Reg. No. : | | | | | | | | | | |

Question Paper Code: 54806

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Fourth Semester

Information Technology

15UIT406- COMPUTER NETWORK

(Regulation 2015)

Duration: 1.15 hrs Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. A set of rules that governs data communication CO1- R

   (a) Protocols (b) Standards (c) RFCs (d) None of the mentioned

2. Frames from one LAN can be transmitted to another LAN via the device CO1- R

   (a) Router (b) Bridge (c) Repeater (d) Modem

3. Which sub layer of the data link layer performs data link functions that depend upon the type of medium? CO2- R

   (a) Logical link control sub layer (b) Media access control sub layer

   (c) Network interface control sub layer (d) None of the mentioned

4. TCP process may not write and read data at the same speed. So we need _____ for storage. CO2- R

   (a) Packets (b) Buffers (c) Segments (d) Stacks

5. Which one of the following routing algorithm can be used for network layer design? CO3- R

   (a) Shortest path algorithm (b) Distance vector routing

   (c) Link state routing (d) All of the mentioned

6. A station in a network forwards incoming packets by placing them on its shortest output queue. What routing algorithm is being used? CO3 -R

(a) hot potato routing (b) flooding

(c) delta routing (d) none of these

7. Transport layer protocols deals with CO4- R

(a) Application to application communication (b) Process to process communication

(c) Node to node communication (d) None of the mentioned

8. Token bucket can easily be implemented with a counter, initialized by CO4 -R

(a) 0 (b) 1 (c) -1 (d) -2

9. The packet of information at the application layer is called _____ CO5- R

(a) Packet (b) Message (c) Segment (d) Frame

10. A packef.filter firewall filters at the CO5 -R

(a) application or transport (b) data link layer

(c) physical (d) network or transport layer

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. During the communication, how various layers of OSI model exchange information to establish the connection? Describe with the help of suitable diagram CO1- U (8)

12. Explain Ethernet protocol. CO2- U (8)

13. Find the class of each IP address give suitable explanation. CO3- Ana (8)

(a) 227.12.14.87
(b) 193.14.56.22
(c) 14.23.120.8
(d) 252.5.15.111
(e) 134.11.78.56
(f) 000 000 00 1111 0000 11111111 00110011
(g) 10000000 1111 0000 11111111 00110011

14. Explain in detail about transport layer protocols with neat diagram. CO4- U (8)

15. Write a brief note on File Transfer Protocol. CO5- U (8)