Time: 3 Hours   **Marks: 80**

Note:

1. Question 1 is compulsory.
2. Attempt any 3 questions out of the remaining questions.

Q1.

a. What are the advantages of a multipoint connection over a   05
    point-to-point connection?
b. What is the relationship between SONET and SDH?   05
c. Explain concept of packet switching   05
d. Compare RIP and OSPF   05

Q2.

a. Explain IGMP and give its message format in detail   10

b. Discuss the functions of each SONET layer.   10

Q3.

a. Explain the purpose of MIB and structure of MIB.   10
b. Explain Queuing model and its uses for traffic engineering. Explain   10
    M/M/1 queuing model in detail.

Q4.

a. Explain IP multicasting   10
b. Explain RSVP. Explain its features and working.   10

Q5.

a. Explain Network Management Model.   10
b. Describe H.323 protocol   10

Q6. Write a short note on (any 4)

a. Optical Networking   05
b. Short note on MOSPF   05
c. BGP Message Header Format   05
d. Performance management and its purpose   05
e. Commonly used WAN technologies and services   05

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