Code No.: CS503PC

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CMR ENGINEERING COLLEGE: : HYDERABAD UGC AUTONOMOUS

III-B.TECH-I-Semester End Examinations (Regular) - January- 2024 COMPUTER NETWORKS

(Common for CSE, CSD, AI&DS)

[Time: 3 Hours]

[Max. Marks: 70]

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks.

	PART-A (20	Marks)
1. a) b) c) d) e) f) g) h) i)	Define Hub and switch. Define point-to-point network. List out the design issues of data link layer. Discuss channel allocation problem. Differentiate between Unicast Routing and multicast routing. What is meant by hop count? Differentiate between TCP and UDP. What are the functions of Transport layer? Write about SNMP. Describe the purpose of DNS?	[2M] [2M] [2M] [2M] [2M] [2M] [2M] [2M]
2.	Explain TCP/IP protocol Suite with neat sketch. OR	Marks) [10M]
3.	What is meant by Transmission Media? Explain various types of Transmission Media.	[10M]
4.	What is framing? Explain the various framing techniques of data link layer.	[10M]
5.	Explain Pure ALOHA and slotted ALOHA? And comparison between Pure ALOHA and slotted ALOHA.	[10M]
6.	Discuss various congestion control algorithms.	[10M]
7.	What are the static routing algorithms? Discuss the concept of shortest path routing algorithm.	[10M]
8.	Draw and explain TCP segment header format.	[10M]
9.	OR Discuss the TCP connection Management.	[10M]
10.	Define HTTP and explain the use of HTTP.	[10M]
11.a) b)	What is an electronic E-mail? Explain the architecture of E Mail? Explain the DNS.	[6M] [4M]