

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ACTIVITY BASED LEARNING

Course Code & Course Title : EC8652/Wireless Communication
Year/ Sem /Branch : III/VI/ECE
Name of Faculty : Dr.S.Kumaran
Designation : Assistant Professor
Unit Title : CELLULAR ARCHITECTURE
Topic : Coverage and capacity improvement in Cellular Systems
LO : To learn how the capacity and coverage area will be improved in cellular systems.
Bloom's Taxonomy Level : Understand

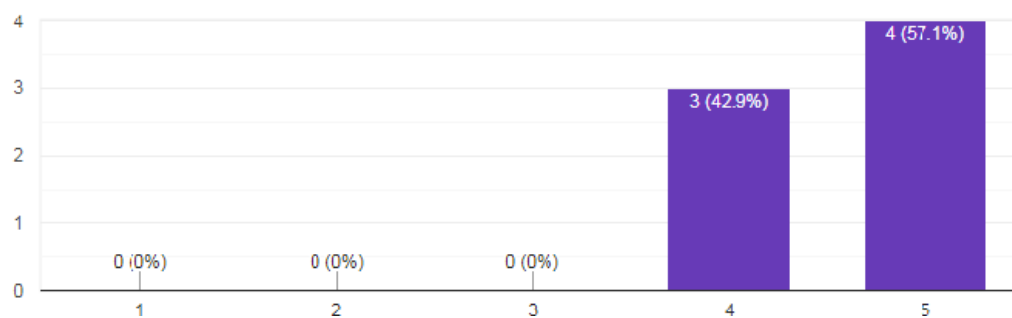
S.No.	Title	Description
1	Concept	<p>Techniques such as cell splitting, sectoring, and coverage zone approaches are used in practice to expand the capacity of cellular systems.</p> <ul style="list-style-type: none"> • Cell splitting allows an orderly growth of the cellular system. • Sectoring uses directional antennas to further control the interference and frequency reuse of channels. • The zone microcell concept distributes the coverage of a cell and extends the cell boundary to hard-to-reach places. <p>While cell splitting increases the number of base stations in order to increase capacity, sectoring and zone microcells rely on base station antenna placements to improve capacity by reducing co-channel interference.</p>
2	Challenges Faced	<p>Students have confusion to understand the concepts of above mentioned topic.</p>
3	Name of the Activity	Group Discussion
4	Description of the Activity	<p>Class Strength: 56 5 groups each with 11 to 12 members The entire class of 56 students was divided into heterogeneous groups with all levels of students. Each student in the group will come out with their own idea and the best of all</p>

		shall be chosen for presentation. At the end of the class each group will share their own presentation and ideas and other groups can ask their queries and get clarified or the group can improvise their learning knowledge.
5	Feedback from Learners (Consolidated)	<ul style="list-style-type: none"> • Easily understandable • Concepts are cleared. • Discussing with each other is very impressive.
6	Feedback of the Faculty about this activity	<p>In last year I handled the same subject for III ECE students. But some students do not have so much clarity on this topic. While am correcting their answer papers, the concepts are shuffled on the above mentioned topics.</p> <p>By this activity based learning, I ensure that students will understand the concepts clearly and this activity based learning is an efficient method for the students.</p>

Analysis Report Chart :

Relevance of the activity to the concept

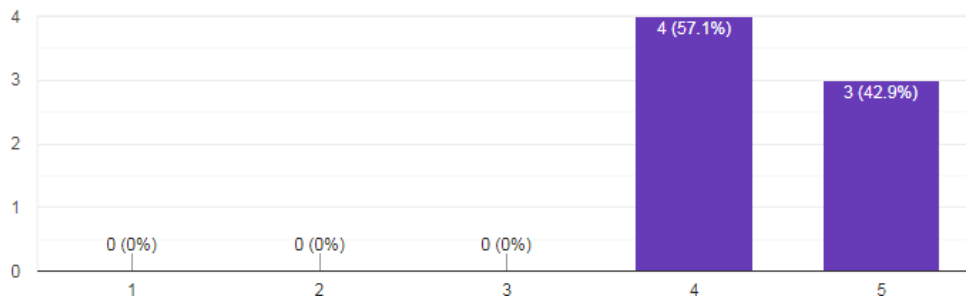
7 responses



How far this activity is understandable when compared to chalk & board method of teaching

