Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER–IV • EXAMINATION– SUMMER • 2014

Subject Code: 740401 **Date: 04-06-2014**

Subject Name: Wireless and Mobile Network Architecture

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)**	What is handoff? Describe Inter-BS Handoff and Intersystem Handoff	**07**
	(b)	What is the significance of link transfer? Explain MCHO link transfer	**07**
Q.2	**(a)**	Describe signaling system no. 7	**07**
	(b)	Explain IS-41 authentication and compare ówithout sharing schemeô and ósharing schemeô	**07**
		OR	
	(b)	Compare adaptive algorithm AA1 and AA2	**07**
Q.3	**(a)**	Draw PACS architecture and interface and describe in brief	**07**
	(b)	Draw GSM architecture and explain functions and significance of each block	**07**
		OR	
Q.3	**(a)**	Write a note on security in GSM networks	**07**
	(b)	Give comparison of HSCSD and GPRS	**07**
Q.4	**(a)**	Write note on USSD	**07**
	(b)	What are the main parts of GSM SMS protocol stack? Describe following types of short message: user-specific, ME-specific and SIM-specific	**07**
		OR	
Q.4	**(a)**	Describe in brief about WAP model, gateway and protocol	**07**
	(b)	Compare W-CDMA and cdma2000 and explain quality of service in 3G	**07**
Q.5	**(a)**	Describe WLL architecture with diagram	**07**
	(b)	Write note on mobile IP	**07**
		OR	
Q.5	**(a)**	Write a note on GSM operation and maintenance	**07**
	(b)	Describe international roaming for GSM	**07**

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