

## SNS College of Technology



[An Autonomous Institution]
Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai

Accredited by NAAC-UGC with 'A++' Grade (Cycle III) &
Accredited by NBA (B.E CSE, EEE, ECE, Mech & B.Tech.IT)

## COIMBATORE-641 035, TAMIL NADU

## **DEPARTMENT OF MANAGEMENT STUDIES**

Academic Year : 2023-24 Semester : 02

Course Code : 23BAT615

Course Name : Artificial Intelligence for Managers

Unit : V – Frameworks for Delivering Al Solutions

## Questions [13 Marks]

- 1. Analyze how the choice of visualization technique can impact the interpretation of complex data sets. Discuss with examples how different visualization methods (e.g., bar charts, line graphs, scatter plots) can highlight various aspects of the same data.
- 2. Evaluate the role of interactive data visualizations in business analytics. How can interactivity enhance data exploration and decision-making processes compared to static visualizations? Provide examples to support your analysis.
- 3. Discuss the significance of providing context in data visualizations. Analyze a case where the lack of context led to misinterpretation of data, and suggest ways to improve the visualization by adding relevant contextual information.
- 4. Evaluate the impact of context on the effectiveness of data visualizations in communicating business insights. Analyze how different types of context (e.g., historical data, industry benchmarks) can change the audience's perception and understanding of the data presented.
- 5. Analyze the elements of effective storytelling in data visualizations. Discuss how narrative techniques can be used to enhance the communication of data insights and influence business decisions. Provide examples of successful data storytelling.
- 6. Evaluate the challenges of balancing storytelling and data accuracy in visualizations.

  Analyze a scenario where storytelling may compromise the integrity of the data, and suggest strategies to maintain both narrative engagement and data reliability.

- 7. Discuss the role of data visualization in influencing strategic business decisions. Analyze how well-crafted visualizations can lead to better decision-making in areas such as marketing, finance, and operations. Provide examples to illustrate your points.
- 8. Evaluate the effectiveness of using data visualizations to persuade stakeholders.

  Analyze the key factors that contribute to a persuasive data visualization and discuss how these factors can be applied in a business context.
- 9. Analyze the importance of selecting appropriate chart types for data visualization.

  Discuss how the misuse of chart types can lead to misinterpretation of data, providing examples of both effective and ineffective chart selections.
- 10. Evaluate the role of color in data visualization. Analyze how color choices can enhance or hinder the readability and effectiveness of visualizations, and discuss best practices for using color in business contexts.
- 11. Discuss how data visualization techniques can be integrated into business intelligence systems. Analyze the benefits and challenges of incorporating advanced visualizations into existing BI platforms, and suggest ways to overcome potential obstacles.
- 12. Evaluate the impact of data visualization on operational efficiency in a business setting.

  Analyze how visualizing operational data can identify bottlenecks, improve resource allocation, and enhance overall productivity. Provide examples to support your analysis.
- 13. Analyze the ethical considerations in data visualization. Discuss the potential for bias and misrepresentation in visualizations, and evaluate strategies to ensure ethical practices in presenting business data.
- 14. Evaluate the role of data visualizations in enhancing customer experience. Analyze how businesses can use visualizations to better understand customer behavior, preferences, and feedback, and suggest ways to leverage these insights for improved customer engagement.
- 15. Discuss the future trends in data visualization and their potential impact on business practices. Analyze emerging technologies and techniques in data visualization and evaluate how they could transform the way businesses analyze and interpret data.