emphasis	2	1,3,5, 14
7	Batch 7	18-411	428	448	441	Generate Time division multiplexing and de-multiplexing	2	1,3,5, 15
8	Batch 8	18-401	405	408	418	Generate Frequency division multiplexing and de-multiplexing	2	1,3,5, 16
9	Batch 9	18-424	425	423	440	Verify Sampling theorm	2	1,3,5, 17
10	Batch	18-416	417	19-410	19-407	Generate	3	1,3,5,

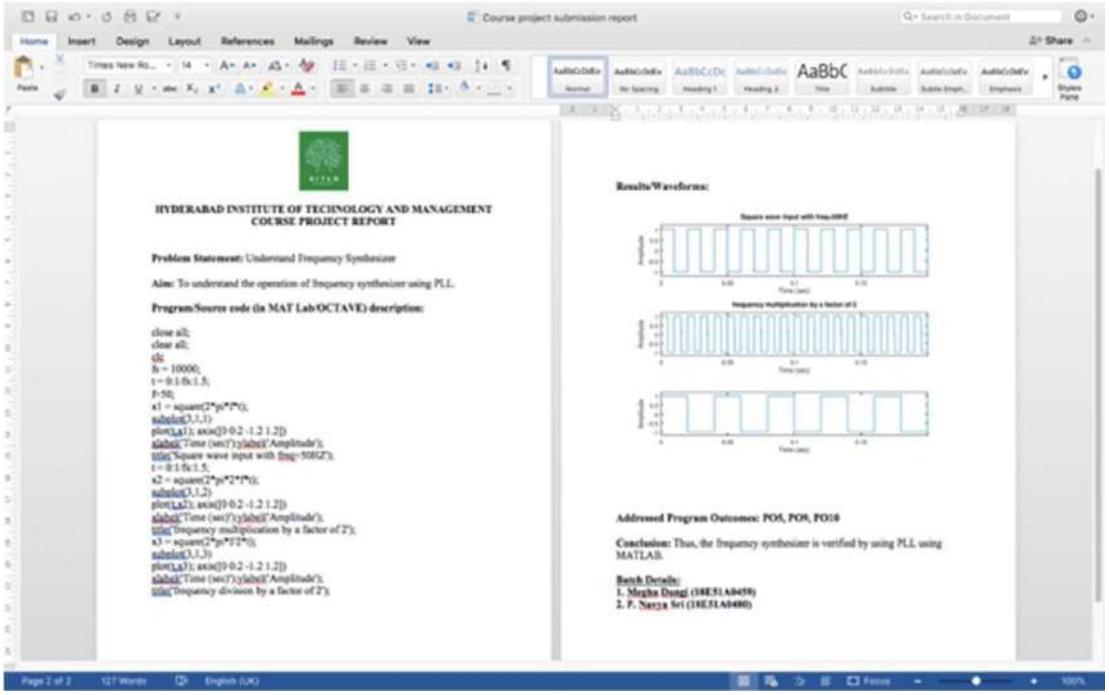
	10					Pulse amplitude modulation and demodulation		18
11	Batch 11	18-446	447	429	439	Generate Pulse width modulation and demodulation	3	1,3,5, 19
12	Batch 12	18-427	414	419	420	Generate Pulse position modulation and demodulation	3	1,3,5, 20
13	Batch 13	19-404	401	415	Nil	Understand Frequency Synthesizer	2	1,3,5, 21
14	Batch 14	19-402	403	405	406	Understand the charecteristic s of AGC	2	1,3,5, 22
15	Batch 15	19-408	409	411	Nil	Study PLL	2	1,3,5, 23
16	Batch 16	19-412	413	414	17-450	Generate ASK waveform using MATLAB/OC TAVE	1	1,3,5, 24
17	Batch 17	17-453	455	4A7	427	Generate PSK waveform using MATLAB/OC TAVE	1	1,3,5, 25

S. No	Name with student id- 1	Name with student id -2	Name with student id- 3	Course project Problem Statement	CO	PO
1	R.krishnaveni ,19E55A0425	R.Pravalika ,19E55A0426	RVN Sai Sravani ,18-481	Generate Amplitude Modulated	1	1,3,5 ,9

				and Demodulated waves		
2	Sandeep - 18E51A0462	Mahesh-19E55A0424	Sripal-19E55A0423	Generate DSB-SC modulator and detector	1	1,3,5,9
3	L. Jayanth	M. Krishna	K. Rishith kumar	Generate SSB-SC modulator and detector	1	1,3,5,9
4	gyaneswar 4a0	b sai Teja 18c2-418	saikumar 455	Generate Frequency modulation and demodulation	1	1,3,5,9
5	sai Teja 463	sankeeth 472	nishanth 469	Generate Study of Spectrum Analyzer and Analysis of AM and FM Signals	1	1,3,5,9
6	Bharat(19E55A0417)	Madhu(19E55A0421)	Dheeraj(19E55A0419)	Study Pre-emphasis and de-emphasis	2	1,3,5,9
7	Manaswini (18-491	Nikhil rehman (18-487)	Mrunal (18-461)	Generate Time division multiplexing and de-multiplexing	2	1,3,5,9
8	P.sai praneeth -477	Kaushik.m 452	G.r.Vishwanath 483	Generate Frequency division multiplexing and de-multiplexing	2	1,3,5,9
9	Vijay Kiran Orisi-(18E51A0471)	Bhanu Teja Ravella-(18E51A0484)	Krishna-(18E51AO457)	Verify Sampling theorm	2	1,3,5,9
10	T.Aarthi Sri (19E55A0427)	V.Divya (19E55A0428)	R.Monalisa(18E51A0460)	Generate Pulse amplitude modulation and demodulation	3	1,3,5,9
11	Nomula tejaswini	Patil arthika	None	Generate Pulse width modulation and demodulation	3	1,3,5,9
12	P.D.Koumudi,18E51A0474	N.Sahithi Sowmya,18E51	R.Sai sravani	Generate Pulse position	3	1,3,5,9

		A0467		modulation and demodulation		
13	Megha Dangi (18E51A0459)	P. Navya Sri (18E51A0480)	-	Understand Frequency Synthesizer	2	1,3,5,9
14	Shivani Singh 18-489	Neha Bhadauria 18-468	N Navya 18-464	Understand the charecteristics of AGC	2	1,3,5,9
15	L.RITISH REDDY 18E51A0450	m.sai Nikhil 456	akhil.t	Study PLL	2	1,3,5,9
16	Navya medisetty 458	Nagam swathi Reddy 466	Vasantada tejaswini 495	Generate ASK waveform using MATLAB/OCTAVE	1	1,3,5,9
17	V.pavan-18-499	Vamshi-18-496	A.satish-19-417	Generate PSK waveform using MATLAB/OCTAVE	1	1,3,5,9
18	pavan Kumar 476	sai Kiran 454	Krishna 473	Generate FSK waveform using MATLAB/OCTAVE	4	1,3,5,9
19	m.sai ram 453	thilak 479	sai shiva 485	Generate QPSK waveform using MATLAB/OCTAVE	4	1,3,5,9
20	rahil 482	v jayanth 497	sai Kumar 486	Generate BPSK waveform using MATLAB/OCTAVE	4	1,3,5,9
21	pavan 488	srujan 490	Kaushik 492	Generate DPSK waveform using MATLAB/OCTAVE	4	1,3,5,9

Sample template of project submitted by the students:



HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT
COURSE PROJECT REPORT

Problem Statement: Understand Frequency Synthesizer

Aim: To understand the operation of frequency synthesizer using PLL.

Program/Source code (in MAT Lab/OCTAVE) description:

```
close all;
clear all;
clc;
fs = 10000;
t = 0:1/fs:1.5;
F=50;
x1 = square(2*pi*F*t);
subplot(3,1,1);
plot(t,x1); axis([0 0.2 -1.2 1.2])
xlabel('Time (sec)');ylabel('Amplitude');
title('Square wave input with freq=50HZ');
t = 0:1/fs:1.5;
x2 = square(2*pi*2*F*t);
subplot(3,1,2)
plot(t,x2); axis([0 0.2 -1.2 1.2])
xlabel('Time (sec)');ylabel('Amplitude');
title('frequency multiplication by a factor of 2');
x3 = square(2*pi*F/2*t);
subplot(3,1,3)
plot(t,x3); axis([0 0.2 -1.2 1.2])
xlabel('Time (sec)');ylabel('Amplitude');
title('frequency division by a factor of 2');
```

Results/Waveforms:

Addressed Program Outcomes: PO5, PO9, PO10

Conclusion: Thus, the frequency synthesizer is verified by using PLL using MATLAB.

Batch Details:
1. Megha Dangi (18E51A0459)
2. P. Navya Sri (18E51A0480)

Parameters for Assessment:

S.No.	Parameters
1	Presentation Skills (On the basis of communication, Way of Explanation, Confidence Level)
2	Team work and communication (Ability to work in a team, involvement and communication among team)
3	Execution (On the basis of working condition of the presented model)
4	Application (On the basis of usefulness of the project and their level of understanding)
5	Technical Skills (On the basis of application of engineering techniques to make the model)
	Total Marks - 50

OUTCOME:

It helps students learn cooperation as group members share responsibility for eachother's **learning** by using critical thinking and **social skills** to complete an assignment. Subsequently, this strategy helps to improve listening, communication, and problem-solving skills.

E-RESOURCES/Texbooks Referred : Nil

Text books: RP Singh and Sapre

ICT USAGE: COMPUTERS, SOUND SYSTEM , MOBILE ,Projector.

TIME TAKEN TO COMPLETE THE ACTIVITY: 2 weeks

BEST Performer: ALL

Slow performer: Nil

Suggestions given to Slow Learner: Personal counselling to motivate students for active participation

CHALLENGES:

1. Lock down

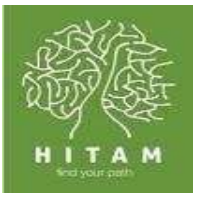
NO.OF STUDENTS PARTICIPATED: 100

NO.OF BATCHES MADE: 38

STUDENT FEEDBACK:

1. Hands on Experience

MODE OF FEEDBACK: ORAL



A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Name Of Activity : JiGSaw

Course: Digital Electronics

Name Of Topic: Logic gates and combinational circuits

Year/Branch: II B.Tech II Semester EEE

Date of conduction: 20/01/2020

AY:2019-20

Prepared by: V Mosherani **M.Tech., MIEEE,MIETE**

Assistant Professor (ECE)

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

The **jigsaw** technique is a method of organizing classroom activity that makes students dependent on each other to succeed. It breaks classes into groups and breaks assignments into pieces that the group assembles to complete the (**jigsaw**) puzzle

IMPLEMENTATION:

- ✓ I formed 6 teams with size of 6 members according to order of their roll numbers.
- ✓ I assigned different segments (total 6 parts) to individual student in group.
- ✓ I gave 2 min to learn independently, later I formed teams who complete same segment in groups as a new group named as expert group. Here I had taken help from one of my faculty **Mr.A Lavanya** to conduct the activity smoothly.
- ✓ Her presence given support to me while interacting with students who were inactive in this activity.
- ✓ In expert group they shared their points and returned to their own group after completing the discussion in expert group.
- ✓ Now students shared complete information to their own groups and finally they presented.

PROOFS:

Fig. Students were sharing the complete information to their own groups

OUTCOME:

It helps students learn cooperation as group members share responsibility for eachother's **learning** by using critical thinking and **social skills** to complete an assignment. Subsequently, this strategy helps to improve listening, communication, and problem-solving skills.

E-RESOURCES/Texbooks Referred : IIEECP Webinar on Collaborative activity.

Text books: moderan electronics

ICT USAGE: COMPUTERS, SOUND SYSTEM , MOBILE ,Projector.

TIME TAKEN TO COMPLETE THE ACTIVITY: 60 min

BEST Performer: Gayatri

Slow performer: Nikhil

Suggestions given to Slow Learner: counseling given to student how to mingle with their classmates to share their points.

CHALLENGES:

1. Time not sufficient

2. Require support of another faculty.

NO.OF STUDENTS PARTICIPATED: 40

NO.OF BATCHES MADE: 4

STUDENT FEEDBACK:

1. More active to participate in the activity

2. feels more satisfactory with outcome of activity

MODE OF FEEDBACK: ORAL

<note:please attach question paper (open book exam) /PPT/any notes utilized to implement the activity,list of students if batches are made>

Please attach marks if it is assessed like open book exam.

If guest lecture please include the details of resource person,feeback of students

If industry visit ,please attach list of students and report writing should be given by any three students.

