

COMPUTER NETWORK

Paper-IT-305-F

Time allowed : 3 hours]

[Maximum marks : 100

Note : *Question No. 1 is compulsory. Attempt one question from each section. All questions carry equal marks.*

1. Explain the following :

(a) MAN

(b) POP

(c) LAN Interconnecting Devices

(d) VLAN.

20

Section-A

2. Explain the ISO-OSI model in detail with the proper diagram. 20

3. (a) Explain in detail the different network topologies. 10

(b) What do you mean by Private Networks? Explain. 10

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Section-B

4. What do you mean by IP addressing ? Also explain the IP address classes and subnet addressing. 20
5. What do you mean by Internet Layer in TCP/IP model ? Explain the different protocols used in the Internet Layer. Explain IPv4 Header in detail with proper diagram. 20

Section-C

6. Explain the ATM reference model in detail. 20
7. (a) Explain the IEEE 802.5 standard in detail. 20
(b) What do you mean by congestion and how we control the congestion ? 20

Section-D

8. (a) What do you mean by performance management ? Explain. 10
(b) What do you mean by Quality of service? Explain. 10
9. Explain the following :
 - (i) Firewalls
 - (ii) Class of Service. 20

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