Roll No. | | | | | | | | | | |

PRESIDENCY UNIVERSITY

BENGALURU

School of Law

Mid - Term Examinations - November 2024

Semester: III

Course Code: BCL 2003

Course Name: Business Statistics

Program: BCL

Date: 04-11-2024

Time: 11.45am to 01.15pm

Max Marks: 50

Weightage: 25%

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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.   **5Qx2M=10M**

1	How is statistical analysis used in the legal field for case evidence and decision-making?	2 Marks	Understanding	CO
2	What are the two types of statistics, and how do they differ in terms of their purpose and application in data analysis?	2 Marks	Remembering	CO
3	Define the arithmetic mean.	2 Marks	Remembering	CO
4	How do measures of dispersion, such as standard deviation, help in understanding the variability within a data set?	2 Marks	Understanding	CO
5	Give formula for combined Arithmetic mean, considering three groups (n_1, n_2, n_3)	2 Marks	Remembering	CO

Part B

Answer ALL Questions. Each question carries 10 marks.   **4QX10M=40M**

6   Find Arithmetic Mean and Median of the following data.   10 Marks   Remembering & Applying   CO2

Criminal Cases	No. of regions
20-25	10
25-30	20
30-35	20
35-40	15
40-45	15
45-50	20

Or

7   From the following data, calculate median and the first and third quartile wages (Q_1 & Q_3):   10 Marks   Remembering & Applying   CO2

Daily Wages (in rupees)	(no. of workers)
30-32	2
32-34	9
34-36	25
36-38	30
38-40	49

8   Calculate the mean and Standard Deviation from the following data: **10 Marks**   **Remembering & Applying**   **CO3**

Marks	No. of students
0-10	10
10-20	15
20-30	25
30-40	25
40-50	10
50-60	10
60-70	5

Or

| 9 | From the data given below, calculate Karl Pearson's coefficient of skewness: | 10 Marks | Remembering & Applying | CO3 |

Class interval	frequency
70-80	12
80-90	18
90-100	35
100-110	42
110-120	50
120-130	45
130-140	20
140-150	8

| 10 | The number of cases disposed off by two high court judges are as given below. With the help of 'Coefficient of Variation' (CoV) , state which judge has been more consistent. | 10 Marks | Remembering & Applying | CO4 |

Judge A	Judge B
85	72
20	4
62	15
28	30
74	59
05	15
69	49
04	27
13	36

Or

11 Share Prices of TATA motors and Mahindra were recorded. Which company's share prices are more variable?　　　10 Marks　Remembering & Applying　CO3

TATA motors	Mahindra
12	113
13	114
15	113
14	115
14	117
14	114
13	112
17	114

12 Calculate Q1, Q3 and Coefficient of Quartile Deviation of the following data　　　10 Marks　Remembering & Applying　CO3

Weight (in kg)	No. of students
60-62	5
63-65	18
66-68	42
69-71	27
72-74	8

Or

13 Find the missing frequency, if total frequency is 120.　　　10 Marks　Remembering & Applying　CO1

Class	Frequency
0-20	17
20-40	F_1
40-60	32
60-80	F_2
80-100	19