Topic: Micro strip antennas, features, advantages, limitations

Pedagogies :Think pair share

Proofs

Topic: Horn antennas and its types

Pedagogies : Demo

FLIPPED CLASSROOM

SEMINAR

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Innovation &creativity in teaching learning

ECE-Department

AY:2020-21

Pedagogy	Implemented by faculty
Problem solving	N. Sindhu, M.H. Bindhu Reddy
Group Seminar	P. Santosh
Guest Lecture	N. Sindhu
Demonstration	J. Rajeshwar Goud
Moodle	P. Kondala Rao
PBL	Vinod Ahuja
Student Seminar	J. Rajeshwar Goud
Visual TCAD	K. Bindhu Madhavi
Breakout rooms	P. Santosh

PROBLEM SOLVING:

Faculty Name: N. Sindhu

Subject: Control Systems

Proofs:

CONTROL SYSTEMS-A

Dashboard / My courses / CS-A sec / General / Assignment5 R-H Stability criteria

Assignment5 R-H Stability criteria

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Grading summary

Hidden from students	No
Participants	70
Submitted	30
Needs grading	30
Due date	Sunday, 13 December 2020, 11:59 PM
Time remaining	Assignment is due

View all submissions | Grade

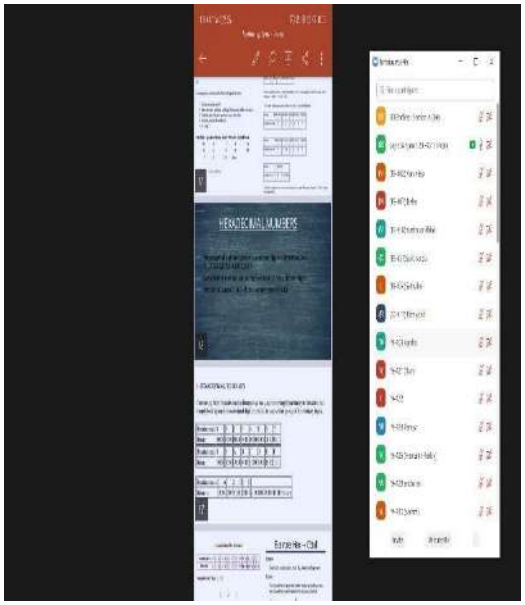
GROUP SEMINAR:

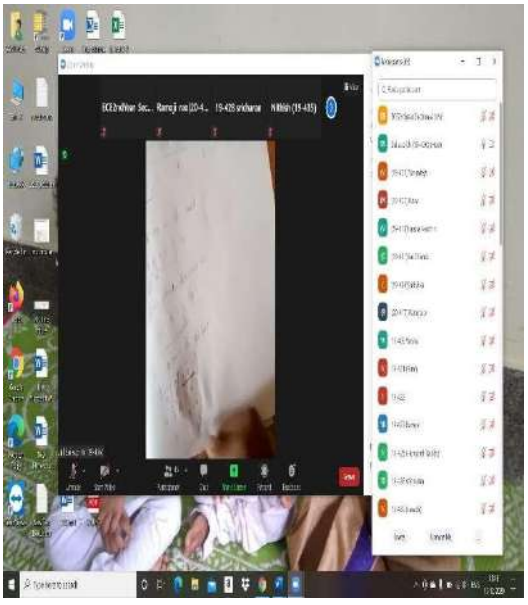
Faculty Name: P. Santosh

Subject: DSD

- I observed that due to Group Seminar students have learnt the topic with their group mates, many of the students showed deeper interest in to the subject.
- With the group presentation all the students were involved and I observed that their communication skills and confidence levels improved

Proofs:



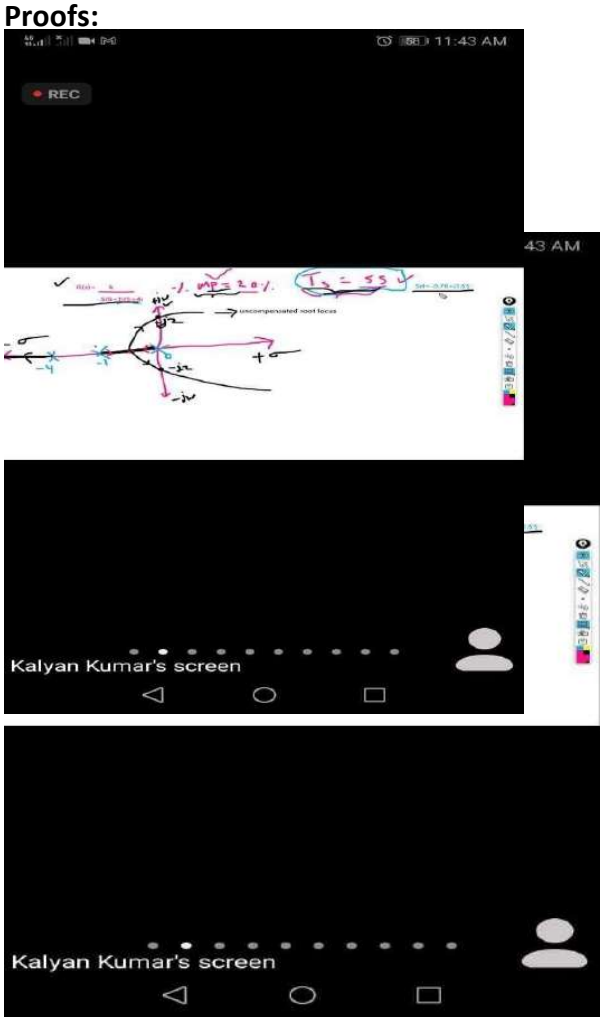


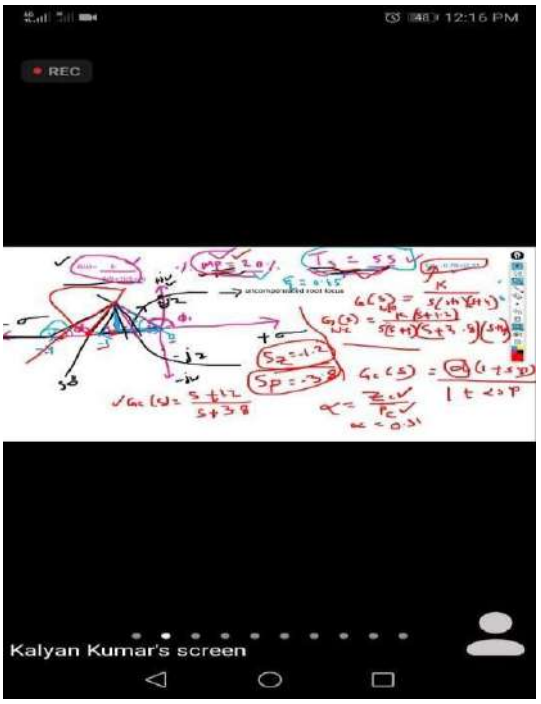
GUEST LECTURES:

FACULTY NAME: N. SINDHU

SUBJECT: CS

Proofs:





FACULTY NAME: J. Rajeshwar Goud

SUBJECT: EMFW

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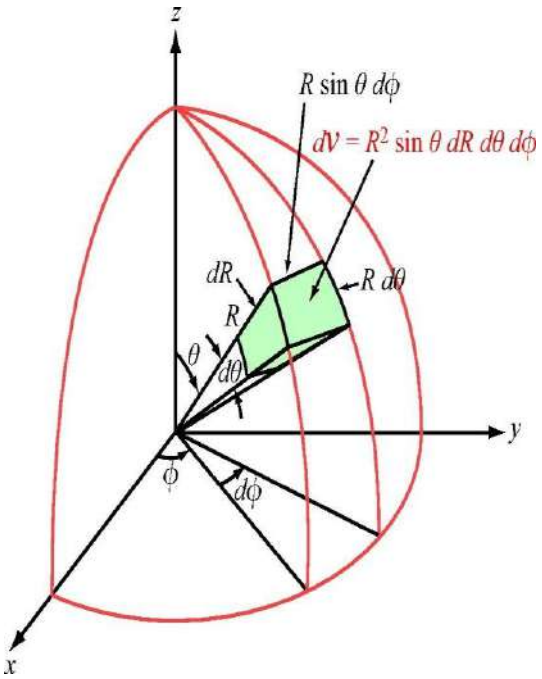
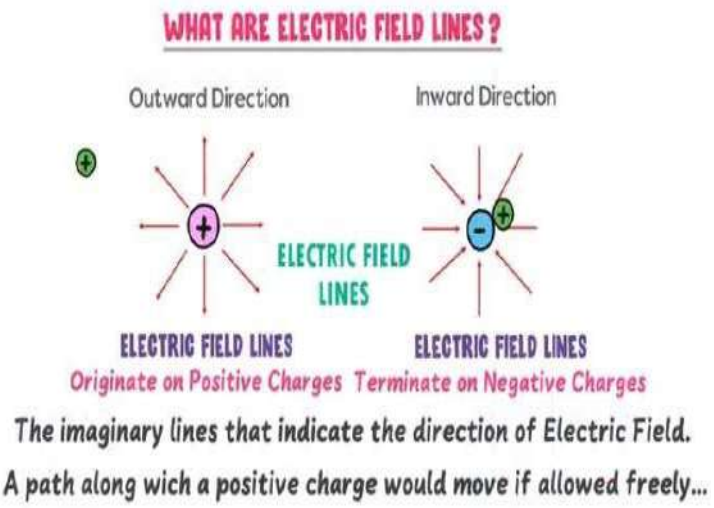




MOODLE:

FACULTY NAME:P. Kondala Rao

SUBJECT: SS &COOS

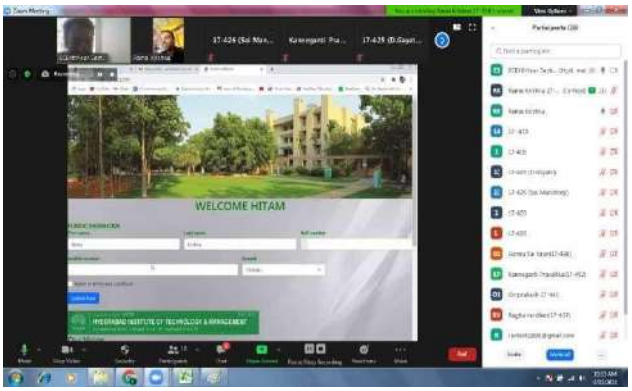
Proofs:

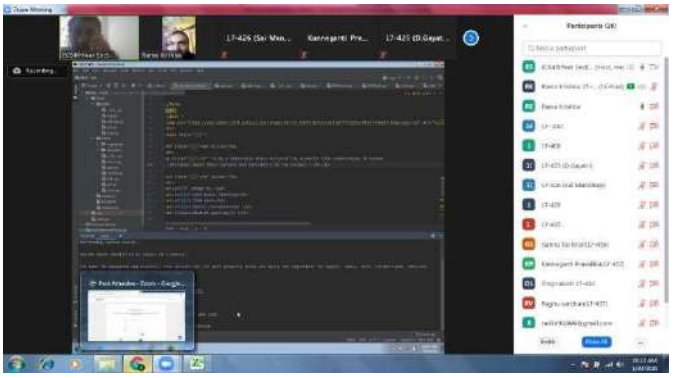
PBL:

FACULTY NAME: Vinod Ahuja

SUBJECT:

Proofs:





STUDENT SEMINAR

FACULTY NAME: J. RAJESHWAR GOUD

SUBJECT: EMFW

- **I observed that due to Seminar students have learnt the topic and involved actively in JAM technical session.**
- **With the student presentation all the students were involved in and asked questions on the boundary conditions. I observed that the such kind presentations will help the students communication and confidence level.**

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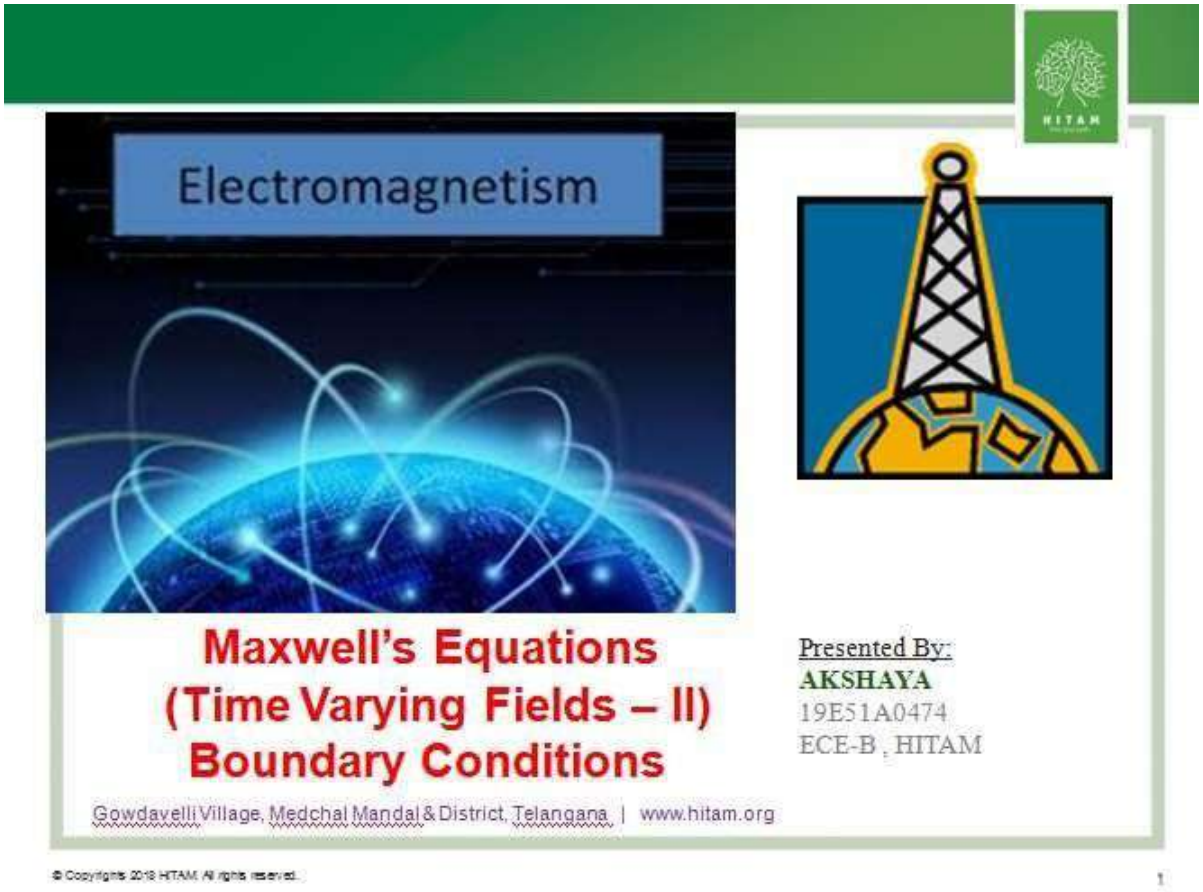
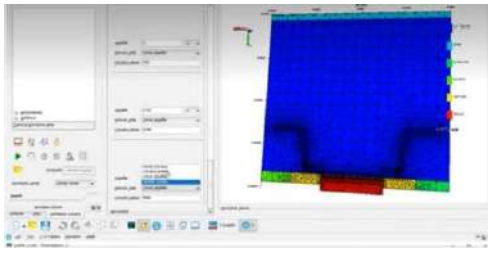


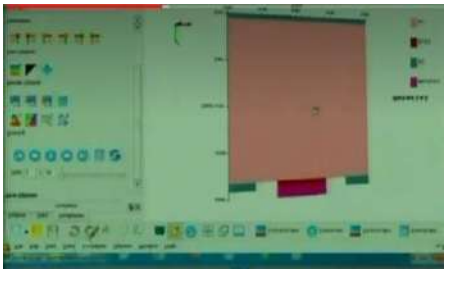
VISUAL TCAD:

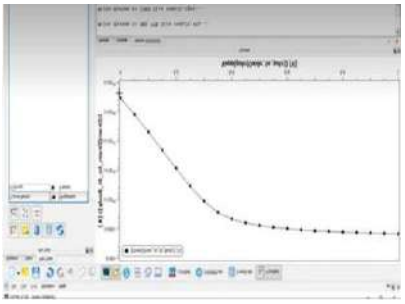
FACULTY NAME: K. Bindu Madhavi

SUBJECT: VLSID

Proofs:



