

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VII (NEW) EXAMINATION – SUMMER 2021****Subject Code:2170710****Date:05/08/2021****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 markss.

		MARKS
<b>Q.1</b>	(a) Explain Piconet and Scatternet.	<b>03</b>
	(b) Differentiate packet switching and circuit switching.	<b>04</b>
	(c) Explain Mobile IP.	<b>07</b>
<b>Q.2</b>	(a) Define IMSI, IMEI and MSISDN.	<b>03</b>
	(b) Define Multiplexing. Explain the FDM and TDM.	<b>04</b>
	(c) Write a note on stop-and-wait and selective repeat ARQ.	<b>07</b>
	<b>OR</b>	
<b>Q.3</b>	(c) Explain GSM architecture.	<b>07</b>
	(a) Explain SGSN and GGSN?	<b>03</b>
	(b) What is noise? Discuss briefly types of noise and its effect on transmission signal.	<b>04</b>
	(c) Explain IEEE 802.11 architecture and its services.	<b>07</b>
	<b>OR</b>	
<b>Q.3</b>	(a) What is channel capacity? What are the factors that affect it?	<b>03</b>
	(b) Discuss the A3 and A8 algorithms.	<b>04</b>
	(c) Explain GSM call routing.	<b>07</b>
<b>Q.4</b>	(a) Define Reflection, Refraction and Handover.	<b>03</b>
	(b) Describe any one error detection technique with suitable example.	<b>04</b>
	(c) Explain direct sequence spread spectrum with example.	<b>07</b>
	<b>OR</b>	
<b>Q.4</b>	(a) Define ASK, FSK and PSK.	<b>03</b>
	(b) Differentiate GSM and CDMA.	<b>04</b>
	(c) Explain the GPRS transmission plane protocol model.	<b>07</b>
<b>Q.5</b>	(a) Discuss Activity life cycle in Android.	<b>03</b>
	(b) Discuss the manifest file with example.	<b>04</b>
	(c) Draw and explain Android platform architecture.	<b>07</b>
	<b>OR</b>	
<b>Q.5</b>	(a) Explain types of Intents.	<b>03</b>
	(b) Explain Android EditText and TextView control with an example.	<b>04</b>
	(c) Write a note on Bluetooth protocol stack.	<b>07</b>

\*\*\*\*\*