CS–501(N)

B. E. (Fifth Semester) EXAMINATION, Dec., 2010

(New Scheme)

(Computer Science & Engg. Branch)

DATA COMMUNICATION

[CS – 501(N)]

Time : Three Hours

Maximum Marks : 100

Minimum Pass Marks : 35

Note : Attempt any *one* question from each Unit. All questions carry equal marks.

Unit – I

1. (a) Explain different modes of data transmission.

    (b) What is the need of Data Compression ? Explain different techniques of data compression.

Or

2. (a) Discuss briefly about the frequency dependent codes.

    (b) Explain about the image and multimedia compression.

Unit – II

3. (a) Discuss about the different multiplexing techniques and compare them.

(b) With the help of a block diagram explain the principle of working of frequency hopped spread spectrum.

Or

4. (a) What do you understand by terminal handling and poling ?

(b) Explain the principle of working of hybrid switching technique.

Unit – III

~~~~~~ the following :

(a)   RS–45

(b)   EIA–449 digital interface

~~ Discuss the V-series modem standards.

Or

5. (a) With the help of block schematic, explain the working of three layer switches.

(b) Explain and differentiate between active and passive hub.

Unit – IV

7. (a) Briefly discuss about the light sources used in optical communication.

(b) With the help of block diagram explain the working of ADSL.

Or

8. (a) Discuss about the losses in optical communication.

(b) Explain the principle of transmission in terrestrial propagation.

Unit — V

9. (a) Explain briefly different methods of error detection.

   (b) Discuss CRC code generation.

Or

10. (a) What are the different methods of error correction ?

   .(b) What are interleaved codes ? How are they good for communication ?