

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED– SEMESTER -IV EXAMINATION –SUMMER-2021

Subject Code: 2648603**Date: 20/09/2021****Subject Name: Computer Networking****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

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

- Q1. (a)** Answer the Following Questions: **07**
1. What is Piggybacking?
 2. What is Repeater?
 3. Explain the term: Frequency.
 4. What is main difference between TCP and UDP?
 5. What is PAN?
 6. Give full form of SMTP.
 7. What is jitter?
- (b)** Explain OSI reference model with its all seven layers in details **07**
- Q2. (a)** 1. Write short note on electromagnetic spectrum? **04**
2. Compare Circuit Switching and Packet Switching. **03**
- (b)** List different types of transmission media. Discuss advantages and disadvantages of fiber Optics over the copper wire. **07**
- OR**
- (b)** List different types of framing techniques? What is Byte stuffing? With suitable example? **07**
- Q3. (a)** Explain Aloha & Slotted Aloha in detail. **07**
- (b)** Explain Go Back N & Selective Repeat Protocols. **07**
- OR**
- Q3. (a)** Discuss Carrier Sense Multiple Access Protocol in detail **07**
- (b)** What is Hidden station and Expose station problem? How it solve with RTS and CTS. **07**
- Q4. (a)** 1. Explain CRC for error detection with suitable example. **04**
2. Explain the terms Hub, Bridge, Switch in brief. **03**
- (b)** Explain Distance Vector Routing Algorithm. **07**
- OR**
- Q4. (a)** 1. Write short note on Link State routing. **04**
2. Explain Flooding. **03**
- (b)** Compare Virtual-Circuit Network and Datagram Network **07**
- Q5. (a)** What is DNS? What is the primary purpose of DNS? **07**
- (b)** 1. Explain Congestion control in short. **04**
2. Discuss the duties of Network Layer. **03**

OR

- Q5.** (a) Explain Three Way Handshake mechanism at transport layer
(b) 1. Define IPV6.
2. Explain Error Control and Flow Control in brief.

07
04
03
