

Total No. of Questions : 12]

SEAT No. :

P3193

[Total No. of Pages : 2

[5670]-295

B.E. (Computer Engineering)

COMPUTER NETWORK DESIGN AND MODELING

(2012 Pattern) (Semester - I) (Elective - I)

Time : 2½ Hours]

[Max. Marks :70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data if necessary.*

- Q1)** a) Explain overview of Network analysis. **[4]**
b) What are the different performance characteristics during network analysis and design process. **[4]**

OR

- Q2)** a) What are the different requirement analysis during network design?**[4]**
b) List and explain the different skill of network manager. **[4]**

- Q3)** What is the use of Requirement specification and Map. **[6]**

OR

- Q4)** Write a note on
a) Delay **[3]**
b) capacity **[3]**

- Q5)** Explain the use of Data Sources and Slinks in Flow analysis. **[6]**

OR

- Q6)** Explain system and network architectures in detail. **[6]**

P.T.O.

- Q7) a)** What is In-Band and Out-of-Band Management of the network? Explain in detail. [8]
b) Explain the detail about Routing Strategies. [8]

OR

- Q8) a)** Explain Network Management Mechanisms. [8]
b) What are the different Address strategies? Explain any two in detail. [8]

- Q9) a)** Write a shortnote on Architectural Considerations of network design? [8]
b) Explain how address Mechanisms are important during Network management architecture. [6]
c) What are various parameters of network back bone designs? How these parameters can influence the network design? [4]

OR

- Q10) a)** List four types of problems that the performance architecture addresses. Give examples of each type of problem. [8]
b) Which of the requirements indicates single-tier performance? Multi-tier performance. [6]
c) Describe Design Traceability in detail. [4]

- Q11) a)** What are network blueprints, network diagrams, and component plans? Why would a network design have sets of each of these? [8]
b) Explain concept of Object aggregation in network design. [4]
c) List out the different simulation tools and explain any one of that. [4]

OR

- Q12) Write a short note on**
a) i) Emulation Capabilities of Network Tools. [8]
ii) Scheduling
iii) Queuing
b) Write a note on “Overview of OmNet”. [8]

