

A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED

Innovation &creativity in teaching learning

EEE-Department

S.No	Name of Pedagogy Implemented
1	Jigsaw
2	Flipped class
3	Project based learning
4	Animated videos
5	Moodles
6	Peer learning
7	Activity based learning
8	Student publications
9	Think pair share
10	PPT
11	STAD
12	Minute paper roleplay
13	Group discussion/group activity
14	Poster presentation
15	Experimental learning
16	Virtual labs
17	Industry visit & ICT
18	Problem based learning

JIGSAW

Utilization of Electrical Energy

Electric Welding (Types)

IV/I,EEE

4/8/18

AY:2018-19

Prepared by: K.SURESH

Associate professor

Hyderabad Institute of Technology and Management

Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

- 1) Class will be divided into groups
- 2) Each member of the group will be given a part of the topic
- 3) All the groups will thoroughly discuss about that topics
- 4) Later on the same topic member of all members will form new groups and discuss thoroughly about that topic
- 5) Finally they will present the topic in the form of seminar

IMPLEMENTATION:

- 1) In our college we will do assessment after every unit by conducting a slip test and marks will be awarded in the form of grades (A, B, C, and D). I will do the groups which will consist of this grades composition.
- 2) Each group will consist of 4 members which forms a total of 7 groups
- 3) Each group member will be given four different types of welding's (Butt, spot, seam and flash welding)
- 4) All members of that group have to discuss about two points about that welding and identify the real time application.
- 5) Now all members belonging to group A will form one group similarly others, These members has to discuss all types of welding's in the newly formed groups

Now every group exchange their points and they will be ready with the questions.

PROOFS:



OUTCOME: All the types of weldings will be discussed and they will thoroughly understand the applications of weldings

E-RESOURCES/Texbooks Referred : G.K.Dubey

TIME TAKEN TO COMPLETE THE ACTIVITY: 90 minutes

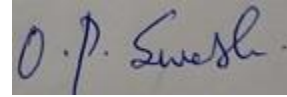
Evaluation:

- 1) All groups have to keep the questions ready which should be like fill in the blanks.
- 2) One student can answer only one time, so that in each group every student will get a chance to answer the question by discussing with the group members.
- 3) I will be recording the marks on the board in the following manner.

Q.NO	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Remarks
1	1	0	1	1	1	0	0	
2	1	1	1	0	0	1	1	
3	0	0	0	0	0	0	0	
4	1	1	0	0	1	1	0	
Total	3	2	2	1	2	1	1	

➤ Total 7groups= 7 groups x 4 questions= 28 questions

- Each group consists of 4 students
- 14 students will be answering the questions
- 14 students will be asking the questions
- Total 28 students will be covered



HOD

Subject Name : **BASIC ELECTRICAL ENGINEERING**

Faculty Name : **S.V.SATHYANARAYANA**

Pedagogy Name : **Flipped classroom**

Topic Name : **Resonance**

Year/Semester : **I CyberSecurity/I SEMESTER (2020-2021)**

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT		
Basic Electrical Engineering (2020-2021)		
Year/sem : III	Department: EEE	Faculty Incharge: S V SATHYANARAYANA
S.NO	Name of the Topic	Web Link
1	Kirchoff laws ,R,L,C Parameters	https://www.youtube.com/watch?v=A48SF-Rqh6w
2	Thevenin theorem	https://www.youtube.com/watch?v=A48SF-Rqh6w
3	Norton theorem & Time domain Analysis	https://www.youtube.com/watch?v=NX-A9I7uYaA
4	Energy sources	https://www.youtube.com/watch?v=D9MADE1odi0
5	Superposition theorem	https://www.youtube.com/watch?v=q5ndewUJOEM
6	Average and RMS Values Of Sinusoidal Wave form	https://www.youtube.com/watch?v=TSCDRMqYI4s&t=3s
7	Problems on RMS values & Phasor representation	https://www.youtube.com/watch?v=IF0bFF10QKY
8	Power in AC Circuits-Real, reactive & apparent power	https://www.youtube.com/watch?v=a35cfngeINM
9	Analysis of single phase ac circuits consisting of R, L, C	https://www.youtube.com/watch?v=opPsYnXfop20&t=5s
10	Analysis of RLC Series & Parallel Circuits	https://www.youtube.com/watch?v=KCUbSdAOgt4&t=1s
11	Resonance in series RLC Circuit	https://www.youtube.com/watch?v=q-q1krfNTE&t=5s
12	Problems on Resonance in series RLC Circuit	https://www.youtube.com/watch?v=PivbDxEI_kM
13	Balanced Three Phase system	https://www.youtube.com/watch?v=BfAj2izt78
14	Problems on Three phase circuits	https://www.youtube.com/watch?v=A46jytI8gHO
15	Ideal & practical transformer and losses in transformer	https://www.youtube.com/watch?v=0TmiMSUpehI
16	Principle of working of Transformer	https://www.youtube.com/watch?v=uO5Gpl-XIXA
17	Problems on EMF Equation of single phase Transformer	https://www.youtube.com/watch?v=trkEvHxWeoI
18	Efficiency of single phase transformer	https://www.youtube.com/watch?v=tASQC7gOouU
19	Equivalent circuit of transformer	https://www.youtube.com/watch?v=aEfnZDntgyk



