MEDC-203

M.E./M.Tech., II Semester

Examination, May 2019

Network Design Technology

Time : Three Hours

Maximum Marks : 70

Note : i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Differentiate between OSI and TCP/IP models. 7

   b) Discuss Medium Access Control techniques including MAC and LLC sublayers. 7

2. a) A FDDI ring has 100 stations and a token rotation time of 40 m sec. The token holding time is 15 m sec. What is the maximum achievable efficiency of the ring? 7

   b) Compare between TCP and UDP protocols. 7

3. a) "TCP is a connection-oriented reliable protocol". Justify the statement. 7

   b) Discuss various interior gateways protocols. 7

4. a) Explain the concept of ISDN on the following points. 7

   i) Principles of ISDN

   ii) Architecture of ISDN

PTO

   b) Discuss the following : 7

   i) Circuit switched network

   ii) Packet switched network

5. a) Discuss about ATM adaptation layer. 7

   b) What is virtual path and virtual channel in ATM networks? Describe the process of call establishment. 7

6. a) Describe various kind of Topologies. 7

   b) Derive the expression for throughput of slotted ALOHA. 7

7. a) What is X.25? Explain frame relay protocols. 7

   b) "BGP is a distance vector protocol", explain this statement. How is it different from RIP? 7

8. Write short notes on the following (Any four) : 14

   a) Multi Protocols Over ATM (MPOA)

   b) MPLS

   c) Gigabit Ethernet

   d) Bit rate and Band rate

   e) Gateway protocols

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