Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE – SEMESTER- VII EXAMINATION-SUMMER 2023

Subject Code: 3170627   **Date: 30/06/2023**
Subject Name: ICT For Development
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)**	Define following terms: a) Packet b) Circuit c) Router	**03**
	(b)	Write a short note on fiber optics.	**04**
	(c)	Write a short note on RFID technology.	**07**
Q.2	**(a)**	Define: LAN, WAN & MAN	**03**
	(b)	What is GIS. Explain in detail the components of GIS.	**04**
	(c)	Give advantages and disadvantages of cloud technology.	**07**
		OR	
	(c)	Justify the statement: "Cloud computing is an emerging area of infrastructure development."	**07**
Q.3	**(a)**	Briefly explain concept of Data center.	**03**
	(b)	Give difference between Primary and secondary storage.	**04**
	(c)	Differentiate between software as a service (SaaS) and Platform as a service (PaaS).	**07**
		OR	
Q.3	**(a)**	What are the roles of ERP in the CRM?	**03**
	(b)	Write the short note on Operating Systems.	**04**
	(c)	What is IaaS? Give role of IaaS in cloud computing.	**07**
Q.4	**(a)**	Briefly explain smart security.	**03**
	(b)	Give the role of IoT in civil engineering.	**04**
	(c)	Enlist various types of sensors. Give detail explanation of any two types of sensors.	**07**
		OR	
Q.4	**(a)**	Briefly explain smart sanitation.	**03**
	(b)	Explain following terms: 1. Temperature Sensor, 2. Pressure Sensor	**04**
	(c)	Explain the term Smart Home. How Smart Mobility and Smart Public Safety helpful for smart homes.	**07**
Q.5	**(a)**	Explain the importance of virtual machine.	**03**
	(b)	Briefly explain hardware-level virtualization.	**04**
	(c)	Write the short note on use of Augmented Reality (AR) in navigation.	**07**
		OR	
Q.5	**(a)**	Briefly explain AR in search engine.	**03**
	(b)	Define virtualization. Explain para virtualization.	**04**
	(c)	Explain VR technology. Give its application in civil engineering.	**07**