III Semester B.C.A. Examination, February 2011
DATA COMMUNICATION

Time : 3 Hours Max. Marks : 80

Instruction: *Answer **all** questions from Part – **A** and answer **any five** questions from Part – **B**.*

PART – A

I. Answer **all** the questions : (10×1=10)

1) Identify the five components of data communication system.

2) What are the three transmission modes ?

3) Which OSI layers are the network support layers ?

4) What are the two modes for transmitting binary data across A Link ?

5) Name the two major categories of guided media.

6) What are the three major multiplexing techniques ?

7) How does a single-bit error differ from a burst error ?

8) What are the difference between communication and transmission ?

9) What are the four types of redundancy checks used in data communication ?

10) Expand CSMA/CD.

II. Answer **all** the questions : (5×4=20)

11) Briefly describe distributed processing.

12) What is the major advantage of shieldes twisted pair with unshielded twisted pair cable ?

13) Explain Hamming Distance.

14) Discuss the concept of redundancy in error detection.

15) Explain CSMA/CD and its use.

P.T.O.

PART – B

I. Answer **any five** questions : (10×5=50)

16) A) Explain the two possible line configuration.

OR

B) Explain mesh Topology with suitable diagram.

17) A) Explain the functions of the Network layer.

OR

B) Explain Parallel transmission.

18) A) Explain the functions of a Modem.

OR

B) Describe Terrestrial Microwave in detail.

19) A) Describe TDM in detail.

OR

B) Explain single bit error correction.

20) A) Explain Multiplexing applications in the telephone system.

OR

B) Describe FDM in detail.

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