

[illegible]

**SRM INSTITUTE OF SCIENCE AND TECHNOLOGY**  
**COLLEGE OF SCIENCE AND HUMANITIES**  
**DEPARTMENT OF COMPUTER APPLICATIONS**  
**MODEL EXAMINATION- OCTOBER 2025**  
**PAD25S01J-DATA VISUALIZATION AND CONCEPTS**  
**CLASS: I MSc ADS** **MAX: 100 Marks**

**PART – A** (Answer any **FIVE** Questions)

**5 X 5 =25 Marks**

	BL	CO	PO
1. Why is decluttering important in dashboards?	2	1	1
2. Define Dimension and Measure in Tableau.	1	1	2
3. Write a short note on Hierarchies with examples	1	2	1
4. What is a group in Tableau? Mention two ways to create it.	2	2	2
5. Summarize the core blocks of Power BI and how they interact.	1	3	1
6. Narrate the concept of Mobile Layouts in Power BI.	1	3	1
7. Distinguish between a histogram and a kernel density estimate.	2	4	2
8. List and briefly describe any three libraries in Python for data visualization.	1	5	1

## PART – B

**5 X 15 =75 Marks**

(Answer **ALL** the Questions)

(Answer <b>ALL</b> the Questions)	<b>BL</b>	<b>CO</b>	<b>PO</b>
9. A. Explain the components of the Tableau Application Suite and their functions.	2	1	1

**OR**

B. Discuss various Gestalt principles and their application in data visualization.

$$2 \quad 1 \quad 2$$

10. A. Demonstrate the various types of filters available in Tableau with suitable examples.

$$3 \quad 2 \quad 3$$

**OR**

B. Describe how sets help in segmenting data for analysis.

$$2 \quad 2 \quad 2$$

11.A. Illustrate how a star schema helps in simplifying data modeling.

3 3 3

**OR**

B. Explain how DAX helps in creating dynamic calculations in Power BI.

3 3 3

12.A. Summarize the key techniques of statistical data visualization in Seaborn with examples. **OR**

2      4      3

**OR**

B. Discuss regression plots in Seaborn and differentiate between `regplot()` and `lmplot()` with an example.

$$2 \quad 4 \quad 2$$

13.A. Explain in detail the key features and functionalities of Matplotlib with suitable examples.

$$2 \quad 5 \quad 2$$

**OR**

B. Illustrate the different types of 3D plottings with examples.

$$3 \quad 5 \quad 2$$