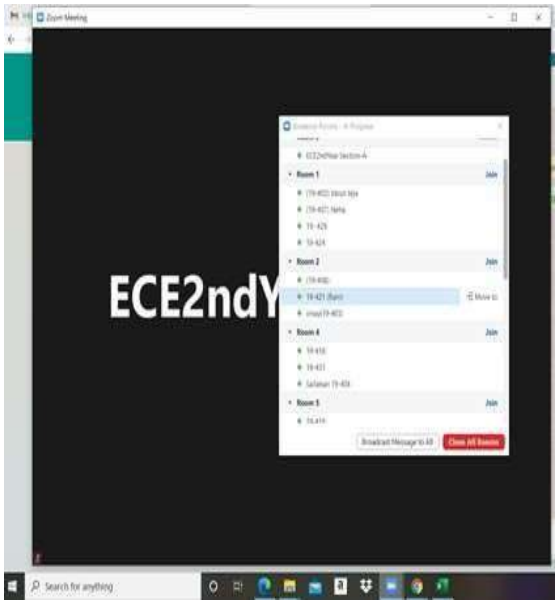


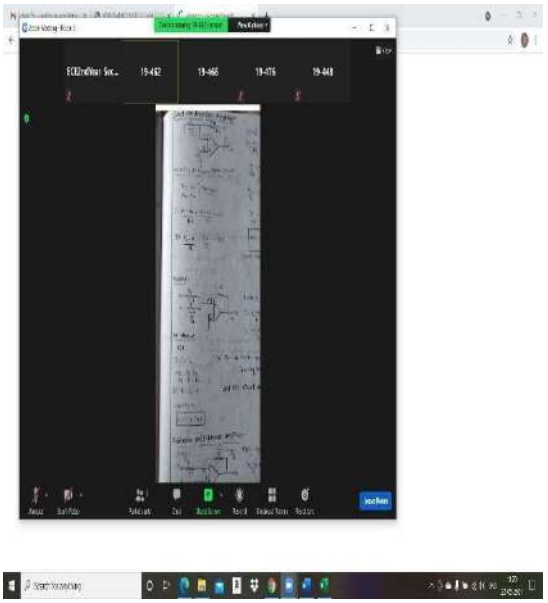


BREAKOUT ROOM:

FACULTY NAME: P.SANTOSH

SUBJECT: LICA





HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

DEPARTMENT OF ECE

A TECHNICAL REPORT ON PEDAGOGYIMPLEMENTED

AY:2021-22

S. No	Pedagogy	Name of the Faculty
1	2 Min Elevator Pitch	Mr. P Santhosh
2	Demonstration	Mr. P Santhosh
3	Group Discussion	Mr. Kondal Rao P
4	Student Seminar	Mr. J Rajeshwar Goud
5	Group Discussion	Dr Julaiba Mazumder
6	PPT	Dr Julaiba Mazumder
7	Group Discussion	Ms. V Tejaswi
8	Student presentation	Ms. V Tejaswi
9	PPT	Ms. V Tejaswi
10	Flipped Class	Ms. V Tejaswi
11	Demonstration	Mr. D PrashanthVarma
12	Group Discussion	Mr. D PrashanthVarma
13	Seminars	Mr. Jagadeesh Chandra Prasad
14	Student Seminars	Ms. M Rani
15	Group Discussion	Ms. K Geetha
16	Student Seminars	Ms. K Geetha
17	Flipped Class	Ms. K Geetha
18	Poster Presentation	Dr S V Devika
19	Poster Presentation	Dr S V Devika
20	Demonstration	Mr. D PrashanthVarma
21	Student PPT	Mr.J Rajeshwar Goud
22	Student Seminars	Mr. Ch Naga Babu
23	Group Discussion	Mr. Kondalarao punati
24	Missing Steps	Ms. K Bindu Madhavi
25	Poster Presentation	Ms. K Bindu Madhavi
26	Student Seminars	Dr. Rahul Vivek Purohit
27	Student Prsentation	Mr. J Rajeshwar Goud
28	Demonstration	Mr. J Rajeshwar Goud
29	Student Prsentation	Mr. Jagadeesh Chandra Prasad

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Name of the Activity: Demonstration

Course: Digital System DesignName of Topic: Counters

Year/ Branch: II B. Tech I Semester ECEDate of conduction:

16/02/2022

AY:2021-22

Prepared by: **P SANTHOSH M.Tech., MIETE**

Assistant Professor (ECE)

Hyderabad Institute of Technology and Management

Gowdavelli (V), Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

This pedagogy is conducted in laboratory, whatever they studied in the class theoretically that will be performed hand on in the lab.

IMPLEMENTATION:

- Most of the topics explained in the class are practically verified in the lab
- This activity can be performed with the help of supporting faculty.

PROOFS:

Fig. Demonstration in the lab

OUTCOME:

It helps students learn the topic practically along with theoretically.

CHALLENGES:

1. Require support of another faculty.

NO.OF STUDENTS PARTICIPATED: 65

STUDENT FEEDBACK:

1. More active to participate in the activity

2. feels more satisfactory with outcome of activity

MODE OF FEEDBACK: ORAL

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Name Of Activity: Two minute Elevator Pitch

Course: Digital System Design

Name Of Topic: Logic gates using Universal gatesYear/Branch: II B.Tech I Semester ECE

Date of conduction: 11/11/2021

AY:2021-22

Prepared by: **P SANTHOSH M.Tech., MIETE**

Assistant Professor (ECE)

Gowdavelli, Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

The Two-minute Elevator Pitch activity is conducted in the classroom only. In this activity Every student has to come and present their topic within two minutes

IMPLEMENTATION:

- One day before I gave the topic to the students that is logic gates using universal gates
- In this activity I will call randomly any student, he/she has to come and design the given logic gate using universal gates within the two minutes on the board.

PROOFS:

Fig. Two minute Elevator Pitch activity

OUTCOME:

With this activity students can learn the topic deeply as well it will improve communication skills and removes stage fear also.

CHALLENGES:

1. Require support of another faculty.

NO.OF STUDENTS PARTICIPATED: 25

STUDENT FEEDBACK:

1. More active to participate in the activity

2. feels more satisfactory with outcome of activity

MODE OF FEEDBACK: ORAL

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Electronic Circuit Analysis

All units

II B.Tech ECE II Sem, 2022

< April 2021 – Aug

2022 >AY:2021-22

Prepared by:

J. Rajeshwar

GoudAsst.

Prof

Hyderabad Institute of Technology and Management

Gowdavelli, Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

The course handled is Network Analysis and Transmission Lines. I have conductedvarious activities in operating system course as mention below.

IMPLEMENTATION: Classroom activity for topic is well planned and executed as per schedule. Rubric designed to assist student's performance.

Topic: Tuned Amplifiers

Pedagogies: Students presentation

Observation: Students actively involved in the class and taught to their friends. However academically week student learned but when it came to delivery on board most of them hesitated.

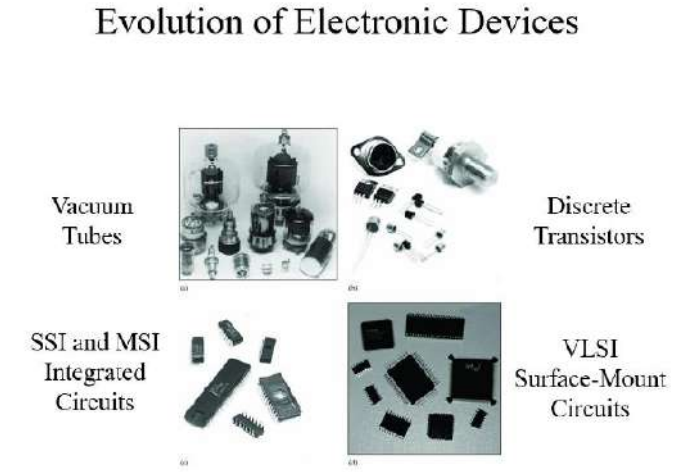
Impact: Approximately 70 % of the students prepared well to teach on the board. Students took responsibility to prepare material for assigned topic and share in the group

Activity: Demonstration

Observation: Students enjoyed when I was teaching this concept.

Impact: Live demo besides problem solving helped students to understand complicated concept easily. I could see students laughing and learning at the same time. It helped the students to score better marks in the mid exams. Approximately 15 % of students including academically strong students missed vital points when asked them to write a fewpoints about topic.

Activity: Real time Examples



Observation: This activity helped me to check how many students understood topic clearly.

Impact:

a) It helped the students to understand what my expectation is when they write answer.

b) With real time examples students are easily understand the importance of Electronic Devices

Guest Lecture: Oscillators

Arranged guest lecture on Oscillators. Mrs. Bindu Madavi explained the topic very clearly.

Students are understanding the Different Types of oscillators clearly. They solved problem on RC and LC oscillators easily.

Topic: All five units overview

Pedagogies: Concept mapping

Observation: I conducted concept mapping activity after completion of portion to make the students understand how each and every unit is interlinked.

Impact: After activity students came to know how each and every unit and topic are interlinked which helped them for mid 1 and external exam.

E-RESOURCES/Text books Referred :
Link1:

TEXT BOOKS:

1. Integrated Electronics, Jacob Millman, Christos C Halkias, McGraw Hill Education.
2. Electronic Devices Conventional and current version -Thomas L. Floyd 2015, Pearson.

REFERENCE BOOKS:

1. Electronic Devices and Circuits, David A. Bell – 5th Edition, Oxford.
2. Electronic Devices and Circuits theory– Robert L. Boylestead, Louis Nashelsky, 11th Edition,2009, Pearson

CONTENTS OUT OF SYLLABUS:

NIL

RUBRICS (if followed):

TIME TAKEN TO COMPLETE THE ACTIVITY: Regularly in the class after explaining the topic

BEST Performer: Akshitha

Slow performer: Vishnu Vardan

Suggestions given to Slow Learner:

CHALLENGES:

1. Irregularity of students

NO. OF STUDENTS PARTICIPATED: 2

NO. OF BATCHES MADE: IndividualSTUDENT FEEDBACK:

Helped to understand the topic clearly

MODE OF FEEDBACK: ORAL

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Wireless Sensor Networks

All units

IV B.Tech ECE II Sem, 2021-2022

<March-Aug >

AY:2021-2022

Prepared by: D.Prasanth Varma

Asst. Prof

Hyderabad Institute of Technology and Management

Gowdavelli,villMedchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

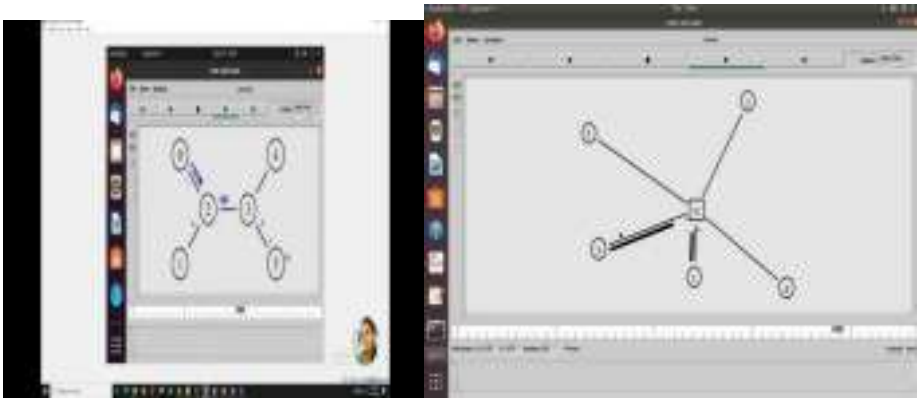
The course handled is Wireless Sensor Networks I have conducted various activities inWSN course as mention below.

IMPLEMENTATION: Classroom activity for topic is well planned and executed as perschedule.

PROOFS:

Topic: Creation of Network

Pedagogies : Demonstration



Observation:

Almost all students participated in demonstration activity.

Impact: I conducted activity in 6th hour and almost all students actively participated. Ihave asked 1 question in mid 1 from same topic, approximately 75 % of the students answered correctly.

Topic: Routing Protocols

Pedagogies: Group Discussion

Observations: Routing Protocols concept is little difficult to understand. Group discussionhelped me to make this concept clear especially to academically week students.

Impact: Apart from making concept clear, I could not find any much impact which can be shared.

Topic: Data Dissemination

Pedagogies: Students presentation

Observation: Students actively involved in the class and taught to their friends. However academically week student learned but when it came to delivery on board most of them hesitated.

Impact: Approximately 70 % of the students prepared well to teach on the board. Students took responsibility to prepare material for assigned topic and share in thegroup

Observation: I conducted concept mapping activity after completion of portion to make the students understand how each and every unit is interlinked.

Impact: After activity students came to know how each and every unit and topic areinterlinked.

Observation: As planned according mid 1 and 2.

Impact: Especially in mid 1, students performed well in both subjective and objectivepapers.

E-RESOURCES/Text books

Referred :Link1:

Text books: DCN by Taninbaum

ICT USAGE:

CONTENTS OUT OF SYLLABUS:NIL

MODE OF FEEDBACK:

ORAL

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Name of the activity: Student seminar competition

Course: EMFW

Name of the Topic: Maxwell's Equations

Year/Branch: II B. Tech II Sem

Date of Conduction: 09/05/2022

AY : 2021-22

Prepared by: R. Jagadeesh Chandra Prasad Assistant Professor, ECE

Hyderabad Institute of Technology and Management

Gowdavelli, Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

The Student seminar competition technique is a method of organizing classroom.

IMPLEMENTATION:

20 - 410 (Deepthi) 20- 453 (Thanmayee)

20- 447 (Sri Hari)

Observation: Students gave the presentation with more effectively one above the other.

Impact: This activity helped me to make students understand the Maxwell's Equationsand Application and utilization of equations in different forms

Topic: Maxwell's Equations

NO. OF STUDENTS PARTICIPATED: 3

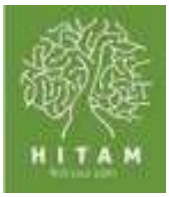
1. 20-410 : M. Deepthi
2. 20-447 : T. Sri Hari
3. 20-453 : V. Thanmayee

STUDENT FEEDBACK:

1. Three students presented very good and effectively
2. Inspired with the way explanation of three students

MODE OF FEEDBACK: Voting by Students (Oral)

1. Excellent : 20-410
2. Very Good : 20-447
3. Good : 20-453



A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Name of the activity: Student presentation

Course: MPMC

Name of the Topic: I2C, SPI and UART

Year/Branch: III B. Tech I Sem, ECE-B

Date of Conduction:2/12/2021

AY : 2021-22

Prepared by: V. M. Rani Assistant Professor, ECE

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

The Student presentation technique is a method of organizing classroom.

IMPLEMENTATION:

Observation: Students gave the presentation and others got the inspiration to give the presentation and they have learnt the topic.

