

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA – SEMESTER V - EXAMINATION –SUMMER-2021

Subject Code: 2650010**Date: 07-08-2021****Subject Name: Advanced Networking (AN)****Time: 02:30 PM to 05:00 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) Explain original IPv4 classful addressing scheme. **07**
- (b) Draw and explain ARP message format when used to map an IPv4 address to an Ethernet address. **07**
- Q.2** (a) Explain Direct and Indirect delivery. **07**
- (b) Explain echo request and reply message format. **07**
- OR**
- (b) What is port number? Explain reserved and available UDP port numbers. **07**
- Q.3** (a) Define terms: Datagram Size, Network MTU, and Fragmentation. **07**
- (b) Explain IPv4 special addresses. **07**
- OR**
- Q.3** (a) Explain properties of the reliable delivery service. **07**
- (b) Explain DHCP options and message type. **07**
- Q.4** (a) Define terms: Acknowledgements, Retransmission, and Timeouts. **07**
- (b) Explain Simple Network Management Protocol. **07**
- OR**
- Q.4** (a) Explain Network Address Translation. **07**
- (b) Explain wireless networking and IEEE 802.15.4 **07**
- Q.5** (a) What is IPsec? Explain IPsec authentication header. **07**
- (b) Explain RTCP operations. **07**
- OR**
- Q.5** (a) Explain SDN architecture and external controllers. **07**
- (b) Explain Simple Mail Transfer Protocol. **07**
