

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2022****Subject Code:3170627****Date:07-01-2023****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
<b>Q.1</b>	(a) Define the terms: 1. Packet, 2. Circuit, 3. Routers.	<b>03</b>
	(b) Give the importance of internet and computer as a key feature of tool of modern Information and communication technology.	<b>04</b>
	(c) Give the different types of topology. Explain each in detail.	<b>07</b>
<b>Q.2</b>	(a) Define : LAN, WAN, and MAN	<b>03</b>
	(b) Explain GIS and its application in civil engineering.	<b>04</b>
	(c) Briefly explain types of primary storage and secondary storage.	<b>07</b>
	<b>OR</b>	
	(c) What is IP addressing? Give the detail explanation class-A, class-B and class-C addresses.	<b>07</b>
<b>Q.3</b>	(a) Explain the term cloud computing.	<b>03</b>
	(b) Explain the roles of ERP in the CRM?	<b>04</b>
	(c) Explain Cloud computing and explain the concept of SaaS in detail	<b>07</b>
	<b>OR</b>	
<b>Q.3</b>	(a) Write the short note on Operating Systems.	<b>03</b>
	(b) Write a note on RFID technology.	<b>04</b>
	(c) Differentiate between software as-a service (SaaS) and platform as-a service (PaaS).	<b>07</b>
<b>Q.4</b>	(a) Justify the statement: “IoT the emerging technology for Civil Engineering.”	<b>03</b>
	(b) Explain smart public safety and smart sanitation.	<b>04</b>
	(c) Explain the concept of smart homes.	<b>07</b>
	<b>OR</b>	
<b>Q.4</b>	(a) What is sensor? Briefly explain types of sensor.	<b>03</b>
	(b) Give the application of IoT in Civil Engineering.	<b>04</b>
	(c) Enlist various types of sensors. Explain any three types of sensor in detail.	<b>07</b>
<b>Q.5</b>	(a) Justify the statement – “AR and VR technologies are a new key feature in civil engineering.”	<b>03</b>
	(b) Explain the importance of virtual machine.	<b>04</b>
	(c) Differentiate between Augmented reality & Virtual reality.	<b>07</b>
	<b>OR</b>	
<b>Q.5</b>	(a) Give the advantages and disadvantages of Augmented Reality (AR).	<b>03</b>
	(b) Define virtualization. Explain para virtualization.	<b>04</b>
	(c) Define Augmented reality and virtual reality. Write the short note on application of such technology in navigation.	<b>07</b>

\*\*\*\*\*