

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER-V • EXAMINATION – SUMMER • 2015

Subject Code: 2650010

Date: 11-05-2015

Subject Name: Advance Networking

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 classification of IPV4 addressing scheme with diagram. **07**
(b) Write short note on ARP refinements and explain the significance of ARP cache with example. **07**
- Q.2** (a) Explain the IPV6 Base header format. **07**
(b) Explain Next-Hop Forwarding and Default Forwarding in brief. **07**
- OR**
- (b) Write a short note on direct and indirect delivery of IP datagram. **07**
- Q.3** (a) Is ICMP Error correcting mechanism? Explain ICMP error reports regarding fragmentation. **07**
(b) Explain IPV6 UDP pseudo-header format. **07**
- OR**
- Q.3** (a) Explain feedback mechanisms SACK and ECN. **07**
(b) Write a short note on VPN. **07**
- Q.4** (a) Explain TCP state machine with each state. **07**
(b) Explain overlay networks in brief. **07**
- OR**
- Q.4** (a) How DHCP differ from BOOTP? Explain DHCP address acquisition states. **07**
(b) What is Real-Time Transport Protocol? Explain in detail. **07**
- Q.5** (a) Explain SNMP message format. **07**
(b) What is firewall? Explain firewall implementation and packet filtering. **07**
- OR**
- Q.5** (a) Explain SDN architecture and external controllers. **07**
(b) Explain IPsec encapsulating security payload. **07**