Impact: This activity helped me to make students understand what is serial communication happening through SPI, UART to Microcontroller

Topic: SPI, I2C, UART

NO. OF STUDENTS PARTICIPATED: 30

STUDENT FEEDBACK:

1. More active to participate in the activity
2. feels more satisfactory with outcome of activity

MODE OF FEEDBACK: ORAL

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

VLSID

All units

III B. Tech ECE II Sem,

2021AY: 2021-2022

Prepared by:

K.GEETHA

Asst. Prof

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

The course handled is VLSID I have conducted various activities in VLSID course as mention below.

IMPLEMENTATION:

Classroom activity for topic is well planned and executed as perschedule.

PROOFS:

Topic: ALTERNATE GATE CIRCUITS

Pedagogies:

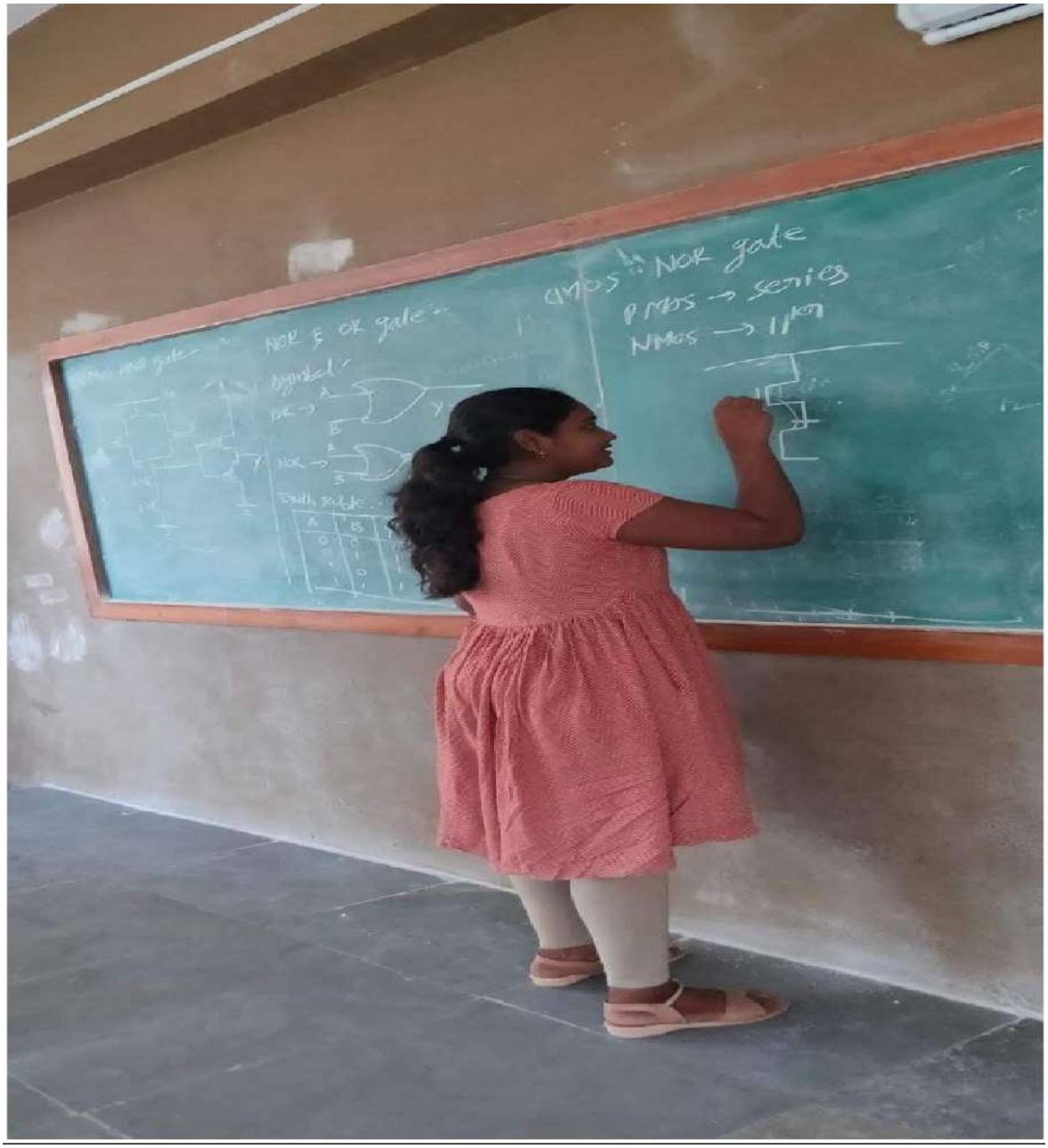
INDIVIDUAL DISCUSSION IN GROUP

Observation:

Impact: I conducted this activity in I st hour so students individually discuss the tough topics so the other students will understand the topics and able to clear their doubts in this particular section.

TOPIC: Logic Gates

Pedagogies: Student Presentation



Observation: Students gave the presentation and others got the inspiration to give thepresentation and they have learnt the topic.

Impact: This activity helped them to make students understand how logic gates isimplemented by using MOS Transistor.

Topic: TRANSMISSION GATE

Pedagogies: Flipped Classroom

Observation: Flipped classroom helped me to revise the topics so that it will be useful for the students for preparation.

Impact: It helped students learn the content and increased self-efficacy in their ability to learn independently.

Topic: DESIGN FLOW

Pedagogies: PPT

Observation: Students will still able to understand the topics and floechart by ppt presentation

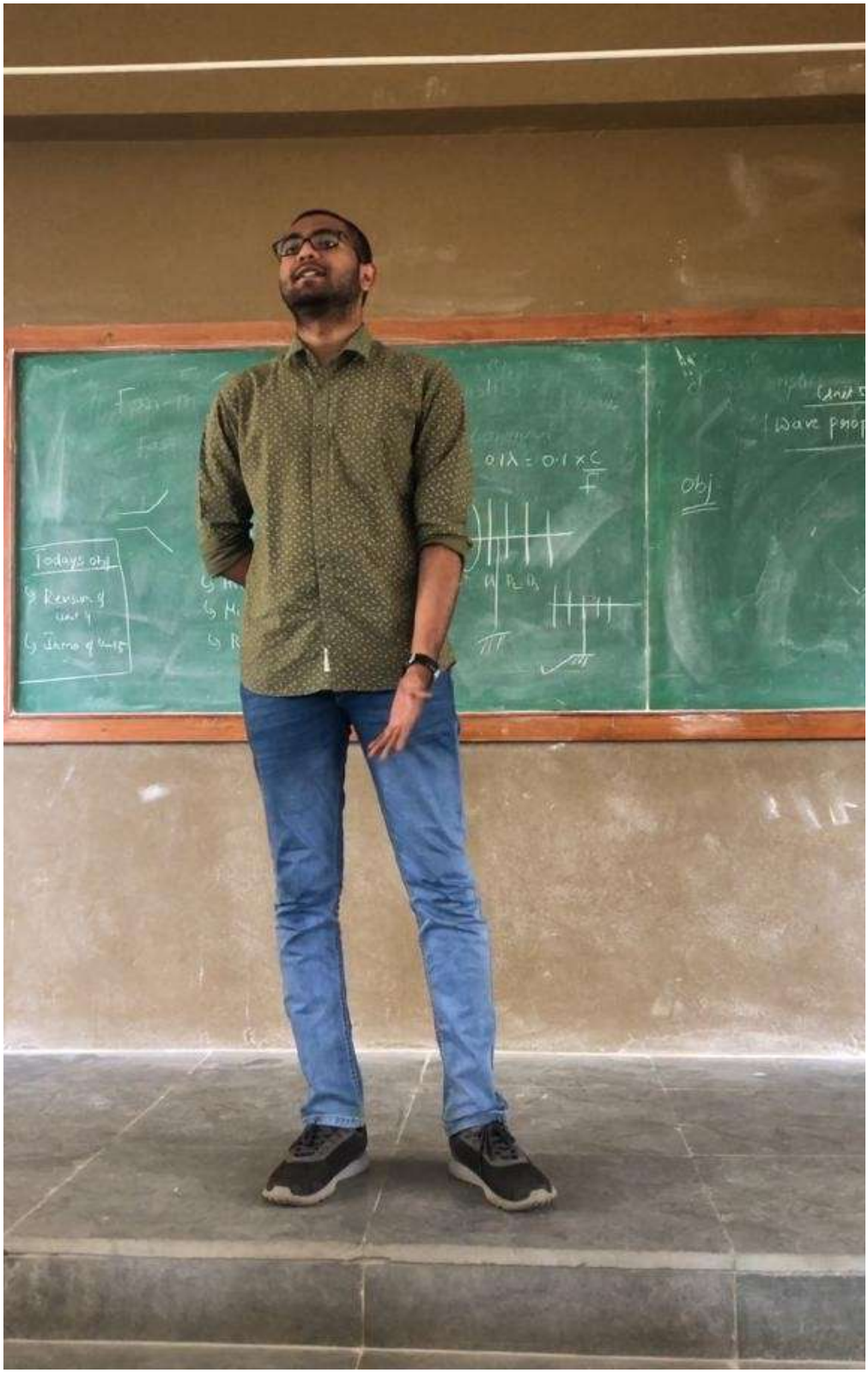
Topic: BICMOS FABRICATION

Pedagogy: Video Presentation

Observation: Students watched video and shared understanding.

Topic: Short topics at the end of unit

Pedagogy: Just a Minute(JAM)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HYDERABAD INSTITUTE OF TECHNOLOGY AND

MANAGEMENT DEPARTMENT OF ECE

A TECHNICAL REPORT

ON

PEDAGOGY IMPLEMENTED IN ANTENNAS & PROPAGATION

(For the Academic year 2021-22)

Name of Activities:

1) Poster Presentation

2) Exit ticket

4) Open book exam

Year/Branch: III B. Tech II Semester ECE

Prepared by: Dr. Devika SV, M. Tech, PhD

Professor of ECE

HYDERABAD INSTITUTE OF TECHNOLOGY AND

MANAGEMENT Gowdavelli, village Medchal, Hyderabad-501401

POSTER PRESENTATION:

Introduction: A poster presentation is a formal, research-based presentation of the work. A poster presentation provides a visual representation of your research through text, charts, graphs, and other visual aids. A poster presentation allows viewers to read your research material at their ownleisure and to interact with you—perhaps asking questions about your methods or your findings.

Topic: LASERS & OPTICS

Unit No: 5

IMPLEMENTATION:

Students were formed into batches

Each batch consists of minimum 1 student to maximum 4 students
A review was scheduled, and presentations were delivered by the students
The posters were submitted by respective batches
Assessment was done based on the performance of the students

Criteria	Ratings	Points
Following the procedure	Clearly understood the procedure-3 Not followed the procedure properly-0	3
Cross checking with the team members and Group performance	Individually solving problem and discussion with peers-3 Individually solving problem without discussion-2 Not solving the problem-0	3
Subject knowledge	100% knowledge on presentation-5 80-90% knowledge on presentation-3 Below 80%(but followed procedure)-2 Below 80%(Not followed procedure)-0	5
Time management	Completion of the topic with clear understanding within given stipulated time -4 Clear understanding, not completed within the time limit-3None-0	4



EXIT TICKET:

Introduction of the Pedagogy: After completion of the unit, students were asked to write any 3 questions on small piece of paper (Which is termed as Ticket), the ticket of each student is shared with other peers. The student who receives the questions should give answers for the same. 2 more interactions of ticket shuffling happens in

the class were students go through 10 important points in the corresponding topic/unit.

Expected outcome: Student recalls 10-15 important short answer questions through this activity.


Open Book Exam

E-RESOURCES/Textbooks Referred: Nil
Textbooks: Kulkarni

ICT USAGE: Nil

BEST Performer: ALL

Slow performer: Nil

Suggestions given to Slow Learner: Personal counselling to motivate students for active participation

CHALLENGES:

Delay in submission

NO. OF STUDENTS PARTICIPATED: 75

STUDENT FEEDBACK:

1. Experiential Learning & Participative Learning

MODE OF FEEDBACK: ORAL

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

DEPARTMENT OF ECE

A TECHNICAL REPORT

ON

PEDAGOGY IMPLEMENTED IN MOC

(For the Academic year 2020-21)

Name of Activities:

1) Poster Presentation

2) Exit ticket

4) PIC mania

5) Learning through animation videos

6) Others

Year/Branch: IV B. Tech I Semester ECE

Prepared by: Dr. Devika SV, M. Tech, PhD

Professor of ECE

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Gowdavelli, village Medchal, Hyderabad-501401

POSTER PRESENTATION:

Introduction: A poster presentation is a formal, research-based presentation of the work. A poster presentation provides a visual representation of your research through text, charts, graphs, and other visual aids. A poster presentation allows viewers to read your research material at their own leisure and to interact with you—perhaps asking questions about your methods or your findings.

Topic: LASERS & OPTICS

Unit No: 5

IMPLEMENTATION:

Students were formed into batches

- Each batch consists of minimum 1 student to maximum 4 students
- A review was scheduled, and presentations were delivered by the students
- The posters were submitted by respective batches
- Assessment was done based on the performance of the students

Criteria	Ratings	Points
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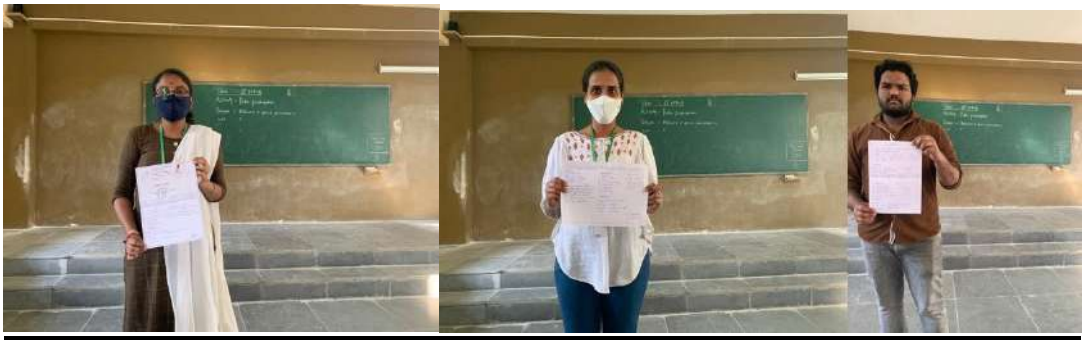
Subject knowledge	100% knowledge on presentation-5 80-90% knowledge on presentation-3 Below 80%(but followed procedure)-2 Below 80%(Not followed procedure)-0	5
Time management	Completion of the topic with clear understanding within given stipulated time -4 Clear understanding, not completed within the time limit-3None-0	4











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Introduction of the Pedagogy: After completion of the unit, students were asked to write any 3 questions on small piece of paper (Which is termed as Ticket), the ticket of each student is shared with other peers. The student who recives the questions should give answers for the same. 2 more iteractions of ticket suffling happens in the class were students go through 10 important points in the corresponding topic/unit.

