BT-5/D-23   45203

COMPUTER NETWORKS
OE-IT-T-303A

Time : Three Hours]   [Maximum Marks : 75

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

Unit I

1. (a) What is Bandwidth ?   3

    (b) What is difference between 10 base 2, 10 base5, 10 base T and 100 base FX.   12

2. Draw the layering architecture of OSI model and explain the working of each layer.   15

Unit II

3. (a) What is difference between transmission control protocol and user datagram protocol ?   7

    (b) Explain the Address Resolution Protocol and Reverse Address Resolution Protocol.   8

4. Explain the following terms :

    (a) SMTP   3

(b) FTP 3

(c) IP version 6. 9

Unit III

5. Explain the difference between the shielded pair, unshielded pair, coaxial cable and optical fiber cable. 15

6. (a) What do you mean by Cyclic Redundancy Check(CRC) and check error in data to be sent 100100 and key is 1101 ? 7

(b) Explain ALOHA and CSMA/CA in detail. 8

Unit IV

7. What are features of network layer ? Also explain the algorithm of shortest path with the help of example. 15

8. Explain the following terms in detail with the help of example : 15

(i) Static routing

(ii) Dynamic routing

(iii) Routing table