Charotar University of Science and Technology
Devang Patel Institute of Advance Technology and Research
Department of Computer Science & Engineering
Subject: CS362 Computer Networks
Unit Test - 1

Semester: 6ᵗʰ (B. Tech.)   **Maximum Marks: 30**
Date: 6/3/2023   **Time: 9:15 AM to 10:15 AM**

Instructions:
(i) Attempt **all** the questions.
(ii) Figures to the right indicate **full** marks.
(iii) Make suitable assumptions and draw neat figures wherever required.

Sr. No	Questions	Marks
Q-1	What all are the fundamental characteristics of Data Communication system.	4
Q-2	What is OSI model? Explain the functions and protocols and services of each layer with neat diagram.	5
Q-3	Comparison of the OSI and TCP/IP reference models.	5
Q-4	Categorize the multiple Access protocol and explain Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA) protocol with proper flow.	6
	OR	
Q-4	List out the Error detection technique. Using CRC method, find out that given data is error free or not. • Data bit is – 10110 • Code generator is – x^3+x^2+1 (generate the binary form	6
Q-5	Which technique is used to determine the position of the error bit in the given data bit? Suppose the data bit is 1010 then find out position of error bit using the same technique?	6
Q-6	Identify that given address is unicast, multicast or broadcast. • **02:00:5E:00:01:01** • **56:04: A6:3F:0B:00** • **09:00:27:EC:10:61** • **FF:30:10:19:10:1A**	4

Best of

Luck