Reg. No.												

Question Paper Code	11962

M.E. / M.Tech. - DEGREE EXAMINATIONS, APRIL/MAY 2023

Second Semester

M.E - Computer Science and Engineering (Specialization in Networks)

20PCNPC201 - NETWORK DESIGN AND PROGRAMMING

(Regulations 2020)

Duration: 3 Hours | Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

		Marks, K-Level, CO
1.	What is Multiplexing? What are the types of Multiplexing?	*2,K1,CO1*
2.	What are Virtual Circuits?	*2,K1,CO1*
3.	What are the problems with SLIP?	*2,K1,CO2*
4.	Differentiate Routers and Switches.	*2,K2,CO2*
5.	What is the use of VPN?	*2,K1,CO3*
6.	Differentiate RIP and OSPF.	*2,K2,CO3*
7.	What is the need for data centre?	*2,K1,CO4*
8.	What is Overlay architecture?	*2,K1,CO4*
9.	Name some byte ordering functions.	*2,K1,CO5*
10.	What are Raw sockets?	*2,K1,CO5*

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11.	a)	(i) Explain in detail about the DWDM and OFDM.	*8,K2,CO1*
		(ii) Explain in detail about shared media networks.	*5,K2,CO1*
		OR	
	b)	Explain in detail about the Infrastructure based Adhoc and Hybrid Wireless networks.	*13,K2,CO1*
12.	a)	Explain in detail about various LAN cabling Technologies with neat diagram.	*13,K2,CO2*
		OR	
	b)	Explain in detail about WAN design and Enterprise Networks.	*13,K2,CO2*
13.	a)	Discuss in detail about VLSM and CIDR protocols.	*13,K2,CO3*

OR

b) Explain in detail about the DHCP with neat diagram. *13,K2,CO3*

14. a) What is SDN architecture? Explain the different planes/layers in the SDN Architecture. *13,K2,CO4*

OR

b) (i) Write short notes on Delay Tolerant Networks. *7,K2,CO4*

(ii) Write short notes on Overlay Architecture. *6,K2,CO4*

15. a) Explain in detail about Elementary TCP Sockets with neat diagram. *13,K2,CO5*

OR

b) Describe in detail about UDP Sockets with neat sketch. *13,K2,CO5*

PART - C (1 × 15 = 15 Marks)

16. a) Discuss in detail about the Transition from IPv4 to IPv6 architecture. *15,K2,CO3*

OR

b) Write a TCP client Server program for chat application. *15,K3,CO5*