

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER- IV • EXAMINATION – WINTER 2020

**Subject Code:4649301**

**Date:01/01/2021**

**Subject Name:Computer Networking**

**Time:02:00 PM to 04:00 PM**

**Total Marks: 56**

### Instructions:

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q1. (a)** i) Write different types of networks. **07**  
ii) Range of wide area networks.  
iii) Examples of local area networks.  
iv) Defination of infrareds.  
v) Types of guided transmission media.  
vi) Defination of piggybacking.  
vii) Name of standard for wireless LANs.
- (b)** Difference between connections oriented services and connection less services. **07**
- Q2. (a)** Explain TCP/IP Reference model in detail. **07**  
**(b)** Explain design issue of the layers in detail. **07**
- Q3. (a)** Explain service primitives in detail. **07**  
**(b)** What is transmission media? Explain unguided media in detail. **07**
- Q4. (a)** Explain OSI model in detail. **07**  
**(b)** Explain design issue of data link layer in detail. **07**
- Q5. (a)** Define ALOHA and pure ALOHA. **07**  
**(b)** Explain a simplex stop-and-wait protocol for a noisy channel. **07**
- Q6. (a)** Explain uthopian simplex protocol in detail. **07**  
**(b)** Explain Electromagnetic spectrum in detail. **07**
- Q7. (a)** What is sliding window protocols? Explain a one-Bit sliding window protocol. **07**  
**(b)** Explain shortest path algorithm in details. **07**
- Q8. (a)** Define the DNS name space. **07**  
**(b)** Explain IP version 4 in detail. **07**

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