(Knowledge for development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS

2020/2021 ACADEMIC YEAR

THIRD YEAR SECOND SEMESTER

MAIN EXAMINATION

REGULAR PROGRAMME

FOR THE DEGREE OF BACHELOR OF EDUCATION ARTS

COURSE CODE: GEO 318

COURSE TITLE: QUANTITATIVE METHODS IN GEOGRAPHY

DATE: OCTOBER 7, 2021 **TIME: 9 – 11 AM**

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

1. **Answer Question ONE (Q1) Compulsory**
2. **Answer any other TWO (2) Questions**
3. **Use illustration where appropriate**

This paper consists of 2 printed pages. Please Turn Over.

1. .a. Highlight any two features of a normal distribution curve (2 marks)

.b. Distinguish between the following terms as applied in statistics

i. A variable and a parameter (4 marks)

ii. Population and sample (4 marks)

iii. Type I and Type II errors (4 marks)

.c. Highlight any four characteristics of a good hypothesis. (4 marks)

.d. Describe three types of peaks observed in a distribution (12 marks)

2. Discuss the different scales of measurements. (20 marks)

3. Discuss any four non-probability sampling techniques used in geographical research. (20 marks)

4. .a. Explain one advantage and two disadvantages of using the mean as a measure of central tendency. (6 marks)

.b. The data below was collected by a geography fieldwork class.

Class	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100
Frequency (f)	2	17	24	44	5	4	3	3

Calculate:

i. Mean using Assumed Mean (4marks)

ii. Mode (5marks)

iii. Standard Deviation (5marks)

5. .a. Highlight any two uses of regression analysis techniques. (2 marks)

.b. The data below was collected on pupils by a nutritionist:

S/N	1	2	3	4	5	6	7	8	9	10
Height (x)	52	62	58	48	55	60	56	53	50	62
Weight (y)	40	55	53	40	44	50	51	45	44	55

i. Plot a scatter diagram for the and explain the nature of the scatter (8 marks)

ii. Use Carl Pearson's method to calculate the coefficient of correlation (r) and explain you results. (10 marks)