

School of Information Technology and Engineering

Winter Semester 2023-2024

Continuous Assessment Test – II

Programme Name & Branch BTech (IT) Course Name & code: Computer Network BITE305L

Class Number (s): VL2024250103353, VL2024250103361, VL2024250103369

Slot: B1+TB1

Faculty : Dr.U.Rahamathunnisa , Dr.Navaneethan. Dr.Vani.M.P

Exam Duration: 90 Min.

Maximum Marks: 50

General instructionn(s):

Q.No.	Question	Max Marks	CO	BL
1.(a)	What happens if the two-character sequence DLE ETX happens to appear in the frame itself?	5	CO1	BL1
(b)	Error control is concerned with insuring that all frames are eventually delivered (possibly in order) to a destination. How? Three items are required what are they explain them.	5		
2.	Mr. A wants to send message 'HI' to Mr.B ..Identify the ASCII value of H and I and consider them as Frame-1 and Frame-2 . using Check sum concept identify if the message is transmitted successfully or not. At both sender and receiver	10	CO1	BL4
3.	A seven bit hamming code is received as 1100100. Assume even parity and state whether the received code is correct or wrong. If wrong do the necessary correction and display the correct form.	10	CO1	BL1
4.	Subnet the IP address 196.10.20.0 into 52 hosts in each subnet i) Identify the class of IP address ii) Convert the default subnet mask to binary iii) Number of host required per subnet and find the subnet generator and octet position iv) Generate new subnet mask	5x2=10	CO2	BL4



	v) Use subnet generator and generate the network ranges subnets in the appropriate octet position			
5.	a. Given the data word to be sent – 100100 and generator polynomial $x^3 + x^2 + 1$ find the CRC at the sender end and receiver end, and justify your answer. b. A slotted ALOHA Network transmits 200-bit frames on a shared channel of 200 kbps. What is the throughput if the system (all stations together) produces a. 1000 frames per second b. 500 frames per second c. 250 frames per second.	7	CO2	BL4
		3		