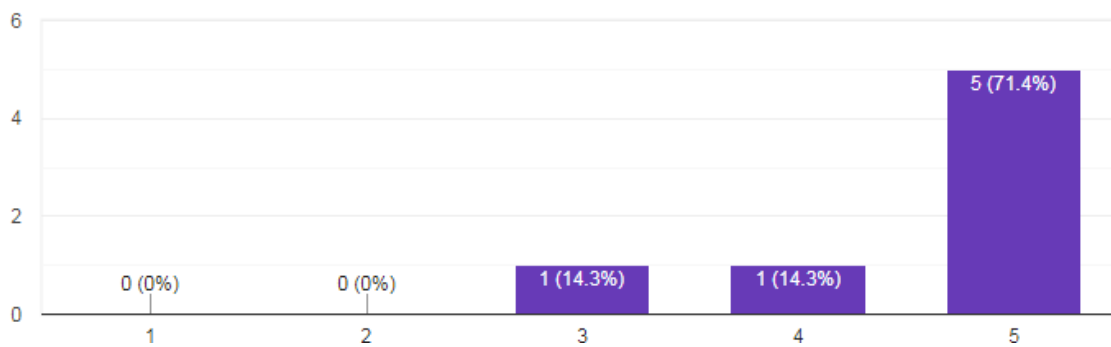
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7 responses



Faculty was able to explain the concept very easily through this activity.

