

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA – SEMESTER –V EXAMINATION – SUMMER - 2016

Subject Code:650010

Date:13/05/2016

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) Explain the followings concepts: **07**
1. RARP.
2. Connectionless Delivery System.
3. Host-specific route.
4. Route change requests from routers.
5. Out of Band data.
6. NDP.
7. MIME.
- (b) Discuss type of broadcasting with example. **07**
- Q.2** (a) Explain the original IPv4 classful addressing scheme. **07**
(b) Discuss the concept of ARP and Proxy ARP. **07**
- OR**
- (b) Discuss the concept of IPv4 subnet mask representation and slash notation. **07**
- Q.3** (a) Explain the concept of datagram size, network MTU and fragmentation. **07**
(b) Write down short note on Network Byte Order. **07**
- OR**
- Q.3** (a) Explain ICMP message format with message types used with IPv4 and IPv6. **07**
(b) What is UDP encapsulation? Explain the concept of protocol layering. **07**
- Q.4** (a) Discuss the properties of Reliable Delivery Service. **07**
(b) What is TCP? Discuss TCP segment format. **07**
- OR**
- Q.4** (a) Write down short note on TCP State Machine. **07**
(b) What are the advantages of combining NAT technology with VPN technology? **07**
- Q.5** (a) Explain the DHCP address acquisition states with necessary diagram. **07**
(b) What is Internet Security? Discuss Ipsec authentication header. **07**
- OR**
- Q.5** (a) What is DHCP retransmission and randomization. **07**
(b) Write down short note on Simple Mail Transfer Protocol. **07**
