



K.R. MANGALAM UNIVERSITY
THE COMPLETE WORLD OF EDUCATION

Roll No.....

End Semester Examination, December 2024

B.A. (Hons/Hons with Research) Economics- 3rd Semester

Statistical Methods for Economics (HUES203)

Time: 2.5 hrs.

Max Marks: **50**

Note: *All Questions are compulsory. Marks are indicated against each question.*

In Part A, Attempt any 5 questions from all. Each Question carry 2 marks.

Part A

- | | |
|---|-----------------------|
| (a) Mention two limitations of Statistics. | [CO-1] [L-2] 2 |
| (b) List any two methods of collecting primary data. | [CO-1] [L-2] 2 |
| (c) What is a frequency distribution? | [CO-1] [L-2] 2 |
| (d) Define arithmetic mean. | [CO-1] [L-2] 2 |
| (e) Define dispersion in Statistics. | [CO-1] [L-2] 2 |
| (f) What is skewness? | [CO-1] [L-2] 2 |
| (g) State the difference between positive and negative correlation. | [CO-1] [L-2] 2 |

Part B

Q2. Discuss the scope and limitations of Statistics. [CO-2] [L-3] **10**

Or

Explain the differences between primary and secondary data. What is their application in real world? [CO-2] [L-3] **10**

Q3. The following data represents the daily production output (in units) of 60 machines in a factory over a month.

Production Output (units):

120, 135, 150, 145, 160, 125, 140, 155, 165, 150, 130, 140, 145, 160, 155, 150, 135, 140, 145, 150, 125, 130, 135, 145, 160, 155, 150, 140, 135, 145, 150, 160, 165, 155, 145, 140, 135, 125, 130, 135, 140, 155, 150, 165, 160, 145, 140, 150, 130, 125, 140, 135, 145, 155, 160, 165, 150, 145, 140, 135

1. Organize the data into a grouped frequency distribution table using class intervals of width 10 (e.g., 120–129, 130–139, etc.).
2. Compute the cumulative frequency for each class interval.
3. Plot a histogram based on the grouped data.
4. Discuss how the distribution of production units might inform the product manager ?

[CO-3] [L-4] **10**

Or

Given below is the distribution of marks obtained by 140 students in an examination.

Marks	10—19	20—29	30—39	40—49	50—59	60—69	70—79	80—89	90—99
No. of students	7	15	18	25	30	20	16	7	2

Find the median of the distribution.

[CO-3] [L-3] **10**

Q4. Explain absolute and relative measures of dispersion with examples. What is the practical application of these measurements? [CO-3] [L-3] **10**

Or

The rainfall recorded in various places of five districts in a week are given below:

Rainfall in mm	Number of places
45	5
50	13
55	4
60	9
65	5
70	5

Find its standard deviation.

[CO-3] [L-4] **10**

Q5. What do you understand by correlation? Discuss the practical applications of correlation in economics and business.

[CO-4] [L-4] **10**

OR

Calculate coefficient of correlation between price and quantity supplied at each price:

Price in Rs	1	2	3	4	5
Supply(units)	10	12	14	20	25

[CO-4] [L-4] **10**