Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VII • EXAMINATION – SUMMER 2013

Subject Code: 170702N   **Date: 24-05-2013**

Subject Name: Wireless Communication & Mobile Programming

Time: 02.30 pm - 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)	Describe the various aspects of mobility with respect to Mobile Computing and list the variants of Mobile Computing.	7
	(b)	What is ICAP? Explain the typical data flow scenario in ICAP environment.	7
Q.2	(a)	What SOC and AOC Clients? Compare them.	7
	(b)	What is piconet and scatternet? Explain. How many maximum numbers of devices can communicate within one piconet?	7
		OR	
	(b)	Explain WiMAX three layer architecture.	7
Q.3	(a)	Explain the following TCP variants	8
		• Indirect TCP	
		• Snooping TCP	
	(b)	Why conventional network IP is not suitable for mobile environment? How Mobile IP works?	6
		OR	
Q.3	(a)	Explain the Tunneling Operation in Mobile IP.	8
	(b)	Explain the IPv6.	6
Q.4	(a)	Explain the importance of following identifiers with that GSM is deals with:	8
		• IMEI	
		• IMSI	
		• MSISDN	
	(b)	Discuss the challenges for SMS as Mobile computing bearer	6
		OR	
Q.4	(a)	Explain the handover procedure in GSM system	8
	(b)	Explain the WAP Layered architecture and protocol stack.	6
Q.5	(a)	Explain the H.323 Framework for Voice Over IP (VoIP).	8
	(b)	Compare the WiFi and 3G Technologies	6
		OR	
Q.5	(a)	Do the Comparison between H.323 and SIP.	8
	(b)	Explain the Direct Sequence Spread Spectrum Techniques.	6

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