



Scott Christian UNIVERSITY

SCHOOL OF PROFESSIONAL STUDIES

BACHELOR OF BUSINESS ADMINISTRATION/ BACHELOR OF BUSINESS INFORMATION TECHNOLOGY

UNIT CODE/NAME: BBA 203/BBIT 213: BUSINESS STATISTICS

September- December 2019/2020 End Semester Exam

- Time: 2 Hours

Instructions: Answer Question ONE (Compulsory) and any other TWO questions.

QUESTION ONE

- (a) Mr. Kyungu is a business analyst. He is not quite sure when to use the mean, mode and median as a measure of central tendency.

Required:

As a student of Scott Christian University who is pursuing a business statistics course, advise him. (12 Marks)

- (b) The table below shows how a statistics class performed in an examination in the year 2018 January – April Semester.

Class	40 – 49	50 – 59	60 – 69	70 – 79	80 – 89
Frequency	10	50	45	30	15

Required;

Calculate

- | | | |
|-------|------------------------|-----------|
| (i) | Median | (3 Marks) |
| (ii) | The Modal Class | (3 Marks) |
| (iii) | Mean Average Deviation | (3 Marks) |
| (iv) | Percentile Range | (3 Marks) |
| (v) | Standard deviation | (3 Marks) |
| (vi) | Variance | (3 Marks) |

QUESTION TWO

- (a) Measures of Normality involves skewness and kurtosis which provide information on symmetrical or peakedness properties of a distribution.

Required:

Using a well labelled diagram, describe the three forms of Kurtosis. (6 Marks)

- (b) Statistics is a branch of mathematics that deals with the collection, analysis, interpretation and presentation of masses of numeric data.

Required:

Explain the importance of statistics as a tool of management. (9 Marks)

QUESTION THREE

- (a) Range is the simplest measure of dispersion as it gives the difference between the maximum and the minimum. Describe three limitations of range (6 Marks)
- (b) Index numbers are statistical devices designed to measure the relative changes in the level of a certain phenomenon in two or more situations. Describe any four uses of index numbers (8 Marks)
- (c) Data collection is a process of bringing together data from different sources.

Required:

Describe two data collection techniques.

(1 Mark)

QUESTION FOUR

The following table shows price of different commodities at different years.

Year 2016			Year 2017	
Item	Price P_0	Quantity Q_0	Price P_t	Quantity Q_t
Milk	26	10	40	7
Bread	40	33	50	20
Sugar	90	10	120	6

Required:

From the data above and using 2017 as base year, calculate;

- (i) Laspeyre's price index (3 Marks)
- (ii) Paasche's price index (4 Marks)
- (iii) Fisher's index number (4 Marks)
- (iv) Marshall- edge worth index (4 Marks)

QUESTION FIVE

- (a) The following data represents the number of patients diagnosed with malaria in Bishop Kioko hospital each year.

Year	2001	2002	2003	2004	2005
No. of patients	150	225	200	100	175

Required:

Represent the above given data in a bar chart

(6 Marks)

- (b) Data can be presented using various methods. Describe five other methods of presenting data for use in statistics (5 Marks)
- (c) Write short notes on the following terms as used in statistics:
- (i) Quantitative data (2 Marks)
- (ii) Qualitative data (2 Marks)