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## School of Computing Science and Engineering

Bachelor of Science in Computer Science

Mid Term Examination - Mar 2024

Duration : 90 Minutes

Max Marks : 50

### Sem VI - E1UP603B - Data Analysis and Handling

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Describe the process of merging two DataFrames in Pandas. K2 (2)
- 2) What is the difference between a pie chart and a stacked bar chart. K1 (3)
- 3) Explain the difference between data aggregation and data summarization. K2 (4)
- 4) How can you handle missing data in a dataset? Explain. K2 (6)
- 5) Illustrate the difference between loc and iloc in pandas with example. K3 (6)
- 6) Illustrate how to sort a DataFrame in pandas based on multiple columns. K3 (9)
- 7) Analyze the effectiveness of different data visualization evaluation methods (e.g., user testing, expert reviews, quantitative metrics) in assessing the quality and usability of visualizations. K4 (8)
- 8) Analyze the effectiveness of different storytelling techniques (e.g., narrative structure, data-driven anecdotes) in engaging non-technical stakeholders and conveying complex analytical insights. Give example K4 (12)

**OR**

Analyze the impact of cultural and contextual factors on the interpretation and perception of data visualizations across diverse audiences. K4 (12)