Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER– V • EXAMINATION – Winter 2016

Subject Code:2650016 **Date:28/11 /2016**

Subject Name: Wireless Communication Mobile

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 are the different tiers in three tier architecture of mobile computing? Describe the functions of these tiers.	**07**
	(b)	Explain following protocol used in the Bluetooth technology. 1. Link Manager Protocol. 2. Logical Link Control and Adaptation Protocol. 3. Service Discovery protocol. 4. RFCOMM 5. Baseband	**07**
Q.2	**(a)**	How does Mobile IP works? Explain with diagram.	**07**
	(b)	What are HLR and VLR in GSM? Describe its functions in call routing and roaming.	**07**
		OR	
	(b)	Explain functional architecture of GPRS system. What is the frequency range of uplink and downlink in GPRS network?	**07**
Q.3	**(a)**	Give functional differences between CDMA and GSM	**07**
	(b)	What are AOC and SOC client? Compare AOC and SOC clients	**07**
		OR	
Q.3	**(a)**	Explain concerned parameters and benefits of wireless network.	**07**
	(b)	State the requirements of WAP and explain different layers of WAP. What are the advantages of WML Script over WML?	**07**
Q.4	**(a)**	What is spread spectrum? Write Note on TDMA, FDMA , CDMA.	**07**
	(b)	What is middleware? Describe its significance in handling the context of any application.	**07**
		OR	
Q.4	**(a)**	Explain Value Added Services Through SMS	**07**
	(b)	What is Handoff? Explain Types of Handoff.	**07**
Q.5	**(a)**	Explain the architecture of SMS.	**07**
	(b)	Write brief notes on: a. CCIPP b. Policy Manager	**07**
		OR	
Q.5	**(a)**	Explain the IEEE 802.11 family of standards.	**07**
	(b)	What do you understand by security algorithms and security protocols? Differentiate between security algorithm and security protocols.	**07**

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