



Permanently Affiliated to Savitribai Phule Pune University Vide Letter No: CA/1542

& Approved by AICTE New Delhi Vide Letter No: 740-89-32 (E) ET/98

AISHE Code - C-41622

#### **Electronics & Telecommunication Engineering**

Academic Year – 2019-2020	Class: Second Year
Semester – II	Date: 03/02/2020
CO: 1,3	PO: 1,3,9,10,12

### **Innovative Teaching Methods**

### Title of Innovation method/activity: Poster & Gallery Work

1. Name of Faculty: Ms. Sarika . M. Jagtap

2. Subject: Analog Communication

3. Objective of Method:

1. To create awareness of communication system.

2. To be familiar with Frequency Spectrum.

3. To create awareness of modulation in Communication.

4. Compare antennas used in communication systems & elaborate its application.

5. Obtain the knowledge of Amplitude Modulation (Generation of AM Signals)

6. Obtain the knowledge of Frequency Modulation

#### 4. Topic Covered through Activity:

Different Modulation techniques & their comparison.

### 5. Description of method with Benefits (8 - 10 lines):

A Poster & Gallery Walk is an action that allows participants/students to discuss and display their final work around a room. It is away that students can share their group work topic or individual responses to a text in a non-threatening way with the assurance of getting some feedback from their learning community.

This discussion technique allows students to be actively engaged as they **walk** throughout the classroom. They work together in small groups to share ideas and respond to meaningful questions, documents, images, **problem-solving situations** or texts.

#### The method:

- 1. An assigned task /activity is completed by a team of 4-6 students that form teams.
- 2. When teams finish their collective work poster, the teacher displays each group's final work around the classroom.

- 3. Then the teacher informs the teams that they will visit each one of the posters to generate a discussion about their work / poster with their immediate group, as well as to make comments and /or post Clarifying Questions using post-its.
- 4. Once each of the teams has visited each of the posters, the teams return to their work table/station.
- 5. The teacher then collects any clarifying questions that were posted on the posters with postits and commences a Whole Group Discussion.
- 6. Each clarifying question is directed to the collective group that generated the poster. To facilitate the discussion, the teacher reads each clarifying question and then writes them on a white board/chart paper, identifying each question by team numbers (i.e., Group 1, 2 or by the Groups invented name, if appropriate)
- 7. The team have opportunity to answer the clarifying question, which can be done by one representative from the group or by all the group members chiming in when appropriate and/or there is a pause after a team member adds a final comment.

#### **Roles and Responsibilities**

#### Teacher

- Provide the Introduction to all the topic.
- Aware the student about the length, Breadth, Depth of Topic
- Provide the Study Material and appropriate guide lines at every stage
- Remain available all the time during all stages of process.
- Prepare assessment methodology.

#### Student

- Go through all the material provided on particular topic
- Once topic assigned understand and gain expertise on topic through collaboration.
- Actively participate in group and contribute by means of discussion, hand-out
- Share the expertise topic when joins a new group.

### Group

- Develop the guidelines to establish group.(i.e. Decide the roll of all participants)
- Every group should gain the expertise on particular topic.
- Prepare at least one-page report which cover all the details corresponding to the topic.
- Appropriate references should be given.
- Grammatical mistake should be checked.
- Develop the guidelines with which every group member can share the topic they learn

#### 6. Assessment Tools & Rubrics:

### 1. Depth of Content [10 Mark]

- Presentation topic includes goals/motivating questions that provide the audience with a sense of the main idea. (5 Mark)
- Information is accurate and includes an explanation of key concepts and theories, as well as a clear description of the topics (2 Mark)
- Valid References (2 Mark)
- Applications (1 Mark)

## 2. Poster Design [5 Mark]

- Poster is attractive in terms of design, layout and neatness.
- Graphics are easily viewed and related to the topic, making the material easy to understand. (3 Mark)
- Text is appropriate in length for audience and to the point of the project. (1 Mark)
- There are no grammatical/spelling mistakes. (1 Mark)

## 3. Verbal Interaction [5 Mark]

• Presenter(s) demonstrate full knowledge of the material and can explain and elaborate on expected questions.

