Code No. BTS 070 (C)

B.TECH. DEGREE VII SEMESTER (SUPPLEMENTARY) EXAMINATION IN
ELECTRONICS AND COMMUNICATION ENGINEERING
OCTOBER 2000

EC 702 COMPUTER NETWORKS

Time: 3 Hours   Maximum Marks: 100

(Answer *all* questions)
(All questions carry *equal* marks)

I.   (a)   What is a statistical multiplexer? What is the advantage of using this over
             other multiplexers?   (10)
      (b)   Explain CSMA/CD network standard.   (10)
                                    OR
II.   (a)   What is a modem? Explain one serial communication standard.   (10)
      (b)   Compare the merits and demerits of the transmission media   (10)
                   (i)   Copper wire   (ii)   Optical fibre

III. (a)   Explain two reasons for using layered protocols.   (8)
      (b)   Discuss the various applications of computer networks.   (12)
                                    OR
IV.   (a)   Discuss the OSI Reference model explaining the functions of each layer.   (12)
      (b)   Briefly explain the structure of HDLC Protocol.   (8)

V.   (a)   What is packet switching? What are the advantages of this over circuit switching? (10)
      (b)   What are the common carrier facilities available?   (10)
                                    OR
VI.   (a)   Explain the principle and architecture of ISDN.   (12)
      (b)   Distinguish between connection oriented and connectionless data transmission. (8)

VII. (a)   What are the factors considered in the design of computer networks?   (12)
      (b)   Explain the use of serial data analyser.   (8)
                                    OR
VIII. (a)   What you mean by network testing?   (10)
      (b)   Explain hybrid modulation.   (10)

IX.   (a)   Briefly explain the different queuing characteristics.   (10)
      (b)   Discuss the performance of a multiserver system with a number of servers
             in parallel.   (10)
                                    OR
X.   Write short notes on: (20)
                   (i)   Gateways
                   (ii)   Internet
                   (iii)   Matrix switch
                   (iv)   Digital PBX

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