

Paper : VI

Data Communication & Network

Time : 3 Hours

M.M. : 100

Note— Attempt any FIVE questions.

- I. What do you mean by Networking ? Why Networking is required ? Discuss various topologies of networking with their advantages and disadvantages. 20
- II. Explain TCP/IP Reference model. Also write the Protocols used with each and every layer in detail. 20
- III. Discuss the followign :
 - (A) X-25 Networks
 - (B) B-ISDN and ATM Reference model. 10 × 2
- IV. How multiplexing plays an important role in Data Communication and Networking ? Discuss in detail. 20
- V. (A) Fourier Analysis (B) Data Transfer modes.
- VI. Explain : (A) HDLC protocol (B) PPP Protocol.
- VII. Differentiate the following :
 - (A) Synchronous and Asynchronous Transmission modes.
 - (B) Connection less and connection oriented services. 10 × 2
- VIII. Give the details of guided and unguided media used for the exchange of Information. 20
- IX. Explain IEEE standard 802.4 : Token BUS. Also tell tht how Ring Management is done in it. 20
- X. Write notes on following :
 - (A) Modems (B) Error Detecting Codes
 - (C) Flow Control (D) Frame Relay.