Project based Learning (Evaluation of a,b,c,d Parametrers)

By

AMAN KUMAR CHOWDARY

Roll # 20E55A0202

N.PRANAY

Roll # 19E51A0218

Under the guidance of

Mr. M.Chiranjivi

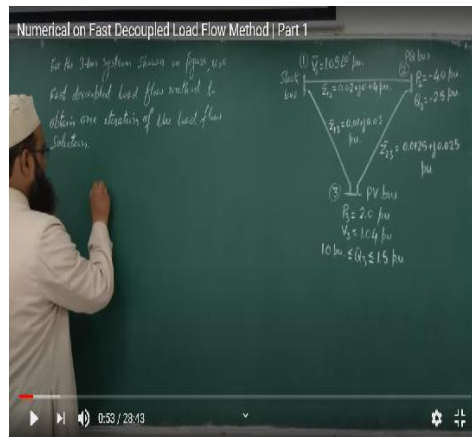
Student Seminars



Animation Video Presentation



Subject Name : **POWER SYSTEM-II**
Faculty Name : **T.SRINIVAS**
Pedagogy Name : **PEER LEARNING**
Topic Name : **Fault Analysis, Transient Analysis.**
Year/Semester : **IV EEE/I SEMESTER (2020-2021)**



Even I gave similar problem with change in numerical data, Five students were able to solve the problem.



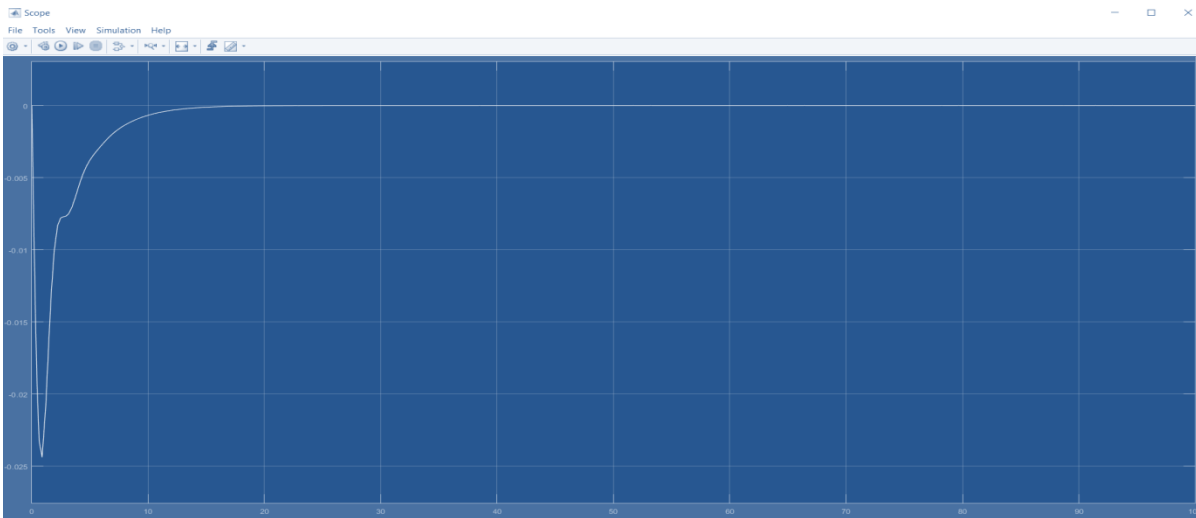
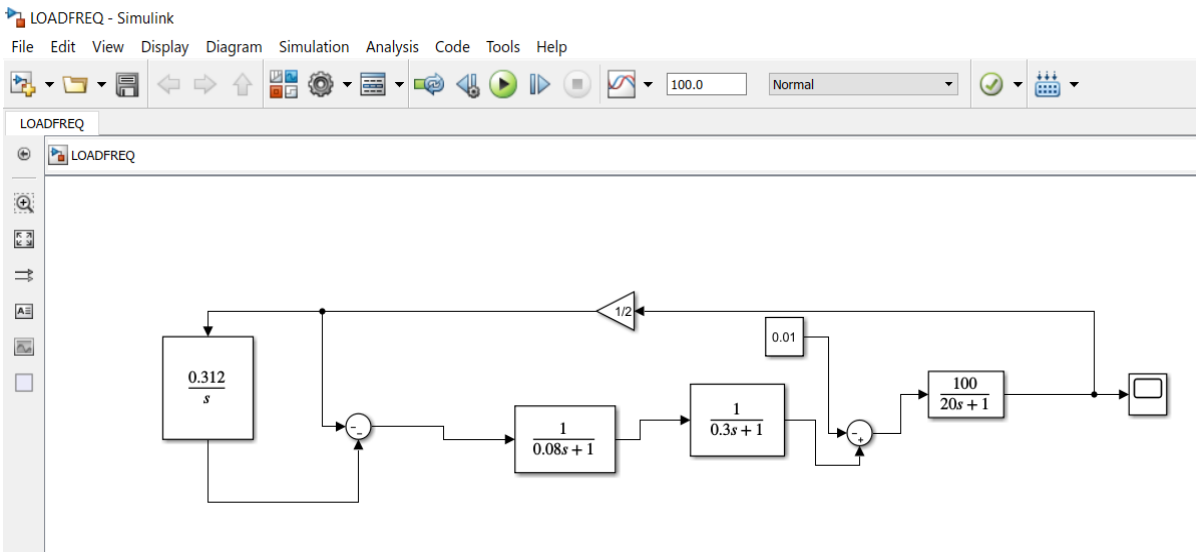
Subject Name : **POWER SYSTEM OPERATION & CONTROL**