Criteria	3- High	2- Moderate	1- Slight
<b>Depth</b> of	Presentation topic includes	Information is un	Applications
Content	goals /motivating questions	accurate (2 Mark)	(1 Mark)
	that provide the audience	Application(1 Mark)	No Valid References
	with a sense of the main idea.	No Valid References	(2 Mark)
	(5 Mark)	(2 Mark)	
	Information is accurate and		
	includes an explanation of		
	key concepts and theories, as		
	well as a clear description of		
	the topics (2 Mark)		
	Valid References (2 Mark)		
	Applications (1 Mark)		
<b>Poster Design</b>	Neatness.	Moderately Relevant	There are no
	Making the material easy to		grammatical/spelling
	understand		mistakes
	There are no		
	grammatical/spelling		
	mistakes		
Verbal	Full knowledge of the	Missing knowledge	Poorly answer
Interaction	material and can explain and	of the material	
	elaborate on expected		
	questions.		

Group	Roll	Name of Students	Depth of	Poster	Verbal	Final
No	No		Content	Design	Interaction	Marks
	Topic	Basics of Communication				
		System				
1.	21	Khyati Khirsagar	9	4	4	18
2	27	Pradny Patil	8	4	4	17
3	32	Patiksha Rajule	8	4	5	17
4	34	Nimisha Salunke	8	4	4	17
5	64	Vaaidehi Sonawani	8	4	4	17
6	67	Rutuja Karate	7	4	4	15
2.	Topic	Need of Modulation &	Depth of	Poster	Verbal	Final
		<b>Different</b> Modulation	Content	Design	Interaction	Marks
		Techniques				
1	8	Thakare Prajakta	8	4	4	16
2	3	Chavan Anushka	9	4	4	17
3	36	Sonar Bhagyashri	8	4	4	8
4	20	Kapse Kanchan	8	4	4	8
5	30	Pawar Sejal	8	4	4	8
6	39	Sonawane Sakshi	9	4	4	17
3.	Topic	Amplitude Modulation	Depth of	Poster	Verbal	Final
			Content	Design	Interaction	Marks
1	15	Himanshu Bhamare	10	5	5	20
2	19	Shivam Jungahare	7	5	5	18
3	10	Shubham Avhad	8	5	5	18
4	28	Shubham Patil	7	5	5	17
5	23	Pracheta Kuwar	9	4	5	18
6	31	Pragya Rai	9	4	5	18
7	11	Shweta Bagale	8	5	5	18
4	Topic	Frequency Modulation	Depth of	Poster	Verbal	Final
			Content	Design	Interaction	Marks
1	61	Sonal Shirsath	9	5	4	18

