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Question Paper Code	13330
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MBA - DEGREE EXAMINATIONS, NOV / DEC 2024

Second Semester

Master of Business Administration

20MBT207 - INFORMATION SYSTEMS AND BUSINESS ANALYTICS

Regulations - 2020

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

	Marks	K- Level	CO
1. Define the term Information System.	2	K1	CO1
2. Name the IS stakeholders for a retail bank.	2	K1	CO1
3. Restate ACID Properties.	2	K1	CO2
4. List the types of data models.	2	K1	CO2
5. Recall the business analytics applications in real time.	2	K1	CO3
6. Compare nominal and ordinal data.	2	K2	CO3
7. Infer whether training data and testing data are the same. If not why?	2	K2	CO4
8. Demonstrate the relation between machine learning and big data.	2	K2	CO4
9. Rephrase the term Scorecard.	2	K2	CO5
10. Contrast between the data exploration and data visualization.	2	K2	CO5

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11. a) Illustrate SDLC life cycle and elaborate on various software development life cycle methodologies.	13	K2	CO1
OR			
b) Explain IS pyramid and functional information systems with any one FIS of your choice.	13	K2	CO1
12. a) Summarize the concurrency problem in transactions and also the control techniques adopted.	13	K2	CO2
OR			
b) Outline the different types of data warehousing techniques.	13	K2	CO2
13. a) For analysing big data, machine learning uses different approaches. Identify the approaches in detail.	13	K3	CO3
OR			
b) Develop the steps involved in Business Analytics for an industry of your choice.	13	K3	CO3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

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14. a) Optimization is the backbone of machine learning. Analyse. 13 K4 CO4
OR
b) Examine the steps involved in descriptive analytics and also explain the tools used in descriptive analytics. 13 K4 CO4
15. a) Determine the various techniques and methods to visualize data. 13 K5 CO5
OR
b) Evaluate the term dashboard highlighting the benefits and design tips to get started. 13 K5 CO5

PART - C (1 × 15 = 15 Marks)
(Compulsory)

16. a) 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. 15 K5 CO5

Questions:

1. In the light of the system, describe the decisions to be made in the area of strategic planning, managerial control and operational control? What information would you require to make such decisions?