GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VII (NEW) EXAMINATION – WINTER 2022

Subject Code:3170710   **Date:10-01-2023**
Subject Name:Mobile Computing and Wireless Communication
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.**
4. **Simple and non-programmable scientific calculators are allowed.**

			MARKS
Q.1	**(a)**	Compare LAN and WAN.	**03**
	(b)	Differentiate GSM and GPRS.	**04**
	(c)	Define channel capacity. Explain Nyquist and Shannon's criteria to find Channel Capacity.	**07**
Q.2	**(a)**	Compare FDM vs TDM.	**03**
	(b)	Compare Packet Switching and Circuit switching.	**04**
	(c)	Describe GSM Authentication and security.	**07**
		OR	
	(c)	Draw and explain GSM Network Architecture.	**07**
Q.3	**(a)**	Compare HLR and VLR.	**03**
	(b)	Discuss any Error detection technique in brief.	**04**
	(c)	Describe Discovery, Registration, and tunneling process in Mobile IP.	**07**
		OR	
Q.3	**(a)**	Explain : MSISDN, IMEI and IMSI	**03**
	(b)	Discuss GSM call routing in brief.	**04**
	(c)	Explain Automatic repeat request in detail.	**07**
Q.4	**(a)**	Discuss Space Division Multiple Access.	**03**
	(b)	Draw and explain IEEE 802.11 Architecture.	**04**
	(c)	Describe Direct Sequence Spread Spectrum Technique.	**07**
		OR	
Q.4	**(a)**	Explain Propagation Modes in brief.	**03**
	(b)	Define Android Activity and Write Android Activity Life cycle.	**04**
	(c)	Describe Frequency Hopping Spread Spectrum Technique.	**07**
Q.5	**(a)**	Compare Wi-Fi and Wi-Max.	**03**
	(b)	What is Intents? Explain the types of Intents.	**04**
	(c)	Explain Bluetooth protocol stack.	**07**
		OR	
Q.5	**(a)**	Discuss Piconet and Scatternet in brief.	**03**
	(b)	Describe Android Button View Control and Text View Control	**04**
	(c)	Discuss various Android Layouts.	**07**

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