

M.E. Second Semester (Computer Science & Engineering) (F.T.) (CGS)
13148 : Computer Communication Network : 2 RMEF 1 / 2 RME 1

P. Pages : 2

Time : Three Hours



AU - 3227

Max. Marks : 80

- Notes : 1. Assume suitable data wherever necessary.
2. Illustrate your answer necessary with the help of neat sketches.

1. a) Compare the OSI and TCP/IP architecture. 7
b) Draw and Explain TCP Header. 7

OR

2. a) Explain the concept of Fragmentation and Reassembly. 7
b) Explain IPv6 header fields. 7
3. a) Explain in brief merits and demerits of packet switching over circuit switching. 7
b) Explain IEEE802.11 services. 6

OR

4. a) Explain the fields in an ATM cell. 7
b) Compare the X.25 and frame relay protocols stack. 6
5. a) List and explain the examples of self-similar data traffic. 7
b) What is meant by network of queues? Explain Jackson's theorem to analyse a network of queues. 6

OR

6. a) State the assumption on which Jackson's theorem is based. Explain its application to packet switching. 7
b) State and illustrate the concepts of total probability and Bayes's theorem. 6
7. a) Define error control. Describe Go-Back-N ARQ error control technique. 7
b) What is congestion? Which are the congestion control technique? Explain any two. 7

OR

8. a) Explain objectives of frame relay congestion control. 7
b) Explain stop and wait ARQ. 7

9. a) Describe Bellman-ford algorithm. 7
b) Explain Breadth-first search for spanning tree. 6

OR

10. a) Explain RIP packet format. 7
b) Describe Dijkstra's algorithm. 6
11. a) What is the difference between FIFO queuing and WFQ queuing Explain in brief. 7
b) List the design goals for RSVP. 6

OR

12. a) What is Token Bucket Scheme. 7
b) What are the different services offered by ISA? Explain them in brief. 6
