

**QP CODE**

**H1150**

**Enrollment Number: .....**

**Name: .....**

**B.SC DEGREE EXAMINATIONS, MARCH 2026**

**Third Semester**

**B.Sc. Data Science**

**B24DS01SE – Data Visualisation**

**(2024 July Admissions)**

**Time: 3 Hours**

**Max Marks: 70**

**Section A**

**Answer any ten of the following questions in a word or sentence each. Each question carries 1 mark.**

1. Define Data Visualisation.
2. Why do we ensure clarity in Visual designing?
3. What is Tufte's rule?
4. Define Data-Ink Ratio.
5. What is the purpose of Audience analysis in Data Visualisation?
6. How Story telling helps in Data visualisation?
7. What is the use of Interactive Visualisation?
8. Write any two common pitfalls in Visualisation.
9. What is Power BI?
10. Write any two data connectors in Power BI.
11. What is Data Modeling?
12. Define Star schema.
13. Expand DAX.
14. Define Visual Reporting.
15. What is Cognitive Load?

**(1X10=10)**

**Section B**

**Answer any five of the following questions in two or three sentences each. Each question carries 2 marks.**

16. What are the three principles of Visual Design?

17. What is the role of Aesthetics in Data Visualisation?
18. What does efficiency in Visual design refer to?
19. What is the impact of a well-told story?
20. What is the importance of DAX in Data modeling?
21. What is KPI?
22. Write about the use of filters.
23. Differentiate Drill Down and Drill Through.
24. Define on-premises Data Gateway.
25. What is Power BI service?

**(2X5=10)**

### **Section C**

**Answer any five of the following questions in a paragraph each. Each question carries 4 marks.**

26. Write any four real world applications of Data Visualisation.
27. Explain the historical evolution of Data Visualisation.
28. Write down the names of Stakeholders and their primary goal.
29. How Annotations and Balance help in Story telling?
30. How do different Stakeholders groups approach data visualisation?
31. Why is flat files/single Excel approach not good? Explain.
32. What is a measure and what are the characteristics of measure?
33. What is Time intelligence and why time intelligence matters in Retail?
34. Write down the steps to publish a BI report.
35. What are the Dashboard Design Principles? Explain.

**(4X5=20)**

### **Section D**

**Answer any two of the following questions in three pages each. Each question carries 15 marks.**

36. Discuss in detail the Gestalt Principles with examples.
37. Describe the Dashboard Principles.
38. What is the use of Data Preparation and explain the key benefits of Data Preparation in Power BI?
39. Write short notes on workspace and what are the roles of Power BI in workspace?

**(15X2=30)**