Faculty Name : **S.V.SATHYANARAYANA**

Pedagogy Name : **(Activity based learning)**

Topic Name : **Load Frequency Control**

Year/Semester : **IV EEE/I SEMESTER (2020-2021)**



Subject Name : **POWER SYSTEM OPERATION & CONTROL**

Faculty Name : **S.V.SATHYANARAYANA**

Pedagogy Name : **Jumble Words**

Topic Name : **Revision of Unit (Compensation)**

Year/Semester : **IV EEE/I SEMESTER (2020-2021)**

PSOC Jumble words - PowerPoint

sathya SV

File Home Insert Design Transitions Animations Slide Show Review View MathType Help Tell me what you want to do Share

Cut Copy Paste Format Painter Clipboard

Layout Reset New Slide Section Slides

Font B I U S abc AV Aa

Paragraph Text Direction Align Text Convert to SmartArt

Drawing Shape Fill Shape Outline Shape Effects Arrange Quick Styles

Find Replace Select Editing

3 Jumble words
S A T
D P S T M
S V I R R
S T C

4 Jumble words
T P M C R
N L A T P M C
L A T P M C
C C V P W R
S S

5 Jumble words
C L S
C C V P W R
M C C
C C V
P W T C

6 Jumble words
L R
P W S C
T T A V
S A I

Jumble words

HITAM
HITAM

T_P_HA__E_R

_N_L_A_T_P_HA__E

_f_L_A_T_P_HA__E

_E_C__V__P_W_R

__O_S_S

Subject Name : **BASIC ELECTRICAL ENGINEERING**

Faculty Name : **S.V.SATHYANARAYANA**

Pedagogy Name : **Jumble words**

Topic Name : **Revision of Unit 3 (Transformers)**

Year/Semester : **I EEE/I SEMESTER (2020-2021)**

BEE Notes online - PowerPoint

sathya SV SS

Participants (40)

Find a participant

SV S V Sathyanarayana (Host, me)

2C 20E5-6210_CR_SIVA KUMAR

((CS)20E5-62129BHARADWAJ

2V 20E5_6243 Venkat Karthik

2S 20E51A6203 Sathish

2(20E51A6205 (Anjali)

2(20E51A6206 (Dhanush)

2A 20E51A-6207 Arpita

2 20E51A6209(NISHIKA)

2A 20E51A6215 Annie

2(20E51A6216 (Nirmal)

2A 20E51A6223 Abhilash

2(20E51A6228 (Sudheer)

2P 20E51A6233 Pavani

2 20E51A6236

Invite Mute All

Animations

Mute Start Video Security Participants New Share Pause Share Annotate

You are screen sharing Stop Share

Add Pen Ruler Ink to Shape Math Convert

Jumble words

1) W _ N _ _ _ G :- winding

2) _ E _ O N _ A R _ :-

3) _ O _ _ O N :-

4) _ N S _ L _ T _ O N :-

5) _ R A N _ _ O _ _ E R

Subject Name : **BASIC ELECTRICAL ENGINEERING**

Faculty Name : **S.V.SATHYANARAYANA**

Pedagogy Name : **Course Projects**

Topic Name : **Wiring & Circuit Breakers**

Year/Semester : **I EEE& CS/I SEMESTER (2020-2021)**



Think pair share

Electrical Machines-I

Armature Reaction in DC machine

II/I,EEE

8/9/19

AY:2019-20

Prepared by: K.SURESH

Associate professor

Hyderabad Institute of Technology and Management
Gowdavelli,vill Medchal, Hyderabad-501401

