GUJARAT TECHNOLOGICAL UNIVERSITY
ME - SEMESTER–IV • EXAMINATION – SUMMER 2013

Subject Code: 740401   **Date: 14-05-2013**

Subject Name: Wireless and Mobile Network Architectures

Time: 10.30 am - 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 handoff? What is roaming? How do you perform handoff during roaming?	**07**
	(b)	Describe the main steps of inter –BS handoff procedure.	**07**
Q.2	**(a)**	Describe some filtering methods for link measurements.	**07**
	(b)	Can you implement MCHO or MAHO on FDMA based systems? tify your answer.	**07**
		OR	
	(b)	Describe four different channel assignment schemes.	**07**
Q.3	**(a)**	What are the main steps of the MAHO link transfer ?	**07**
	(b)	Compare soft handoff with hard handoff.	**07**
		OR	
Q.3	**(a)**	Plot the flowcharts for the various IS-41 intersystem handoff types.	**07**
	(b)	What are the main steps in the PACS call origination process?	**07**
Q.4	**(a)**	How does DSMA work in CDPD?	**07**
	(b)	Describe the possible connection configurations for BTSs and BSCs in GSM.	**07**
		OR	
Q.4	**(a)**	Describe the code formats for MSRN and MSISDN. Explain why they have the same format.	**07**
	(b)	Can you recover a GSM system if both the HLR and VLR fail at the same time ? Justify your answer.	**07**
Q.5	**(a)**	What are the main parts of the GSM SMS protocol stack ?	**07**
	(b)	Based on GSM OA&M ,design a measurement job for GSM MS call termination.	**07**
		OR	
Q.5	**(a)**	Draw the message flow for the SGSN –initiated and MS- initiated PDP context deactivation procedures.	**07**
	(b)	Describe the WAP protocol stack.	**07**

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