SRM Institute of Science and Technology
College of Engineering and Technology

DEPARTMENT OF ECE

SRM Nagar, Kattankulathur – 603203, Chengalpattu District, Tamilnadu

Academic Year: 2022-23 (EVEN)

Batch 2
SET B

Test: CLAT-1 **Date: 20.02.2023**
Course Code & Title:18ECC303J& COMPUTER COMMUNICATION NETWORK Duration:8 – 9 AM
Year & Sem: III & VI **Max. Marks:** 25

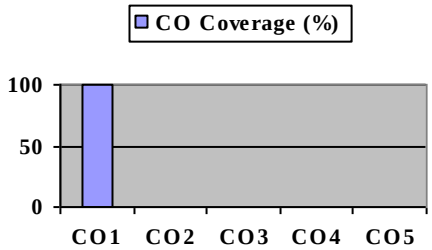
Course Articulation Matrix:

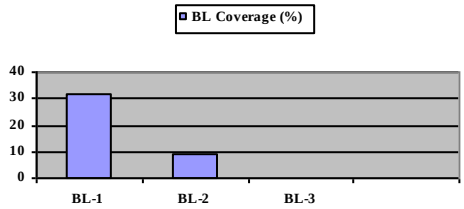
	18ECC303J - Computer Communication Networks	**Program Outcomes (POs)**														
CO	**Course Outcomes (COs)**	**Graduate Attributes**												**PSO**		
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**
1	Express the basic services and concepts related to internetworking.	-	-	-	-	-	-	3	-	-	-	-	2	-	-	-
2	Define the basic OSI model architecture and its lower layer functions.	-	-	2	-	-	-	1	-	-	-	-	-	-	-	3
3	Apply the various Network Layer concepts, mechanisms and protocols.	-	-	3	-	-	1	2	-	-	-	-	-	-	-	-
4	Analyze the services and techniques of Transport Layer.	-	-	-	-	-	-	2	-	-	-	-	-	-	-	3
5	Produce the various services and protocols in Application Layer.	-	-	2	-	-	-	-	-	-	-	-	-	-	-	3
6	Evaluate the various Networking concepts and Routing protocols.	-	-	-	-	1	-	-	-	-	-	-	2	-	-	3

Q. No	**PART – A (5 X 1 = 5 Marks)** **Answer all the questions**	**Marks**	**BL**	**CO**	**PO**
1	The number of full duplex links required in mesh topology to connect 8 devices is ____ **a.** 8 b. 64 c. 56 d. 28	**1**	**2**	**1**	**7**
2	Token bus is physically configured like_____ a. Token Ring b. Ethernet c. FDDI d. Cable	**1**	**1**	**1**	**7**
3	Hop to Hop delivery is found in _____ layer a. Physical b. Data Link c. Network d. Transport	**1**	**1**	**1**	**7**
4	In _____ transmission, the channel capacity is shared by both communicating devices at all times. a. Full Duplex b.Half Duplex c. Simplex d. Serial	**1**	**1**	**1**	**7**
5	In asynchronous transmission usually _____ bit is used as start bit a. 0 b. 1 c. Multiple 0's d. Multiple 1's	**1**	**1**	**1**	**7**
	Part -B (2 X 4 = 8 Marks) **Answer Any two questions**				
6	Consider 5 devices are arranged in STAR and BUS topology. Draw the above-mentioned topologies and discuss the consequences of a link failure in each topology	**4**	**2**	**1**	**7**

7	Why does a circuit switched network need end to end addressing during the setup and tear down phase? Why no addresses are needed during the data transfer phase for this type of network?	**4**	**1**	**1**	**7**
8	Discuss the 10BaseT implementation of ethernet with a neat diagram.	**4**	**2**	**1**	**7**
	PART – C (1 X 12 =12 Marks) **Answer ANY ONE of the following**				
9	a. With a neat sketch, explain working of IEEE 802.5 b. Draw the frame format of IEEE 802.3. **(OR)**	**8** **4**	**2** **2**	**1** **1**	**7** **7**
10	a. What is the need for layered architecture? Draw the OSI model and explain the function of each layer. b. Compare LAN and WAN	**8** **4**	**1** **1**	**1** **1**	**7** **7**

Course Outcome (CO) and Bloom's level (BL) Coverage in Questions





Name of the Student: **Register No.:**

Part- A (5 x 1= 5 Marks)					
Q. No	**CO**	**PO**	**Maximum Marks**	**Marks Obtained**	**Total**
1	**CO1**	**7**	**1**		
2	**CO1**	**7**	**1**		
3	**CO1**	**7**	**1**		
4	**CO1**	**7**	**1**		
5	**CO1**	**7**	**1**		
Part- B (2 x 4= 8 Marks)					
6	**CO1**	**7**	**4**		
7	**CO1**	**7**	**4**		
8	**CO1**	**7**	**4**		
Part- C (1 x 12= 12 Marks)					
9	**CO1**	**7**	**12**		
10	**CO1**	**7**	**12**		

CO	Maximum	Marks
1	**41**	
Total	**41**	

PO	Maximum	Marks
7	**41**	
Total	**41**	

Signature of the Course Teacher