PAN AFRICA CHRISTIAN UNIVERSITY

BACHELORS OF COMMERCE

END OF TERM EXAMINATION

DEPARTMENT: BUSINESS

COURSE CODE: BCM108/BUS2243

COURSE TITLE: BUSINESS STATISTICS 1

ROYSAMBU CAMPUS

EXAM DATE: FRIDAY

TIME: 2.00PM

INSTRUCTIONS

- This examination script consists of **six (6)** questions.
- Answer question ONE and ANY other three Questions.
- Show all your workings
- Read all questions carefully before attempting.

Write your **student number** on the answer booklet provided.

QUESTION ONE

a) Giving a relevant example in each case, distinguish between the following terms:

i) A bar graph and a histogram (2 Marks)
ii) Skewedness and Kurtosis (2 Marks)
iii) A sample and a population (2marks)

b) Describe the appropriate level of measurement for each of the following variables:
i) Level of education (1mark)
ii) Religion (1mark)
iii) Production (1mark)
iv) Weight (1mark)

QUESTION TWO

The observations below represent scores for students in business statistics I during the last.

68	52	48	68	58	63	88	60	68	68
68	82	58	73	52	68	60	58	68	82
68	56	66	82	66	58	82	68	63	52
48	68	73	58	82	66	68	73	58	82
68	82	66	82	38	82	58	68	58	58

Required:

a) Organize this data into a frequency distribution table (8marks)
b) Determine the mode (2marks)

QUESTION THREE

The age distribution of the employee of Kad & Cos has been provided as follows:

38	32	31	38	28	23	48	39	38	38
38	42	28	23	32	38	39	28	38	42
38	28	27	42	27	28	42	38	23	32
42	38	23	28	42	27	38	23	28	42
38	42	27	42	28	42	28	38	28	28

Required:

a) Organize this data into a frequency distribution table (5marks)
b) Then determine the median (5marks)

QUESTION FOUR

The following frequency distribution table represents the employees' wages of Mas firm in Ksh'000'

Wages	1 - 20	21 - 30	31 - 40	41 - 50	51 - 60
Frequency	5	17	23	7	9

a) Determine the arithmetic mean (4marks)
b) Then determine the standard deviation (6 marks)

QUESTION FIVE

The following data has been provided:

Commodity	**Year**	**Price (Ksh)**	**Quantity (kgs)**
Oranges	2021	1010	16
	2022	1520	11
Gas fuel	2021	5100	19
	2022	5300	15

Using 2017 as the Base year, determine the price index of 2020 using:

a) Fixed base method (4 Marks)
b) Laspeyres method (6 Marks)

QUESTION SIX

With reasons, describe the appropriate way of collecting data on:

a) Cultural values of a given tribe (2marks)
b) Employees' performance (2marks)
c) Health status of patients at the hospital (2marks)
d) Traffic movement on the road (2marks)
e) Student's attitude towards a course (2marks)