



KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

SECOND YEAR EXAMINATION FOR THE AWARD OF THE
DEGREE OF BACHELOR OF EDUCATION ARTS
FIRST SEMESTER, 2021/2022
(FEBRUARY - JUNE, 2022)

BUST 212: QUANTITATIVE METHODS IN BUSINESS

STREAM: Y2 S1

TIME: 2 HOURS

DAY: THURSDAY, 12.00 – 2.00 PM

DATE: 12/05/2022

INSTRUCTIONS:

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

QUESTION ONE

(a) Define statistics and explain its characteristics. [12marks]

(b) “Statistics plays an increasingly important role in modern business organization”. Discuss this statement and explain the scope and limitations of statistics. [9marks]

(c) Find out five yearly moving averages from the following:

Year	1	2	3	4	5	6	7	8	9	10	11	12	13
Number of Students	52	75	78	66	69	94	105	87	79	104	98	97	100

[9marks]

QUESTION TWO

(a) You are requested to plan a survey with a view to control and abolish street begging in Nairobi. Outline the main steps you would take and draft a suitable questionnaire to collect the necessary data. [12marks]

(b) Prepare a frequency distribution for the following observations:

15 45 40 42 50 60 62 68 70 42
75 75 80 81 25 26 31 32 78 45
31 45 42 43 55 56 78 80 81 62
69 62 58 45 69 70 50 72 56 58
75 62 68 65 69 70 35 37 40 55

[8marks]

QUESTION THREE

(a) "Statistics only furnishes a tool, necessary though imperfect, which is dangerous in the hands of those who do not know its use and deficiencies." In the light of this statement, explain five areas of statistical application and outline five ways of statistical interpretation of results.

[10 marks]

(b) Outline briefly the advantages and disadvantages of studying population characteristics by sampling method.

[10 marks]

QUESTION FOUR

(a) The following data shows marks obtained by 160 students in a class.

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No. of students	5	10	40	30	25	20	15	10	3	2

Required:

(a) Calculate the arithmetic mean of marks. [12 marks]

(b) Explain the requisites of a good average. [8 marks]

1. (a) Calculate the correlation coefficient from the following data:

X 100 200 300 400 500 600 700
Y 30 50 60 80 100 110 130

[10marks]

(b) Define the terms interpolation and extrapolation and explain their assumptions. [10marks]