

COMPUTER NETWORKS

Paper-IT-305-E

*Time allowed : 3 hours]**[Maximum marks : 100**Note : Attempt any five questions out of given eight.*

1. What is a computer network ? Explain various topologies related to computer network with their practical real time applications. 20
2. (a) Draw and explain OSI model. 10
(b) What are the various classes related to IP addressing ? 10
3. (a) Enlist and explain the protocols which are essential for E mail. 10
(b) Explain IP version 6. 10
4. (a) What are IEEE 802 standards ? Explain. 10
(b) Explain the concept of interconnections in LAN. Also explain the different devices used for interconnection. 10

5. (a) What is congestion in a computer network? How it is measured ? How it is controlled ? 10
- (b) Explain the concept of ATM. 10
6. Explain the concept of Network management. What are remote monitoring techniques ? Explain any two of them after listing all of them. 20
7. (a) What is client server infrastructure ? How it is installed and where it is used ? 10
- (b) Compare and contrast ethernet and fast ethernet and gigabit ethernet. 10
8. Write short notes on any *two* : 20
- (a) CSMA
- (b) Firewalls
- (c) SONET.