

B.E. (Computer & Information Technology)
Elective I: Advanced Computer (Sem VII)

[REVISED COURSE] A Network

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N/2597-06.

(3 Hours)

[Total Marks : 100

8th June 06

Note :

1. Q1 is compulsory and attempt any 4 from remaining questions.
2. Answer to the point.
3. Assumptions should be highlighted and justified.
4. Draw diagram to explain the theory wherever necessary.
5. Start major question on new page and maintain the order of questions.
6. For every question and its answer, title it with details e.g. Q3/a/2/i if there are subsections.
7. While stapling the supplements, take care that questions numbers and answers are not obscured.

- Q1 (a) ABC company has got six offices where A,B offices are in mumbai. C is in delhi, D is in Calcutta, E is in Bangalore,F in New york US. We have 40 terminals in each offices which has got two departments beside servers such as Email server, DB server, Web server. Assume suitable applications and identify the communication needs in terms of hardware, software and links. 10
- Q1 (b) Over the period of time networking protocols are getting embedded in hardware. Comment. 10
- Q2 (a) Comment on Microwave, Fiber and Satellite, current status and future. 10
- Q2 (b) What are the protocols and tools available for network management. 10
- Q3 (a) Explain Traffic Engineering and Capacity Planning. Explain their relevance in Network designing. 10
- Q3 (b) Compare Ipv4 and Ipv6 protocols. 10
- Q4 (a) Addressing happens in networking at different levels. Comment on traditional and modern addressing. Consider TCP/IP and also other families such as GSM, ATM etc. 10
- Q4 (b) Explain different design issues in Access Network Design and Backbone Network Design. 10
- Q5 (a) How queuing theory is important for networking with small example. 10
- Q5 (b) Compare and contrast different common WAN protocols. (TCP/P, FR, ATM, X.25). 10
- Q6 (a) Explain the role of Graphs and Probability in networking. 10
- Q6 (b) Comment on the quality of service in networking. 10
- Q7 (a) List and state the IEEE series of standards in the field of communication. 10
- Q7 (b) If Common man is guaranteed with 5000 Kbits/S communication bandwidth between one end to customers end and computing power equal to Pentium IV on end terminals. Imagine terminal may be any thing where communication device is mounted. What would you see in near future? 10