QP Code : 2010

100 marks   3 hrs.

NB :

    1.   **Question 1 is compulsory**
    2.   **Attempt any 4 questions out of the remaining questions.**

Q1.
    a) Explain Transmission hierarchy of media.   (05)
    b) Compare FR, ATM and private lines by considering the WAN services.   (05)
    c) Explain Backbone design issues of Network   (10)

Q2.

    a) Compare and contrast RIP and OSPF.   (10)
    b) Why traditional routing algorithms cannot be used for Multicasting.   (10)
          Explain one multicast protocol(MOSPF/DVMRP)

Q3.

    a) Explain Queuing model and its uses for traffic engineering. Explain M/M/1   (10)
          queuing model in detail.
    b) Explain the working of MPLS Networks.   (10)

Q4.

    a) Explain SONET SDH Structure in detail   (10)
    b) What are the various Time Delay consideration taken into account while doing   (10)
          engineering for a traffic network .

Q5.

    a) Explain AAL layer and its various classes for ATM.   (10)
    b) What are the various tools available for network management explain SNMP protocol(10)

Q6.

    a) Explain X.25 and X.75 in detail.   (10)
    b) Write a connection less (UDP) socket program for client server communication.   (10)

Q7.   Short Notes on any (4)   (20)

    a) Quality of Service in IP
    b) Network Address Translation
    c) Enterprise Network security
    d) NMAP
    e) Class base and Classless Addressing scheme in IPV4.
    f) SMDS

QP-Con. 10304-15.