2	52	Manasi Mehetre	8	5	4	17
3	58	Rohini Sanap	8	5	4	17
4	53	Devyani Pagar	8	5	4	17
5	56	Tanuja Prajapati	9	5	4	18
6	55	Kaveri Patil	8	5	4	17
5	Topic	Amplitude Modulation	Depth of	Poster	Verbal	Final
			Content	Design	Interaction	Marks
1	12	Bankar Vruda	8	5	4	17
2	01	Rundal Sneha	8	4	4	16
3	13	Bari Neeraj	8	5	4	17
4	14	Barudwale Shreyas	8	5	4	17
5	04	Katkar Mayur	AB	AB	AB	AB
6	02	Ahire Rinku Namdev	8	4	4	16
07	07	Parag Suryanvanshi	8	4	4	16
6	Topic	<b>Basics of Communication</b>	Depth of	Poster	Verbal	Final
	•		•			
	•	System	Content	Design	Interaction	Marks
1	26	System Panse Sarang	_	Design 5	Interaction 4	Marks 18
		-	Content			
1	26	Panse Sarang	Content 9	5	4	18
1 2	26 24	Panse Sarang Piyush Mahale	Content 9 9	5 4	5	18 18
1 2 3	26 24 60	Panse Sarang Piyush Mahale Saurabh Shewale	9 9 8	5 4 5	4 5 5	18 18 18
1 2 3 4	26 24 60 45	Panse Sarang Piyush Mahale Saurabh Shewale Pratik Datir	9 9 8 8	5 4 5 5	4 5 5 5	18 18 18 18
1 2 3 4 5	26 24 60 45 51	Panse Sarang Piyush Mahale Saurabh Shewale Pratik Datir Parag Kulthe	9 9 8 8 9	5 4 5 5 5	4 5 5 5 4	18 18 18 18 18
1 2 3 4 5	26 24 60 45 51	Panse Sarang Piyush Mahale Saurabh Shewale Pratik Datir Parag Kulthe	9 9 8 8 9	5 4 5 5 5	4 5 5 5 4	18 18 18 18 18
1 2 3 4 5 6	26 24 60 45 51 49	Panse Sarang Piyush Mahale Saurabh Shewale Pratik Datir Parag Kulthe Ritesh Jadhav	9 9 8 8 9 9	5 4 5 5 5 5	4 5 5 5 4 4	18 18 18 18 18
1 2 3 4 5 6	26 24 60 45 51 49	Panse Sarang Piyush Mahale Saurabh Shewale Pratik Datir Parag Kulthe Ritesh Jadhav  Generation Techniques of	9 9 8 8 9 9 Depth of	5 4 5 5 5 7 Poster	4 5 5 5 4 4 4 Verbal	18 18 18 18 18 18 18 Final
1 2 3 4 5 6	26 24 60 45 51 49  Topic	Panse Sarang Piyush Mahale Saurabh Shewale Pratik Datir Parag Kulthe Ritesh Jadhav  Generation Techniques of Amplitude Modulation	9 9 8 8 9 9 Depth of Content	5 4 5 5 5 5 Poster Design	4 5 5 5 4 4 4 Verbal Interaction	18 18 18 18 18 18 18 Marks
1 2 3 4 5 6	26 24 60 45 51 49  Topic	Panse Sarang Piyush Mahale Saurabh Shewale Pratik Datir Parag Kulthe Ritesh Jadhav  Generation Techniques of Amplitude Modulation Avhad Shruti	9 9 8 8 9 9  Depth of Content 8	5 4 5 5 5 5 Poster Design 5	4 5 5 5 4 4 4 Verbal Interaction 4	18 18 18 18 18 18 18 Marks
1 2 3 4 5 6 7 1 2	26 24 60 45 51 49  Topic	Panse Sarang Piyush Mahale Saurabh Shewale Pratik Datir Parag Kulthe Ritesh Jadhav  Generation Techniques of Amplitude Modulation Avhad Shruti Sakshi Kapadnis	9 9 8 8 9 9  Depth of Content 8 9	5 4 5 5 5 5 Poster Design 5 5	4 5 5 5 4 4 4 Verbal Interaction 4 4	18 18 18 18 18 18 18 18 18 17 18
1 2 3 4 5 6 7 1 2 3 3	26 24 60 45 51 49  Topic  43 50 44	Panse Sarang Piyush Mahale Saurabh Shewale Pratik Datir Parag Kulthe Ritesh Jadhav  Generation Techniques of Amplitude Modulation Avhad Shruti Sakshi Kapadnis Mallika Bhosale	Content  9  9  8  8  9  9  Depth of Content  8  9  8	5 4 5 5 5 5 Poster Design 5 5 5	4 5 5 5 4 4 4 4 4 4 4 4	18 18 18 18 18 18 18 18 18 17 18 17
1 2 3 4 5 6 7 1 2 3 4	26 24 60 45 51 49  Topic  43 50 44 05	Panse Sarang Piyush Mahale Saurabh Shewale Pratik Datir Parag Kulthe Ritesh Jadhav  Generation Techniques of Amplitude Modulation Avhad Shruti Sakshi Kapadnis Mallika Bhosale Sonal More	Content  9  9  8  8  9  9  Depth of Content  8  9  8	5 4 5 5 5 5 Poster Design 5 5 5 5 5	4 5 5 5 4 4 4 4 4 4 4 4 4	18 18 18 18 18 18 18 18 18 17 17 18 17