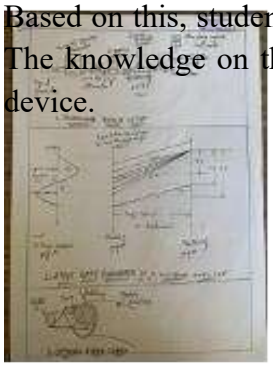
Expected outcome: Student recalls 10-15 important short answer questions through this activity.

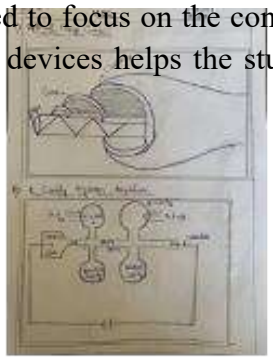
Implementaion:

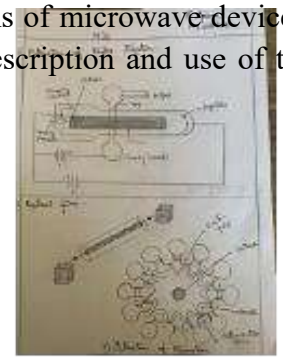
PIC mania:

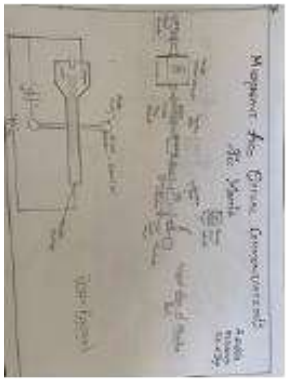
Introduction: " 1 Picture express 1000 words"

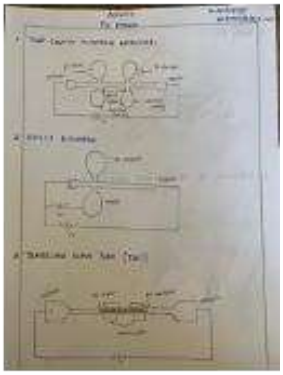
Based on this, students were asked to focus on the construction diagrams of microwave devices. The knowledge on the design of devices helps the students to write description and use of the device.









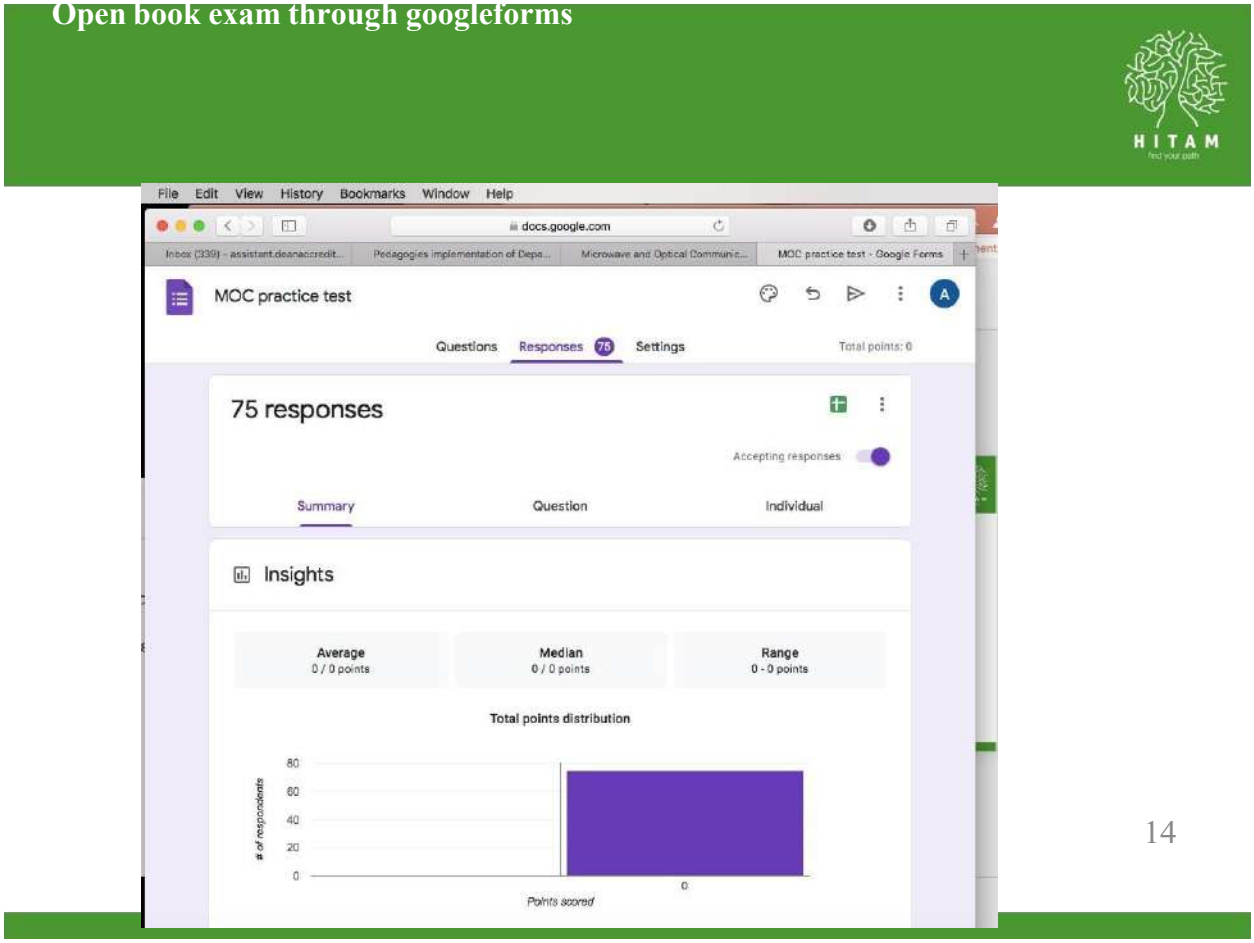


Outcome: Students practiced all the diagrams in the units and recalled them during the class that helped students to score the maximum marks.

Learning through Animation Videos:

Outcome: The working principal of microwave devices can be easily understood through animation of working videos which were shown to the students in the class along with explanation through chalk and talk

Open Book Exam through google forms:



Outcome: Questions from all the units under Bloom's Level 3&4 were given in the form where students apply engineering knowledge in solving them.

Brain storming and peer learning:

E-RESOURCES/Textbooks Referred: **Nil**

Textbooks: Kulkarni

ICT USAGE: Nil

BEST Performer: ALL

Slow performer: Nil

Suggestions given to Slow Learner: Personal counselling to motivate students for active participation

CHALLENGES:

Delay in submission

NO. OF STUDENTS PARTICIPATED: 75

STUDENT FEEDBACK:

1. Experiential Learning & Participative Learning

MODE OF FEEDBACK: ORAL

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Network Analysis and Transmission Lines

All units

B. Tech ECE I sem, 2021

<Nov 2021 -Feb 2022 >AY:2021-22

Prepared by:

J. Rajeshwar GoudAsst. Prof

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

The course handled is Network Analysis and Transmission Lines. I have conducted various activities in operating system course as mention below.

IMPLEMENTATION: Classroom activity for topic is well planned and executed as perschedule. Rubric designed to assist students performance.

Topic: Two port network

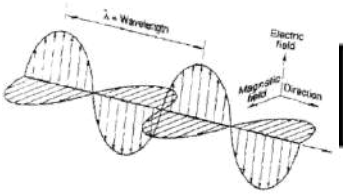
Pedagogies : Students presentation

Observation: Students actively involved in the class and taught to their friends. However academically week student learned but when it came to delivery on board most of them hesitated.

Impact: Approximately 70 % of the students prepared well to teach on the board. Students took responsibility to prepare material for assigned topic and share in the group

Topic: Power in a Wave

Pedagogies : Animation Video, lecture video



Observation: Students watched video individually and shared understanding about powerin wave.

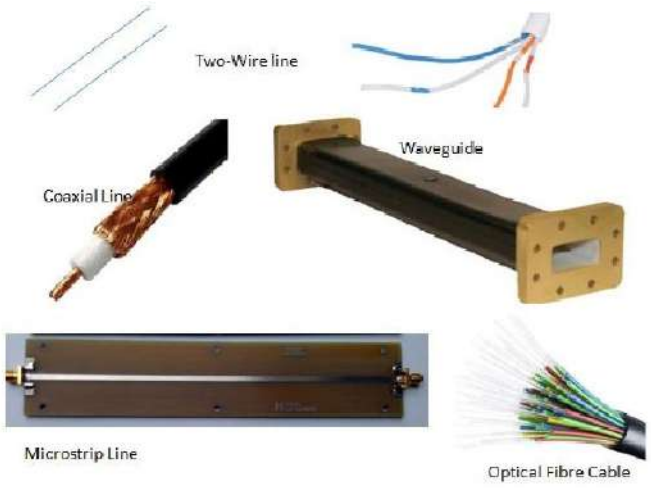
Impact: This activity helped me to make students understand what deadlock avoidance is, ignorance, prevention, recovery. In mid 2 more then 90 % students attempted Transmission of power.

Activity: Demonstration

Observation: Students enjoyed while teaching this concept.

Impact: Live demo besides problem solving helped students to understand complicated concept easily. I could see students laughing and learning at the same time. It helped the students to score better marks in the mid exams. Approximately 15 % of students including academically strong students missed vital points when asked them to write a fewpoints about topic.

Activity: Real time Examples



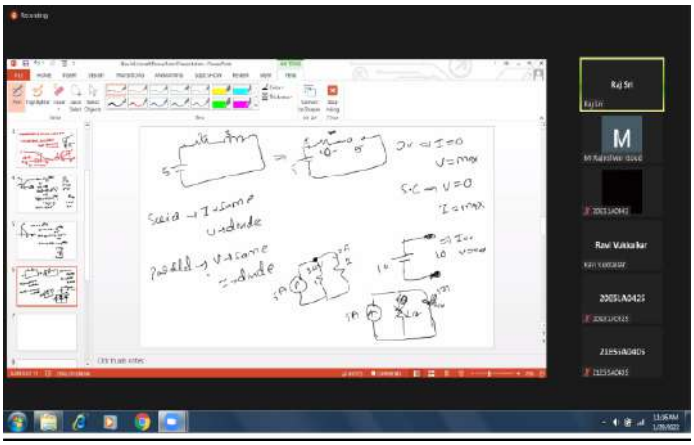
Observation: This activity helped me to check how many students understood topic clearly.

Impact:

a) It helped the students to understand what my expectation is when they write answer.

b) With real time examples students are easily understand the importance of transmissionlines.

Guest Lecture: Transients



Arranged guest lecture on Transients. Mrs. Rajasri explained the topic very clearly. Students are understanding the transients clearly. They solved problem on transients easily.

Topic: All five unit's overview

Pedagogies : Concept mapping

Observation: I conducted concept mapping activity after completion of portion to make the students understand how each and every unit is interlinked.

Impact: After activity students came to know how each and every unit and topic are interlinked which helped them for mid 2 and external exam. I shared 24 Long questions and 37 short questions. I could see 8 short questions and 9 long questions appeared in JNTU-H external paper

E-RESOURCES/Texbooks Referred :

Link1:

TEXT BOOKS:

1. Network Analysis – Van Valkenburg, 3rd Ed., Pearson, 2016.
2. Networks, Lines and Fields - JD Ryder, PHI, 2nd Edition, 1999.

REFERENCE BOOKS:

3. Electric Circuits – J. Edminister and M. Nahvi – Schaum's Outlines, Mc Graw Hills Education, 1999.
4. Engineering Circuit Analysis – William Hayt and Jack E Kemmerly, MGH, 8th Edition, 1993.
5. Electromagnetics with Applications – JD. Kraus, 5th Ed., TMH
6. Transmission Lines and Networks – Umesh Sinha, Satya Prakashan, 2001, (Tech. India Publications), New Delhi.

CONTENTS OUT OF SYLLABUS:

NIL

RUBRICS (if followed):

TIME TAKEN TO COMPLETE THE ACTIVITY: Regularly in the class after explaining the topic

BEST Performer: Akshitha

Slow performer: Vishnu Vardan

Suggestions given to Slow Learner:

CHALLENGES:

1. Irregularity of students

NO. OF STUDENTS PARTICIPATED: 2

NO. OF BATCHES MADE:

IndividualSTUDENT FEEDBACK:

1. Helped to understand the topic clearly

MODE OF FEEDBACK:

ORAL

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Data Communications and Networks

All units

II B.Tech ECE I sem, 2021-2022

<Sep-Feb > AY:2021-2022

Prepared by:

D.Prasanth

Asst. Prof

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

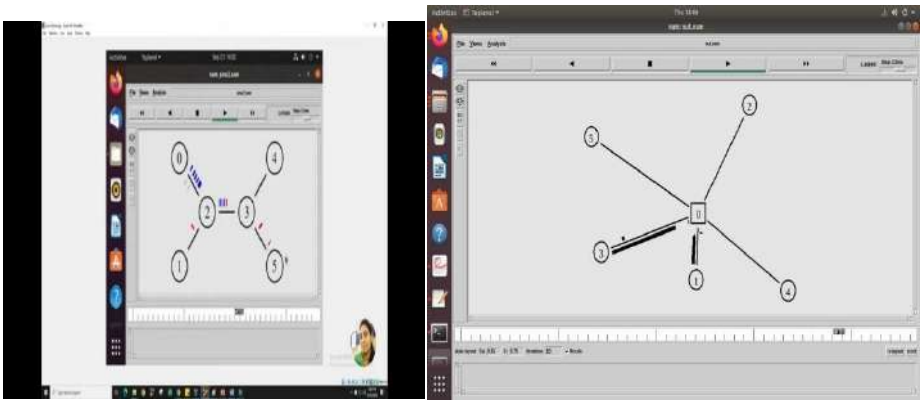
The course handled is Data Communications and Networks I have conducted various activities in DCN course as mention below.

IMPLEMENTATION: Classroom activity for topic is well planned and executed as per schedule.

PROOFS:

Topic: Topologies

Pedagogies : Demonstration



Observation: Almost all students participated in demonstration activity.

