

Code: 20EE4601E

III B.Tech - II Semester – Regular Examinations – JUNE 2023**COMPUTER NETWORKS
(ELECTRICAL & ELECTRONICS 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)	Illustrate the working of fiber optic cable with the help of diagram and list out the advantages and disadvantages.	L2	CO1	7 M
	b)	Discuss the functionalities of different layers in OSI Model with the help of diagrams.	L2	CO1	7 M
OR					
2	a)	Differentiate between Full-Duplex and Half-Duplex systems.	L2	CO1	7 M
	b)	List out the advantages and disadvantages of Twisted pair cable.	L2	CO1	7 M
UNIT-II					
3	a)	Discuss about various mechanisms used in DLL for Error Detection and Correction.	L2	CO2	7 M

	b)	Discuss in detail about selective repeat-ARQ protocol with the help of diagrams.	L2	CO2	7 M
OR					
4	a)	Explain the need for Framming. How does DLL implement it?	L2	CO2	7 M
	b)	Explain the Simplex Stop and Wait protocol for noisy channel.	L3	CO2	7 M
UNIT-III					
5	a)	Explain in detail about link state routing algorithm.	L3	CO3	7 M
	b)	What is the difference between Broadcasting and Multicasting? How routing is performed in both.	L2	CO3	7 M
OR					
6	a)	What is congestion? Explain various mechanisms for handling congestion.	L2	CO3	7 M
	b)	Explain shortest path routing with an example.	L3	CO3	7 M
UNIT-IV					
7	a)	Explain in detail the header format of TCP.	L2	CO2	9 M
	b)	Differentiate between connection oriented service and connectionless service.	L2	CO2	5 M
OR					
8	a)	Explain various services of transport layer.	L2	CO2	9 M
	b)	Explain the applications of UDP.	L2	CO2	5 M

UNIT-V

9	a)	Describe Domain Name space with a neat sketch.	L2	CO4	7 M
	b)	A client transmits an e-mail using connection oriented protocol. Explain about mechanism used for transmitting it along with the protocols used.	L3	CO4	7 M

OR

10	a)	Explain about the iterative and recursive approach used by DNS.	L2	CO4	7 M
	b)	Explain the protocols used for streaming audio.	L3	CO4	7 M