BACHELOR OF COMPUTER APPLICATIONS (PRE - REVISED)

Term-End Examination

June, 2013

CS-68 : COMPUTER NETWORKS

Time : 2 hours   *Maximum Marks : 60*

Note :   *Question No 1. is **compulsory**. Attempt **any three** questions from the rest.*

1. (a)   Illustrate simplex, half duplex, and   6
          full duplex modes with the help of example
          for each. Explain which mode is used for
          TV communication.

    (b)   In twisted pair cable why wires are   6
          twisted ? Briefly explain two categories of
          twisted pair cables, with their advantages.

    (c)   What is meaning of bit rate in   4
          communication ? Explain difference
          between bit rate and band rate with the help
          of an example.

    (d)   What is congestion ? Why does it happen ?   4

    (e)   What is multiplexing ? How does time   3
          division multiplexing work ?

    (f)   What is Telnet ? Explain briefly, how does   4
          it work ?

    (g)   What is repeater ? Why they are used at   3
          physical layer of the network ?

2. (a) What is router ? Explain briefly two routing protocols.   5

(b) What is Token Bus Protocol ? How it is different from Token Ring Protocol ?   5

3. (a) Explain operation of a selective repeat protocol with the help of a diagram.   5

(b) What is ISDN ? Explain briefly two applications of ISDN.   5

4. (a) Differentiate between followings :   6
   (i) Circuit Switching and Packet Switching.
   (ii) Star Topology and Ring Topology.

(b) List and explain services provided by *data link layer*.   4

5. (a) What is OSI model ? Explain briefly differences between OSI model and TCP/IP model.   6

(b) Explain briefly how ATM protocol works.   4