INTRODUCTION ON PEDAGOGY:

- 6) Class will be divided into groups
- 7) Each member of the group will be given a part of the topic
- 8) All the groups will thoroughly discuss about that topics
- 9) They will visualize the topic in the form of animation displayed during the class hour

IMPLEMENTATION:

Step 1: Topic is divided into three steps (Verbal, picture & video)

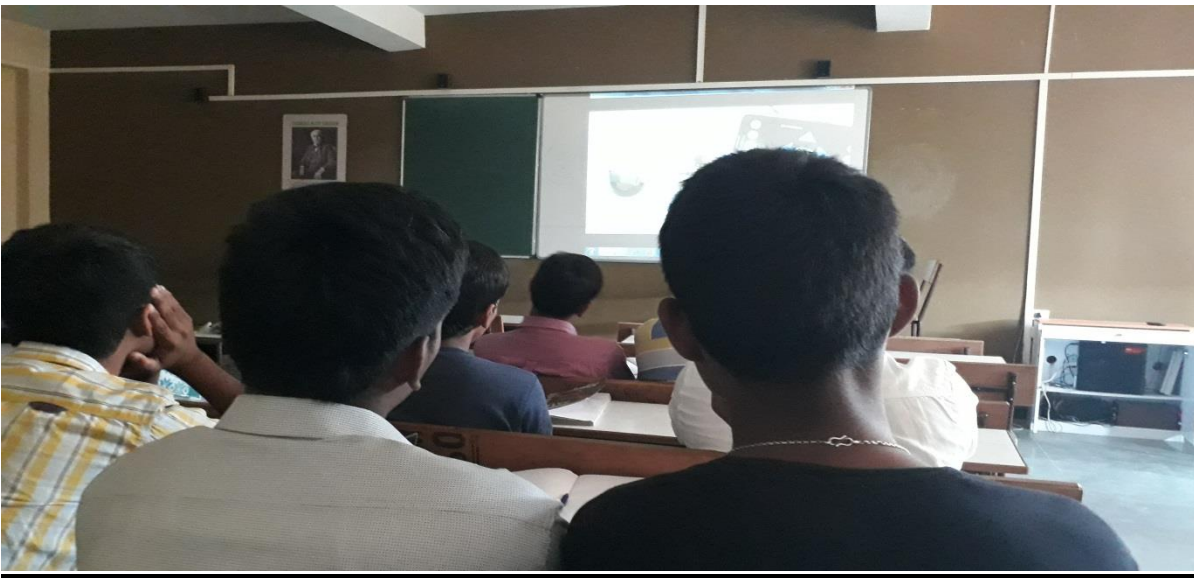
Step 2: Basic terms of the topic will be explained.

Step 3: Images will be shown for three different cases for better understanding and random questions will be asked

Step 4: Animated video will be shown to understand the effects of armature reaction.

Step 5: Numerical will be done to check the Assessment of the students.

PROOFS:



OUTCOME: All types of learners in the class will understand the concept and effects of armature reaction.

E-RESOURCES/Textbooks Referred :

- **Electrical machines by P.S Bimbra**
- **education.ebizel.com (Learn and grow)**

TIME TAKEN TO COMPLETE THE ACTIVITY: 90 minutes

Evaluation:

Step 1: Numerical will be done to check the Assessment of the students.

Difficulties expected:

- 1) All students may not bring calculators
- 2) Only some set of students will give the answers for the problems

Steps to overcome:

- 1) Make sure that at least each bench consists of one calculator
- 2) Student who got solutions has to help others for getting the solutions.
- 3) Randomly students will be asked to share the procedure of the numerical so that every student gets the solution.

O.P. Swesh

HOD

COLLABORATIVE LEARNING

Activity Planned :	STAD (STUDENT TEAMS-ACHIEVEMENT DIVISIONS)
Subject:	Electrical Measurements and Instrumentation
Topic:	SENSORS AND TRANSDUCERS

Procedure followed to implement the activity:

1. I have selected STUDENT TEAMS-ACHIEVEMENT DIVISIONS, to implement this activity.
2. Total strength in my class is 50. Average attending students in the class is 38.
3. I have made the groups based on the attending strength of the class.
4. Minimum size of the team is 5.
5. I have prepared the topic and given the introduction of the lecture in the class.
6. I have given the task to the students on 10 different types of sensors. They have to analyse the sensors and prepare the content for presentation.
7. After thorough discussion of the topic, I asked them to prepare individually and they have to give individual and group presentations.
8. After presentation, each group is evaluated individually and as a team based on their performance.
9. The individual score is summed up and the team score is evaluated finally.
10. Time duration:

Forming Teams and Assigning topics to teams-1 day

Individual preparation for assigned topic-1 day

Team discussion-1 day

Team or group presentation in the class-3 hours(1 day)

First Common test-1 hour (1 day) and evaluation report of each individual on the same day (Formative Assessment)

Second Common test-1 hour(1 day) and evaluation report of each individual on the same day (Formative Assessment)

Summative assessment report for each team-1 day

Total STAD activity time- 1 week.