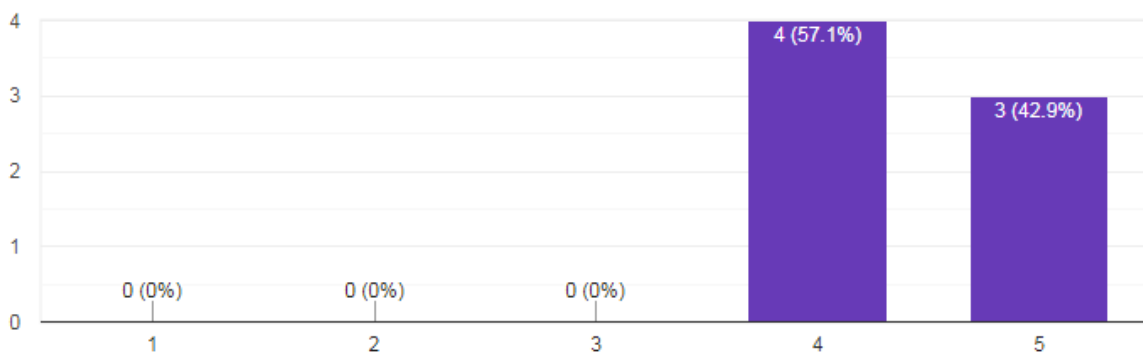
7 responses



I was able to easily correlate the activity and the concept



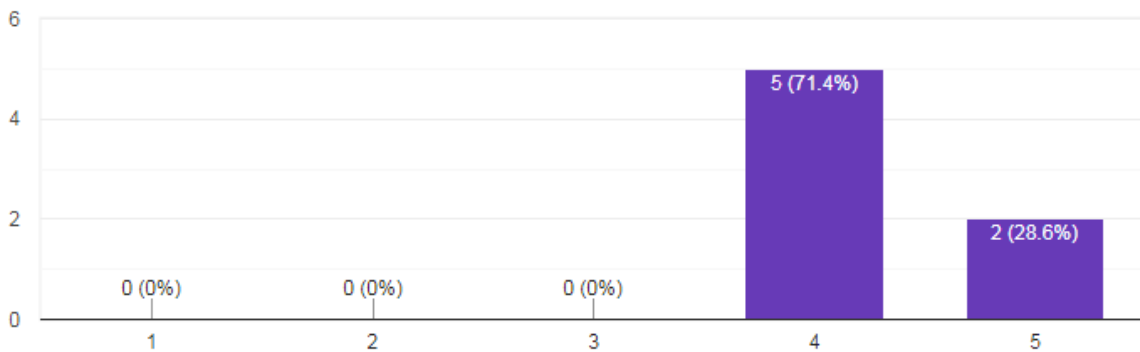
7 responses



✓

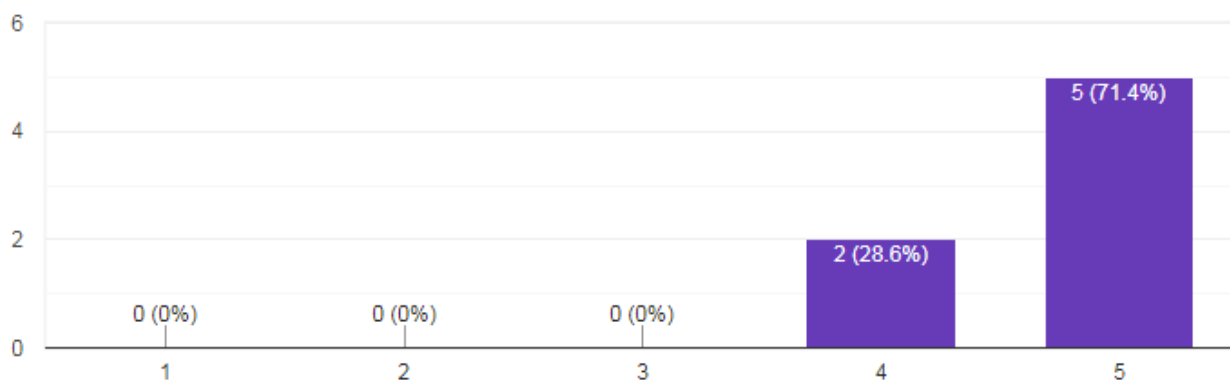
The team work was interesting

7 responses



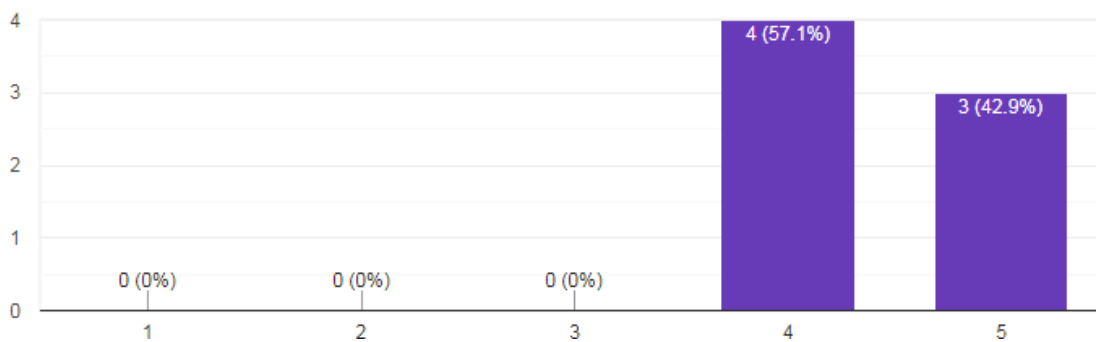
This activity helped me to have better understanding

7 responses



Overall, I would rate this activity as

7 responses



Signature of the Course Faculty

Signature of HOD

Evidences/Proofs :

