Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

M.C.A. – SEMESTER-V • EXAMINATION – WINTER 2015

Subject Code: 2650016 **Date:10/12/2015**

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? Describe the functions of these tiers?	**07**
	(b)	What is WiMax? How is it different from WiFi? Explain the WiMax physical layer.	**07**
Q.2	**(a)**	Give the full form of the followings: (Any seven) a. PLMN b.GSM c. VHE d. CDMA e. WTLS f. GPRS g. MSRN h. IMEI	**07**
	(b)	Describe the GSM architecture.	**07**
		OR	
	(b)	Discuss the protocol Stack of Bluetooth.	**07**
Q.3	**(a)**	Explain wireless LAN advantages in detail.	**07**
	(b)	Describe the spread-spectrum technology in detail.	**07**
		OR	
Q.3	**(a)**	What is RFID? Explain active RFID and passive RFID. Also describe two applications of active RFID and passive RFID.	**07**
	(b)	Explain value added services through SMS in detail.	**07**
Q.4	**(a)**	Describe the contrast between 3G and Wi-Fi technologies.	**07**
	(b)	What are the different components of Information security?	**07**
		OR	
Q.4	**(a)**	Explain data services in GPRS in detail.	**07**
	(b)	Give six functional differences between CDMA and GSM.	**07**
Q.5	**(a)**	Discuss the IEEE 802.11 family of standards.	**07**
	(b)	Explain mobile ad hoc networks and sensor networks in detail.	**07**
		OR	
Q.5	**(a)**	What is Mobile IP? Explain tunneling in the context of Mobile IP.	**07**
	(b)	What are the limitations of IPv4 that are overcome b y IPv6? Discuss.	**07**

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