Roll No.												

PRESIDENCY UNIVERSITY

BENGALURU

Make up Examinations – December 2025

Date: 31 – 12- 2025 **Time:** 09:30am – 12:30pm

School: SOCSE	**Program**: B.TECH	
Course Code: CSE2027	**Course Name:** Fundamentals of Data Analysis	
Semester: MK	**Max Marks**: 100	**Weightage**: 50%

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

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.	What is central tendency in data analysis?	**2 Marks**	**L1**	**CO1**
2.	What are the types of variables in data analysis?	**2 Marks**	**L1**	**CO1**
3.	What is a **T-test** and when is it used?	**2 Marks**	**L1**	**CO2**
4.	Mention any two types of **sampling techniques**.	**2 Marks**	**L1**	**CO2**
5.	What is a **questionnaire**?	**2 Marks**	**L1**	**CO3**
6.	Define **survey** in data collection.	**2 Marks**	**L1**	**CO3**
7.	Name any two commonly used **types of charts**.	**2 Marks**	**L1**	**CO4**
8.	What is **forecasting** in data analysis?	**2 Marks**	**L1**	**CO4**
9.	State one real-world example of **classification**.	**2 Marks**	**L1**	**CO5**
10.	What is the purpose of **regression analysis**?	**2 Marks**	**L1**	**CO5**

Part B

Answer theQuestions. **Total Marks 80M**

11.	**a.**	**Explain the process and importance of** data cleaning **and** removal of variables **in data preparation.**	**10Marks**	**L2**	**CO1**
	b.	Explain the different **scales of data measurement** (nominal, ordinal, interval, ratio).	**10Marks**	**L2**	**CO1**
		Or			
12.	**a.**	Differentiate between qualitative and quantitative Data.	**10 Marks**	**L2**	**CO1**
	b.	Define the differentiate between **T-test** and **Z-test** .	**10 marks**	**L1**	**CO2**

13.	**a.**	**Explain any two** important sampling distributions **used in statistics..**	**5 Marks**	**L2**	**CO2**
	b.	Explain the **process of collecting secondary data** and list its common sources.	**5 Marks**	**L2**	**CO3**
	c.	What is the difference between a **survey and an experiment**? Give suitable examples.	**10 marks**	**L2**	**CO3**
		Or			
14.	**a.**	Define **correlation**. Explain different types of correlation with examples.	**10 Marks**	**L1**	**CO3**
	b.	Explain the process of **visualizing data using charts** with suitable examples.	**10 Marks**	**L3**	**CO4**

15.	**a.**	Discuss in details about Principal of Excellence Graph .	**10 Marks**	**L2**	**CO4**
	b.	Describe how data analyzing can be done using Pivot tables.	**10 Marks**	**L2**	**CO4**
		Or			
16.	**a.**	Illustrate with an example how real-world data is transformed into **business insights** using visual tools.	**10 Marks**	**L3**	**CO4**
	b.	Derive the Difference between **classification** and **regression** with examples.	**10 Marks**	**L3**	**CO5**

17.	**a.**	**What is** simple non-linear regression**? Explain with a real-life application.**	**10 Marks**	**L1**	**CO5**
	b.	Describe **evaluation metrics** used to measure the performance of regression models.	**10 Marks**	**L2**	**CO5**
		Or			
18.	**a.**	Differentiate between **simple linear** and **non-linear regression** using classification technique.	**20 Marks**	**L3**	**CO5**