

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF DOCTOR OF
PHILOSOPHY IN COMMUNITY DEVELOPMENT

CDEV 922: ADVANCE SOCIAL STATISTICS

STREAM:

TIME: 3 HOURS

DAY/DATE: TUESDAY 18/4/2023

2.30P.M – 5.30 P.M.

INSTRUCTIONS:

- i) Do not write on the question paper
- ii) Answer question one and any other two

QUESTION ONE

- a) Evaluate three circumstances under which statistical methods may not be effectively applied. (9 marks)
- b) Citing relevant examples discuss the four levels of measurement. (12 marks)
- c) Demonstrate your understanding of the following terms as used in statistics.
 - i) Discrete variable. (3 marks)
 - ii) Quantitative data (3 marks)
 - iii) Confidence interval (3 marks)

QUESTION TWO

- a) Distinguish between independent t-test and paired t-test. (6 marks)
- b) Determine the relationship between intelligence and discipline using product moment correlation coefficient and interpret the answer. (9 marks)

Intelligence	38	46	25	48	56	27
Discipline	54	67	52	72	98	60

QUESTION THREE

- a) Workout the descriptive statistics using data in the table below.

Class	11-15	16-20	21-25	26-30	31-35	36-40
Frequency	7	12	36	43	8	4

- i) Mode (2 marks)
- ii) Median (3 marks)
- iii) Standard deviation (4 marks)
- b) Compute the value of sales when the advertising expenses are 56. (6 marks)

Advertising	25	30	35	40	45	50
Sales	68	74	82	93	84	78

QUESTION FOUR

- a) The following data was collected during a research study. Represent the information on an appropriate statistical figure. (6 marks)

Age	36-45	46-55	56-65
Frequency	48	84	25

- b) Test the hypothesis that place of work is independent of gender at a significance level of 0.05 using data in the table below. (9 marks)

	Nairobi	Kampala	Mombasa
Male	46	68	22
Female	38	84	66

.....

.