



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

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' salaries of Penta firm in Ksh'000'

Salary	10 - 19	20 - 29	30 - 39	40 - 49	50 - 59
Frequency	2	11	15	9	6

- Determine the arithmetic mean (4marks)
- 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
Bread	2017	640	11bags
	2018	520	9 bags
Oil	2017	4200	15 litres
	2018	5700	13 litres

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

- Fixed base method (4 Marks)
- Paasche method (6 Marks)

QUESTION SIX

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

- Customer satisfaction in a given hotel (2marks)
- Students' performance in campus (2marks)
- Acidity of the soil in an agricultural firm (2marks)
- Traffic movement on the road (2marks)
- Cultural beliefs of a given tribe (2marks)