14951

MBA 4th Semester Examination
Data Communication & Networking (N.S.)
IT-04

Time : 3 Hours Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

SECTION - A

Attempt all questions. Each question carries 2 marks.

1. (a) What is data communication?
   (b) Define bandwidth.
   (c) What is digital data rate?
   (d) Which type of network topology is required for a single university campus?
   (e) What is NIC?
   (f) Define port and Socket.
   (g) The IP address 192.170.30.0 belongs to which IP class?
   (h) Define VPN.
   (i) What is transmission impairment?
   (j) Define light waves. (10×2=20)

14951/30 [P.T.O.]
SECTION - B

Attempt any four questions. Each question carries 5 marks.

1. Define the various ways of data encodings on the transmission medium.

2. Explain briefly the CDMA.

3. Explain fine server and workstation. How the two are different?

4. How tunneling is followed when data transfer is done between a IPV4 machine and IPV6 machine?

5. Explain in brief the term “Broadcasting”.

6. Discuss wireless TCP & UDP. \( (4\times5=20) \)

SECTION - C

Attempt any two questions. Each question carries 10 marks.

1. How Hamming Codes is useful for single bit error detection and correction? Explain with an example.

2. Discuss the functions of each layer of OSI model.

3. Explain the applications of mobile communications.

4. How the data is transmitted through optical fiber? Also explain the different cladding layers of an optical fiber. \( (2\times10=20) \)