ANURAG Engineering College
(An Autonomous Institution)
III B.Tech II Semester Supplementary Examinations, December – 2024
COMPUTER NETWORKS
(ELECTRONICS & COMMUNICATION ENGINEERING)

Time: 3 Hours   **Max. Marks: 75**

Section – A (Short Answer type questions)   (25 Marks)
Answer All Questions

		Course Outcome	B.T Level	Marks
1.	What are the advantages of having layered architecture?	CO1	L1	2M
2.	What is the difference between LAN and MAN.	CO1	L1	3M
3.	What are the responsibilities of data link layer?	CO2	L2	2M
4.	Define Error detection and correction.	CO2	L2	3M
5.	What is bridge.	CO3	L1	2M
6.	Draw and mention the size of each field in 802.3 MAC frame?	CO3	L2	3M
7.	Mention any four applications of multicasting	CO4	L2	2M
8.	What are the advantages of using UDP over TCP?	CO4	L2	3M
9.	Write short note on application layer.	CO5	L1	2M
10.	Compare HTTP and FTP.	CO5	L2	3M

Section B (Essay Questions)
Answer all questions, each question carries equal marks.   (5 X 10M = 50M)

			Course Outcome	B.T Level	Marks
11.	A)	Explain ISO/OSI reference model	CO1	L3	10M
		OR			
	B)	i) Write the advantages of optical fiber over twisted and coaxial cables.	CO1	L2	5M
				L3	5M
		ii) Discuss in detail about TCP/IP protocol suite.			
12.	A)	What are the draw backs of stop and wait protocol? How can they overcome by sliding window protocol?	CO2	L3	10M
		OR			
	B)	i) Obtain a 4-bit CRC code for the data bit sequence 10011011100 using the polynomial $X^4 + X^2 + 1$.	CO2	L3	5M
					5M
		ii) With an example explain the sliding window Flow control mechanism.			
13.	A)	i) Discuss about fast Ethernet with suitable diagram.	CO3	L3	5M
		ii) Explain in brief about Virtual LANs.			5M
		OR			
	B)	Explain the IEEE standard 802.11 in detail?	CO3	L3	10M
14.	A)	i) How does UDP differ from TCP? List the applications of UDP.	CO4	L3	6M
		ii) Explain the structure of TCP Header format.		L2	4M
		OR			
	B)	What is multicasting? Briefly discuss multicasting techniques and protocols.	CO4	L3	10M
15.	A)	What are the protocols associated with WWW. Explain them.	CO5	L3	10M
		OR			
	B)	i) Write short notes on Electronic Mail	CO5	L3	5M
		ii) Discuss about HTTP in detail.		L2	5M