Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VIII • EXAMINATION – SUMMER 2013

Subject Code: 180704 Date: 10/05/2013

Subject Name: Advance Computer Networks (Department Elective-I)

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)**	What is the relationship between SONET and SDH? Describe DWDM in detail.	**07**
	(b)	Explain sub netting? For a network address 192.168.10.0 and subnet mask 255.255.255.224 then calculate: i. No of subnet and no of host ii. Valid subnets.	**07**
Q.2	**(a)**	Explain the ATM reference model and explain what are the various services provided by it.	**07**
	(b)	How the flow control implemented in X.25? Compare X.25 and TCP/IP protocol suite.	**07**
		OR	
	(b)	List and explain five commands to configure router.	**07**
Q.3	**(a)**	Write short note on Spanning tree protocol (STP).	**07**
	(b)	Compare IPV4 and IPV6 with their header format.	**07**
		OR	
Q.3	**(a)**	List and explain seven application layer protocol of TCP/IP protocol suite.	**07**
	(b)	Describe the multiprotocol label switchingôs (MPLSôs) working and operation? Compare MPLS with ATM network.	**07**
Q.4	**(a)**	Explain the purpose and structure of managed information based (MIB)	**07**
	(b)	Describe BGP (Border Gateway protocol) in detail.	**07**
		OR	
Q.4	**(a)**	Explain availability, reliability and maintainability of a network in detail for network management.	**07**
	(b)	Write short note on OSPF (open shortest path first) algorithm.	**07**
Q.5	**(a)**	Give header format of Real Time Transport Protocol and its working.	**07**
	(b)	Explain Network Management Architecture.	**07**
		OR	
Q.5	**(a)**	Explain business requirement, technical requirement and challenges in traffic engineering.	**07**
	(b)	Wright short note on IGRT(Interior Gateway Routing Protocol)	**07**

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