11. After learning part, I will conduct a common quiz to all teams on the topics assigned to them.

Now I will evaluate and each individual marks (Formative Report) are displayed.

The above 2 steps are repeated by conducting one more common test after 2 days for better improvement.

I will take best marks among the 2 tests for each individual.

Then I will sum the individual scores(Summative report) of a particular team and the team which scores highest marks is the best team. I will be rewarding the best team with some gift items.

Total Team maximum marks = $5 \times 10 = 50$ marks.

Median score was 50% Of total team score i.e., 50% of $50 = 25$ marks

12. The evaluation is done based on the grading given below.

A. poor B. fair C. average D. good E. excellent

Strategies used for team formation:

I have followed heterogenous scheme which is having more benefits compared to homogeneous scheme.

Scenario in homogeneous teams:

In this scheme, students with top performers forms the same group and the slow learners will not have option to pair up with top performers. Top performers are hesitant to join with slow learners, as they have fear that their marks will be reduced. Due to this, slow learners are not able to get good score, since the groups left out are all slow learners.

Scenario in heterogeneous team:

Homogenous teams formed will perform good as a team, since all the team members are well performers, but if they go into outside world, they have to work with both well performers as well as non performers. So, it is better to make them practice from professional course itself with heterogeneous teams to get better success rate and have good experience for the well performers. In heterogenous teams, slow performers will cope up with the better performers and they will improve their skills from the better performers.

Major drawbacks associated with the homogeneous team are:

Comfort zone: Since all the well performers, they might relax and they don't give their best performance. They will depend on each other where the efficiency will be reduced.

2. They won't take the things serious. Causes disturbance in class, sometimes playing, chit chatting.
3. Competency will be lost in their team and casual attitude will be developed.
4. No student work individually, where the originality will be lost.

Team Selection:

Heterogeneous team formation is the better scheme for the team formation. The student teams are framed based on the following criteria:

Knowledge – Test Marks conducted on the assigned topic (poor, average, good)

Skill – based on the problem solving, thinking ability, class room activities.

Attitude- enthusiasm on the subject, showing personal interest in delivering their skills and knowledge sharing among their friends.

Salient points noticed in the heterogeneous team are:

Competency among teams. All the students in team learns and compete with other teams and the leadership qualities will be developed.

2. undergoes discussions in a healthy manner and the seriousness will be developed, which improves the quality of thinking among team members.
3. Confidence building: Helping among fast and slow performers builds confidence in both who are guiding and the receivers also.

Group member 1	Group member 2	Group member 3
Group member 4	Group member 5	
Outstanding performer	Good performer	Average performer level 1
Average performer level 2	Slow learner	
CIE marks >90%	CIE marks between 80% to 90%	CIE marks
between 70% to 80%	CIE marks between 60% to 70	CIE marks
obtained below 60%		

Brief questionnaire to collect formal feedback from students:

Whether the activity is good or bad, write in a single statement.

What type of skills enhanced or developed from this activity?

Whether the topic learning is clear or not.

During activity, whether doubts cleared or not.

What is the quantum of effort in this activity.

Whether the activity is interesting or not.

What are the pitfalls in the activity.

Heterogeneous team formation is better or homogenous team is better.

Suggest the improvements to be done in the activity.

Any other suggestions.

Strategy used to keep the discussion going on among team members of a group:

While the activity is going on, I asked the students about their progress in the work and given suggestions how to go further for completing their task. I have given the extra resources where they can fetch the data for improvement and better understanding of their topic. I have reminded the status of their work completed.

Strategy used to motivate non participating members in the student group:

I have counseled the non performing and non participating members.

I have announced that surprise gifts will be presented for the team who completes the task and presents first and also to the best performing team.

Extra marks will be given in their assignment marks for the students whose performance is good in their presentation.

Strategy used by faculty to open a deadlock while activity is going on in the class:

All the teams are working on different types of sensors. When the team are presenting, they have got stuck on internal architecture of the sensor which is beyond the scope of the topic. Mainly students have to concentrate on the principle, working and its applications of sensors. I have clarified them, the internal architecture will be taken care by the manufacturers which is in the research level and their PG courses we will be studying. Some of the students still not satisfied and finally I have downloaded companies manual and projected. Finally they satisfied and the discussion continued normally.

