BT-5/D-23   45275

COMPUTER NETWORK
ES-CS-AIML-305A

Time : Three Hours]   [Maximum Marks : 75

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit.

Unit I

1. (a) What do you mean by Computer Network ? Discuss different network topologies.   8

    (b) Differentiate between frequency division multiplexing and time division multiplexing.   7

2. Discuss OSI reference model in detail with its *pros* and *cons*.   15

Unit II

3. Discuss different error detection and correction methods in detail.   15

4. (a) Differentiate between pure ALOHA and slotted ALOHA.   8

    (b) What do you mean by CSMA collision detection ? Explain ?   7

Unit III

5. Explain link state routing protocol and distance vector routing protocol. **15**

6. Write short notes on the following :
   (a) Flooding **8**
   (b) Difference between IPv4 and IPv6 **7**

Unit IV

7. Explain different congestion control algorithms. **15**

8. Write short notes on the following :
   (a) Firewall **5**
   (b) Digital signatures **5**
   (c) Cryptography **5**