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B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

June 2025 Semester End Main Examinations

Programme: B.E. **Semester: V**
Branch: Artificial Intelligence and Machine Learning **Duration: 3 hrs.**
Course Code: 23AM5PEABI **Max Marks: 100**
Course: AI in Business Intelligence

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.

		UNIT - I	CO	PO	Marks
1	a)	Elaborate on the key elements of the Business Pressures-Responses-Support Model and how it aids in comprehending the motivations behind companies.	CO1	PO1	10
	b)	Consider a business setting where decision support and analytics are booming due to advancements beyond traditional technology growth. Share specific examples of these developments and how they are reshaping real-world decision-making in organizations?	CO1	PO1	10
		OR			
2	a)	Analyze the architecture of a Business Intelligence system by highlighting the key components and their relationships with a neat diagram.	CO1	PO2	10
	b)	Explore the three types of decision-making process in business analytics with a suitable example for each.	CO1	PO2	10
		UNIT - II			
3	a)	Facing a decline in online sales, Snapdeal E-Commerce swiftly decided to apply Simon's decision-making modelling process. Suggest key steps and decision phases to be followed by Snapdeal to address the issue.	CO1	PO2	10
	b)	Analyze the foundational structure of Mathematical Models for decision support with a neat diagram.	CO2	PO1	10
		OR			
4	a)	Explain Decision Support System and the components of a DSS framework with a neat diagram.	CO2	PO1	10
	b)	Discuss the following: i. Certainty and uncertainty ii. Risk management system	CO2	PO1	10

			UNIT - III			
	5	a)	Provide detailed examples that highlight the strategic advantages derived from data warehousing methodologies.	***CO2***	***PO1***	**5**
		b)	Examine the roles and significance of Extraction, Transformation, and Load (ETL) processes in data management. Provide real-world example to illustrate how organizations can optimize ETL processes for streamlined data integration and enhanced data-driven decision-making.	***CO2***	***PO2***	**10**
		c)	Explore the distinctive characteristics of data warehousing.	***CO2***	***PO2***	**5**
			OR			
	6	a)	Describe the main stages in the data warehousing process, from data sourcing to delivery of insights.	***CO2***	***PO1***	**10**
		b)	Compare the three main types of data warehouse architectures with suitable example for each.	***CO2***	***PO1***	**10**
			UNIT - IV			
	7	a)	Outline the phases of knowledge management process and its components with a neat diagram.	***CO3***	***PO1***	**10**
		b)	Design and implement each phase of the Knowledge Management cycle to maximize the creation, organization, and application of knowledge within an organization.	***CO3***	***PO1***	**10**
			OR			
	8	a)	How does groupwork, or teamwork, contribute to the effectiveness of decision-making? Provide examples to illustrate the impact of collaborative efforts on achieving successful outcomes.	***CO3***	***PO2***	**10**
		b)	Illustrate the various technologies that support knowledge management system with suitable examples.	***CO3***	***PO1***	**10**
			UNIT - V			
	9	a)	Compare different recommendation engines, highlighting their key principles, strengths, and limitations with a diagram for each.	***CO3***	***PO2***	**10**
		b)	Discuss the critical legal, privacy, and ethical issues associated with analytics in today's data-driven landscape.	***CO2***	***PO1***	**10**
			OR			
	10	a)	Explain the role of Web 2.0 technologies in enabling analytics for online social networking platforms.	***CO2***	***PO1***	**10**
		b)	Analyze the e-commerce organization by considering the geospatial and location as the parameters in detail with help of diagram.	***CO2***	***PO1***	**10**

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