

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2021****Subject Code:3171608****Date:10/12/2021****Subject Name: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) What is Wireless Communication? Also Explain the Types of Wireless Communication.	03
	(b) Explain the Difference between Wired and Wireless Communication.	04
	(c) Explain the Evolution of Mobile Communication.	07
Q.2	(a) What is Wi-Fi?	03
	(b) Explain the CSMA Protocols in Detail.	04
	(c) Write a Short notes.1) TDMA 2) CDMA	07
OR		
(c)	Write a Short notes.1) FDMA 2) OFDM	07
Q.3	(a) Explain the Wireless Protocol.	03
	(b) What is Soft Handoff in Wireless Systems?	04
	(c) Explain the GSM Architecture.	07
OR		
Q.3	(a) Explain the Difference LAN and WLAN.	03
	(b) Explain the Indoor and outdoor propagation models.	04
	(c) Explain the GPRS Architecture.	07
Q.4	(a) Explain the CDMA features. (Any Four)	03
	(b) Write Short Note: ZigBee Networks	04
	(c) Explain the Authentication and security in GSM	07
OR		
Q.4	(a) Write Short Note : Hand Over	03
	(b) Explain the Security issues and challenges in a Wireless network.	04
	(c) What is UWB Radio? Explain in Detail.	07
Q.5	(a) Write a short Note : Bluetooth	03
	(b) Write a short Note : Personal Area Network	04
	(c) Explain the Wireless Ad Hoc Network and Mobile Portability.	07
OR		
Q.5	(a) Explain the Small scale multipath propagation.	03
	(b) Explain the cell Splitting and cell sectorization.	04
	(c) Explain Hexagonal geometry cell and concept of frequency reuse,	07
