

[Time:2.30 Hrs]

[Marks:75]

Please check whether you have got the right question paper.

- N.B:
1. All question are compulsory.
 2. Figures to the right indicate full marks.

Q.1 Attempt any four of the following: 20

- A Explain different types of topologies.
- B What are the components of Data communication?
- C Explain the concept of TCP/IP.
- D Write note on following.
a) Packet switching b) Message Switching
- E Define DSSS and explain how it achieves bandwidth spreading.
- F Define carrier signal and its role in analog transmission.

Q.2 Attempt any four of the following: 20

- A Define analog transmission.
- B Describe the goals of multiplexing.
- C Name the advantages of optical fiber over twisted-pair and coaxial cable.
- D Describe the Address Resolution Protocol (ARP).
- E Explain the concept of polling.
- F Name the two major categories of transmission media.

Q.3 Attempt any four of the following: 20

- A Explain the concept of hubs.
- B Explain the concept of CSMA/CD.
- C What is the World Wide Web? Explain.
- D Explain Client server programming.
- E Compare TCP and UDP.
- F Explain Unicast routing.

Q.4 Attempt any three of the following:

15

- A Write note on DNS.
- B List and explain services of TCP.
- C Explain Error Detection and Correction?
- D Write short note on:
 - a) HTTP
- E Explain distance-vector (DV) routing.
- F With the help of diagram illustrate the concept of virtual LANs.
