

Total No. of Questions : 12]

SEAT No. :

**P3851**

**[5561]-279**

[Total No. of Pages : 2

**B.E. (Computer Engineering)**

**COMPUTER NETWORK DESIGN AND MODELLING**

**(2012 Pattern) (Semester - I) (410444B) (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 system description and methodology in regard with requirement analysis. **[4]**

b) What are the different performance characteristics during network analysis and design process. **[4]**

OR

**Q2) a)** What are the service description during network design? **[4]**

b) List and explain the different skill of network manager. **[4]**

**Q3)** What is the uses of requirement specification and Map. **[6]**

OR

**Q4)** Write a note on

a) Developing RMA **[3]**

b) Capacity **[3]**

**Q5)** Explain the identifying and developing flow in detail. **[6]**

OR

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

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

b) Explain the detail about addressing Strategies. **[8]**

OR

**P.T.O.**

**Q8) a)** Explain Network Management Mechanisms. [8]

b) What are the different routing strategies? Explain any two in detail. [8]

**Q9) a)** Write a short note on Routing mechanisms. [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 Metrics 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 representing packets 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 [8]

a) i) Smart Pointer

ii) Scheduling

iii) Queuing

b) Write a note on “Overview of OmNet”. And also explain the compiling and running process of simulation. [8]

