



SRM Institute of Science and Technology
College of Engineering and Technology
School of Computing

DEPARTMENT OF COMPUTING TECHNOLOGIES

SRM Nagar, Kattankulathur – 603203, Chengalpattu District, Tamilnadu

Academic Year: 2022-2023 (Even)

Mode of Exam

OFFLINE

Test: CLAT-2

Course Code & Title: 18CSE458T/Wireless and Mobile Communication

Year & Sem: III & VI

Date: 3//4

Duration: 100 Mins

Max. Marks: 50

Course Articulation Matrix:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-
CO2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2
CO4	3	-	1	-	-	-	-	-	-	-	-	-	-	-	-
CO5	3	1	2	-	-	-	-	-	-	-	-	-	-	-	-

Part - A
(6x 1 = 6 Marks)

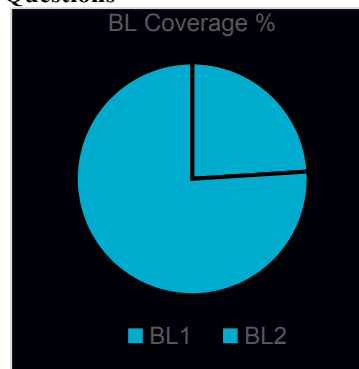
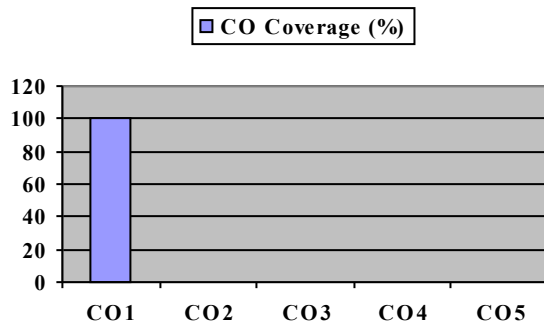
Instructions: Answer all

Q. No	Question	Marks	BL	CO	PO	PI Code
1	Assume three terminals are there in a straight line such as A, B and C. Initially A sends message to B, C cannot hear that message. Now C wants to send message to B, in the mean while C senses a free medium. But Collision occurs at B. A cannot receive the collision. Hence C is _____ from A a. Exposed b. Hidden c. Near d. Far	1	3	2	2	1.6.1
2	Which unused channels of GPRS use for transferring the Data in general? A. Standalone Dedicated Control Channel B. Broadcast Control Channel C. Traffic Channel D. Synchronization Channel	1	3	3	3	1.6.1
3	A cellular system has 10 channels where each channel is divided into 5 cells. The available duplex channels available are a. 25 b. 75 c. 50 d. 20	1	3	2	2	1.6.1
4	Whenever a call to a mobile user has established the base station signals the mobile station to change over towards	1	3	2	2	1.6.1

	a. Unused forward voice channel and reverse voice channel b. Unused forward control channel and reverse control channel c. Unused forward control channel d. Unused reverse control channel					
5	Cell splitting is known as subdividing the _____ into _____ a. Small cell, microcell b. Macro cell, micro cell c. Congested cell, smaller cells d. Congested cells, transmitter cells	1	3	2	2	1.6.1
6	If the telephone moves out from the area covered by one cell and approaches the area covered by another cell, the call is moved to the second cell to avoid interruption of the call as the caller crosses past the first cell is known as A. Dropped calls B. Call hold C. Call block D. Handover	1	3	3	3	1.6.1
<p style="text-align: center;">Part – B (3 x 4 = 12 Marks)</p> Instructions: Answer all						
7.	Identify the advantages of 4G networks compared to previous 2G and 3G networks	4	2	2	2	1.6.1
8.	Compare FDMA with TDMA	4	3	2	2	1.6.1
9.	Specify the handoff strategies in satellite system	4	4	3	3	1.6.1
<p style="text-align: center;">Part – C (2 x 16 = 32 Marks)</p>						
10.	a). Specify the need of Multiple Access Techniques? Describe any two Multiple access technique with Example? or b) Mention the following techniques in detail <ul style="list-style-type: none"> ○ Classical Aloha ○ Slotted Aloha ○ OFDM 	4+4+8	4	2	2	1.6.1

11.	<p>a) Mention the high level architecture of LTE components and the functional split with proper diagram and explanation</p> <p>or</p> <p>b) In GSM network identify which methodology is used to perform periodic location updates? Describe in detail?</p>	16	4	3	3	1.6.1
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Course Outcome (CO) and Bloom's level (BL) Coverage in Questions



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Year & Sem: IV & VII

Date: 03/0

Duration: 1 hr 45 min

Max. Marks: 50

Course Learning Outcome(CLO):

CLO 2: Improve their knowledge on Digital and analog modulation techniques

CLO 3: Equip themselves familiar with principle of Mobile Communication

Question No	Reference to Outcome	Marks Alloted()	Marks Scored	Outcomes Met Yes/No
1.				
2.				
3				
4.				
5				
6				
7				
8				
9				
10.a				
10.b				
11.a.				
11.b.				

Faculty Name :

Signature :

Approved by the Audit Professor/Course Coordinator