



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.														
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End - Term Examinations – May / June 2026

Date: 23- 05- 2026

Time:09:30am – 12:30pm

School: SOCSE	Program: CBD	
Course Code: CBD2502	Course Name: Data Visualization and Reporting	
Semester: IV	Max Marks: 100	Weightage: 50%

CO - Levels	C01	C02	C03	C04	C05
Marks	24	24	26	26	-

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.-

Part A

Answer ALL the Questions. Each question carries 2marks.

10Q x 2M=20M

1.	State the importance of visualization in analytics.	2 Marks	L2	C01
2.	Define exploratory visualization.	2 Marks	L2	C01
3.	What is Plotly used for?	2 Marks	L1	C02
4.	What is data transformation?	2 Marks	L1	C02
5.	Define drill-down functionality.	2 Marks	L2	C03
6.	Give two examples of interactive visuals.	2 Marks	L1	C03
7.	What is user experience (UX) in dashboards?	2 Marks	L1	C03
8.	Define narrative flow in storytelling.	2 Marks	L2	C04
9.	List two types of reports.	2 Marks	L1	C04
10.	Why is clarity important in storytelling?	2 Marks	L1	C04

Part B

Answer the Questions.

Total Marks 80M

11.	a.	Demonstrate the concept of visual encoding and its types (position, color, size) using suitable python code.	20Marks	L2	C01
Or					
12.	a.	Compare exploratory and explanatory data visualization by analyzing their objectives, methods, and outcomes.	20 Marks	L2	C01
13.	a.	Explain the working and applications of Tableau, Power BI for web-based data visualization.	10 Marks	L2	C02
	b.	Analyze the differences between Matplotlib, Seaborn, Plotly, and Altair and identify the most suitable tool for different visualization scenarios.	10 Marks	L3	C02
Or					
14.	a.	Discuss various types of imputation techniques in detail with suitable code.	20 Marks	L3	C02
15.	a.	Explain dashboard design principles, interactive features, and the significance of real-time visualization in modern systems.	10 Marks	L2	C03
	b.	Discuss the principles of dashboard design and explain best practices for developing effective dashboards.	10 Marks	L2	C03
Or					
16.	a.	How does responsive design improve dashboard performance across devices? Explain with examples.	10 Marks	L2	C03
	b.	Analyze the role of user experience (UX) in dashboard design and its impact on usability and decision-making.	10 Marks	L3	C03
17.	a.	Discuss data storytelling, its key components, and explain how narrative flow and visual elements enhance communication.	10 Marks	L2	C04
	b.	Explain the process of generating reports for data visualization, including PDF and web-based formats.	10 Marks	L2	C04
Or					
18.	a.	Compare traditional reporting methods with automated reporting in terms of efficiency and usability.	20 Marks	L2	C04