

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

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

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MCA - SEMESTER- V EXAMINATION – SUMMER - 2018**

**Subject Code:3650009**

**Date:07/05/ 2018**

**Subject Name: ADVANCED 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.

- Q.1 (a)** Write the answer in short. **07**
1. Write the full form of OSI.
  2. What is Latency?
  3. What is maximum TLS record size?
  4. Which standard is used for LAN?  
**A. IEEE 802.10    B. IEEE 802.11    C. IEEE 802.15**
  5. Write the full form of CORS.
  6. “ws” is used for encrypted text communication in Web Socket. State whether it is true or false.
  7. What is SRTP in WebRTC?
- (b)** Explain OSI reference model in detail. **07**
- Q.2 (a)** Write the answer in brief.
1. List out and explain the components of latency. **03**
  2. Explain Head-of-line blocking in TCP connection. **04**
- (b)** Discuss congestion avoidance and control in TCP connection in detail. **07**
- OR**
- (b)** Explain Optimization of TCP protocol. **07**
- Q.3 (a)** Write the answer in brief.
1. List out types of wireless networks with its standards. **03**
  2. Write down the single line definition of following: **02**
    - a. Origin
    - b. Socket Pool
  3. Write the equation to calculate the channel capacity provided by Claude E. Shannon. **02**
- (b)** Discuss Signal power in wireless network in detail. **07**
- OR**
- Q.3 (a)** Explain Cross-Origin Resource Sharing in details. **07**
- (b)** Explain Event stream protocol in detail. **07**
- Q.4 (a)** Write the answer in brief.
1. Explain the process of streaming data with XHR. **04**
  2. Explain polling with XHR. **03**
- (b)** Explain ‘ws’ and ‘wss’ url schemes in WebSocket. **07**
- OR**
- Q.4 (a)** Write the answer in brief.
1. Explain uploading data with XHR. **04**
  2. Explain long-polling with XHR. **03**
- (b)** How to send and receive text and binary data in WebSocket. **07**

- Q.5 (a)** Write the answer in brief.
1. What is WebSocket API? **04**
  2. Discuss data efficiency and compression in XHR. **03**
- (b)** Discuss HTTP upgrade negotiation in detail. **07**
- OR**
- Q.5 (a)** Discuss SRTP header in details. **07**
- (b)** Explain session description protocol in details. **07**

\*\*\*\*\*