TEAM NO	TEAM SCORE(20)	POSITIVES OBSERVED INTEAM	NEGATIVES OBSERVED INTEAM
1	15	Fair Team work	Communication problem
2	19	Extreme involvement in discussion	Nil
3	18	Good Team work	Nil
4	14	Nil	Lack of Confidence
5	18	Good Team work	Nil

Student Feedback Form

Date: 24.02.2020

Name: NAVEEN.P

Branch: ECE

Year/Sem: III/V

Subject Code & Name: EC8652/Wireless Communication

Faculty: Dr.S.Kumaran

Activity: Group discussion

Topic: Coverage and capacity improvement in Cellular Systems

Rate the activity from 4 to 1. (4 being the highest)

NA – Not Applicable

S.No.	Description	4	3	2	1	NA
1	Relevance of the activity to the concept	4				
2	How far this activity is understandable when compared to chalk & board method of teaching	4				
3	Faculty was able to explain the concept very easily through this activity.	4				
4	I was able to easily correlate the activity and the concept	4				
5	The team work was interesting	4				
6	This activity helped me to have better understanding	4				
7	Overall, I would rate this activity as	4				

*What did you like most about today's session?

Method of teaching is remarkable

*What are the dislikes of today's session?

NIL

Student Feedback Form

Date: 24.02.2020

Name: TEJASVIN.U

Branch: ECE

Year/Sem: III/V

Subject Code & Name: EC8652/Wireless Communication

Faculty: Dr.S.Kumaran

Activity: Group discussion

Topic: Coverage and capacity improvement in Cellular Systems

Rate the activity from 4 to 1. (4 being the highest)

NA – Not Applicable

S.No.	Description	4	3	2	1	NA
1	Relevance of the activity to the concept	4				
2	How far this activity is understandable when compared to chalk & board method of teaching		3			
3	Faculty was able to explain the concept very easily through this activity.	4				
4	I was able to easily correlate the activity and the concept	4				
5	The team work was interesting	4				
6	This activity helped me to have better understanding	4				
7	Overall, I would rate this activity as	4				

*What did you like most about today's session?

Interesting activity

*What are the dislikes of today's session?

NIL

Student Feedback Form

Date: 24.02.2020

Name: OM PRAKASH.B

Branch: ECE

Year/Sem: III/V

Subject Code & Name: EC8652/Wireless Communication

Faculty: Dr.S.Kumaran

Activity: Group discussion

Topic: Coverage and capacity improvement in Cellular Systems

Rate the activity from 4 to 1. (4 being the highest)

NA – Not Applicable

S.No.	Description	4	3	2	1	NA
1	Relevance of the activity to the concept	4				
2	How far this activity is understandable when compared to chalk & board method of teaching	4				
3	Faculty was able to explain the concept very easily through this activity.	4				
4	I was able to easily correlate the activity and the concept	4				
5	The team work was interesting		3			
6	This activity helped me to have better understanding	4				
7	Overall, I would rate this activity as		3			

*What did you like most about today's session?

Good activity

*What are the dislikes of today's session?

NIL

Student Feedback Form

Date: 24.02.2020

Name: DAYANA G

Branch: ECE

Year/Sem: III/V

Subject Code & Name: EC8652/Wireless Communication

Faculty: Dr.S.Kumaran

Activity: Group discussion

Topic: Coverage and capacity improvement in Cellular Systems

Rate the activity from 4 to 1. (4 being the highest)

NA – Not Applicable

S.No.	Description	4	3	2	1	NA
1	Relevance of the activity to the concept		3			
2	How far this activity is understandable when compared to chalk & board method of teaching		3			
3	Faculty was able to explain the concept very easily through this activity.	4				
4	I was able to easily correlate the activity and the concept		3			
5	The team work was interesting	4				
6	This activity helped me to have better understanding	4				
7	Overall, I would rate this activity as		3			

*What did you like most about today's session?

Nice session

*What are the dislikes of today's session?

NIL
