Course Code: 1950521 Roll No: **MLRS- R19**

MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
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III B.Tech I Sem Supply End Examination, December 2022

Computer Networks

(CSE)

Time: 3 Hours. **Max. Marks: 70**

Note: 1. Question paper consists: Part-A and Part-B.
2. In Part – A, answer all questions which carries 20 marks.
3. In Part – B, answer any one question from each unit.
Each question carries 10 marks and may have a, b as sub questions.

PART- A

(10*2 Marks = 20 Marks)

1.	a)	What are the types of twisted pair cable?	2M	CO1	BL1
	b)	List the four levels of addressing employed in TCP/IP protocols.	2M	CO1	BL2
	c)	What is a sliding window protocol? Where is it used?	2M	CO2	BL1
	d)	How is error controlled in data link controlled protocol?	2M	CO2	BL1
	e)	What are the goals and characteristics of routing algorithms?	2M	CO3	BL1
	f)	Mention the limitations of Distance Vector and Shortest path routing algorithms.	2M	CO3	BL2
	g)	If UDP is so powerless, why would a process want to use it?	2M	CO4	BL1
	h)	Define TCP?	2M	CO4	BL1
	i)	What is the purpose of DNS?	2M	CO5	BL1
	j)	Write the e-mail services of application layer.	2M	CO5	BL1

PART- B

(10*5 Marks = 50 Marks)

2	a)	List and explain the advantages of fiber optics over copper as a transmission medium.	5M	CO1	BL3
	b)	In the TCP/IP protocol suite, what are the identical objects at the sender and the receiver sites when we think about the logical connection at the application layer?	5M	CO1	BL2
		OR			
3		Make a comparison between the TCP/IP and OSI Models.	10M	CO1	BL4
4	a)	List and explain the data link layer design issues.	5M	CO2	BL3
	b)	Consider the delay of pure ALOHA versus slotted ALOHA at low load. Which one is less? Explain your answer.	5M	CO2	BL2
		OR			

5		Explain sliding window protocol using Go back n and using selective repeat.	10M	CO2	BL4
6	a)	List and explain the elements of transport protocols.	5M	CO3	BL3
	b)	Discuss the congestion control in virtual circuit subnets.	5M	CO3	BL4
		OR			
7		With an example explain the Flooding, Hierarchical routing algorithms used in computer networks.	10M	CO3	BL4
8	a)	List and explain Transport Services	5M	CO4	BL3
	b)	The following is a dump of a UDP header in hexadecimal format. CB84000D001C001C, what is the source port number?	5M	CO4	BL2
		OR			
9		Compare and contrast the two TCP/IP transport protocols: TCP and UDP, in terms of de multiplexing, reliability and flow control	10M	CO4	BL4
10	a)	Discuss the e-mail architecture and services.	5M	CO5	BL3
	b)	Explain DNS with reference to its components and working.	5M	CO5	BL2
		OR			
11		Write a short note on the following: a) World WEB b) HTTP	10M	CO5	BL2

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CO - Course Outcome **BL - Blooms Taxonomy Levels**