Registration No: **M.TECH**

Total Number of Pages : 1

M.TECH 1ST SEMESTER REGULAR EXAMINATIONS, DECEMBER 2018
ADVANCED COMMUNICATION NETWORKS
Branch: EC, Subject Code:MECPC1010
(Regulations 2018)

Time: 3 Hours   **Max Marks : 70**   **Question Code: RD18002018**

PART-A (10 X 2=20 Marks)

1. Answer the following questions.
   a. What is the difference between thick Ethernet and Thin Ethernet?
   b. Specify the class, net-id, host-id of IP address 192.12.14.87.
   c. Define RSA. What are the drawbacks of RSA?
   d. What is the difference between multiple bit error and burst error?
   e. What is the difference between logical address and physical address?
   f. What are the advantages and disadvantages of static routing?
   g. What are the major factors involved in the performance of the network?
   h. What is persistent HTTP?
   i. Write about 32-bit subnet masking.
   j. What is the need for tunneling and encapsulation?

PART-B (5 X 10=50 Marks)
Answer any five questions from the following.

2.a) Define multiplexing? Describe different types of multiplexing briefly? [5]

  b) What do you mean by flow control and Error control? Describe different types of flow control and Error control mechanisms with neat and clean diagram? [5]

3.a) What is a bridge? Describe different types of bridges briefly? [5]

  b) What is the difference between TCP and UDP? [5]

4.a) Discuss advantages and disadvantages for network topology with neat sketch. [5]

  b) Define multiple access. Describe the CSMA/CD access method with suitable diagram. [5]

5 a) What is Random access protocol? Describe different types of random access protocols with advantages and disadvantages of each? [5]

  b) Describe OSPF routing protocol briefly? [5]

6.a) What is Frame Relay? Describe the architecture and various layers of Frame relay? [5]

  b) What do you mean by flow control and Error control? Describe different types of flow control and Error control mechanisms with neat and clean diagram? [5]

7.a) Describe the token bucket mechanism for congestion control. With which other technique is token bucket usually combined to achieve complete flow control? What problems in the simpler approach are addressed by using a token bucket mechanism? [5]

  (b)Discuss the use of formal analysis techniques for protocols. [5]

8. Write short notes on
   (a) DDNS [5]
   (b) Fast Ethernet [5]

==0==