Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER-V • EXAMINATION - WINTER • 2014

Date: 08-12-2014

Subject Code: 650016

Ti	-	Name: Wireless Communication Mobile Programming 0:30 am - 01:00 pm Total Marks: 70 ns:	
	1. 2. 3.	Make suitable assumptions wherever necessary.	
Q.1	(a)	Answer the following in short. (Each carry one mark): (i) TCP Connection (ii) Registration (iii) Advertisement (iv) Time out freezing (v) AODV (vi) H.323 (vii) SIP	07
	(b)	(i) Write a note on architecture for mobile computing, also explain three tier Architecture.(ii) Write a note on History of Wireless Communication.	05
Q.2	(a)	Define the functionality of Bluetooth. Explain in detail protocol Stack of Bluetooth. Draw the frame structure of Bluetooth.	07
	(b)	Define RFID. Differentiate between active RFID and passive RFID. List down the applications of active RFID and passive RFID.	07
		OR	
	(b)	Explain 802.16 Standard in detail. Explain its operations with its advantages and disadvantages.	07
Q.3	(a)	Give the example for the following. 1) Wireless Communication, 2) Ad Hoc Networks, 3) Mobile Computing through Internet, 4) 3C, 5) CPS 6) WSP 7) PSID.	07
	(b)	through Internet, 4) 3G, 5) GPS 6) WSP 7) RFID. Give a brief idea about the architecture of GPRS. List down the applications. How does billing and charging is done with GPRS.	07
		OR	
Q.3	(a)	Give the example for the following. 1) WLAN, 2) Ad Hoc Networks, 3) GSM Security, 4) WAP, 5) VoIP 6) 802.16 7) GPRS.	07
	(b)	How is mobile computing done over SMS? How to obtain value aided service by means of SMS. Explain how to access a SMS Bearer.	07
Q.4	(a)	(i) Explain IPv6 Frame structure in detail.(ii) What do you mean by Snooping TCP?	05 02

(b)	(i) Differentiate between H.323 and SIP.(ii) Differentiate between 802.11 and 802.16.	07
	OR	
(a)	(i) How does indirect TCP work? Explain Mobile TCP in detail.	05
(b)	(i) Differentiate between CDMA and GSM.(ii) Differentiate between GPRS and 3G.	02 07
(a)	Explain MANET (Mobile Ad hoc Network). Explain what are the issues we	07
(b)	Give full form of the following: i) VHE ii) CDMA iii) PLMN iv) MSRN v) IMEI vi) WTLS vii) MSRN	07
	OR	
(a)	What are the security issues faced by mobile technologies. Which security techniques are used to deter these attacks? Explain security framework in detail.	07
(b)	Give full form of the following: i) RTP ii) SMS iii) SIP iv) VoIP v) GPRS vi) GSM vii) SOC	07
	(a) (b) (a) (b)	(ii) Differentiate between 802.11 and 802.16. OR (a) (i) How does indirect TCP work? Explain Mobile TCP in detail. (ii) Explain how selective retransmission is done. (b) (i) Differentiate between CDMA and GSM. (ii) Differentiate between GPRS and 3G. (a) Explain MANET (Mobile Ad hoc Network). Explain what are the issues we face with faster moving nodes? (b) Give full form of the following:
