

III/IV B.Tech. DEGREE EXAMINATIONS, NOVEMBER- 2019**First Semester****COMPUTER SCIENCE ENGINEERING****COMPUTER NETWORKS****Time: Three Hours****Maximum marks:60****Answer Question No.1 Compulsory****6X2=12 M****Answer ONE Question from each Unit****4X12=48 M**

1. a) How distributed system is different from computer networks?
- b) Brief on store and forward message switching?
- c) What is Firewall
- d) What is byte oriented protocol?
- e) What is routing?
- f) Tunneling

UNIT-I

2. Give a brief on network and explain OSI architecute with neat diagram. What are the design issues for session and application layer of OSI model?

(OR)

3. a) What is the role of a physical layer? What are the different access methods using which internet services are accessed? Explain.
- b) How circuit switching is different from packet switching? Explain.

UNIT-II

4. a) What are the relative merits and demerits of Error detection and Error correction?
- b) Mentioning the advantages and disadvantages, explain sliding window protocol using Go back-n and using selective repeat.

P.T.O

(OR)

5. a) What are the services provided by data link layer to network layer? Explain.
- b) What is framing? What are the methods for framing? Explain.

UNIT-III

6. a) What is routing? Explain two major classes of routing algorithms.
- b) Explain shortest path routing in detail.

(OR)

7. a) Explain why routing is very important in networking. Illustrate any one of the routing algorithm used in networks.
- b) Explain the concepts in brief: (i) Flooding (ii) Quality of service.

UNIT-IV

8. a) In detail explain the working and use of Domain Name Service.
- b) What is transport protocol? Explain different elements of transport protocol.

(OR)

9. a) Give TCP header format and explain.
- b) Explain the message headers of HTTP with example used in WWW.



III/IV B.Tech. (Supple) DEGREE EXAMINATIONS, JUNE- 2019**First Semester****COMPUTER SCIENCE ENGINEERING****COMPUTER NETWORKS****Time: Three Hours****Maximum marks:60****Answer Question No.1 Compulsory****6X2=12 M****Answer ONE Question from each Unit****4X12=48 M**

1. a) Differentiate between computer network and distributed system
- b) What is flooding?
- c) Packet switching
- d) Applications of multicasting
- e) Firewall
- f) IP address

UNIT-I

2. Explain in detail ISO-OSI reference model and write a short notes on interface, service and protocol.

(OR)

3. a) Explain the uses of computer networks and give a brief on network hardware.
- b) Give a brief on characteristic features of Fiber optics.

UNIT-II

4. a) With suitable examples compare point-to-point channels and broadcast channels?
- b) Discuss the services provided by the data link layer to the network layer?

(OR)

5. a) Explain one-bit sliding window protocol. Give the advantages and disadvantages of one-bit sliding window protocol.

P.T.O

- b) What is flow control? Why is essential at the data link layer? Mention few techniques for the same and give a brief of each.

UNIT-III

6. a) What are the services provided by Network layer to Transport layer. Explain.
- b) How the complexity at Network layer & Transport layer varies with connection oriented and connectionless service? Explain in brief.

(OR)

7. What is adaptive routing? Is Distance vector routing adaptive algorithm or not. Justify your answer. Explain in detail Distance vector routing.

UNIT-IV

8. What is DNS? Give its uses and explain how DNS works.

(OR)

9. a) Why does UDP exist? Would it now have been enough to just let user processes send raw IP packets? Explain.
- b) Give a brief on elements of Transport protocol.

