

**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.

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

\*\*\*\*\*

**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**

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

\*\*\*\*\*