

MCA/M12
COMPUTER NETWORKS AND DATA COMMUNICATION
Paper-MCS-202

Time allowed: 3 hours

M.M.: 80

Note: Attempt Q. No. 1 and one question from each of Units-I, II, III and IV.

1.
 - (a) What do you mean by network architecture? Outline its relevance.
 - (b) What is meant by asynchronous TDM? Discuss its relevance.
 - (c) What is frame relay ? Discuss its significance.
 - (d) What is multicast routing? Discuss its significance.
 - (e) What do you understand by limited Contention Protocols? Discuss their role.
 - (f) What is virtual circuit? Discuss its relevance.
 - (g) What do you mean by Link State Routing? Explain.
 - (h) What do you understand by transmission impairments? How are these significant?

UNIT-I

2.
 - (a) what is network software? How are network protocols and architecture related? How are network protocols relevant in context of network software? Illustrate.
 - (b) What do you mean by ATM? Illustrate their significance.
3. Explain the following :
 - (a) X.25
 - (b) ATM

UNIT-II

4.
 - (a) What is encoding ? Illustrate different types of Manchester encoding techniques.
 - (b) What is multiplexing? What are various types of multiplexing techniques? Illustrate.
5. Explain the following :
 - (a) Packet Switching
 - (b) Wireless transmission.

UNIT-III

6.
 - (a) What do you understand by sliding window protocols? Illustrate their working along with significance.
 - (b) What are the main responsibilities of data link layer? How does this layer address error and flow control related issues? Explain.
6. Explain the following :
 - (a) IEEE 802.5 Token Ring
 - (b) CDMA

UNIT-IV

8.
 - (a) What is load shedding ? Discuss its significance.
 - (b) What is routing ? What are routing algorithms? Which routing algorithm is the most popular? Illustrate its working and justify its acceptability.
9. Explain the following:
 - (a) Virtual Circuit
 - (b) Routing for Mobile Hosts.