BMCET

EC

DCN

Assignment: 1 Submission date : 1/7/2017

1. Explain the following terms:
    a. Data communication
    b. Network
    c. Protocol
    d. Internet
    e. Attenuation
    f. Distortion
    g. Bandwidth
    h. Delay
    i. Throughput
    j. Noise
2. What is network topology? Explain network topology with an example.
3. Explain LAN, MAN and WAN in brief.
4. Draw and explain OSI model with function of each of layers.
5. Explain different types of addressing in data communication and networking.
6. Write down the difference between bit and baud rate.
7. Write down the difference between base band and broad band transmission.
8. Explain guided transmission media.
9. Explain unguided transmission media.
10. What do you mean by circuit switching? Explain three phases of it.
11. Write a short note on TCP/IP protocol suit.

Assignment: 2 Submission date : 31/7/2017

1. What do you mean by framing? Explain the type of framing in detail.
2. Explain noiseless channel protocol in brief.
3. Explain stop and wait ARQ protocol in brief.
4. Explain Go back N protocol in brief.
5. Explain selective repeat ARQ protocol in brief.
6. Write down the difference between go back N and stop and ait protocol.
7. What do you mean by piggybacking?
8. Explain configuration and transfer mode of HDLC.
9. Explain frame format of HDLC.
10. Explain control field of HDLC.
11. Explain PPP in brief.
12. What do you mean by error detection? List various methods for the same. Explain any one method in brief.
13. Explain CRC with an example.

Assignment: 3 Submission date : 14/8/2017

1. What do you mean by multiple access? Write down different multiple access protocols.
2. Write a short note on pure ALOHA and slotted ALOHA.
3. What is vulnerable time?
4. What do you mean by CSMA?
5. Explain in brief persistence methods.
6. Write a short note on following:
    a. CSMA-CD
    b. CSMA-CA
    c. Control access protocol
    d. Channelization protocol

Assignment: 4 Submission date : 1/9/2017

1. Explain MAC sub layer of standard Ethernet.
2. Explain physical layer of standard Ethernet.
3. How to increase the capacity of standard Ethernet?
4. Explain physical layer of fast Ethernet.
5. Explain physical layer of gigabit Ethernet.
6. Explain 10GB Ethernet.
7. What do you mean by DCF? Explain process flowchart for the same.
8. What do you mean by PCF? Explain in brief.
9. What is hidden station problem and exposed station problem?
10. Write a short note on following:
    a. Bluetooth
    b. ATM
    c. Frame relay
11. Explain following terms:
    a. NAV
    b. Handshaking signal
    c. L2CAP
12. Explain in brief connecting devices.

Assignment: 5 Submission date : 18/9/2017

1. Enlist network layers issues.
2. What do you mean by routing?
3. Explain in brief following routing algorithm:
    a. Shortest path
    b. Distance vector
    c. Link state
4. What do you mean by congestion control? Explain principle of it.
5. Explain IP address in brief.
6. Write a short note on following:
    a. ICMP

b. ARP
c. RARP, DHCP and BOOTP
d. DNS
e. Electronic mail

7. Draw and explain architecture of WWW.
8. What do you mean by cryptography?
9. Explain symmetric key cryptography in brief.
10. Explain asymmetric key cryptography in brief.