

ADMISSION NUMBER									

School of Liberal Education

**Bachelor of Arts Honours in Economics
Semester End Examination - Nov 2023**

**Duration : 180 Minutes
Max Marks : 100**

Sem V - K1UB503T - Elementary Statistics

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) How sampling method is more useful over census method of data collections. K1 (2)
- 2) Give formulas to calculate quartile deviation and standard deviation. K2 (4)
- 3) Calculate Bowley's co-efficient of skewness from the following data: K2 (6)
Class; 0-10,10-20,20-30,30-40,40-50,50-60,60-70,70-80 and the frequencies are 12,16,26,28,38,22,15,7,4.

- 4) Calculate Karl Pearson's Coefficient of Skewness from the following data: K3 (9)

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No. of Students	12	18	27	20	17	6

- 5) Analyze real-world data and discuss the potential implications of a negative correlation. K3 (9)
- 6) Utilize the least squares method to find the regression line for a given dataset. K5 (10)
- 7) Calculate Rank correlation using the following data: K4 (12)

X	6	2	10	4	8
Y	9	11	5	8	7
- 8) The time taken (in minutes) to complete a homework by 8 students in a day are given by 38, 40, 47, 44, 46, 43, 49, 53. Find the coefficient of variation. K5 (15)
- 9) Examine a regression line and explain how well it fits the data points. K5 (15)
- 10) Calculate Bowley's coefficient of skewness from the following data; K6 (18)

Class	0-10	10-20	20-30	30-40	40-50
frequency	22	38	46	35	20