

M.C.A. Third Semester (CGS)
15522 : Computer Networks : 3 MCA 4

P. Pages : 2
Time : Three Hours



AV - 3277
Max. Marks : 80

- Notes :
1. Assume suitable data wherever necessary.
 2. Illustrate your answer necessary with the help of neat sketches.
 3. Use of pen Blue/Black ink/refill only for writing the answer book.

1. a) Describe the various types of delays in packet switched network. 8
b) Describe the working of FTP with the help of suitable diagram. 6

OR

2. a) Explain various FTP commands and their probable replier. 8
b) What is packet loss? Explain the solution to this problem. 6
3. a) Explain reliable data transfer over a channel with bit-errors. 7
b) Describe the services provided by TCP. 7

OR

4. a) What is multiplexing and demultiplexing? Explain connectionless and connection-oriented multiplexing and demultiplexing. 14
5. a) Explain the classification of Routing algorithms. 7
b) Explain Inter-Autonomous system routing. 6

OR

6. a) Explain OSPF (Open Shortest Path First) protocol in detail. 7
b) Explain the datagram services modes for networking. 6
7. a) What is multiple Access problem? State its probable solution. 7
b) What is PPP? State the desired requirements for PPP. 6

OR

8. a) What is polling? Explain the Roll-call polling method. 7
b) Explain the Ethernet frame structure. 6

9. a) Describe the desirable properties of a secure communication. 7
b) What is digital signature? Describe the procedure to create a digital signature. 6

OR

10. a) What is a key? Explain the Symmetric key cryptography technique. 7
b) What is KDC (Key Distribution Center)? Give a brief note on it. 6
11. a) What is network management? Explain how a network administration benefit from the appropriate network management tool. 7
b) What is SNMP? Explain the various PDU types of SNMP. 6

OR

12. a) Explain management information base. 7
b) Explain: 6
i) Configuration management.
ii) Security management.
