Seat No.:	Enrolment No
	<b>GUJARAT TECHNOLOGICAL UNIVERSITY</b>
	ME SEMESTED III (NEW) • EXAMINATION SHMMED 201

ME – SEMESTER III (NEW) – • EXAMINATION – SUMMER 2016 Subject Code: 2730206 Date: 03/05/2016 **Subject Name: Ubiquous Computing** 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. Describe any one mobile operating system and explain how they are different 07 **Q.1** (a) than the computer based operating system. What is Spread Spectrum? Compare direct sequence spread spectrum and **(b)** 07 frequency hopping spread spectrum. **Q.2** (a) Draw and explain the system architecture of infrastructure based IEEE 07 802.11. Write advantages and disadvantages of Wireless LAN. Explain calling in GSM. 07 **(b)** OR Write a short note on Digital Enhanced Cordless Telecommunications (DECT). 07 **(b)** What is the need of mobile IP? Explain agent discovery in mobile IP. 07 0.3 (a) Explain the evolution of cellular communication from 1G to 3G. 07 **(b)** OR What are WML features? What are the additional capabilities offered by WML **Q.3** 07 (a) Script than WML? Describe the WAP architecture in detail? Also describe how it is different from 07 **(b)** OSI Reference Model? 0.4 (a) Write a short note on Wireless Sensor network. 07 What do you mean by HCI? Describe different interface designs of HCI. 07 **(b)** OR Explain routing in mobile ad-hoc network. Compare wired network with mobile 07 **Q.4** (a) ad-hoc network. What is Ubiquitous Communication? Explain Data networks, Wireless Data 07 **(b)** Networks and Ubiquitous Networks. 0.5 Explain Explicit Intent and demonstrate it by writing code for small android **07** (a) application **(b)** Differentiate between the Relative Layout and Absolute Layout. Write Code for **07** Creating Login Activity in Absolute Layout. OR (a) Write a code to Develop Android App for Picture Book with Forward and **07** Q.5 Previous Button to load image. Write a code to Develop Android App for Picture Book with Forward and Previous Button to load image. Explain Following Terms. 07 **(b)** (1) Dalvik Virtual Machine (DVM) (2) Android Virtual Device (AVD) (3) Intent

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(4) SDK Manager