Seat No.: _____ *Enrolment No._____*

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – I • EXAMINATION – WINTER • 2013

Subject code: 712304N **Date: 06-01-2014**

Subject Name: Ubiquitous Computing

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)**	Define and classify handover. Explain each in detail.	**07**
	(b)	Draw the Reference Architecture of GSM. Explain in brief the function of every block	**07**
Q.2	**(a)**	Write short note on GSM radio interface.	**07**
	(b)	Write short note on DECT protocol architecture.	**07**
		OR	
	(b)	MAC management of IEEE 802.11.	**07**
Q.3	**(a)**	Explain DHCP in detail.	**07**
	(b)	List necessary configuration parameters to adapt TCP in wireless environment. Explain each in detail.	**07**
		OR	
Q.3	**(a)**	Write short note on : Bluetooth Security	**07**
	(b)	Discuss the advantages of CDMA technology. Why orthogonal codes are used in CDMA mobile?	**07**
Q.4	**(a)**	What is Mobile-IP? Explain tunneling and encapsulation in the context of Mobile IP.	**07**
	(b)	Compare I-TCP with S-TCP.	**07**
		OR	
Q.4	**(a)**	Explain DECT system and its protocol architecture in detail.	**07**
	(b)	Write a note on mobile operating system. Explain any one in detail.	**07**
Q.5	**(a)**	State the requirements of WAP and explain different layers of WAP.	**07**
	(b)	Explain problem of hidden and exposed terminal. Explain scheme to solve it.	**07**
		OR	
Q.5	**(a)**	Write note on wireless network simulators.	**07**
	(b)	Describe mobile oriented call (MOC) and mobile terminated call (MTC) setup in GSM.	**07**

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