

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – SUMMER 2024****Subject Code:3170627****Date:30-05-2024****Subject Name:ICT For Development****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) Define the terms: 1. Packet, 2. Circuit, 3. Routers	03
	(b) Briefly explain the role of computer and internet as a key feature of modern Information and communication technology.	04
	(c) Give the different types of topology. Explain any two in detail.	07
Q.2	(a) Define the terms: LAN, WAN and MAN.	03
	(b) Explain GIS and its application in civil engineering.	04
	(c) Define RFID technology. Give its uses in construction.	07
	OR	
Q.3	(c) What is GIS? Explain the components of GIS.	07
	(a) Briefly explain concept of Data center.	03
	(b) Write the short note on Operating Systems.	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) Differentiate between Primary and secondary storage.	04
	(c) Explain term cloud computing? Explain the concept IaaS in detail.	07
Q.4	(a) Explain the concept of Smart homes.	03
	(b) Explain smart public safety and smart sanitation.	04
	(c) Enlist various types of sensors. Explain any three types of sensor in detail.	07
	OR	
Q.4	(a) Explain the terms: 1. Smart Security, 2. Smart Mobility and 3. Smart meter.	03
	(b) Describe the role of IoT in Civil Engineering.	04
	(c) Explain the term Smart Home. How Smart Mobility and Smart Public Safety helpful for smart homes.	07
Q.5	(a) Explain operating system level virtualization.	03

(b) Give the advantages and disadvantages of AR-VR technology. **04**

(c) Give the difference between Augmented reality & Virtual reality. **07**

OR

Q.5 (a) Explain briefly Para-virtualization. **03**

(b) Explain the concepts of virtual machine. **04**

(c) Write the short note on Use of augmented reality (AR) in navigation. **07**