Final! 07.01.2022

Course Code: 1950521   Roll No: MLRS- R19

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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 Regular End Examination, January 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 limitations of Arpanet?	2M	CO1	BL1
	b)	Explain the purpose of layering in network reference model.	2M	CO1	BL4
	c)	What are the design issues of Data Link Layer?	2M	CO2	BL1
	d)	What do you mean by collision free protocols?	2M	CO2	BL1
	e)	Define Internetworking.	2M	CO3	BL1
	f)	Enumerate the differences between broadcast and multicast routing.	2M	CO3	BL4
	g)	List out the services provided by transport layer.	2M	CO4	BL1
	h)	What is segmentation in computer networks?	2M	CO4	BL1
	i)	Outline management information base (MIB).	2M	CO5	BL4
	j)	How does DNS used in Internet?	2M	CO5	BL2

PART- B
(10*5 Marks = 50 Marks)

2	a)	Describe the services provided by physical layer.	5M	CO1	BL2
	b)	How are the guided media differing from unguided transmission media? Explain with examples.	5M	CO1	BL4

OR

3	Illustrate OSI reference model with a neat diagram.	10M	CO1	BL4

4	a)	What is the need of Framing? Explain character stuffing and bit stuffing for framing.	5M	CO2	BL4
	b)	Explain briefly about the Persistent and Non-persistent CSMA protocols?	5M	CO2	BL4

OR

5	Discuss about the various carrier sense multiple access protocols.	10M	CO2	BL2

6	a)	Describe the concept of flooding in network layer.	5M	CO3	BL2
	b)	Explain the congestion control at network layer.	5M	CO3	BL4

OR

7	Illustrate shortest path routing algorithm with suitable example.	10M	CO3	BL4

8	a)	Compare and contrast the differences between TCP and UDP protocols.	5M	CO4	BL2
	b)	Draw and explain the header format for a user datagram protocol.	5M	CO4	BL4

OR

9	Explain the TCP connection establishment, TCP connection release, and TCP connection management.	10M	CO4	BL4

10	a)	Explain about HTTP Request Message Format.	5M	CO5	BL4
	b)	Explain the audio compression techniques.	5M	CO5	BL4

OR

11	What is SNMP? Elaborate the working of SNMP.	10M	CO5	BL4

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