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

Subject Code:3170710   **Date:08/06/2022**
Subject Name:Mobile Computing and Wireless communication
Time:02:30 PM TO 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.**
4. **Simple and non-programmable scientific calculators are allowed.**

			MARKS
Q.1	**(a)**	Enlist various multiplexing techniques and explain any one.	**03**
	(b)	Compare Packet switching and Circuit Switching.	**04**
	(c)	Define channel capacity and various factors which affect it. State Nyquist and Shannnon criteria.	**07**
Q.2	**(a)**	Define Scattering, Refraction and Reflection.	**03**
	(b)	Describe Hamming code in brief.	**04**
	(c)	Explain Direct Sequence Spread Spectrum with example.	**07**
		OR	
	(c)	Explain Frequency Hopping Spread Spectrum.	**07**
Q.3	**(a)**	Enlist types of Antenna and Explain any one of them.	**03**
	(b)	Describe CRC in brief.	**04**
	(c)	Compare 1G,2G,3G and 4G technology.	**07**
		OR	
Q.3	**(a)**	Explain Piconet and Scatternet.	**03**
	(b)	Describe WAP in brief.	**04**
	(c)	Describe Multiple Access with Collision Avoidance and explain how hidden terminal problem can be solved by it.	**07**
Q.4	**(a)**	Define IMSI,MSISDN and LMSI.	**03**
	(b)	Draw GPRS protocol stack and write the functions of GTP,LLC protocols.	**04**
	(c)	Draw and describe GSM Architecture.	**07**
		OR	
Q.4	**(a)**	Define TMSI,LAI and IMEI.	**03**
	(b)	Enlist types of Handover and explain any one.	**04**
	(c)	Write short note on Mobile IP.	**07**
Q.5	**(a)**	Discuss type of Intents.	**03**
	(b)	Compare Wi fi and Wi Max	**04**
	(c)	Draw and explain Android Architecture.	**07**
		OR	
Q.5	**(a)**	Compare HLR and VLR.	**03**
	(b)	Draw and describe Bluetooth protocol architecture in brief.	**04**
	(c)	Enlist various Android layouts and explain them.	**07**

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