Ministry of Higher Education & Scientific Research
Salahaddin University-Erbil
College of Administration and Economics
Department: Statistics and Informatics
Stage: First

Subject: Principle of Statistics
Date: 14 / 01 / 2024
Time: 2 Hours

Final Exam- First semester: First Trial 2023- 2024

Q1\\ A Define each of the following   (15 Marks)

  1- Statistics
  2- Population
  3- Variable
  4- Data

 B What are the differences between the following?
  1- Homogeneous Population and Heterogeneous Population
  2- Discrete Variables and Continuous Variables

Q2\\A** Suppose there are **32 elements in the population select a sample of **8** elements? using **Systematic Random Sampling**   (20 Marks)

B   From the following Data:
   X_i :   2, 4, 1, 3
   Y_i :   3, 2, 5, 2
    Find

1) $\displaystyle\sum_{i=2}^{4} x_i\, y_i$,   2) $\displaystyle\sum_{i=1}^{4}(x_i - 2)$,   3) $\displaystyle\prod_{i=1}^{4} 5x_i$,   4) $\log \displaystyle\prod_{i=1}^{3} y_i$

Q3 The following data represent persons number of (20) family in small town.

3, 5 ,8 ,10, 12, 2, 7, 5, 11, 9, 5, 6, 13, 15, 14, 4, 5, 4, 3, 5   (15 Marks)

Find the following:

1- Frequency Distribution Table?
2- Ascending Cumulative Frequency distribution (ACF)?
3- Steam and Leaf?

Q4** From the following Frequency Distribution Table find **Frequency Histogram and **Frequency curve**?   (10 Marks)

Classes	2-4	4-6	6-8	8-10	10-12
fi	2	4	5	4	1

Good Luck