Sea	t No.:	Enrolment No	Enrolment No	
		GUJARAT TECHNOLOGICAL UNIVERSITY		
M.E. SEMESTER III–EXAMINATION – WINTER 2015 Subject code: 2735404 Subject Name: EMBEDDED WIRELESS TECHNOLOGIES Time: 2:30 PM to 5:00 PM Instructions:			MINATION – WINTER 2015 Date: 04/12/2015	
		rks: 70		
111,	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a)	 Answer the following questions. Explain how power is provided to a passive RFID tag. How does WiMax differ from Wi-Fi? Define a pseudorandom sequence as it applies to FHSS What is the primary difference between the POP3 and IMAP protocols? Explain the socket function bind (). Why was OFDM selected for WiMax? Discuss issues of TRF receiver. 	07	
Q.2	(b) (a) (b)	Explain the GSM architecture in detail. Explain UDP SOCKET Programming in detail. What is MIMO? Explain zero forcing equalization technique in MIMO.	07 07 07	
	(b)	OR Explain TCP/IP SOCKET Programming in detail.	07	
Q.3	(a)	Explain TCP/IP architecture and differentiate with OSI stack.	07	
•	(b)	Explain any two Internet application protocol in detail. OR	07	
Q.3	(a) (b)	Explain Development tools of SDK. Explain Protocol debugging and testing tools.	07 07	
Q.4	(a) (b)	Explain GPRS architecture in detail. Explain RFID Implementation with any one Microcontroller OR	07 07	
Q.4	(a) (b)	Explain Bluetooth architecture stack in detail. Explain Zigbee Implementation with any one Microcontroller	07 07	
Q.5	(a)	Explain practical application of Health Monitoring and data Transmission by	07	

2) Discuss difference between 1G, 2G, 3G and 4G technologies.

OR

Q.5 (a) Explain practical application of Industrial Automation and agriculture by embedded unit.

(b) 1) Explain DSSS in detail.
2) What is software defined radio?

1) Explain the WLAN physical layer frame as per 802.11a?

embedded unit.

(b)

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