



PAN AFRICA CHRISTIAN UNIVERSITY

BACHELORS OF COMMERCE

END OF TERM EXAMINATION

DEPARTMENT: BUSINESS

COURSE CODE

COURSE TITLE: BUSINESS STATISTICS - DIPLOMA

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 rate at which patients were served was observed and recorded in minutes as follows:

14	28	41	14	38	13
14	22	38	13	28	14
14	33	6	22	6	38
28	14	13	38	22	6
14	22	6	22	38	22

Required:

- a) Organize this data into a discrete series (8marks)
- b) Determine the mode (2marks)

QUESTION THREE

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

16	22	31	16	28	13
16	12	28	13	22	16
16	28	17	12	17	28
22	16	13	28	12	17
16	12	17	12	28	12

Required:

- a) Organize this data into a continuous data series (5marks)
- b) Then determine the median (5marks)

QUESTION FOUR

The following frequency distribution table represents the production data of Herbal soap over the last five years:

Year	2016	2017	2018	2019	2020
Production('000' kgs)	2800	5600	2000	8500	1600

- Determine the arithmetic mean (4marks)
- Determine the standard deviation (6marks)

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

- Fixed base method (5 Marks)
- Chain base method (5 Marks)

QUESTION SIX

- Using relevant examples, explain two ways in which data is collected (4marks)
- Discuss any three ways of presenting data (6 Marks)