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**KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**UNIVERSITY EXAMINATION, 2017/2018 ACADEMIC YEAR**  
**DIPLOMA IN BUSINESS INFORMATION TECHNOLOGY**

**DBT 024 - BUSINESS STATISTICS**

Date:

Time:

**INSTRUCTIONS TO CANDIDATES**

**ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS**

**QUESTION ONE (30 MARKS)**

a) Explain each of the following.

i. Frequency distribution (2 Marks)

ii. Descriptive statistics (2 Marks)

b) Outline five limitations of statistics. (10 Marks)

c) Given the data below of scores of some Forty five students in a given competition.

118	139	155	129	140	123	105	134	112
122	144	112	122	133	122	117	116	119
129	109	121	126	114	148	124	126	132
133	118	139	130	142	113	126	109	145
108	78	159	147	109	145	119	124	141

Construct a frequency distribution table using 8 classes.

(8 Marks)

d) A bucket contains 3 oranges and 5 mangoes. Jane picks a fruit at random from the bucket and then replacing it back. She mixes them and picks another fruit at random from the bucket. Calculate the probability that Jane picks an orange in first draw and a mango in the 2<sup>nd</sup> draw.

(4Marks)

e) Explain the Two advantages of mean as a measure of central tendency

(4 Marks)

**QUESTION TWO (20 MARKS)**

- a) The following relates to the number of successful sales made by the salesmen Employed by a large microcomputer firm in a particular quarter.

No. of sales	0-4	5-9	10-14	15-19	20-24	25-29
No. of sales men	1	14	23	21	15	6

*Required*

- i. Calculate the Mean number of sales (6 Marks)
- ii. Compute for standard variation and Co-efficient of variation (10 Marks)
- b) List four advantages of Arithmetic mean (4 Marks)

**QUESTION THREE (20 MARKS)**

- a) Define data tabulation highlighting its Five advantages (7 Marks)
- b) Discuss the Four sampling techniques in data collection (8 Marks)
- c) State Five properties of Arithmetic mean (5 Marks)

**QUESTION FOUR (20 MARKS)**

- a) Distinguish between primary sources and secondary sources of statistical data. (2 Marks)
- b) What are the five advantages and three disadvantages of secondary data over primary data? (8 Marks)
- c) Define statistics clearly explaining its four functions and four limitations (10Marks)

**QUESTION FIVE (20 MARKS)**

The prices and quantities of five commodities during the 2010 and 2011 are shown in the table.

Commodity	2010		2011	
	Price (shs/kg)	Quantity (Kg, 000)	Price (sh/kg)	Quantity (Kg, 000)
A	6	14	9	18
B	9	16	14	20
C	7	12	11	16
D	15	20	19	24
E	12	15	10	20

Using 2010 as the base year, calculate the following;

- i. Laspeyre's Price Index
- ii. Paasche's Price Index
- iii. Fischer's Price Index
- iv. What do you conclude about the indexes?

(20 Marks)