8	Topic	<b>Detailing</b> of Frequency	Depth of	Poster	Verbal	Final
		Spectrum	Content	Design	Interaction	Marks
1	33	Rutu Raka	AB	AB	AB	AB
2	37	Anushka Sonawane	8	5	4	17
3	40	Shubham Suryavanshi	8	4	4	16
4	38	Jay Sonawane	8	5	4	17
5	35	Ankita Sapnar	8	5	4	17
6	42	Harshal Yeole	8	5	4	17
9	Topic	Need of Modulation &	Depth of	Poster	Verbal	Final
		Different Modulation	Content	Design	Interaction	Marks
		Techniques				
1	46	Gayatri Gunjal	9	5	4	18
2	47	Renu Guraddi	8	5	4	17
3	62	Prinyka Shouche	8	5	4	17
4	65	Mahima Tekale	8	5	4	17
10	Topic	Types of Antenna	Depth of	Poster	Verbal	Final
			Content	Design	Interaction	Marks
1	63	Shubham Kulkarni	7	5	4	16
3	09	Ruthik Admane	8	5	4	17
4	57	Sumit Salke	7	5	4	16
5	59	Mahesh Sawant	7	5	4	16
6	66	Siddhart Todkar	7	5	4	16
11	Topic	Types of Antenna use	Depth of	Poster	Verbal	Final
			Content	Design	Interaction	Marks
1	16	Esha Chaakor	7	5	4	16
2	41	Tikhe Prajwal Deepak	7	5	4	16
3	18	Vaishanavi Gawande	8	5	4	17
4	25	Kshitij Malsane	8	5	4	17
5	29	Vikarant Patil	7	5	4	16

# 8. Evaluation Sheet

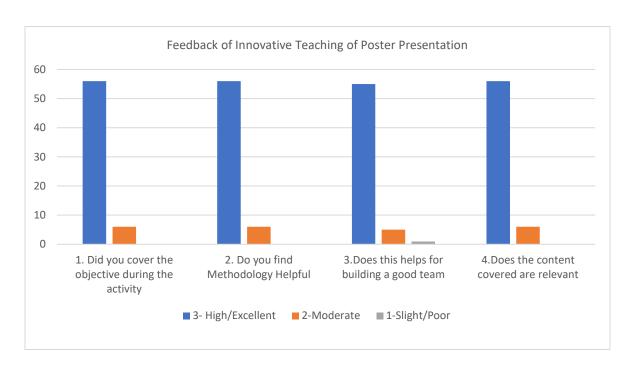
Sn	Roll	Name	Depth of	Poster	Verbal	Final
	No		Content	Design	Interaction	Marks
1	1	Raundal Sneha Onkar	8	4	4	16
2	2	Ahire Rinku Namdev	8	4	4	16
3	3	Chavan Anushka Sanjay	9	4	4	17
4	4	Katkar Mayur Rajendra	AB	AB	AB	AB
5	5	More Sonal Chandrakant	8	5	4	17
6	6	Pendharkar Rohini Ravindra	8	5	4	17
7	7	Suryawanshi Parag Dhanraj	8	4	4	16
8	8	Thakare Prajakta Bapu	8	4	4	16
9	9	Admane Ruthik Prasad	8	5	4	17
10	10	Avhad Shubham Machhindra	8	5	5	18
11	11	Bagade Shweta Vinodkumar	8	5	5	18
12	12	Bankar Vrunda Vinod	8	5	4	17
13	13	Bari Niraj Dilip	8	5	4	17
14	14	Barudwale Shreyas Pramod	8	5	4	17
15	15	Bhamare Himanshu Pramod	10	5	5	20
16	16	Chokhar Esha Deepak	7	5	4	16
17	17	Dighe Saurabh Prakash	AB	AB	AB	AB
18	18	Gawande Vaishnavi Ganpat	8	5	4	17
19	19	Shivam Sunil Junghare	7	5	5	18
20	20	Kapse Kanchan Anil	8	4	4	8
21	21	Kshirsagar Khyati Devendra	9	4	4	18
22	22	Kumbhakarn Rohan Umesh	AB	AB	AB	AB
23	23	Kuwar Prcheta Anil	9	4	5	18
24	24	Mahale Piyush Sanjiv	9	4	5	18
25	25	Malsane Kshitij Sanjay	8	5	4	17
26	26	Panse Sarang Ajaykumar	9	5	4	18
27	27	Patil Pradnya Avinash	8	4	4	17
28	28	Patil Shubham Ramesh	7	5	5	17
29	29	Patil Vikrant Satish	7	5	4	16
30	30	Pawar Sejal Sanjay	8	4	4	8
31	31	Rai Pragya Bipinkumar	9	4	5	18