Assessment:

Group:

Presentation of the PPT as a team and each member involvement

Depending the outcome presented

Depending on their group summing of the quiz marks.

Individual:

Preparation of the topic

Involvement in the topic assigned

Grading in quiz conducted

Evaluation procedure:

The data of complete activity is shown below as per given format observation, most of the students are preparing

Team Number	Number of students (based on roll numbers)	Team score (median score = 25)	Team performed (<median score) Yes/No	Reason for team's performance
1	5	37	NO	Actively engaged with other teams
2	5	35	NO	Active Participation in activity
3	5	37	NO	Actively engaged with other teams
4	5	21	YES	Students are involved actively and needs counselling
5	5	38	NO	Active Participation in activity and communication is excellent among team members
6	5	31	NO	Participated for getting marks
7	5	35	NO	Active Participation in activity
8	5	33	NO	Performance is satisfactory
9	5	29	NO	Performance is average
10	5	41	NO	Active Participation in activity and communication is excellent among team members

individually and they are not sharing their views

with their friends.

While giving presentations in their PPTS, group effort is not identified.

To improve this STAD activity to next level, I need the support of one more faculty.

Here I am attaching the marks list obtained by students after conducting 2 tests and the best of two is taken and accordingly summative report has been prepared in the table provided below.

Hyderabad Institute of Technology and Management			
Department of EEE			
Max Marks/Team:50			

Max Marks/Individual:10					
S.No	Roll Number	Name of The Student	Individual Score (best of Test1 and Test2)	Team Total	<Median (Yes/No)
1	15E51A0214	KATUKAM RAMU	8	37	NO
	16E51A0202	Achyuth balla	7		
	17E51A0201	ADDI NIKHITHA	6		
	17E51A0202	ANANTHOJU KARTHEEK	7		
	17E51A0203	ASHISH YADAV	9		
2	17E51A0204	AVANTHIKA MARRI	8	35	NO
	17E51A0205	BHONGIRI MAHESH	9		
	17E51A0207	CHANDULAL DEVASOTH	4		
	17E51A0210	DEVULAPALLY SWATHI	6		
	17E51A0211	ERROLLA PAVAN KALYAN	8		
3	17E51A0212	G MANIKANTA	9	37	NO
	17E51A0213	GARNEPUDI SAI RAJA SRI	7		
	17E51A0214	K ABHISHEK KUMAR	6		
	17E51A0216	KAMMARI CHAITHANYA ACHARI	7		
	17E51A0217	KARRI UDAY KIRAN	8		
4	17E51A0219	KUNTE NAVYA SRI	5	21	YES
	17E51A0220	KUPUREDDY PRAVALIKA	4		

	17E51A0221	MADURI PRAVEEN	4		
	17E51A0222	MAJJI DURGA BHAVANA	3		
	17E51A0223	NARNI LAKSHMI PRASANNA	5		
5	17E51A0227	RUNKU HEMALATHA	6	38	NO
	17E51A0228	S BHARGAV	8		
	17E51A0229	SATHYA PRAKASH PULIPATI	7		
	17E51A0230	SHEEBI KUMARI	9		
	17E51A0231	SHIVA SRIRAM	8		
6	17E51A0232	SOANKER SAI NAVYASRI	6	31	NO
	17E51A0233	T SINDHUJA	7		
	17E51A0234	VEERAVALLI DEVI MAHALAKSHMI	6		
	17H11A0204	SHAIK YOUNUS UDDIN	7		
	18E55A0201	AALA MADHU	5		
7	18E55A0202	ATI HARI PRASAD	8	35	NO
	18E55A0203	BODDUNA DHEERAJ	9		
	18E55A0204	BOLLABOINA SHIRISHA	7		
	18E55A0205	BOMMASANI SRINIVAS	6		
	18E55A0206	BUNGA VENKATA GANESH	5		
8	18E55A0207	G GYANA TEJA	8	33	NO
	18E55A0209	KASINADH BANDARU	7		

	18E55A0210	KOPPUNAVONI LAKSHMAN	9		
	18E55A0211	MANDUMULA SRI SAI CHARAN	4		
	18E55A0212	MOHAMMAD ABDUL GHANI BABA	5		
9	18E55A0213	NIDADAVOLU PRANEETH PAUL	4	29	NO
	18E55A0214	PASULA AKHIL	8		
	18E55A0215	PASULA NIKHIL	7		
	18E55A0216	PREMSAGAR	6		
	18E55A0217	RANGRECE VINAY KUMAR	4		
10	18E55A0218	SAMILETI NAVEEN	9	41	NO
	18E55A0219	SAPAVATH DEVENDAR NAIK	8		
	18E55A0220	SUDDALA ANIRUDH	7		
	18E55A0221	TEEGALA ASMITHA	8		
	18E55A0222	THOTA NAGESH	9		

