

SE/SEM-IV/CBCS/IT/MAY-17

SUB:- CN

19/05/2017

Q.P. Code : 13123

[Time: Three Hours]

[Marks:80]

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