Roll No.												

PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date: 29-10-2025 **Time:** 02.30pm to 04.00pm

School: SOCSE	**Program:** B.Tech. Computer Science and Engineering(Data Science)	
Course Code : CSD3406	**Course Name:** Business Oriented Data Analytics	
Semester: VII	**Max Marks**: 50	**Weightage**: 25%

CO - Levels	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Marks	**24**	**24**	**2**		

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. **5Q x 2M=10M**

1	Define business analytics and describe its main types.	**2 Marks**	**L2**	**CO1**
2	Explain how predictive analytics differs from prescriptive analytics with examples.	**2 Marks**	**L2**	**CO1**
3	Identify the major stages in the data transformation process used for analysis.	**2 Marks**	**L2**	**CO2**
4	Explain why handling missing values is essential before performing data analysis.	**2 Marks**	**L2**	**CO2**
5	Apply the concept of diagnostic analytics to detect performance issues in an organization.	**2 Marks**	**L3**	**CO3**

Part B

Answer the Questions. **Total Marks 40M**

6.	a.	Explain the role of descriptive, diagnostic, and predictive analytics in the analytics process lifecycle. Which stage would you apply first to obtain useful business insights, and why?	10 Marks	L2	CO1
	b.	Discuss how analytics contributes to improving business performance in marketing and finance domains. Provide suitable examples.	**10 Marks**	**L2**	**CO1**
		Or			
7.	**a.**	Describe the different types of analytics — descriptive, diagnostic, predictive, and prescriptive — and explain how each type supports strategic decision-making in business.	**10 Marks**	**L2**	**CO1**
	b.	Explain the stages of the analytics process and how they help in converting raw data into actionable insights.	**10 Marks**	**L2**	**CO1**

8.	a.	Apply systematic steps to clean, transform, and visualize data to prepare it for business analysis. Justify the selection of tools and techniques for each step.	10 Marks	L3	CO2
	b.	Explain the role and benefits of exploratory data analysis (EDA) in discovering hidden patterns in datasets.	**10 Marks**	**L2**	**CO2**
		Or			
9.	**a.**	Discuss common data collection methods used in organizations and explain the challenges related to data quality.	**10 Marks**	**L2**	**CO2**
	b.	Apply visualization techniques using tools such as Power BI or Tableau to represent business performance. Explain how visualization enhances decision-making.	**10 Marks**	**L3**	**CO2**