

(3 Hours)

Total marks : 80

Note:

- Question No. 1 is compulsory.
- Attempt any Three questions out of remaining questions.
- Make suitable assumptions whenever necessary.

Q 1:

[4 X 5]

- What are the design issues for the Layers ?
- Differentiate between Aloha and Slotted Aloha .
- Explain in short different framing Methods.
- How does the Token Bucket Algorithm works?
- Why does the data link protocol always put the CRC in a trailer rather than in a header ?

Q 2:

- Explain Sliding window Protocol using Go Back-N technique. [10]
- Describe the OSI Reference Model with a neat diagram. [10]

Q 3:

- What is the function of IP Protocol? Discuss its header format. [10]
- Discuss the quality of service parameters in computer network. [10]

Q 4:

- What is count to infinity problem in distance vector routing? Discuss in detail. [10]
- Explain three way handshake technique in TCP. [10]

Q 5:

- Explain the need for DNS and describe the protocol functioning. [10]
- Explain CSMA Protocols. Explain how collisions are handled in CSMA/CD. [10]

Q 6: Write short notes on the following.

[5 X 4]

- Functions of Session Layer.
- Address Resolution Protocol (ARP).
- Berkeley Socket
- Differentiate between OSPF and BGP .