Seat No. /Enrollment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA-SEMESTER-I-EXAMINATION-WINTER-2025

Subject Code: MB01096011   **Date: 17/01/2026**
Subject Name: Information Technology Management
Time: 10:30 AM TO 01:30 PM   **Total Marks: 70**

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

Q. No.	Question Text and Description	Marks
Q.1	**(a)** Define the treads in IT sectors.	**14**
	(b) What is the importance of data visualization in business decision-making?	
	(c) Define MAN and provide an example of its use.	
	(d) What is a digital dashboard?	
	(e) Explain the concept of analog and digital signals.	
	(f) Explain the internet protocol.	
	(g) Differentiate telnet server and telnet client.	
Q.2	**(a)** Define data and information. Discuss the key attributes that differentiate data from information in an organizational setting.	**07**
	(b) Discuss how information systems can provide a competitive advantage using Porter's Five Forces Model. Provide examples to illustrate your points.	**07**
	OR	
	(b) Describe the Value Chain Model and how organizations can leverage information systems to enhance each stage of the value chain.	**07**
Q.3	**(a)** Explain Management Information Systems (MIS). What are their primary functions, and how do they aid in managerial decision-making? Illustrate with practical examples.	**07**
	(b) Explain the importance of data visualization in organizational decision-making. What tools and techniques are commonly used for data visualization, and why are they essential?	**07**
	OR	
Q.3	**(a)** What are the key differences between analog and digital data, and how do these differences impact data transmission?	**07**
	(b) Explain Types of Information Technology Systems.	**07**
Q.4	**(a)** Explain the types of the network.	**07**
	(b) What is characteristic and component of data communication?	**07**
	OR	
Q.4	**(a)** Explain the type of the connectivity.	**07**

(b) How do viruses, worms, and spyware differ in their functionality and impact on information security?   **07**

Q.5 **CASE STUDY:**
Background:
HealthPlus Solutions is a mid-sized healthcare IT company specializing in providing software solutions for hospitals and clinics. As the demand for their services grew, the company faced challenges related to data management, regulatory compliance, and effective communication among teams. To enhance their operations and better serve their clients, HealthPlus decided to implement a strategic IT overhaul.

Implementation:
Integrated Health Management System:
HealthPlus implemented a comprehensive electronic health record (EHR) system that integrates patient data, billing information, and appointment scheduling. This system enabled healthcare providers to access patient information in real-time, improving the quality of care and operational efficiency.

Cloud Storage Solutions:
To address data management challenges, the company migrated to a secure cloud storage solution. This shift ensured that sensitive patient data was stored securely while allowing for easy access and collaboration among healthcare providers.

Regulatory Compliance Training:
Understanding the importance of compliance with healthcare regulations (such as HIPAA), HealthPlus instituted mandatory training programs for all employees. These sessions focused on best practices for data handling and the legal implications of non-compliance.

Collaboration Tools:
The company adopted collaboration tools (such as Microsoft Teams) to facilitate communication among remote teams. These tools helped streamline project discussions and document sharing, leading to better teamwork and project outcomes.

(a) What challenges did HealthPlus Solutions face before implementing its new IT strategy? Discuss how these challenges affected their operations?   **07**

(b) Discuss the measures HealthPlus Solutions took to enhance data security. Why are these measures particularly important in the healthcare industry?   **07**

OR

Q.5 **(a)** Explain how the collaboration tools implemented by HealthPlus Solutions contributed to improved teamwork. What specific benefits did these tools provide to remote teams?   **07**

(b) What were the overall outcomes of HealthPlus Solutions' IT strategy implementation? Discuss the changes in patient care, employee satisfaction, and operational efficiency.   **07**

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