Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – II • EXAMINATION – WINTER • 2013

Subject code: 1720101 **Date: 24-12-2013**

Subject Name: Wirelesss Networking and Mobile Computing

Time: 10.30 am – 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)**	Explain Bluetooth protocol stack with each layer in brief.	**07**
	(b)	What is Multiplexing? Explain Frequency Division Multiplexing and Code Division Multiplexing.	**07**
Q.2	**(a)**	Explain Advanced Phase Shift Keying.	**07**
	(b)	Explain Snooping TCP in detail.	**07**
		OR	
	(b)	Explain Frequency Hoping Spread Spectrum.	**07**
Q.3	**(a)**	Explain coding method in CDMA.	**07**
	(b)	Explain Architecture of GSM System.	**07**
		OR	
Q.3	**(a)**	Explain L2CAP protocol in Bluetooth.	**07**
	(b)	Write a WML Script to implement calculator functionality	**07**
Q.4	**(a)**	Write NS2 TCL script for network consists of 4 nodes n0, n1, n2, n3. The duplex links between n0 and n2, and n1 and n2 have 2 Mbps of bandwidth and 10 ms of delay. The duplex link between n2 and n3 has 1.7 Mbps of bandwidth and 20 ms of delay.	**07**
	(b)	Explain DSR (Dynamic Source Routing) in Mobile Node	**07**
		OR	
Q.4	**(a)**	Explain GPRS Architecture reference model	**07**
	(b)	Discuss DECT Protocol Layers.	**07**
Q.5	**(a)**	Explain DFWMAC-DCF with RTS/CTS extension	**07**
	(b)	Explain WAP 2.0 Architecture with figure.	**07**
		OR	
Q.5	**(a)**	Explain DFWMAC-PCF with Polling.	**07**
	(b)	Explain Synchronization in MAC Management of IEEE 802.11	**07**

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