

IV Semester M.B.A. (Day and Eve.) Examination, November/December 2023 (CBCS) (2022 – 23 and Onwards) MANAGEMENT

Paper - 4.9.1 : Data Visualization

Time: 3 Hours

Max. Marks: 70

SECTION - A

Answer any five out of the following questions. Each question carries 5 marks.

 $(5 \times 5 = 25)$

- Differentiate between measures and dimensions in Tableau and provide examples of each.
- Tableau dashboards assist in identifying and conveying the narrative within data effectively. Enumerate.
- 3. How does data joining work in Tableau, and what are the common scenarios where it is used?
- Compare and contrast worksheets and dashboards in power BI and their roles in data visualization.
- Describe the concept of table calculations and parameters in Power BI and their impact on data analysis.
- 6. Provide an overview of the Data Studio homepage and its key features.
- 7. How can custom table calculations and parameters be leveraged in Google Data Studio for data analysis?

SECTION - B

Answer any three out of the following questions. Each question carries 10 marks.

 $(3\times10=30)$

- 8. Explain the steps involved in importing data into the Tableau workspace and the importance of data preparation.
- Describe the process of working with different types of geographic data in Tableau, including creating custom maps.

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- Provide examples and applications for specific types of charts in Power BI, such as scatter plots, Gantt charts, histograms and bullet charts.
- 11. How do Google Data Studio's features contribute to creating dashboards that effectively communicate the narrative within data?

SECTION - C

12. Case Study (Compulsory Question).

 $(1 \times 15 = 15)$

In the healthcare sector, Regional Hospital faced significant challenges in optimizing patient care and resource allocation. To address these issues, they implemented Tableau for visual analytics. The hospital utilized Tableau's tools for charting to monitor patient data and resource utilization in real-time. Specific types of charts such as scatter plots helped identify trends in-patient admissions and discharges, while Gantt charts enabled better scheduling of surgeries and procedures. Tableau's mapping capabilities allowed the hospital to visualize geographic patient distribution and allocate resources accordingly. By creating custom table calculations and parameters, Regional Hospital fine-tuned their analysis, optimizing patient outcomes and resource allocation. However, the hospital faced challenges in integrating data from various sources and ensuring data security.

Questions:

- a) How did the implementation of Tableau's visual analytics tools help Regional Hospital in improving patient care and resource allocation? Can you provide specific examples of the benefits?
- b) What role did scatter plots and Gantt charts play in identifying trends and optimizing scheduling at the hospital?
- c) Explain how Tableau's mapping capabilities contributed to geographic resource allocation. What challenges did the hospital face when integrating data from various sources, and how did they address these challenges?