SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B.Tech II Year I Semester Regular & Supplementary Examinations December-2023
COMPUTER NETWORKS
(Common to CCC & CIC)

Time: 3 Hours   **Max. Marks: 60**

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

1		Demonstrate the various layers of TCP/ IP reference model with neat sketch.	CO1	L2	12M

OR

2	a	Classify performance of the networks.	CO1	L2	6M
	b	Explain in detail about Fiber optic cable with neat diagram.	CO1	L2	6M

UNIT-II

3	a	Compute the CRC error detection technique using generator polynomial $x^4 + x^3 + 1$ and data 11100011.	CO2	L3	6M
	b	Compare Pure and slotted ALOHA protocols.	CO2	L3	6M

OR

4		Illustrate HDLC Protocol with the elaborative explanation of its frames.	CO2	L3	12M

UNIT-III

5	a	Sketch and explain in detail about IPV4protocol.	CO3	L2	6M
	b	Describe about distance vector routing algorithm.	CO3	L3	6M

OR

6		List and explain congestion control algorithms in network layer.	CO3	L3	6M

UNIT-IV

7	a	Develop the three way handshake protocols with suitable diagram.	CO4	L3	6M
	b	Identify the problems occur during connection establishment.	CO4	L3	6M

OR

8	a	List and define the elements of transport layer.	CO4	L2	6M
	b	Elaborate each field of UDP segment header with neat diagram.	CO4	L2	6M

UNIT-V

9	a	Explain about secure shell in application layer.	CO5	L2	6M
	b	Illustrate in detail about function and structure of e-mail protocol.	CO5	L3	6M

OR

10		Discuss the features of HTTP and explain how HTTP works.	CO5	L2	12M

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