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: 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.	**07**
	(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**

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