Bachelor of Science (B.Sc. I.T.) Semester-III (C.B.S.) Examination
DATA COMMUNICATION AND NETWORK–I
Paper—III

Time : Three Hours]   [Maximum Marks : 50

N.B. :— (1) All questions are compulsory and carry equal marks.

(2) Draw neat and labelled diagrams wherever necessary.

EITHER

1. (a) Explain Noise cancellation in data communication.   5

   (b) Explain requirements and characteristics of serial and parallel data communication.   5

   OR

   (c) Explain process of digital modulation.   5

   (d) Explain standard organization for data communication.   5

EITHER

2. (a) Explain the process of optical fibre transmission.   5

   (b) Write a short note on transmission media.   5

   OR

   (c) Explain laser digital transmission.   5

   (d) What are the losses in optical fiber cables ?   5

EITHER

3. (a) Explain error correction and detection process in data communication.   5

   (b) Explain optical properties of Radio waves.   5

   OR

   (c) Explain the various data communication hardwares.   5

   (d) Explain satellite communication system.   5

EITHER

4. (a) Explain MAC sub-layer.   5

   (b) What are connectivity devices for network ? Explain.   5

   OR

   (c) Explain LAN Data-Link-Layer.   5

   (d) Explain medium access control.   5

5. Attempt all :

   (a) What is Bit Rate and Baud Rate ?   2½

   (b) What are metallic cables for transmission ?   2½

   (c) What is free-space pathloss ?   2½

   (d) What is Broadcast Domain ?   2½