PAN AFRICA CHRISTIAN UNIVERSITY

BACHELORS OF COMMERCE

END OF TERM EXAMINATION

DEPARTMENT: BUSINESS

COURSE CODE: BCM108/BUS2243

COURSE TITLE: BUSINESS STATISTICS 1 - DEGREE

ROYSAMBU CAMPUS - DAY

EXAM DATE: FRIDAY

TIME: 8.00AM – 11.00AM

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

Distinguish between the following terms:

a) Primary and secondary data (2Marks)
b) A pie chart and a histogram (2 Marks)
c) Nominal and ordinal measurements (2 Marks)
d) Discrete and continuous data series (2 Marks)
e) A sample and a population (2 Marks)

QUESTION TWO

A traffic inspector has counted the number of automobiles passing a certain point in 100 successive 20-minute time periods. The observations are listed below.

18	32	41	18	38	13	28	10	18	18	41	13	38	22	18	13	32	28	10	18
18	22	38	13	32	18	10	38	18	22	10	18	41	38	18	22	13	32	10	22
18	36	6	22	6	38	22	18	13	32	6	18	22	41	18	6	38	13	18	22
32	18	13	38	22	6	18	13	38	22	13	18	32	6	38	22	6	18	22	38
18	22	6	22	38	22	38	18	38	38	38	18	38	38	6	6	13	13	38	28

Required:

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

QUESTION THREE

The following employees' wages were obtained from the salaries section of TENT Ltd in a given period. They are in Ksh '000'

8	22	31	8	28	3	18	9	8	8
8	12	28	3	22	8	9	28	8	12
8	28	7	12	7	28	12	8	3	22
22	8	3	28	12	7	8	3	28	12
8	12	7	12	28	12	28	8	28	28

Required:

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

QUESTION FOUR

The following frequency distribution table represents students marks out of 60 during a particular term:

Class	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60
Frequency	2	5	15	9	12

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

QUESTION FIVE

The following data was obtained from the Kenya Bureau of Statistics.

Commodity	**Year**	**Price (Ksh)**	**Quantity (Kgs)**
Sugar	2019	3400	11
	2020	4800	9
Maize	2019	2300	15
	2020	2700	13

Using 2019 as the Base year, determine the price index of 2020 using:

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

QUESTION SIX

a) Using relevant examples, explain two ways in which data is collected (2marks)
b) Discuss any two ways of presenting data (2 Marks)
c) Describe the following terms:
    i. Normal distribution (2 Marks)
    ii. Skewness (2 Marks)
    iii. Kurtosis (2 Marks)