Challenges:

This activity had benefited the students who are regular and punctual in completing the task. Those who missed the activity, coming with doubts to explain the topic which indicates the activity is good and the students feedback is also good. Main challenges in this activity is

Somewhat time is more consuming

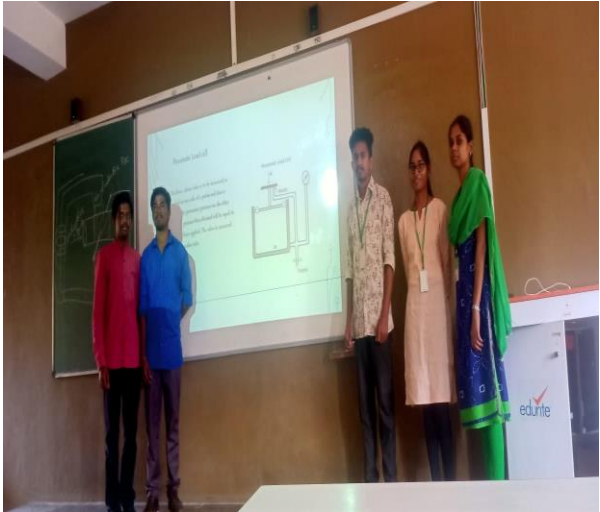
Focus should be kept on individual and also the group which is somewhat tedious to faculty.

During students presentation, some disturbance is going on, if their presentation is not upto the mark and the students are getting bored.

Since we have conducted this activity for the first time, taken long time. we have gained experience and we can improve for the next time.

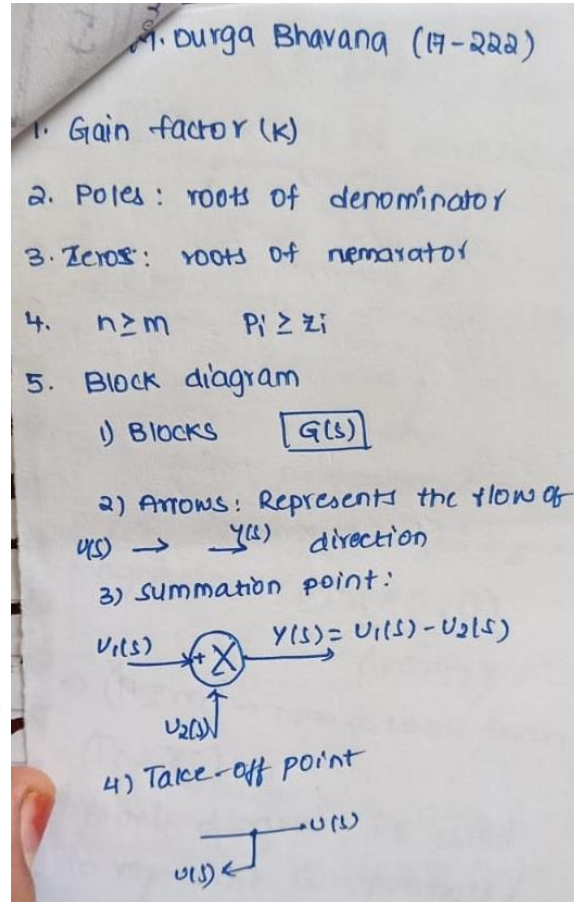
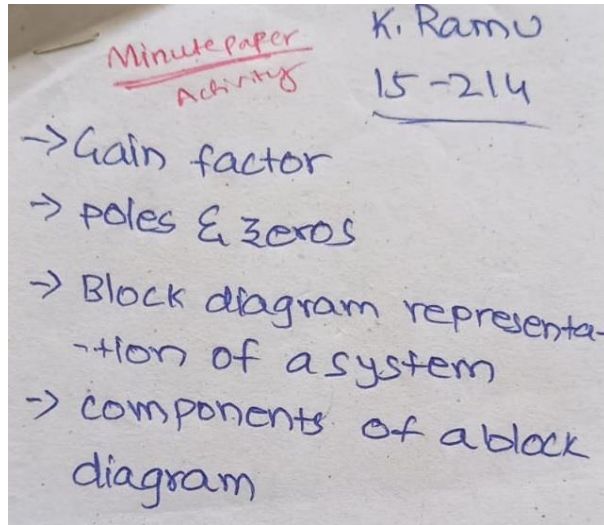
Some Students have not shown interest due to inferiority feeling to present in front of their friends.

Activity evidences:



Topic: Control System Stability

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.

