PRESIDENCY UNIVERSITY

BENGALURU

Make up Examinations – December 2025

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

School: SOM UG & SOC	**Program**: BBA, BCM
Course Code: SOC2003	**Course Name:** Business Statistics
Semester: MK	**Max Marks**: 100 **Weightage**: 50%

CO - Levels	CO1	CO2	CO3	CO4
Marks	46	40	48	31

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 2 marks.   **10Q x 2M=20M**

1.	Outline cross sectional data and panel data.	**2 Marks**	**L1**	**CO1**
2.	List out parts of statistical table.	**2 Marks**	**L1**	**CO1**
3.	Recognize cumulative frequency distributions.	**2 Marks**	**L1**	**CO1**
4.	Outline geometric mean formula for an ungrouped frequency distribution.	**2 Marks**	**L1**	**CO2**
5.	Summarize partition values.	**2 Marks**	**L1**	**CO2**
6.	Outline measures of dispersion.	**2 Marks**	**L1**	**CO3**
7.	Recognize absolute and relative measure of scatteredness.	**2 Marks**	**L1**	**CO3**
8.	Differentiate positive and negative correlation between two variables.	**2 Marks**	**L1**	**CO4**
9.	Outline descriptive statistics and inferential statistics.	**2 Marks**	**L1**	**CO1**
10.	Differentiate qualitative and quantitative data.	**2 Marks**	**L1**	**CO1**

Part B

Answer ALL the Questions. Each question carries 7 Marks.   **Total Marks 35M**

11.	Discuss about various types of classification of statistical data with hypothetical numerical example.	07 Marks	L2	CO1
	Or			
12.	Discuss the steps of constructing Pie diagram and present the data given below in pie diagram. **States / Population table below**	07 Marks	L3	CO1

States	Population
Karnataka	600
Tamil Nadu	721
Telangana	350
Andra Pradesh	490
Kerala	334
Goa	145

13.	Discuss in detail various methods of collecting primary data.	07 Marks	L2	CO1
	Or			
14.	Discuss in detail about various measures of central tendency.	07 Marks	L2	CO2

15.	Discuss about different types skewness of statistical distributions with the help of diagrams.	07 Marks	L2	CO3
	Or			
16.	Discuss in detail about various measures of dispersion.	07 Marks	L2	CO3

17.	Explain correlation and different directions of linear association between two variables.	07 Marks	L2	CO4
	Or			
18.	Discuss briefly about regression analysis and state the formula of intercept and slope co-efficient of a simple linear regression line X on Y.	07 Marks	L2	CO4

19.	Discuss about merits and demerits of Mode and calculate mode of the frequency distribution given below. **Classes / Frequency table below**	07 Marks	L3	CO2

Classes	Frequency
10-20	20
20-30	15
30-40	10
40-50	30
50-60	5
60-70	15

	Or			
20.	Calculate Harmonic mean of the distribution given below.	07 Marks	L3	CO2

Ticket price	No of tickets sold
10	20

	50	80			
	100	10			
	200	30			
	250	5			
	500	15			

Part C

Answer any Three Questions. Each question carries 15 marks   **3Q x 15M=45M**

21.	Present the data given below in percentage bar diagram. Average daily Expenditure: Place Items of Exp. / Mizoram / Assam / Sikkim / Meghalaya Food / 200 / 300 / 100 / 150 Health / 100 / 150 / 50 / 200 Entertainment / 50 / 100 / 25 / 75 Education / 100 / 200 / 50 / 25 Accommodation / 150 / 300 / 50 / 80	15 Marks	L3	CO1

Table for Q21:

Average daily Expenditure	Place			
Items of Exp.	Mizoram	Assam	Sikkim	Meghalaya
Food	200	300	100	150
Health	100	150	50	200
Entertainment	50	100	25	75
Education	100	200	50	25
Accommodation	150	300	50	80

22.	Compute Arithmetic Mean and Median for the data given below.	15 Marks	L3	CO2

Xi	Frequency
100	10
200	15
300	8
400	20
500	5
600	12

23.	Calculate Range and Mean deviation about A.M of the data given below.	15 Marks	L3	CO3

Variable Value	Frequency
50-100	15
100-150	20
150-200	30
200-250	20
250-300	10
300-350	5

24.	Compute standard deviation and coefficient of variation for the data given below.	15 Marks	L3	CO3

Variable Value	Frequency
20-40	2
40-60	5
60-80	15
80-100	20
100-120	4
120-140	7

25.	Calculate Karl Pearson's co efficient of Correlation between the variable given below.	15 Marks	L3	CO4

Variable X	Variable Y
20	5
80	40
30	20
50	10
100	60
70	15