Salahaddin University–Erbil

College of Basic Education

Department: Mathematics

Module: **Introduction to Statistics**

Stage: **Second**

Round: **Second**

1st Semester Examination 2022-2023 Time: **2 Hours**

Q1: **A//** Count all types of data (variables) with provide an example for each types. **[*6+6 Mark*]**

B// What is methods of collection the data in statistics?

Q2: Calculate the **rank correlation** coefficient between the Math and Statistics tests for 5 students. Analysis and explain the results. **[*12 Mark*]**

Calculus	Good	Medium	Excellent	Satisfy	Very Good
Statistics	Medium	Very Good	Good	Excellent	Satisfy

Q3: From the following data represents the degree for some students in two modules: **[*12 Mark*]**

English **95, 75, 84, 72, 92, 40, 68, 65, 73**

Statistics **74, 80, 86, 68, 72, 82, 71, 63, 68**

Compute: 1- Coefficient Variation for both **English** & **Mathematic,** then compare results.

2- Median for both modules 3- $\bar{X} + \sum_{i=1}^{n} Y_i$

Q4: From the following information: **[8 +4 Mark]**

$\sum X = 150$ $\sum Y = 195$ $\sum XY = 6800$ **n=5** $\sum X^2 = 5500$

Find 1- Simple regression equation. 2- Predict $\hat{Y}$ when X_new= 16.

Q5:The bellow data represents the heights of thirty-two students **[*12 Mark*]**

280	**285**	**265**	**260**	**259**	**280**	**190**	**285**	**280**	**284**	**288**	**265**	**281**	**289**	**282**	**284**
269	**289**	**261**	**281**	**259**	**268**	**287**	**264**	**191**	**258**	**283**	**281**	**258**	**257**	**280**	**262**

Find (1) Create table frequency. (2) Percentage from Table. (3) Arithmetic mean

Examiner: Dr. Dler Mustafa Khidhr