

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2021****Subject Code: 3170627****Date: 27/12/2021****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 the terms: LAN, WAN and MAN.	03
	(b) Justify the statement: “Computer and Internet - The key feature of modern Information and communication technology.”	04
	(c) What are the various network topologies explain with example?	07
Q.2	(a) Define GIS. Give the application of GIS in civil engineering.	03
	(b) What is Cloud computing? Give the types of cloud deployment.	04
	(c) What is IP addressing? Give the detail explanation class A, class B and class C addresses.	07
	OR	
	(c) Define RFID technology. Give its uses in construction.	07
Q.3	(a) Define ERP. Briefly explain the components of the ERP system.	03
	(b) Give the difference between wireless networks and Mobile network.	04
	(c) Explain Cloud computing and explain the concept of IaaS in detail.	07
	OR	
Q.3	(a) What are the roles of ERP in the CRM?	03
	(b) What is Primary and secondary storage?	04
	(c) Differentiate between software-as-a-service (SaaS) and platform-as-a-service (PaaS).	07
Q.4	(a) Give the detail short note on Smart Public Safety.	03
	(b) What are the uses of IoT in civil engineering?	04
	(c) Write down different types of Sensors. Explain Temperature sensor and Fibre Optic Sensor in detail.	07
	OR	
Q.4	(a) Explain in briefly how Sensor works?	03
	(b) Explain following terms: 1. Moisture sensor 2. Tilt sensor	04
	(c) Write detailed short note on Concept of Smart Home.	07
Q.5	(a) Justify the statement: “AR and VR technologies are emerging trends for development.”	03
	(b) Define virtualization. Explain types of virtualization.	04
	(c) Write the short note on Use of augmented reality (AR) in navigation.	07
	OR	
Q.5	(a) Explain the concepts of virtual machine	03
	(b) Give the advantages and disadvantages of Augmented Reality (AR).	04
	(c) Differentiate between Augmented reality & Virtual reality.	07

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – SUMMER 2022****Subject Code:3170627****Date:06/06/2022****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

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|------------|--|-----------|
| Q.1 | (a) Define the terms: LAN, WAN and MAN. | 03 |
| | (b) Briefly explain managed and unmanaged switches. | 04 |
| | (c) What are the various network topologies explain with example? | 07 |
| Q.2 | (a) Define the terms: 1. Packet, 2. Circuit and 3. Router. | 03 |
| | (b) What is Cloud computing? Give the types of cloud deployment. | 04 |
| | (c) What is GIS? Explain in detail Components of GIS. | 07 |
| | OR | |
| | (c) What is IP addressing? Give the detail explanation class A, class B and class C addresses. | 07 |
| Q.3 | (a) What are the roles of ERP in the CRM? | 03 |
| | (b) Give difference between Primary and secondary storage. | 04 |
| | (c) Explain term cloud computing? Explain the concept PaaS in detail. | 07 |
| | OR | |
| Q.3 | (a) Write short note on Operating System. | 03 |
| | (b) Explain uses of RFID technology in construction. | 04 |
| | (c) Differentiate between software-as-a-Service (SaaS) and platform-as-a-Service (PaaS). | 07 |
| Q.4 | (a) Explain the terms: 1. Smart Security, 2. Smart Mobility and 3. Smart Sanitation. | 03 |
| | (b) Explain in briefly how Sensor works and enlist the types of sensors. | 04 |
| | (c) Define Internet of Things. How it plays an important role for Smart home. | 07 |
| | OR | |
| Q.4 | (a) Justify the statement: "IoT – The emerging technology in the field of Civil Engineering." | 03 |
| | (b) What are the uses of IoT in civil engineering? | 04 |
| | (c) Write detailed short note on Concept of Smart Home. | 07 |
| Q.5 | (a) Explain the concepts of virtual machine. | 03 |
| | (b) Give the advantages and disadvantages of AR-VR technology. | 04 |
| | (c) Differentiate between Virtual reality & Augmented reality. | 07 |
| | OR | |
| Q.5 | (a) Define virtualization. Explain in detail types of virtualization. | 03 |
| | (b) Define Virtual Machine. Explain Para-Virtualization in detail. | 04 |
| | (c) Write the short note on Use of augmented reality (AR) in navigation. | 07 |
