

LAIKIPIA



UNIVERSITY

UNIVERSITY EXAMINATIONS

2ND SEMESTER 2023/2024 ACADEMIC YEAR

THIRD YEAR EXAMINATION FOR THE DEGREE
OF BACHELOR OF SCIENCE IN COMMUNITY
DEVELOPMENT

CDEV 325: SOCIAL STATISTIC I

STREAM:

TIME: 2 HRS

DAY: MONDAY [8.30-10.30 A.M]

DATE: 15/04/2024

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

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INSTRUCTIONS

- (i) Answer Question ONE and any other two Questions.
 (ii) Do not write on the question paper.

QUESTION ONE

- a) Define the following terms as used in social statistics and give examples for each
- i) Data **(4 Marks)**
 - ii) Variable **(4 Marks)**
 - iii) Statistical estimation **(2 Marks)**
- b) Some third year students from Laikipia University were asked to name their favourite flavour of cake. The table below show some information about their responses.

Table 1: Students' distribution according to their favourite flavours

Flavour	Number of students	Percentage	Degrees
Vanilla	20		
Mint	12		
Strawberry	8		
Chocolate	10		
Black forest	16		
Normal	24		
Total			

Source: Field data, 2024

- i) Copy, fill Table 1 above **(8 Marks)**
 - ii) draw a well-labelled pie-chart to represent the data in Table 1. Show your working clearly **(8 Marks)**
- c) Suppose the size of population 18 and the researcher wishes to select samples of 16. Determine the number of samples that are available for use by the researcher can **(4 Marks)**



QUESTION TWO

- a) By the use of suitable examples, differentiate between qualitative and quantitative statics **(14 Marks)**
- b) State and explain three types of probability distribution as used in social statistics. **(6 Marks)**

QUESTION THREE

You are given the mass of selected population in a certain market in Kenya as 24, 40, 29, 79, 29, 33, 42, 33, 41, 37, 33, 68, 25, 46, 48, 56, 57, 62, 29 and 33 kgs. As the investigative officer in charge, you wish to establish some characteristic of the inmates. By showing your working, determine the following characteristics of the population.

- i) Mode **(4 Marks)**
- ii) Median **(2 Marks)**
- iii) Mean **(3 Marks)**
- iv) Variance **(2 Marks)**
- v) Standard Deviation **(3 Marks)**
- vi) Range **(2 Marks)**
- vii) Coefficient of Variation **(4 Marks)**

QUESTION FOUR

- a) Explain the term levels of measurement as used in statistics? **(4 Marks)**
- b) Describe the common levels of measurements used in social statistics and give corresponding examples for each. **(16 Marks)**

QUESTION FIVE

- a) Differentiate between probability and distribution **(4 Marks)**
- b) Explain two types of distributions **(4 Marks)**
- c) Outline the advantages and disadvantages of simple random sampling **(12 Marks)**

