Enrollment No./Seat No.: _____

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

Subject Code: MB01092031   **Date: 19-01-2026**

Subject Name: Information Systems and Analytics for Management Decision Making

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.

		Marks
Q.1	ALL 7 Questions must be Compulsory.	**14**
(a)	IoT	
(b)	E-governance	
(c)	Low-Cost Leadership Strategy	
(d)	DSS	
(e)	Strategic Managers	
(f)	Data Warehouse	
(g)	Data Mining	
Q.2 (a)	Define IS. Explain any THREE strategic objectives of IS with examples.	**07**
(b)	You are working as a Director of an MBA school. Explain various types of decisions (at least TWO for each level) people working at different levels of management need to make giving reasons thereof.	**07**

OR

(b)	Use Porter's value chain model to explain different activities of the organization of your choice. Very briefly mention, how IS might help perform any FOUR of these activities?	**07**
Q.3 (a)	Explain any TWO types of information systems that serve the different management levels within an organization by giving appropriate examples.	**07**
(b)	Define Business Analytics. Explain different types of business analytics keeping in mind any business/company of your choice.	**07**

OR

(a)	Explain CRM and application of IS in CRM.	**07**
(b)	What do you mean by KPI? Explain any FIVE KPIs that you would like to track about an industry/company of your choice giving reasons.	**07**
Q.4 (a)	Explain Data Mining process.	**07**

(b) Discuss Retail analytics with suitable examples. **07**

<div align="center">**OR**</div>

(a) Discuss Web Analytics and its applications. **07**

(b) What do you mean by Dashboard? You are working as a Marketing Manager in Health Care Industry. List any FIVE metrics that you would like to have on your dashboard. **07**

Q.5 **Digital Transformation at Gujarat Bank**

Gujarat Bank is a leading commercial bank with over 1,200 branches and a vast network of third-party vendors, ranging from IT infrastructure providers to specialized legal and audit firms. By 2020, Bank faced significant operational friction. Their "Physical Supply Chain" (office supplies, ATM hardware, and marketing materials) was managed in silos, while their "Financial Supply Chain" (cash flow management, vendor payments, and inter-branch settlements) relied on aging legacy systems.

This lack of integration led to several critical issues:

- Operational Inefficiency: Procurement of hardware for new branches took weeks due to manual approval workflows.
- Compliance Risks: Without a centralized vendor management system, the bank struggled to track the regulatory compliance of its 500+ service providers, risking heavy fines.
- Liquidity Management: The treasury department lacked real-time visibility into outgoing vendor payments, making it difficult to optimize the bank's daily cash position.

In 2021, the bank implemented a cloud-based ERP system with an integrated SCM and Procurement module. The transformation focused on three pillars:

1. Vendor Life-cycle Management: A centralized portal for on-boarding vendors, ensuring they meet various legal requirements and data security standards before a single contract is signed.
2. Automated Financial Flow: Linking the procurement of physical assets (like ATMs) directly to the General Ledger in the ERP, allowing for automated invoicing and real-time budget tracking.
3. Predictive Analytics: Using the ERP's AI capabilities to forecast "internal demand" for cash and physical resources across branches.

As a result of this initiative, the bank reduced its procurement cycle time by 40%. The integration of SCM data into the ERP allowed the treasury team to improve cash flow forecasting accuracy by 20%, and the bank successfully automated 90% of its regulatory compliance reporting for third-party vendors.

(a) In a service-oriented industry like banking, what constitutes the "Supply Chain"? Explain. **07**

(b) Explain the concept of "Real-time Liquidity" in the context of ERP-SCM integration. **07**

OR

(a) How does an integrated ERP system enhance "Operational Risk Management" for a bank? **07**

(b) What are the primary barriers to implementing ERP in a legacy-heavy banking environment? **07**

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