Register Number :

Name of the Candidate :

6620

M.C.A. DEGREE EXAMINATION, 2010

(SECOND SEMESTER)

(PAPER - XII)

251. COMPUTER NETWORKS

(New Regulations)

December]

[Time: 3 Hours

Maximum: 100 Marks

PART - A $(8 \times 5 = 40)$

Answer any EIGHT questions. All questions carry equal marks.

- 1. Identify the five components of a Data Communication Networks.
- 2. Mention the network layer service goals.
- 3. Discuss the design issues for the layers.
- 4. Explain one-bit sliding window protocol.

Turn Over

- 5. Mention the principal conditions that influence routing decision.
- 6. What are the frame relay congestion control techniques?
- 7. Compare symmetric and asymmetric cryptographic algorithms.
- 8. Write brief notes on ISO security.
- 9. Write short notes on encryption with private and public keys.
- 10. Write short notes on LAN.

PART - B $(3 \times 20 = 60)$

Answer any THREE questions. All questions carry equal marks.

- 11. Discuss in detail ISO-OSI model and explain the functions of various layers.
- 12. What is the need for error detection? Explain any one effective error detecting technique with suitable example.
- 13. Why are there multiple LAN standards? List four common LAN topologies and describe their modes of operation.

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14. Explain IEEE standard 802 for LAN in detail.

15. Discuss network management protocol.