Impact: I conducted activity in 6th hour and almost all students actively participated. Ihave asked 1 question in mid 1 from same topic, approximately 75 % of the students answered correctly.

Topic: Routing Algorithms

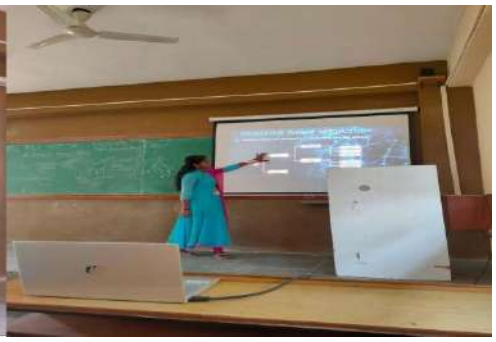
Pedagogies : Group Discussion


Observations: Routing Algorithm concept is little difficult to understand. Group discussion helped me to make this concept clear especially to academically week students.

Impact: Apart from making concept clear, I could not find any much impact which can beshared.

Topic: Transport layer services

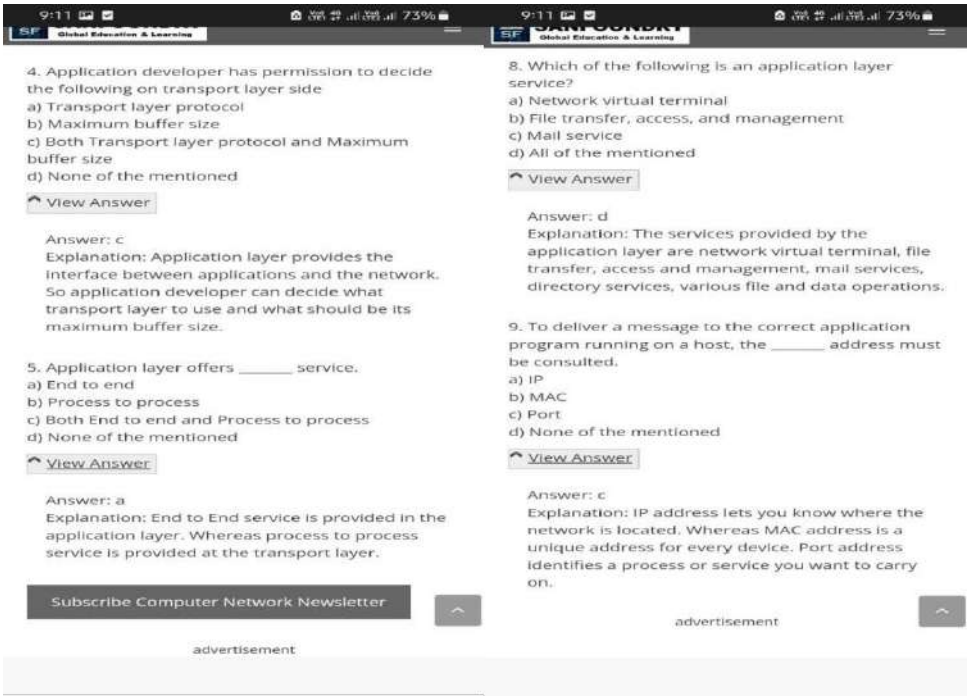
Pedagogies: Students presentation

Observation: Students actively involved in the class and taught to their friends. However academically week student learned but when it came to delivery on board most of them hesitated.

Impact: Approximately 70 % of the students prepared well to teach on the board. Students took responsibility to prepare material for assigned topic and share in the group

Pedagogies: QUIZ



4. Application developer has permission to decide the following on transport layer side
a) Transport layer protocol
b) Maximum buffer size
c) Both Transport layer protocol and Maximum buffer size
d) None of the mentioned

View Answer

Answer: c
Explanation: Application layer provides the interface between applications and the network. So application developer can decide what transport layer to use and what should be its maximum buffer size.

5. Application layer offers _____ service.
a) End to end
b) Process to process
c) Both End to end and Process to process
d) None of the mentioned

View Answer

Answer: a
Explanation: End to End service is provided in the application layer. Whereas process to process service is provided at the transport layer.

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8. Which of the following is an application layer service?
a) Network virtual terminal
b) File transfer, access, and management
c) Mail service
d) All of the mentioned

View Answer

Answer: d
Explanation: The services provided by the application layer are network virtual terminal, file transfer, access and management, mail services, directory services, various file and data operations.

9. To deliver a message to the correct application program running on a host, the _____ address must be consulted.
a) IP
b) MAC
c) Port
d) None of the mentioned

View Answer

Answer: c
Explanation: IP address lets you know where the network is located. Whereas MAC address is a unique address for every device. Port address identifies a process or service you want to carry on.

advertisement

Observation: I conducted concept mapping activity after completion of portion to make the students understand how each and every unit is interlinked.

Impact: After activity students came to know how each and every unit and topic areinterlinked.

Observation: As planned according mid 1 and 2.

Impact: Especially in mid 2 , students performed well in both subjective and objectivepapers.

E-RESOURCES/Texbooks Referred :

Link1:

Text books: DCN by Taninbaum

ICT USAGE:

CONTENTS OUT OF SYLLABUS:

NIL

MODE OF FEEDBACK:

ORAL

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Name of the activity:

JIGSAWCourse : ESD

Name of the Topic : Memories and Importance in Embedded

SystemsYear/Branch : III B.Tech II Sem ,ECE

Date of Conduction : 21/04/2022

AY : 2021-22

Prepared by: Kondalarao

PunatiAssistant

Professor,ECE

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

The **JIGSAW** technique is a method of organizing classroom activity that makes students dependent on each other to succeed. It breaks classes into groups and breaks assignments into pieces that the group assembles to complete the puzzle

IMPLEMENTATION:

- ✓ I formed 6 teams with size of 6 members according to order of their roll numbers.
- ✓ I assigned different segments (total 6 parts) to individual student in group.
- ✓ I gave 15 min to learn independently, later I formed teams who complete same segment in groups as a new group named as expert group.
- ✓ In expert group they shared their points and returned to their own group after completing the discussion in expert group.
- ✓ Now students shared complete information to their own groups and finally they presented.

OUTCOME:

It helps students learn cooperation as group members share responsibility for each other's **learning** by using critical thinking and **social skills** to complete an assignment. Subsequently, thisstrategy helps to improve listening, communication, and problem-solving skills.

E-RESOURCES/Texbooks Referred : IIEECP Webinar on Collaborative activity.

Text books: Modern electronics

ICT USAGE: COMPUTERS, SOUND SYSTEM , MOBILE ,Projector.

TIME TAKEN TO COMPLETE THE ACTIVITY: 60 min

BEST Performer: Sai Kiran

Slow performer: Kalyan

Suggestions given to Slow Learner: counseling given to student how to mingle with their classmates to share their points.

CHALLENGES:

1. Time not sufficient

2. Require support of another faculty.

NO.OF STUDENTS PARTICIPATED: 36

NO.OF BATCHES MADE: 6

STUDENT FEEDBACK:

1. More active to participate in the activity

2. feels more satisfactory with outcome of activity

MODE OF FEEDBACK: ORAL

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Signals and Systems

Laplace Transform

PropertiesIII B.Tech ECE

II sem, 2021

<Sept-Feb 2022

>AY:2021-2022

Prepared by:

Ch

Nagababu

Asst. Prof

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INRODUCTION ON PEDAGOGY:

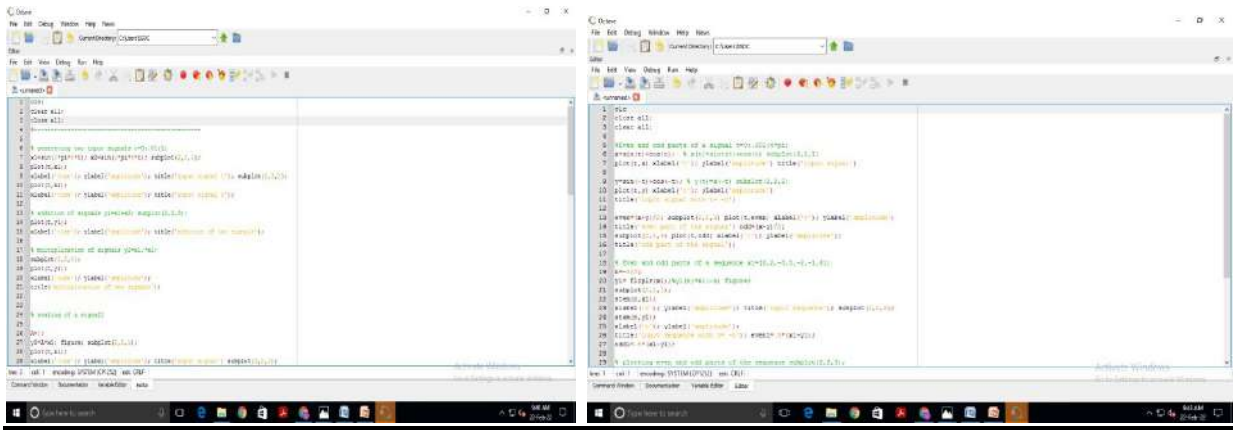
The course handled is Signals and Systems I have conducted various activities in Signalsand Systems course as mention below.

IMPLEMENTATION: Classroom activity for topic is well planned and executed as perschedule. Rubric designed to assist students performance.

PROOFS:

Topic: Generation of Signals

Pedagogies: Lab Demonstration



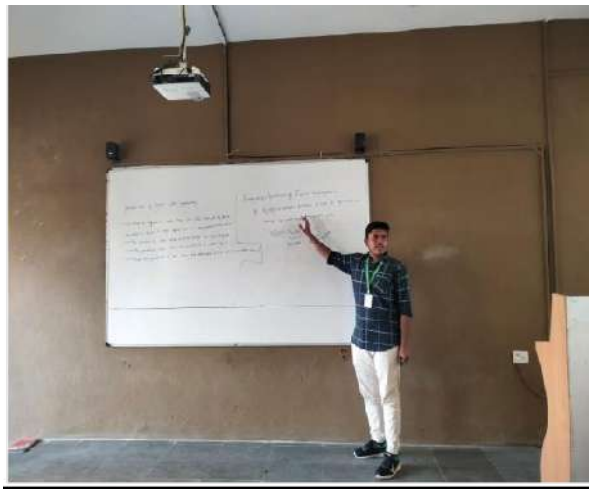
Observation:

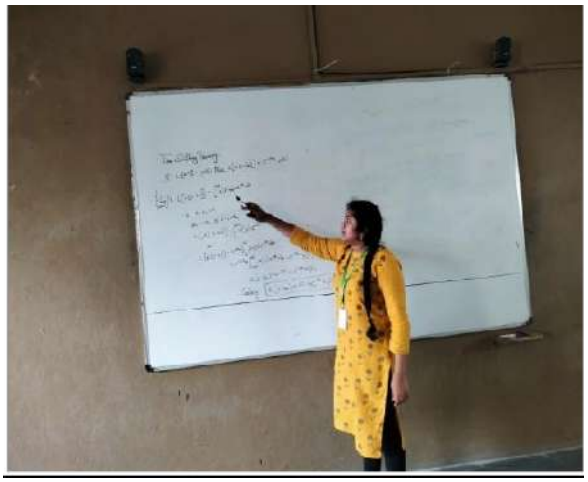
Almost all students participated in Lab Demonstration activity. I could see for the firsttime 18-05 participated and explained the concept to other students.

Impact: I conducted activity in 4th and 5Th Hour and almost all students actively participated. I have asked 1 questions majority students answered correctly.

Topic: Laplace Transform Properties

Pedagogy: Student Seminars



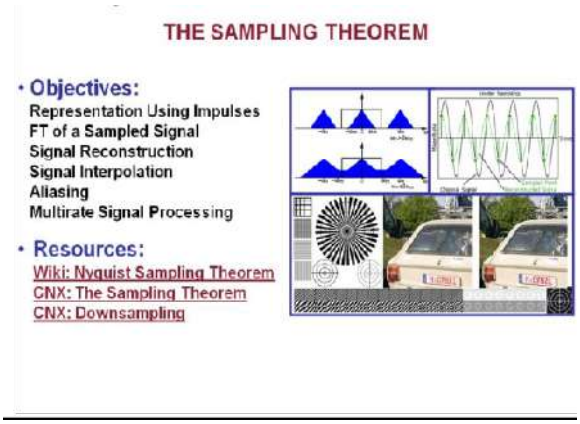


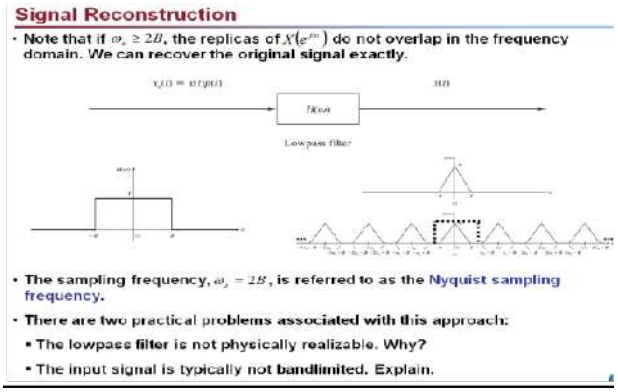
Observation: Students actively involved in the class and taught to their friends. However academically week student learned but when it came to delivery on board most of them hesitated.

