R18

ANURAG Engineering College
(An Autonomous Institution)
III B.Tech II Semester Regular/ Supplementary Examinations, June/July – 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.	Group the OSI layers by function.	CO1	L1	2M
2.	Write short note on physical layer.	CO1	L1	3M
3.	Define HDLC.	CO2	L2	2M
4.	Define the term medium access control mechanism. What are the functions of MAC.	CO2	L2	3M
5.	List the advantages of wireless LAN's.	CO3	L1	2M
6.	What is mean by Ethernet? List the advantages of Ethernet.	CO3	L2	3M
7.	Define routing.	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)**

11. A)	i) What are the responsibilities of Presentation layer and Session layer of OSI model?		CO1	L3	5M
				L2	5M
	ii) Write the advantages of optical fiber over twisted and coaxial cables.				
		OR			
B)	Explain the different Network topologies and their advantages in detail.		CO1	L3	10M
12. A)	What is the purpose of CSMA/CD. Explain it.		CO2	L3	10M
		OR			
B)	i) Obtain a 4-bit CRC code for the data bit sequence 11001011100 using the polynomial $X^4 + X^3 + 1$.		CO2	L3	5M
				L4	5M
	ii) Explain flow control mechanism using Sliding window protocol				
13. A)	Discuss about Gigabit Ethernet with suitable diagram.		CO3	L3	10M
		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	L4	6M
	ii) Explain the structure of TCP Header format.			L3	4M
		OR			
B)	What are the motivation factors of IPV6? Explain in detail the IPV6 address structure?		CO4	L4	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