Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

ME – SEMESTER III (NEW) – EXAMINATION – WINTER-2016

Subject Code: 2730206 **Date:25/10/2016**

Subject Name: Ubiquous Computing

Time:02:30 pm to 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 Spread Spectrum technology? Explain DSSS and FHSS in detail with suitable examples.	**07**
	(b)	Explain routing in mobile ad-hoc network.	**07**
Q.2	**(a)**	Explain in detail advantages, disadvantages and design goals for WLANs.	**07**
	(b)	Describe GSM System Architecture with the functionalities provided by each of its subsystems.	**07**
		OR	
	(b)	Write short note on DECT protocol architecture.	**07**
Q.3	**(a)**	Answer the following Questions.	
		1. Explain Agent Discovery in Mobile IP.	**04**
		2. Give merits & demerits of TDM and FDM.	**03**
	(b)	Write a Short note on Wireless Sensor Network.	**07**
		OR	
Q.3	**(a)**	Explain Tunneling - Detunneling and types of Encapsulation in Mobile IP.	**07**
	(b)	What is Android? Draw and explain Android Architecture.	**07**
Q.4	**(a)**	Write short note on: Wireless Markup Language.	**07**
	(b)	What do you mean by HCI? Describe different interface designs of HCI. Give examples of three different applications where HCI is being used.	**07**
		OR	
Q.4	**(a)**	Explain WAP 2.0 architecture in detail.	**07**
	(b)	What is Ubiquitous Communication? Explain Audio Networks, Data Networks and Wireless Data Networks.	**07**
Q.5	**(a)**	What are the types of animation offered by android? When to use each type of animation and how?	**07**
	(b)	Develop an Android Application for Calculator with simple arithmetic operators.	**07**
		OR	
Q.5	**(a)**	What is SQLite database? Explain How to provide the database connection using SQLite database.	**07**
	(b)	Develop Android App for Picture Book with Forward and Previous Button to load image.	**07**

****