

Q.P. Code : 13123



[Time: Three Hours]

Please check whether you have got the right question paper.

- N.B: 1. Question No. 1 is compulsory.  
2. Attempt any Three questions out of remaining questions.

- Q. 1 Answer any four 20
- a) Compare Slotted ALOHA and Pure ALOHA.
  - b) Explain IP Address and Subnet Mask
  - c) Compare Circuit switched and Packet switched networks.
  - d) Explain Selective Repeat Protocol.
  - e) Piggybacking.
- Q. 2 a) What is OSI model? Give the function and services of each layer. 10
- b) What are three main functions of Network layer? What is Routing? Explain shortest path Routing. 10
- Q. 3 a) Draw and explain TCP segment header. 10
- b) Explain CSMA/CD protocol. 10
- Q. 4 a) Compare 802.3, 802.4 and 802.5 IEEE standard. 10
- b) Explain HDLC protocol along with its different frame structure. 10
- Q. 5 a) What is congestion control and what are the causes of congestion? Explain Token Bucket algorithm. 10
- b) What are the elements of Transport Layer 10
- Q. 6 Write short notes on (Any Four) 20
- i) Network Topologies
  - ii) Traditional Ethernet
  - iii) Mobile Telephone System
  - iv) RIP(Routing Information Protocol)
  - v) Berkeley socket
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