Subject Code—383

M.C.A. (Third Year) EXAMINATION

(Main & Re-appear for Batch 2009 Onwards)

(5 Years Integrated Course)

COMPUTER NETWORKS

MCA-301

Time : 3 *Hours*   *Maximum Marks :* 70

Section A

Note : Attempt any *Seven* questions.   **7×5=35**

1. Explain the concept of Data Transmission.

2. List the different type of network topology and explain any *two* of them.

3. Discuss the primary attribute of LAN.

4. What is the need of routing algorithm ?

5. Explain Link-state routing algorithm.

6. Explain the error correction technique with example.

7. What is Multimedia ? How is it related to computer networks ?

8. Explain the issue of Network Security.

9. Explain the design issue for Data Link Layer.

10. Explain the functioning of FDDI.

Section B

Note : Attempt all the questions.

11. Explain OSI reference model and compare OSI and TCP/IP reference model on form of their merits and demerits. **12**

Or

Explain the IEEE 802.3, IEEE 802.4, IEEE 802.5 standards in detail.

12. Explain the various channel access methods. Why CSMA/CD gives better performance than Aloha ? **12**

Or

Discuss the methods that control the flow of data across the communication links. **12**

13. (a) Compare the TCP and UDP protocol. **6**

(b) Explain the basics of Network Management. **5**

Or

Write short notes on the following : **11**

(a) DNS

(b) ISDN

(c) TCP Header

(d) Token Bucket.