

OCTOBER 2012

**P/ID 17419/RBX**

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Draw the layered architecture of OSI reference model and mention the service of each layer.

Or

- (b) What are the benefits and requirements of computer networks?
2. (a) Define the following terms:
  - (i) Topology
  - (ii) Packet
  - (iii) Cell
  - (iv) Protocol
  - (v) Deadlock.

Or

- (b) Write notes on terminal handling.
  3. (a) Describe SDLC protocol.
- Or
- (b) Describe the functions of sub layers of data link layer.

4. (a) List out the functions of network layer.

Or

(b) List out the problems of inter networking.

5. (a) Discuss the properties of Ethernet.

Or

(b) Write notes on timer based connection management.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

6. Describe the various network architectures.
7. Compare the merits and demerits of all network topologies.
8. Describe the ISDN interfaces and benefits of ISDN.
9. Explain sliding window protocol.
10. Describe the concept of packet discarding and choke packets.
11. Write notes on routers, bridges and repeaters.
12. List out the functions of transport layer and describe TCP protocol.
13. Describe POP and MIME.