B.E. Eighth Semester (Electronics Engineering / Electronics & Telecommunication / Electronics & Communication Engineering) (C.B.S.)

Computer Communication Network

P. Pages : 2

Time : Three Hours

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Max. Marks : 80

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Notes : 1. All questions carry marks as indicated.
2. Solve Question 1 OR Questions No. 2.
3. Solve Question 3 OR Questions No. 4.
4. Solve Question 5 OR Questions No. 6.
5. Solve Question 7 OR Questions No. 8.
6. Solve Question 9 OR Questions No. 10.
7. Solve Question 11 OR Questions No. 12.
8. Due credit will be given to neatness and adequate dimensions.

1. a) Draw and explain TCP/IP protocol architecture. **6**

 b) Explain with neat sketch, the network architecture based on OSI reference model. Discuss the function of each layer and specify the protocol of each layer. **7**

OR

2. a) Write short notes on X.25 Networks. **6**

 b) Compare ATM and FRAME RELAY. **7**

3. a) Explain the classification of transmission media. **7**

 b) Compare circuit switching and packet switching. **7**

OR

4. a) Write short notes on selection of IEEE 802.11. a, b, g and n. **7**

 b) Explain SONET network. **7**

5. a) Explain the frame format of HDLC. **6**

 b) Write short notes on Error control & flow control. **7**
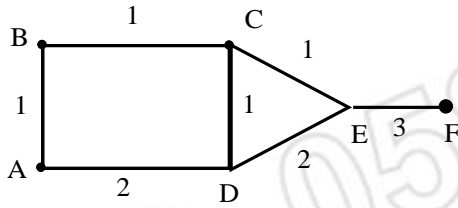
OR

6. a) Explain Active Hubs and passive Hubs. **6**

 b) Explain the sliding window protocol used in data link layer. **7**

7. a) What do you mean by the term congestion and what are its causes & policies. **7**

 b) Explain the difference between IPv4 and IPv6-addressing. **6**

8. a) Explain the following Routing Algorithm **7**
      a) Shortest path Routing.
      b) Compute the shortest path form A to F using Dijkstra's. **6**

9. a) Write short notes on

    1) File transfer protocol. **5**

    2) Simple Mail Transfer protocol. **5**

    3) Email structure. **4**

10. a) Explain the concept of Peer to Peer file sharing. **7**

   b) Give different types of sockets in computer Network. **7**

11. a) Explain secret key Algorithm Draw its block diagram and give the advantages and disadvantages of it. **7**

   b) Explain concept of Digital Signature and public key cryptography. **6**

12. Write short notes on : **13**

   a) Network tester

   b) Network simulation

   c) Internet access through Dialup/DSL/Leased Line/Mobile handset.

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