

Roll No .....

**CS - 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) Differentiate between serial and parallel transmission.  
(b) Explain briefly about L2 Compression technique.

OR

- II (a) Discuss about the frequency dependent codes.  
(b) Explain how Image & multimedia compression obtained.

**Unit - II**

- III (a) With the help of block diagram explain the working of frequency hopped spread spectrum system.  
(b) Discuss the principle working of ISDN

OR

- IV (a) Discuss the principle working of direct sequence spread spectrum system.  
(b) Explain the packet switching technique.

**Unit - III**

- V Write short notes on the following  
(a) RJ - 45  
(b) ITU-TV series modem

OR

- VI Write short notes on the following  
(a) Group Band and Null modems  
(b) Three layer switches

**Unit - IV**

- VII (a) Explain the principle of transmission in optical fibers.  
(b) Discuss the terrestrial propagation of electro magnetic waves.

OR

- VIII (a) Discuss the principle working of LASER  
(b) Compare HDSL, SDSL and VDSL

**Unit - V**

- IX (a) Discuss the methods of error control.  
(b) Explain the principles of CRC codes

OR

- X Explain briefly about the following codes  
(a) Hamming code  
(b) Block codes.