Roll No

IT - 501

B.E. V Semester

Examination December 2012

Data Communication

Time: Three Hours

Maximum Marks: 70/100

Note: Attempt *One* question from each unit All questions carry equal marks.

Unit - I

- I. (a) Explain what do you understand by Baseband & Broad Band transmission.
 - (b) Differentiate between attenuation and distortion.
 - (c) Explain sampling theorem and. Nyquist criteria.

OR

- II. (a) Discuss about the Shannon capacity of channel
 - (b) Explain the following
 - (i) Throughput (ii) Delay (iii) Jitter

Unit - II

- III. Explain the following:
 - (a) Synchronous and Asynchronous Transmission
 - (b) RZ and NRZ codes

OR

- IV. Explain the following
 - (a) Parallel & serial transmission
 - (b) Point to point and point to multi point configuration.

Unit - III

- V. (a) Explain the working principle of VDSL.
 - (b) Discuss the standards of SDH hierarchy.

OR

- VI (a) Differentiate between FDM, TDM and WDM.
 - (b) Discuss the standards of plesiochronous digital hierarchy.

Unit - IV

- VII (a) Explain briefly about the hybrit switching Technique.
 - (b) With the help of Block diagram explain ISDN.

OR

- VIII (a) Discuss briefly about vertical and longitudinal redundancy check codes.
 - (b) Discuss about the ISDN protocols.

Unit - V

- IX. Write short notes on the following
 - (a) Infrared transmission. (b) RJ 45

OR

- X. Write short notes on the following
 - (a) Microwave transmission (b) Network interface card.