Name Of Activity : **Group discussion**

Course : **Network theory**

Name Of Topic: **Transient response of RLC circuit**

Year/Branch : **II B.Tech I Semester EEE**

Date of conduction : **06/09/2018**

Prepared by: N.Ravi
Assistant Professor (EEE)

INTRODUCTION ON PEDAGOGY:

Group activity is a tool in which three or more students learn something together to solve a problem. This is the best tool for the teacher to create platform to the student's interaction with other students and share their ideas. This gives more results in education system. There are so many advantages of collaborating learning.

1. Peer to peer learning.
2. Effective team work.
3. Multiple solutions.
4. Deep learning.

IMPLEMENTATION:

Total time for the activity is 30 minutes.

Group's formation -5minutes

Chart preparation-12 minutes

Presentation- 8minutes

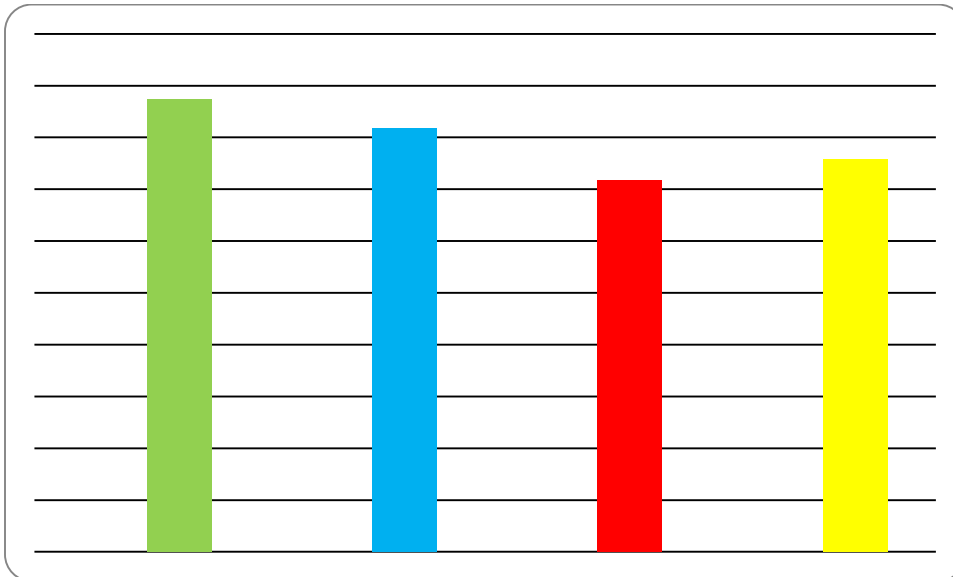
Questions and answers-2minutes

Evaluation – 3minuts

PROOFS:



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



Results of activity

OUTCOME:

1. The students have awareness about transient response of electrical circuits.
2. The students aware about the transient conditions for different combinations of the circuit.

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

Text books: Electrical circuit analysis by William Hayt

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

TIME TAKEN TO COMPLETE THE ACTIVITY: 60 min

BEST Performer: Star group

Slow performer: Diamond group

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.

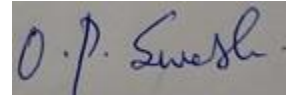
NO.OF STUDENTS PARTICIPATED: 36

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



HOD

Students Poster Presentation



EXPERIMENTAL LEARNING





Motivation Levels / Interest Levels on a 1-10 scale

1	BEEE With MATLAB	Verification of Ohm's Law	08
2	BEEE With MATLAB	Verification of KVL and KCL	10

Virtual Labs: Feedback Form

(Total No. of Experiments Performed : 02)

Name: EEE	Date: 14/06/2021
Institute: Hyderabad Institute of Technology and Management	Faculty: S V Satyanarayana Student: B.ROSHANN SAGAR
Email: satyanarayanav.eee@hitam.org	Class/Roll No: II Mechanical/ 19E51A0305
Phone: 9491702518	Subject: BEEE Lab

Details of first Lab:

Sr.No	Name of the Lab	Name of the Experiment	Does it work (Yes or No)	If No, what is the issue with it?
1	BEEE With MATLAB	Verification of Ohm's Law	Yes	
2	BEEE With MATLAB	Verification of KVL and KCL	Yes	

1. Why and how often do you plan to use Virtual Labs?

Virtual labs are planned during this pandemic situation due to online mode. From last year onwards we are conducting virtual labs.

2. Specify the problems or difficulties faced while performing the experiments.

No major challenges but Doing with High end software's like MATLAB facing network issues in computes.

3. What are the most interesting things about the experiments?

Learned the SIMULINK model creation and solving of any number of numerical problems in electrical circuits.

3. What are your suggestions about making them better?

High RAM required to work out with MATLAB software



Signature: _____

Roll No: _19E51A0305_____