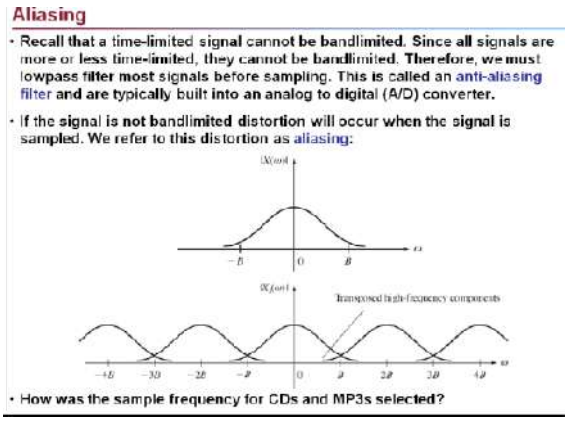
Impact: Approximately 75 % of the students prepared well to teach on the board. Students took responsibility to prepare material for assigned topic and share in the group

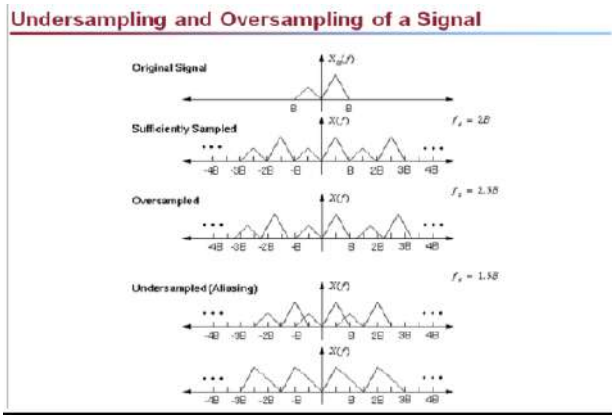
Topic: Sampling Theorem

Pedagogy: Power Point Presentation







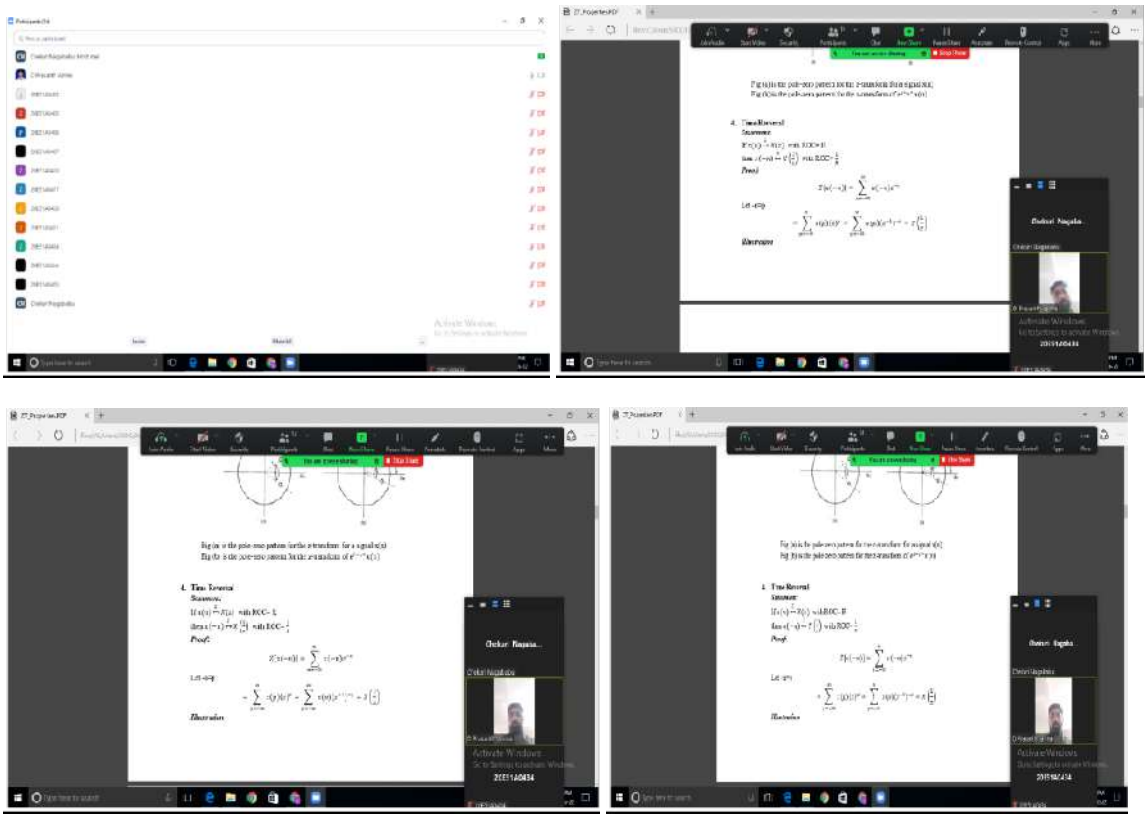


Observation: Students actively involved while teaching with PPTs in the class and understood sampling process well. However academically week student learned.

Impact: Approximately 85 % of the students involved, listened very well. PPTs areshared in students group.

Topic: Z-Transform Properties

Pedagogies: Guest Lecture



Observation: Guest Lecture taken by Mr. D Prasanth Varma in online mode due to Covid19 vacation, Students also listened very sincerely and asked their doubts, cleared byGuest faculty.

Impact: This activity helped to students to understand about Z Transform properties, Inmid 2 more then 70 % students attempted Z Transform properties**.**

E-RESOURCES/Texbooks Referred :

Link1:

Text books: Signals and Systems A.Anand Kumar

ICT USAGE:

COMPUTERS

CONTENTS OUT OF SYLLABUS:

NIL

RUBRICS (if followed):

TIME TAKEN TO COMPLETE THE ACTIVITY: Regularly in the class after explaining the topic

BEST Performer: Sathvika

Slow performer: Akash

Suggestions given to Slow Learner:

CHALLENGES:

1. Irregularity of students

NO. OF STUDENTS PARTICIPATED: 29

NO. OF BATCHES MADE: Individual

STUDENT FEEDBACK:

1. Helped to understand the topic clearly

MODE OF FEEDBACK:

ORAL

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Name of the activity: Group

DiscussionCourse : COOS

Name of the Topic : Memories and Importance in Embedded

SystemsYear/Branch : III B.Tech I Sem ,ECE

Date of Conduction : 1/12/2021

AY : 2021-22

Prepared by: Kondalarao

PunatiAssistant

Professor,ECE

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

The **Group Discussion** technique is a method of organizing classroom activity that makes students dependent on each other to succeed. It breaks classes into groups and breaks assignments into pieces that the group assembles to complete the (**Group Discussion)** puzzle

IMPLEMENTATION:

- ✓ I formed 6 teams with size of 6 members according to order of their roll numbers.
- ✓ I assigned different segments (total 6 parts) to individual student in group.
- ✓ I gave 15 min to learn independently, later I formed teams who complete same segment in groups as a new group named as expert group.
- ✓ In expert group they shared their points and returned to their own group after completing the discussion in expert group.
- ✓ Now students shared complete information to their own groups and finally they presented.

OUTCOME:

It helps students learn cooperation as group members share responsibility for each other's **learning** by using critical thinking and **social skills** to complete an assignment. Subsequently, thisstrategy helps to improve listening, communication, and problem-solving skills.

E-RESOURCES/Texbooks Referred : IIEECP Webinar on Collaborative activity.

Text books: Modern electronics

ICT USAGE: COMPUTERS, SOUND SYSTEM , MOBILE ,Projector.

TIME TAKEN TO COMPLETE THE ACTIVITY: 60 min

BEST Performer: Dibya

Slow performer: Rakesh

Suggestions given to Slow Learner: counseling given to student how to mingle with their classmates to share their points.

CHALLENGES:

1. Time not sufficient

2. Require support of another faculty.

NO.OF STUDENTS PARTICIPATED: 30

NO.OF BATCHES MADE: 5

STUDENT FEEDBACK:

1. More active to participate in the activity

2. feels more satisfactory with outcome of activity

MODE OF FEEDBACK: ORAL

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

LICA

2.5 units

II B.Tech ECE II sem, 2021

AY: 2021-22

Prepared by:

Dr. Julaiba Tahsina MazumderAssistant Professor

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

The course handled is LICA.

I have conducted various activities in LICA course as mention below.

IMPLEMENTATION: Classroom activity for topic is well planned and executed as per schedule.

PROOFS:

Topic: SCMITT TRIGGER

Pedagogies: Group Discussion

Observation:

Almost all students participated in Group Discussion activity.

Impact: I conducted activity in class and almost all students actively participated. They got the clear idea about the working of SCHMITT Trigger and its characteristics.

Topic: Instrumentation Amplifier

Pedagogies: QUIZ

Observations: Quiz helped students to learn this concept clearly especially to academically week students.

Topic: ACTIVE FILTER

Pedagogies: PPT

Observation: I explained this topic using slides and this made the students understand the concept in pictorial fashion showing the characteristics and using the examples, Students and Ienjoyed when I was teaching this concept.

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

VLSID

Group Discussion &

SeminarsIII B.Tech ECE II

Sem, 2021 AY: 2021-2022

Prepared by:

V.

TEJASWI

Asst. Prof

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

The course handled is VLSID I have conducted various activities in VLSID course as mention below.

IMPLEMENTATION: Classroom activity for topic is well planned and executed as per schedule.

PROOFS:

Topic: FABRICATION, DESIGN FLOW

Pedagogies: GROUP DISCUSSION

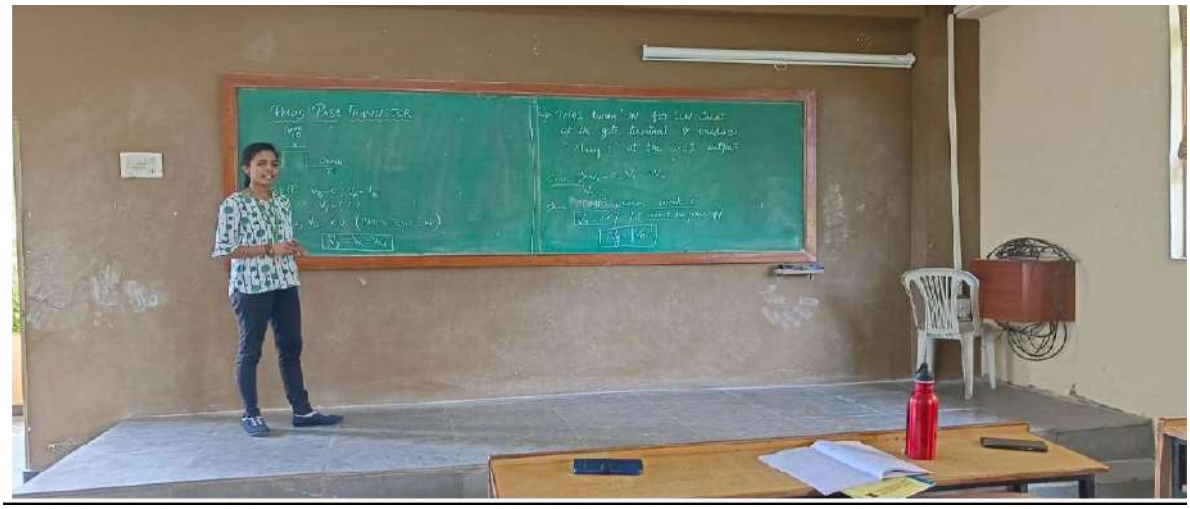
Observation:

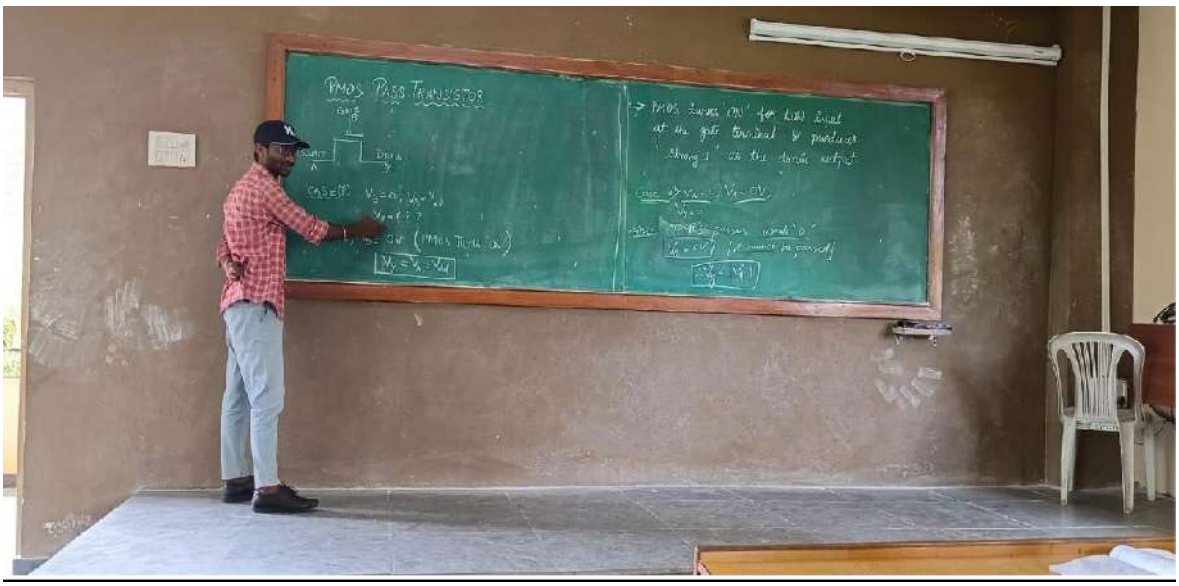
Almost all students participated in GROUP DISCUSSION activity.

Impact: I conducted activity in 6th hour and almost all students actively participated. Many students attempted and answered correctly these topics in MID 1.

TOPIC: PMOS Pass Transistor

Pedagogies: Student Presentation





Observation: Students gave the presentation and others got the inspiration to give the presentation and they have learnt the topic.

Impact: This activity helped me to make students understand what Pass Transistor is andthey got to know the working of Pass Transistor.

Topic: TRANSMISSION GATE

Pedagogies: Flipped Classroom

Observation: Flipped classroom helped me to revise the topics so that it will be useful forthe students for preparation.

Impact: It helped students learn the content and increased self-efficacy in their ability tolearn independently.

Topic: DESIGN FLOW

Pedagogies: PPT

Topic: BICMOS FABRICATION

Pedagogy: Video Presentation

Observation: Students watched video and shared understanding.

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

DEPARTMENT OF ECE

A TECHNICAL REPORT ON PEDAGOGYIMPLEMENTED

AY:2021-22 (II year)

S. No	Name of the faculty	Subject	Year
1	Dr. Rahul Vivek Purohit	ADC	II
2	Dr. Julaiba	LICA	II
3	Mr. R. Jagadeesh Chandra Prasad	EMF	II
4	Mr. Rajeshwar Goud	ECA	II

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Electronic Circuit Analysis

All units

II B.Tech ECE II Sem, 2022

< April 2021 – Aug 2022 >

AY:2021-22

Prepared by:

J. Rajeshwar Goud

Asst. Prof

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

The course handled is Network Analysis and Transmission Lines. I have conducted various activities in operating system course as mention below.

IMPLEMENTATION: Classroom activity for topic is well planned and executed as per schedule. Rubric designed to assist students performance.

Topic: Tuned Amplifiers

Pedagogies: Students presentation

Observation: Students actively involved in the class and taught to their friends. However academically week student learned but when it came to delivery on board most of them hesitated.

