

2304

B.E. 6th Semester (ECE) Examination, May-2012

COMPUTER NETWORK

Paper-IT-305-E

Time allowed : 3 hours] [Maximum marks : 100

Note : Attempt any five questions.

1. (a) What do you mean by Network topology ?
Describe various Network topologies with their advantages and disadvantages. 10
- (b) Describe the main reasons for using layered protocols. 5
- (c) What is the principal difference between connection less and connection oriented communication ? 5
2. (a) Differentiate between TCP/IP and OSI reference model. 5
- (b) What is the need of subnet addressing ?
Explain. 10
- (c) Describe IPV6. 5
3. Explain various LAN interconnecting devices in detail. 20

4. (a) Describe main features of Ethernet, fast Ethernet and gigabit Ethernet. 10
- (b) What is SSMA ? Describe briefly various versions of CSMA. 10
5. (a) What is congestion ? Describe main factors that can cause congestion. 10
- (b) Explain DQDB in detail. 10
6. Describe briefly following networks :
- (a) SONET
- (b) ATM
- (c) Frame Relay. 20
7. What are the five main issues related to network performance ? Explain. 20
8. Write short note on :
- (a) Leaky Bucket algorithm
- (b) Windows NT. 20