32	32	Rajule Pratiksha Vijay	8	4	5	17
33	33	Raka Rutu Anil	AB	AB	AB	AB
34	34	Salunkhe Nimisha Durgesh	8	4	4	17
35	35	Sapnar Ankita Bhagwat	8	5	4	17
36	36	Sonar Bhagyashri Ravindra	8	4	4	8
37	37	Sonawane Anushka Ramesh	8	5	4	17
38	38	Sonawane Jay Sanjay	8	5	4	17
39	39	Sonawane Sakshi Bapu	9	4	4	17
40	40	Suryawanshi Shubham Bhausaheb	8	4	4	16
41	41	Tikhe Prajwal Deepak	7	5	4	16
42	42	Harshal Rajendra Yeole	8	5	4	17
43	43	Avhad Shruti Dulaji	8	5	4	17
44	44	Bhosale Mallikaraje Sanjaysing	8	5	4	17
45	45	Datir Pratik Shantaram	8	5	5	18
46	46	Gunjal Gayatri Ravindra	9	5	4	18
47	47	Guraddi Renu Shivkumar	8	5	4	17
48	48	Jadhav Diksha Prabhakar	AB	AB	AB	AB
49	49	Jadhav Ritesh Shyam	9	5	4	18
50	50	Kapadnis Sakshi Shashikant	9	5	4	18
51	51	Kulthe Parag Sanjay	9	5	4	18
52	52	Mehetre Manasi Nandkishor	8	5	4	17
53	53	Pagar Devyani Dhananjay	8	5	4	17
54	54	Panpatil Anisha Nitendra	8	5	4	17
55	55	Patil Kaveri Jitendra	8	5	4	17
56	56	Prajapati Tanuja Rajendra	9	5	4	18
57	57	Salke Sumit Dattatray	7	5	4	16
58	58	Sanap Rohini Sharad	8	5	4	17
59	59	Sawant Mahesh Devnath	7	5	4	16
60	60	Shewale Saurabh Jayant	8	5	5	18
61	61	Shirsath Sonal Ajay	9	5	4	18
62	62	Shouche Priyanka Ashwinikumar	8	5	4	17
63	63	Shubham Atul Kulkarni	7	5	4	16
64	64	Sonavani Vaaideehi Nilesh	8	4	4	17

65	65	Tekale Mahima Sanjay	8	5	4	17
66	66	Todkar Siddharth Jayant	7	5	4	16
67	67	Rutuja Keshav Karate	7	4	4	15

# 8. Impact Analysis

Questions	3-	2-Moderate	1-
	High/Excellent	/Average	Slight/Poor
1. Did you cover the objective during the	56	06	00
activity			
2. Do you find Methodology Helpful	56	06	00
3.Does this helps for building a good team	55	05	01
4.Does the content covered are relevant	56	06	00
5. Would you like to participate in	Yes- 62		
activity again			



# 9. Activity Picture



10. For review and critique contact: e-mail address of faculty and HOD jagtap.sarika@kbtcoe.org hod@kbtcoe.org