GALGOTIAS UNIVERSITY

ADMISSION NUMBER												

School of Computing Science and Engineering

Bachelor of Technology in Computer Science and Engineering
Mid Term Examination - May 2024

Duration : 90 Minutes
Max Marks : 50

Sem IV - R1UC401T - Computer Networks

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	Compare pure ALOHA with slotted ALOHA in terms of values of efficiency and vulnerable time.	K2	(2)
2)	Draw the flow-chart(any one) of CSMA/CD or CSMA/CA depicting all the process.	K1	(3)
3)	Demonstrate the roles and responsibilities of LLC ?	K2	(4)
4)	The bit rate of a signal is 300 bps. If each signal element carries 6 bits, compute it's baud rate?	K2	(6)
5)	Explain the computer network in detail, various goals and applications in real life of computer network.	K3	(6)
6)	Solve- Identify how long does it take to transmit x KB over a y-Mbps link? Give your answer as a ratio of x and y.	K3	(9)
7)	Examine all three parts A.. Define cyclic codes. (2 Marks) B. Define Hamming Distance (2 Marks) C. Justify what should be the Minimum Hamming Distance to detect "t" bits error and also prove that what should be the minimum hamming distance to detect 1 bit error. (4 Marks)	K4	(8)
8)	We have a channel with a 1-MHz bandwidth. The SNR for this channel is 63. Examine the appropriate bit rate ?	K4	(12)
	OR		
	Examine the roles and responsibilities of physical addresses, logical addresses and port addresses in TCP/IP model. Also discuss the role of Repeater and in which layer of OSI reference model repeater is used.	K4	(12)