

GUJARAT TECHNOLOGICAL UNIVERSITY
ME – SEMESTER III (NEW) – EXAMINATION – WINTER-2016

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