Enroll. No._____

MARWADI EDUCATION FOUNDATION

Faculty of Technology

Information and Communication Technology

B.E. SEM: 2 MID-SEM. EXAM: V July -2019

Subject: - Computer Network (01CT0503) **Date:- 03/08/2019**

Total Marks:- 30 **Time: - 75 Minutes**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Question: 1. [6]

(a) Analyze error detection and correction capabilities of (23,11) code in which hamming distance varies in the range of 8 to 20.

(b) Compare throughput of Pure ALOHA, slotted ALOHA and various persistent strategies with help of graph of S Vs G.

Question: 2. [12]

(a) Demonstrate how hamming code method use for error detection and correction ?

(b) Why Cyclic Redundancy check is called so? Step wise explain the procedure of CRC Encoder for generating codeword for the data words of (7,4) code.

OR

(b) What are the two part of Data link layer ? what are the roles of each ? Classify various medium access protocol.

Question: 3. [12]

(a) With respect to Bluetooth differentiate
(i) SCL and ACO
(ii) Piconet and scatternet
(iii) Single secondary communication and Multiple secondary communication

(b) What are the advantages and disadvantages of Bit-Map protocol ? explain the procedure in detail.

OR

(a) Draw the Manchester and differential Manchester code for 1011000111010 sequence. Also justify why differential Manchester code is most popular for Ethernet standard

(b) Draw the flow chart of CSMA-CD and CSMA-CA. Explain each step in details.

---Best of Luck---

Course Outcome Wise Questions

Subject Code	**01CT0503**	Subject	**COMPUTER NETWORKS**

CO No.	Course Outcome
CO1	Understand the functionality of various protocols, models and networks.
CO2	Analyze various flow and error control algorithms
CO3	Analyze different medium access protocols and network hardware component.
CO4	compare various static and dynamic routing protocol.
CO5	Understand various transport services, protocol and application layer functionalities.
CO6	Built and test various network topologies and routing protocols for various networks scenarios.

Blooms Taxonomy	Question List
Remember / Knowledge	
Understand	
Apply	
Analyze	
Evaluate	
Higher order Thinking / Creative	