

QP Code : 29896

(3 Hours)

[Total Marks: 80]

N.B: (1) Question No. 1 is Compulsory

(2) Solve any three questions out of the remaining five questions.

Q1. A company has its central office in Dadar. It has three sub-offices in Andheri, Vashi and Chembur. Total number of nodes required at Dadar is 400 while at the sub-offices 72 nodes each are required.

Design the office structure with classless addressing scheme with any suitable starting address.

Q2. Discuss the business and technical challenges of an organization which a network designer must understand. Discuss also the time and delay considerations.

Q3.a. What are the different steps of top-down network design? List typical technical goals and business goals.

b. Explain the relevance of queuing theory in Network design.
Explain M/M/1 queuing model.

Q4.a. Discuss the common network problems and various challenges faced by an IT manager to manage the network of an enterprise.

b. Discuss the two-tier and three-tier organization model of a network management system.

Q5.a. Explain SNMP community profile and SNMP access policy.

b. Compare SNMP v1 & v2 network management architecture.

Q6. Write short notes on (FIVE TWO):-

- ASN.1 notation.
- TMN Functional Architecture.
- RMON
- Network management standards.