Reg. No.												

Question Paper Code	12365

M.E. / M.Tech. - DEGREE EXAMINATIONS, NOV / DEC 2023

First Semester

M.E.- Computer Science and Engineering (Networking)

20PCNPC103 - ADVANCED COMPUTER COMMUNICATION AND NETWORKING

(Regulations 2020)

Duration: 3 Hours | Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

		Marks, K-Level, CO
1.	List the function of Network layer.	*2,K1,CO1*
2.	Differentiate IPV4 and IPV6.	*2,21,CO1*
3.	For n devices in a network, what is the number of cable links required for a mesh and ring topology?	*2,K3,CO2*
4.	What is the use of Repeaters in Networks?	*2,K1,CO2*
5.	What are the three main elements of distance vector algorithms?	*2,K1,CO3*
6.	How does a router differ from a bridge?	*2,K2,CO3*
7.	List the Web security requirements.	*2,K2,CO4*
8.	What are the functions of traffic management?	*2,K1,CO4*
9.	List the types and uses of backbone networks.	*2,K1,CO5*
10.	What are the types of network topologies?	*2,K1,CO5*

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11.	a)	Explain the ISO-OSI model of computer network with a neat diagram.	*13,K2,CO1*
		OR	
	b)	Describe IPv6 addressing format.	*13,K2,CO1*
12.	a)	Write short notes on circuit switching , packet switching and message switching.	*13,K1,CO2*
		OR	
	b)	Write short notes on Hubs, repeaters, router and Gateway.	*13,K1,CO2*
13.	a)	Explain the building and distribution of link state packets in link state routing algorithm.	*13.K2.CO3*
		OR	

b) Illustrate with examples working and implementation Multicast Routing Protocols: MOSPF and DVMRP. *13.K2.CO3*

14. a) List the features of Web Security in Networks. *13,K1,CO4*

OR

b) Explain how QoS is handled in Networking with a scenario. *13,K1,CO4*

15. a) Explain Proxy servers and their need during communication. *13.K1,CO5*

OR

b) Discuss NAT and its types. *13,K1,CO3*

PART - C (1 × 15 = 15 Marks)

16. a) Explain Transparent Proxy and its need in networking applications. *15,K3,CO3*

OR

b) Explain in detail network performance parameters and their importance in tuning the network performance. *15,K3,CO3*