No. of Printed Pages : 2

Sl. No.

21CSC1C3L

P.T.O.

M.Sc. I Semester Degree Examination, April/May - 2023 COMPUTER SCIENCE

Computer Networks

compation networks			
Time : 3 Hours Maximum Marks : 70 Note : Answer any five questions (Question No. 1 is compulsory)			
1.	(A)	Explain the factors to measure Network performance in detail.	7
	(B)	Discuss the functioning of DHCP.	7
2.	(A)	Explain IPV4 header format with neat diagram.	7
	(B)	State Distance Vector Algorithm with example.	7
3.	(A)	What is Multicasting ? Explain the basic components involved in Multicast Communication.	7
	(B)	Calculate the routing tables for the routers in the given network using Distance Vector Routing.	7
		$\begin{array}{c} D \\ 1 \\ A \\ 2 \end{array} \begin{array}{c} 11 \\ 7 \\ B \end{array} \begin{array}{c} C \\ 3 \\ B \end{array}$	
4.	(A)	Explain IPV6 addressing in detail.	7
	(B)	List the strategies used for Transition from IPV4 to IPV6.	7
5.	(A)	Explain Congestion Control Mechanism.	7
	(B)	Explain UDP Header format with a neat diagram.	7

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- **6.** (A) What is Maximum Transmission Unit (MTU) and how does it relate to IP **7** fragmentation ?
 - (B) Differentiate between Distance Vector and Link State Routing Protocols.
- 7. (A) What is MDVP and how does it differ from unicast routing protocols ? 7
 - (B) How does TCP use Selective Acknowledgement (SACK) to improve Flow **7** control ?
- 8. Write short notes on the following :

4+5+5

7

- (A) Subnetting
- (B) Border Gateway Protocol Version4 (BGPV)
- (C) Classful Addressing.

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