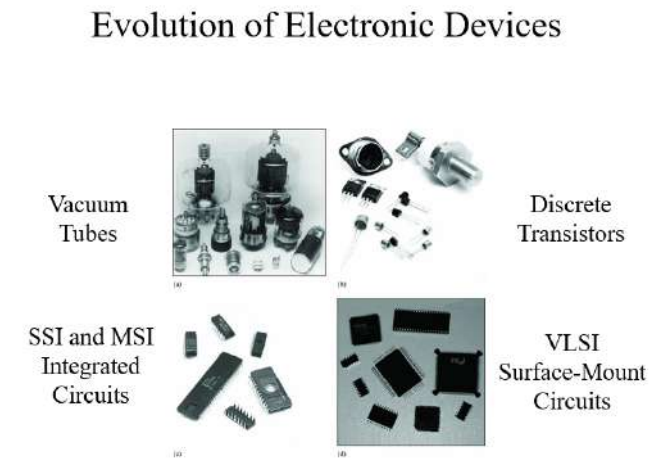
Impact: Approximately 70 % of the students prepared well to teach on the board. Students took responsibility to prepare material for assigned topic and share in the group

Activity: Demonstration

Observation: Students involved teaching this concept.

Impact: Live demo besides problem solving helped students to understand complicated concept easily. I could see students laughing and learning at the same time. It helped the students to score better marks in the mid exams. Approximately 15 % of students including academically strong students missed vital points when asked them to write a few points about topic.

Activity: Real time Examples



Observation: This activity helped me to check how many students understood topic clearly.

Impact:

a) It helped the students to understand what is my expectation when they write answer.
b) With real time examples students are easily understand the importance of Electronic Devices

Guest Lecture: Time Base Generators

Arranged guest lecture on Oscillators. Mrs. Bindu Madavi explained the topic very clearly.

Students understood different Types of Time base generators. They solved problem on Time base generator circuits.

Topic: All five units overview

Pedagogies: Concept mapping

Observation: I conducted concept mapping activity after completion of portion to make the students understand how each and every unit is interlinked.

Impact: After activity students came to know how each and every unit and topic are interlinked which helped them for mid 1 and external exam.

E-RESOURCES/Text books Referred :

Link1:

TEXT BOOKS:

1. Integrated Electronics, Jacob Millman, Christos C Halkias, McGraw Hill Education.
2. Electronic Devices Conventional and current version -Thomas L. Floyd 2015, Pearson.

REFERENCE BOOKS:

1. Electronic Devices and Circuits, David A. Bell – 5th Edition, Oxford.
2. Electronic Devices and Circuits theory– Robert L. Boylestead, Louis Nashelsky, 11th Edition,2009, Pearson

CONTENTS OUT OF SYLLABUS:

NIL

RUBRICS (if followed):

TIME TAKEN TO COMPLETE THE ACTIVITY: Regularly in the class after explaining the topic

BEST Performer: Akshitha

Slow performer: Vishnu Vardan

Suggestions given to Slow Learner:

CHALLENGES:

1. Irregularity of students

NO.OF STUDENTS PARTICIPATED: 2

NO.OF BATCHES MADE: Individual

STUDENT FEEDBACK:

1. Helped to understand the topic clearly

2.

MODE OF FEEDBACK:

ORAL and Online

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Name of the activity	**:**	**Student seminar competition**
Course	**:**	**EMFW**
Name of the Topic	**:**	**Maxwell's Equations**
Year/Branch	**:**	**II B.Tech II Sem**
Date of Conduction	**:**	**09/05/2022**
AY	**:**	**2021-22**

Prepared by: R. Jagadeesh Chandra Prasad

Assistant Professor, ECE

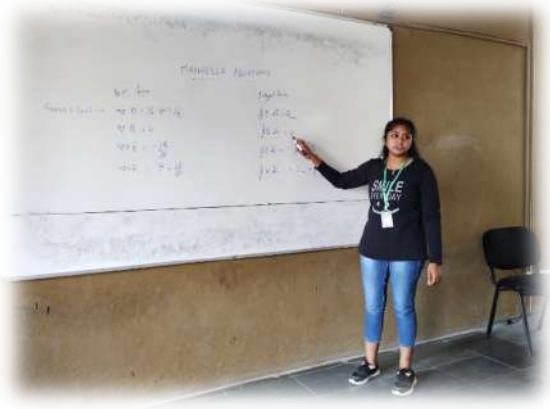
Hyderabad Institute of Technology and Management

Gowdavelli, Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY 1:

The **Student seminar competition** technique is a method of organizing classroom.

IMPLEMENTATION:



20 - 410 (Deepthi)

20- 453 (Thanmayee)

20- 447 (Sri Hari)

Observation: Students gave the presentation with more effectively one above the other.

Impact: This activity helped me to make students understand the Maxwell's Equations and Application and utilization of equations in different forms

Topic: Maxwell's Equations

NO.OF STUDENTS PARTICIPATED: 3

1. 20-410 : M. Deepthi
2. 20-447 : T. Sri Hari
3. 20-453 : V. Thanmayee

STUDENT FEEDBACK:

1. Three students presented very good and effectively
2. Inspired with the way explanation of three students

MODE OF FEEDBACK: Voting by Students (Oral)

1. **Excellent** **:** 20-410
2. **Very Good** **:** 20-447
3. **Good** **:** 20-453

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Name of the activity	**:**	**Practical demonstration of waveguide, E and H fields on HFSS**
Course	**:**	**EMFW**
Name of the Topic	**:**	**Wave guide, TE and TM modes**
Year/Branch	**:**	**II B.Tech II Sem**
Date of Conduction	**:**	**20/07/2022**
AY	**:**	**2021-22**

Prepared by: R. Jagadeesh Chandra Prasad

Assistant Professor, ECE

Hyderabad Institute of Technology and Management

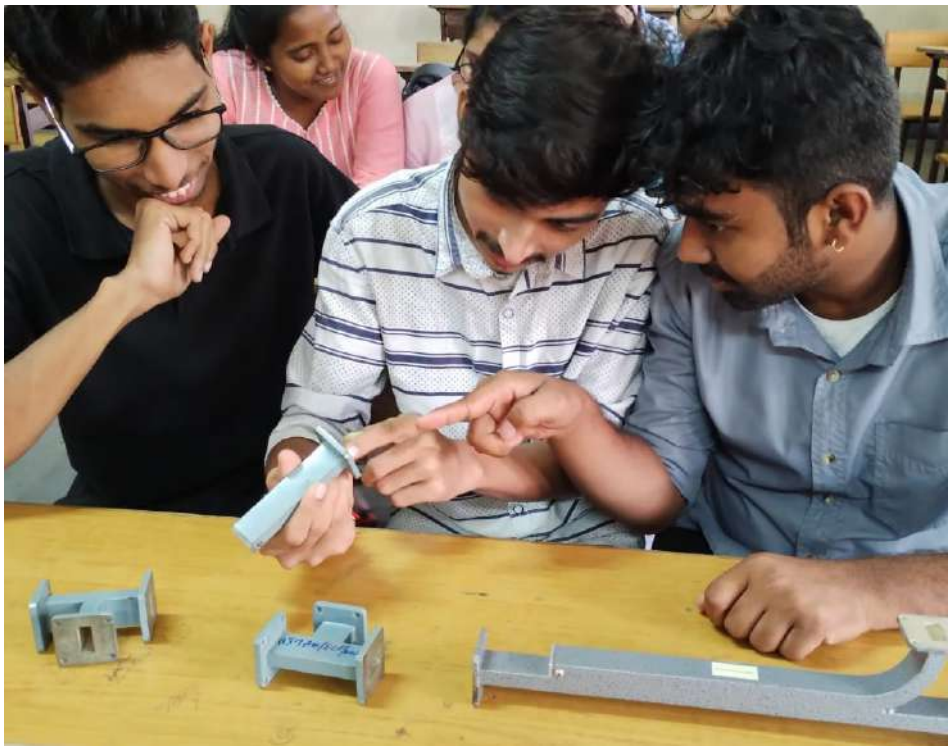
Gowdavelli, Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY 2:

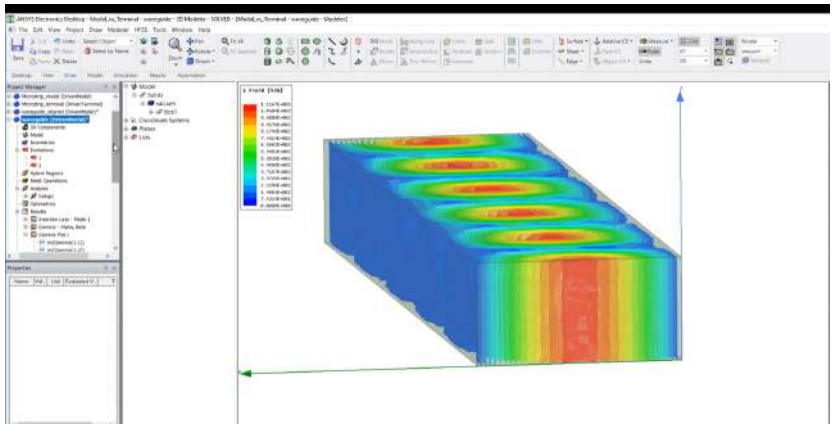
1. **Demonstration of different wave guides in class**
2. **Practical view of E –Field and H- field flow in waveguide using HFSS**

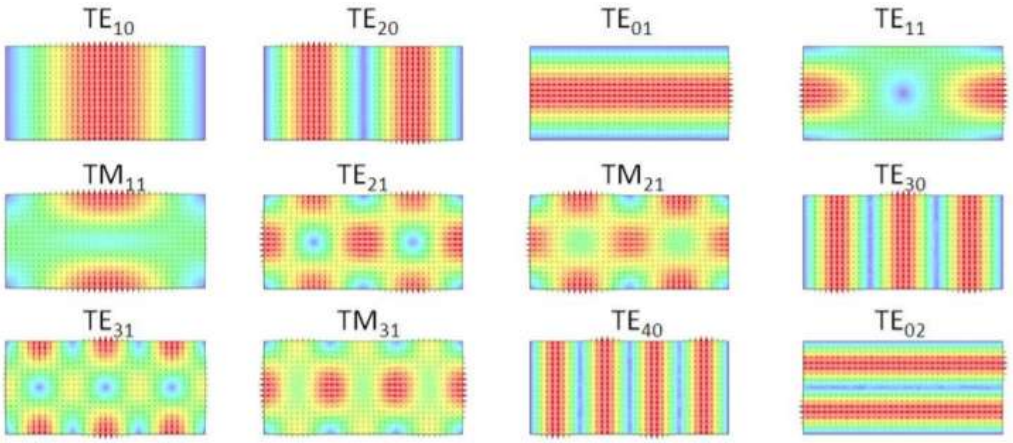
IMPLEMENTATION:

Demonstration of different wave guides in class



E –Field and H- field flow in waveguide using HFSS





Observation: Students very anxiety on designing of wave guide in software as same as practical.

Impact: Students more understood on the different modes of waveguide.

Topic: Wave guides and TE and TM modes

NO.OF STUDENTS PARTICIPATED: 37

STUDENT FEEDBACK:

1. They want to learn this software.
2. Knowledge gain with the practical mode

Faculty in charge **HOD**

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

LICA

2.5 units

II B.Tech ECE II sem, 2022

AY: 2021-22

Prepared by:

Dr. Julaiba Tahsina Mazumder

Assistant Professor

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

The course handled is LICA.

I have conducted various activities in LICA course as mention below.

IMPLEMENTATION: Classroom activity for topic is well planned and executed as per schedule.

PROOFS:

Topic: SCMITT TRIGGER

Pedagogies: Group Discussion

Observation:

Almost all students participated in Group Discussion activity.

Impact: I conducted activity in class and almost all students actively participated. They got the clear idea about the working of SCHMITT Trigger and its characteristics.

Topic: Instrumentation Amplifier

Pedagogies: QUIZ

Observations: Quiz helped students to learn this concept clearly especially to academically week students.

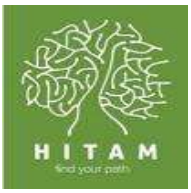
Topic: ACTIVE FILTER

Pedagogies: PPT

Observation: I explained this topic using slides and this made the students understand the concept in pictorial fashion showing the characteristics and using the examples, Students and I enjoyed when I was teaching this concept.

Submitted by: **HOD** **Principal**

Dr. Julaiba Tahsina



TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

LICA

All units

II-II B.Tech, ECE, 2022

AY: 2021-22

Prepared by:

Dr. Julaiba Tahsina Mazumder

Asst. Prof

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

Name of the Activity: Student Presentation

Introduction on Pedagogy:

For the subject Linear Integrated Circuit Applications, different pedagogies were implemented. Here, I have presented the details of one of those pedagogy-Student Presentations.

Implementation of Pedagogy:

- I have prepared 65 different questions from all units
- Each student was given one question to answer
- They were asked to write the answer for that particular question and also need to explain the answer in the class
- As a subject teacher, I have corrected them in case of any discrepancy in explanation
- Based on their submission and presentation internal marks assigned

Proof of Implementation of the Pedagogy:

i) Design of Adder-subtractor circuit using op-amp

ii) Inverting and non-inverting op-amp, virtual ground

iii) R-2R Digital to Analog Converter

Outcome:

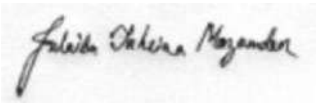
It helped the students to overcome the fear of speaking in front of large audience and improved their understanding on that topic. Since, different topics were explained by different students so they got the chance to revise various topics from all units.

Resources used: Textbook, class notes, and e-resources

Time required for preparation and performance: 3 weeks

No. of students Participated: 55-Students submitted assignment, 20-students presented in the class.

Observations from my side: Some of them have the fear of expressing in front of others; some of them are well prepared. Overall performance in terms of participation and presentation was good.



Submitted by

(Julaiba Tahsina Mazumder) (HOD) (Principal)

TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

LICA

All units

II-II B.Tech, ECE, 2022

AY: 2021-22

Prepared by:

Dr. Julaiba Tahsina Mazumder

Asst. Prof

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

Name of the Activity: Think Pair share

Introduction on Pedagogy:

For the subject Linear Integrated Circuit Applications, different pedagogies were implemented. Here, I have presented the details of one of those pedagogy-Think pair and share.

Topic of the Pedagogy: Common mode gain differential amplifier using op-amp

Outcome:

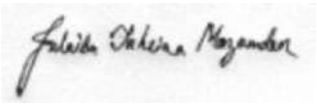
It helped the students to learn how they can do group study and understand a topic easily. As a result, it helped them to develop communication skill to explain the content to others.

Resources used: Textbook, and e-resources

Time required for preparation and performance: 1 week

No. of Students Participated: All

Observations from my side: Few were reluctant to contribute, but they did listen to others.



Submitted by

(Julaiba Tahsina Mazumder) (HOD) (Principal)