

06 JAN 2023

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Reg. No.

Question Paper Code

11590

B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV/ DEC 2022

Fourth Semester

Computer Science and Engineering

(Common to CCE, IT and AIDS)

20CSPW401 - COMPUTER NETWORKS WITH LABORATORY

(Regulations 2020)

Duration: 3 Hours

Max. Marks: 100

Answer ALL Questions

PART - A (10 × 2 = 20 Marks)

- | | <i>Marks,
K-Level, CO</i> |
|---|-------------------------------|
| 1. Define Computer Network. | 2,K1,CO1 |
| 2. Differentiate packet switching and circuit switching. | 2,K2,CO1 |
| 3. Find the type of the following MAC address :A2:34:45:11:92:F1. | 2,K2,CO2 |
| 4. Draw the timeline to show the concept of Piggy Backing. | 2,K2,CO2 |
| 5. Define CRC. | 2,K1,CO3 |
| 6. Write about Forwarding and Routing. | 2,K3,CO3 |
| 7. Differentiate TCP and UDP. | 2,K2,CO4 |
| 8. What is the role of port number in transport layer? Write the port number for TCP,UDP. | 2,K2,CO4 |
| 9. List down the features of telnet and SSH. | 2,K1,CO5 |
| 10. Compare IMAP and POP. | 2,K2,CO5 |

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11. a) Explain the ISO-OSI model of computer network with a neat diagram. 13,K2,CO1
- OR**
- b) Discuss in detail about Packet and circuit switching technique with a neat diagram. 13,K2,CO1
12. a) Discuss the principle of Stop & Wait flow control algorithm in noiseless channels. 13,K2,CO2
- OR**
- b) Explain Cyclic Redundancy Check with an example of your own. 13,K2,CO2
13. a) List the classes in classful addressing and point out the application of each class. 13,K1,CO3

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create

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OR

b) Explain distance vector routing with an example. 13,K2,CO3

14. a) Write about Stream Control Transmission Protocol (SCTP). Compare its performance with TCP and UDP. 13,K3,CO3

OR

b) Discuss in detail about the three-way handshake protocol for connection establishment in TCP. 13,K2,CO4

15. a) Explain in detail about Domain Name System. 13,K2,CO5

OR

b) Demonstrate the functions of SMTP. Also show the role of MIME with SMTP. 13,K3,CO5

PART - C (1 × 15 = 15 Marks)

16. a) Explain in detail how electronic mail application is carried out in a network. Also explain the protocols used in the applications. 15,K2,CO6

OR

b) List the elements of network management and explain the operation of SNMP protocol in details. 15,K2,CO6