

Code No: **R20A0510****MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY****(Autonomous Institution – UGC, Govt. of India)****III B.Tech I Semester Supplementary Examinations, June 2025****Computer Networks****(ECE, CSE-AIML, CSE-DS, B.Tech-AIDS & B.Tech-AIML)**

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

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing **ONE** Question from each SECTION and each Question carries 14 marks.

			<u>SECTION-I</u>	BCLL	CO(s)	Marks
1	<i>A</i>	Explain the TCP/IP model in detail.		L2	CO-I	[8M]
	<i>B</i>	Illustrate the uses of network in brief.		L2	CO-I	[6M]
		OR				
2	<i>A</i>	Explain TCP/IP and OSI model in detail.		L2	CO-I	[9M]
	<i>B</i>	Illustrate guided transmission media in brief.		L2	CO-I	[5M]
		<u>SECTION-II</u>				
3	<i>A</i>	Explain the Error correction and detection techniques in DLL.		L2	CO-II	[7M]
	<i>B</i>	Summarize Ethernet Mac Sub layer with a neat sketch.		L2	CO-II	[7M]
		OR				
4	<i>A</i>	Explain CSMA/CA in detail.		L2	CO-II	[7M]
	<i>B</i>	Illustrate elementary Data Link Layer Protocols in brief		L2	CO-II	[7M]
		<u>SECTION-III</u>				
5	<i>A</i>	Compare in between connection less and connection oriented networks.		L2	CO-III	[8M]
	<i>B</i>	Explain in detail about ARP in network layer.		L2	CO-III	[6M]
		OR				
6	<i>A</i>	Compare and contrast in between Sub netting and Super Netting.		L2	CO-III	[6M]
	<i>B</i>	Explain different types of routing algorithms in brief.		L2	CO-III	[8M]
		<u>SECTION-IV</u>				
7	<i>A</i>	List out the services provided by transport layer in detail		L4	CO-IV	[7M]
	<i>B</i>	Explain the connection release process of TCP in brief		L2	CO-IV	[7M]
		OR				
8	<i>A</i>	Explain in detail about Error and Flow control in transport layer.		L2	CO-IV	[7M]
	<i>B</i>	Illustrate the TCP Congestion Control Algorithm in brief.		L2	CO-IV	[7M]
		<u>SECTION-V</u>				
9	<i>A</i>	What are the different application layer protocols.		L1	CO-V	[7M]
	<i>B</i>	Discuss in detail about email in application layer.		L6	CO-V	[7M]
		OR				
10	<i>A</i>	Explain in detail about DNS.		L2	CO-V	[7M]
	<i>B</i>	Illustrate about TELNET in brief.		L2	CO-V	[7M]
