MCA–19

December – Examination 2021

Master of Computer Application (III Year) Examination

Data Communication and Computer Networks

Paper : MCA-19

Time : 1½ Hours]   [*Maximum Marks : 80*

Note :– The question paper is divided into two Sections A and B. Write answers as per the given instructions.

Section–A   4×4=16

(Very Short Answer Type Questions)

Note :– Answer any *four* questions. As per the nature of the question you delimit your answer in one word, one sentence or maximum up to **30** words. Each question carries 4 marks.

1. (i) List any *four* features of Data Link Layer.

   (ii) What do you understand by network ? Explain in short.

   (iii) What are the advantages of peer-to-peer LAN ?

   (iv) What do you mean by phase modulation ?

   (v) Write *two* advantages of digital signaling over analog signaling.

   (vi) List *four* layers of TCP/IP reference Model.

   (vii) Write any *two* advantages of IPv6 over IPv4.

   (viii) What are ports and sockets ? Give example of each.

Section–B   4×16=64

(Short Answer Type Questions)

Note :– Answer any *four* questions. Each answer should not exceed **200** words. Each question carries 16 marks.

2. Distinguish between Connectionless and Connection-oriented communication.

3. Explain serial transmission and parallel transmission with required diagram.

4. Write short notes on the following :

   (i) Frequency-division multiplexing

   (ii) Time division multiplexing

5. Give the comparison of OSI and TCP/IP reference model with necessary diagram.

6. Explain the concept of a Client Server model in detail.

7. Explain modes of communication with required diagrams.

8. Describe Point-to-Point protocol of the Data link layer.

9. Explain the concept of switching in data communication along its different categories in short.