Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA- Vth SEMESTER-EXAMINATION -JUNE - 2012 Subject code: 650010 Date: 15/06/2012 **Subject Name: Advance Networking (AN)** Time: 02:30 pm - 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) Attempt the following with explanation (1 Mark for Each) 07 (1) Define how many subnetworks are created if the subnet mask for class C address is 255.255.255.192? (2) Define how many subnetworks are created if the subnet mask for class B address is 255.255.240.0? (3) Define how many subnetworks are created if the subnet mask for class A address is 255.252.0.0? (4) What is the subnet address if one of the hosts address is 192.168.123.123 and subnet mask given is 255.255.255.240? (5) What can be the subnet mask if Class C address block is divided into 16 subnetworks? (6) What can be the subnet mask if Class B address block is divided into 32 subnetworks? (7) What can be the subnet mask if Class A address block is divided into 128 subnetworks? **(b)** Write a short note on CIDR (Classless Internet Domain Routing). 07 **Q.2** (a) Define the subnet mask and Number of host in the network for given slash 07 notation in classless addressing. (2) \27 $(3) \ 18$ (4) \25 $(6) \ 17$ $(7) \ 19$ (b) Explain what is an ARP (Address Resolution Protocol) .Also define ARP 07 cache timeout.

OR

- **(b)** Explain the following TCP protocol operation in detail
 - Peer-To-Peer communication. (i)
 - (ii) Stream Delivery.

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Q.3	(a)	Define TCP Segment Format. Also explain the important	07
	(b)	Write a note on SSL and TLS.	07
		OR	
Q.3	(a)	Explain TCP connection Establishment and Termination process in detail.	07
	(b)	Explain the "Need of Dynamic configuration"? Also define how DHCP fulfill these requirements.	07
Q.4	(a)	Write a short note on private and hybrid networks.	07
	(b)	What is DNS? Explain Domain name resolution.	07
	` /	OR	
Q.4	(a)	Write a note on Secure FTP	07
	(b)	Write a note on Telnet options and option negotiation.	07
Q.5	(a)	Explain Inverse mapping in DNS.	07
	(b)	Write a note on Proxy servers	07
		OR	
Q.5	(a)	Write a short note on firewalls	07
•	(b)	What is HTTP? Explain its error messages	07

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