

Code: 20EC4601D

III B.Tech - II Semester – Regular Examinations – JUNE 2023**COMPUTER NETWORKS
(ELECTRONICS & COMMUNICATION ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.

2. All parts of Question must be answered in one place.

BL – Blooms Level

CO – Course Outcome

			BL	CO	Max. Marks
UNIT-I					
1	a)	Describe the architecture of TCP/IP Reference model.	L2	CO1	7 M
	b)	Bring out the differences of WAN, LAN, and MAN.	L2	CO1	7 M
OR					
2	a)	What are the different types of network topologies used? What are the points to be kept in mind in choosing a given network topology?	L2	CO1	7 M
	b)	Compare among circuit, packet, and message switching.	L3	CO2	7 M
UNIT-II					
3	a)	Discuss the operation of Go-Back-N sliding window protocol.	L2	CO3	7 M
	b)	Explain ALOHA protocol. What are its disadvantages?	L3	CO3	7 M

OR					
4	a)	Give the Frame format of HDLC data link layer protocol and explain it.	L2	CO3	7 M
	b)	Explain IEEE 802.11 frame structure.	L2	CO2	7 M
UNIT-III					
5	a)	Why modern computer use dynamic routing? Explain with example, how distance vector routing is used to route the packet and why count to identify problem arises and how does it get solved?	L3	CO4	7 M
	b)	What is virtual circuit? Explain with suitable example subnet and tables for virtual circuit. How virtual circuit changes a packet sequence?	L3	CO4	7 M
OR					
6	a)	State various causes of Congestion in subnet? Explain how congestion is handled using Jitter control?	L2	CO4	7 M
	b)	Discuss limitations of IPv4. Write the need for mobile IP.	L3	CO4	7 M
UNIT-IV					
7	a)	Draw and explain TCP header format with a neat diagram.	L2	CO3	7 M
	b)	Compare between connection oriented and connection less protocol.	L3	CO3	7 M
OR					

8	a)	How transport layer establishes and releases a connection? Explain state diagram for simple connection.	L2	CO3	7 M
	b)	What is UDP? What is maximum and minimum size of a UDP datagram? Also discuss the use of UDP.	L2	CO3	7 M
UNIT-V					
9	a)	What is need of domain name system? Explain it.	L2	CO1	7 M
	b)	Explain architecture and services of e-mail.	L2	CO1	7 M
OR					
10	a)	Describe HTTP.	L2	CO3	7 M
	b)	Explain various audio compression techniques in the world wide web.	L2	CO3	7 M