



KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

FIRST YEAR EXAMINATION FOR THE AWARD OF THE DIPLOMA
DIPLOMA IN AGRICULTURAL AND APPLIED ECONOMICS
FIRST SEMESTER 2022/2023
(SEPTEMBER - DECEMBER, 2022)

AGEC 0104: INTRODUCTION TO STATISTICS

STREAM: Y1 S1

TIME: 2 HOURS

DAY: TUESDAY, 9:00 A.M – 11:00 A.M

DATE: 13/12/2022

INSTRUCTIONS:

- 1. Do not write anything on this question paper.***
- 2. Answer Question ONE (Compulsory) and any other TWO Questions.***

QUESTION ONE

(a). with illustration explain the following terms as used in statistics

- | | |
|------------------|-----------|
| (i) Statistics | (2 marks) |
| (ii) Observation | (2 marks) |
| (iii) Data | (2 marks) |
| (iv) Variance | (2 marks) |

(b). Discuss types of variables as used in statistics (8 marks)

(c). In an examination the scores of 10 students were as follows;

60, 45, 75, 42, 70, 65, 69, 64, 50, 80

Find;

- | | |
|---------------------------|-----------|
| (i). Range. | (3 marks) |
| (ii) Variance. | (4 marks) |
| (iii) Standard deviation. | (3 marks) |

(d). Discuss the two sources of data. (4 marks)

QUESTION TWO

(a) The following data shows the height of students in Kisii University;

13, 35, 46, 87, 56, 78, 48, 45, 24, 35, 44, 84, 12, 15, 86, 56

Find;

- (i) Quartile (4 marks)
- (ii) Quartile deviation (4 marks)
- (iii) Coefficient of quartile range (4 marks)
- (iv) Mean (3 marks)
- (b) Discuss the methods of data collection (5 marks)

QUESTION THREE

The IQ of students in Kisii University were recorded in the table below;

IQ	No. of students
1-20	6
21-40	18
41-60	32
61-80	48
81-100	27
101-120	13
121-140	2

Calculate;

- (i) Mean (4 marks)
- (ii) Median (4 marks)
- (iii) Mode (4 marks)
- (iv) Variance (4 marks)
- (v) Standard deviation (4 marks)

QUESTION FOUR

With examples, define sample and discuss in detail the types of sampling used in statistics

(20 marks)