

Total No. of Questions : 6]

SEAT No. :

P117

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Oct.-16/B.E./Insem.- 175

B.E. (Computer Engineering)

COMPUTER NETWORK DESIGN AND MODELING

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

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.*
- 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 Service Characteristics and Service Levels. [5]
b) What are the different types and groups of applications? [5]

OR

- Q2)** a) Why is requirements analysis is important to network architecture and design? Give three reasons. [5]
b) Describe why delay performance is important for VoIP and Teleconferencing. [5]

- Q3)** a) What is service metrics? Explain service metrics for RMA, capacity, delay. [5]
b) Your customer is a hospital that wants to upgrade its LAN. Develop a questionnaire to gather requirements from users, hospital management and staff. What kinds of questions would you ask to better understand their environment? [5]

OR

- Q4)** a) Explain requirement mapping in a network process. [5]
b) Explain in brief about Environment-Specific Thresholds and Limits. [5]

P.T.O.

Q5) a) Explain different flow attributes and common flow characteristics of network. **[5]**

b) Explain the data sources and sinks with examples. **[5]**

OR

Q6) a) Explain different Flow Models. **[5]**

b) What are the differences between the Access/Distribution/Core architectural models? **[5]**

