Subject Code—6711

M.C.A. (Third Year) EXAMINATION

(5 Years Integrated Course)

MCA-301 (CN)

COMPUTER NETWORKS

Time : 3 Hours   *Maximum Marks : 100*

Note : Attempt any *Five* questions. All questions carry equal marks.

1. (a) Discuss advantages of computer networks. Also discuss hardware and software used in it.

   (b) Describe about the TCP/IP reference model.

2. (a) Discuss Shannon and Nyquest theory for data communication.

   (b) Explain various types of Transmission Technologies.

3. (a) What do you mean by channel allocation ? Discuss various problems in it.

   (b) Explain Token Ring, IEEE 802·5 standards.

4. (a) What is FDDI ? How does it work ?

   (b) Describe about primary design issues of DL layer. Explain framing with help of example.

5. (a) Discuss design issues at network layer. Why is internetworking so difficult ?

   (b) Explain Hierarchical routing algorithm with the help of example.

6. (a) Compare transport services UDP and TCP.

   (b) Discuss various elements of transports with their basic problems.

7. (a) Discuss SNMP protocol in detail.

   (b) How does multi media work and useful to the society ?

8. Write short notes on any *two* of the following :

   (a) ATM

   (b) CSMA/CD

   (c) Ge-back-N

   (d) DNS.