BT-5/D-22   **45203**

COMPUTER NETWORKS

Paper–OE–IT–303A

Time : Three Hours]   [Maximum Marks : 75

Note : Attempt any *five* questions selecting atleast *one* question out of each unit.

UNIT–I

1. Explain the following terms :
   (a) Bandwidth.   (3)
   (b) Physical and Logical Topologies.   (9)
   (c) Media 10 base 2.   (3)

2. What is OSI Model? Explain all the functions of layers in brief.   (15)

UNIT–II

3. What is TCP/IP Model? Explain all the layers in brief. (15)

4. What do you mean by Protocol? Explain SMTP, FTP and SNMP in detail.   (15)

UNIT–III

5. Define Attenuation. Also explain different types of twisted pair cable, untwisted pair cable and optical fibre cable.

(15)

6. Explain ALOHA protocol, CSMA/CA and token ring protocol with the help of an example. (15)

UNIT–IV

7. (a) What do you mean by IP address class, subnetting, net mask. Explain it with the help of an example.

    (b) Explain the structure and working of IPv6 in detail.

(15)

8. What do you mean by static and dynamic routing? Explain distance vector routing, link state routing, hierarchical routing and multicast routing. (15)