Ministry of Higher Education & Scientific Research

Salahaddin University-Erbil

College of Administration and Economics

Department: Statistics and Informatics

Stage: First



Subject: Statistical methods Date: 07 / 05 / 2024

Time: 2 Hours

Final Exam- Second Semester: First Trial 2023- 2024

Q1\\ Find **Median** for the following frequency distribution:

(15 marks)

| Classes | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 |
|---------|-------|-------|-------|-------|-------|-------|-------|
| fi | 5 | 9 | 10 | 11 | 9 | 10 | 6 |

 $\mathbf{Q2}\backslash \mathbf{A}\backslash$ (10 marks)

If Yi = Xi + b where b is a constant, then prove that $S_v^2 = S_x^2$

Q2\\B Find **variance** of the following data:

(10 marks)

6, 5, 9, 10, 15

Q3\\ (10 marks)

- 1- Why might the range not be the best estimate of variability?
- 2- If the **Mean** of **four** values is (6) and three of values are (5, 4, 10) find the fourth value.

 $\mathbf{Q4}$ \\ (15 marks)

Calculate part value (Q₂, D₇, P₂₀) (4, 6, 3, 10, 2, 13, 15, 11, 9, 5)

Good luck