Code No: R20A0510

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

III B.Tech I Semester Supplementary Examinations, June/July 2024 Computer Networks

Compater recording											
(ECE, CSE-AIML, CSE-DS, B.Tech-AIDS & B.Tech-AIML										AL)	
Re	oll No										

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.

		SECTION-I	
1	\boldsymbol{A}	Draw the layer diagram of TCP/IP protocol suite and explain it.	[7M]
_	\boldsymbol{B}	Explain the concept of transmission media. Illustrate through an example	[7M]
		OR	
2	\boldsymbol{A}	Write the comparison of the OSI and TCP/IP Reference models.	[4M]
	\boldsymbol{B}	Draw and explain the OSI Reference model	[10M]
		SECTION-II	
3	\boldsymbol{A}	Is an oil pipeline a simplex system, a half-duplex system, a full-duplex	[7M]
		system, or none of the above? What about a river or a walkie-talkie-style	
		communication?	
	В	Briefly explain and distinguish between circuit switching, packet switching OR	[7M]
4	\boldsymbol{A}	Explain sliding window protocol for flow control at data link layer with	[7M]
		suitable example	
	\boldsymbol{B}	Give two reasons why networks might use an error-correcting code instead	[7M]
		of error detection and retransmission.	
_		SECTION-III	
5	\boldsymbol{A}	What is routing? Discuss the types routing algorithms. List the desirable	[7M]
		properties of a routing algorithm.	F#3 #3
	B	Write short notes on IPV4 protocol.	[7M]
,	4	OR	[//]] /[]
6	A	Discuss the importance of optimality principle in routing.	[7M]
	\boldsymbol{B}	What is congestion control? How the choke packets are used in congestion	[7M]
		control. SECTION-IV	
7	\boldsymbol{A}	What are the functions of the Transport Layer? Explain briefly and also name	[7M]
,	A	a few applications based on this layer.	[/1/1]
	В	Illustrate the scenarios for establishing a connection using a Three-Way	[7M]
	D	Handshake.	[/141]
		OR	
8	\boldsymbol{A}	Write a short note on the function of	[7M]
•		(a) Sessions layer	[, _, _,
		(b) Applications layer	
	\boldsymbol{B}	Differentiate between Virtual Circuit versus Datagram subnets.	[7M]
			F 1

SECTION-V

9	\boldsymbol{A}	Explain different basic functions that e-mail system supports.	[7M]
	\boldsymbol{B}	Briefly explain the client server model with a neat sketch.	[7M]
		OR	
10	\boldsymbol{A}	Why do we need DNS? Discuss different fields in the DNS message.	[7M]
	\boldsymbol{B}	Briefly explain HTTP and its types.	[7M]
