

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA-SEMESTER-I-EXAMINATION-WINTER-2024

Subject Code: MB01092031**Date: 17/01/2025****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.

Q. No.	Question Text and Description	Marks
Q.1	Definitions / terms / explanations / short questions based on concepts of theory/practical (a) Snowflake schema (b) OLTP (c) Data and Information (d) Text mining (e) Data visualization (f) Predictive Business analytics (g) KPI	14
Q.2	(a) Discuss the components of IS in details.	07
	(b) Explain different type of decision with suitable example.	07
OR		
	(b) Explain how Information system supports business organization.	07
Q.3	(a) Discuss in details ERP.	07
	(b) What is a Transaction Processing System? How does TPS work in MIS?	07
OR		
Q.3	(a) What are the major differences in Business Intelligence and Business Analytics?	07
	(b) Explain different types of OLAP operations like Roll – up, Drill Down, Slicing, and Dicing with proper examples.	07
Q.4	(a) What are key performance indicators of a successful business unit?	07
	(b) How can Social Media analytics be useful to business?	07

OR

- Q.4** (a) What is text mining? Discuss applications of text mining. **07**
(b) Discuss HR analytics with suitable example. **07**

CASE STUDY:

A waiter takes an order at a table, and then enters it online via one of the six terminals located in the restaurant dining room. The order is routed to a printer in the appropriate preparation area: the cold item printer if it is a *salad*, the hot-item printer if it is a hot *sandwich* or the bar printer if it is a *drink*. A customer's meal check-listing (bill) the items ordered and the respective prices are automatically generated. This ordering system eliminates the old three-carbon-copy guest check system as well as any problems caused by a waiter's handwriting. When the kitchen runs out of a food item, the cooks send out an 'out of stock' message, which will be displayed on the dining room terminals when waiters try to order that item. This gives the waiters faster feedback, enabling them to give better service to the customers. Other system features aid management in the planning and control of their restaurant business.

The system provides up-to-the-minute information on the food items ordered and breaks out percentages showing sales of each item versus total sales. This helps management plan menus according to customers' tastes. The system also compares the weekly sales totals versus food costs, allowing planning for tighter cost controls. In addition, whenever an order is voided, the reasons for the void are keyed in. This may help later in management decisions, especially if the voids consistently related to food or service. Acceptance of the system by the users is exceptionally high since the waiters and waitresses were involved in the selection and design process. All potential users were asked to give their impressions and ideas about the various systems available before one was chosen.

- (a) In the light of the system, describe the decisions to be made in the area of managerial control and operational control? **07**
- (b) What information would you require to make decisions in the area of strategic planning? **07**

OR

- Q.5** (a) What would make the system a more complete MIS rather than just doing transaction process? **07**
- (b) Explain the probable effects that making the system more formal would have on the customers and the management. **07**
