

REGULAR UNIVERSITY EXAMINATIONS 2018/2019 ACADEMIC YEAR FIRST YEAR FIRST SEMESTER

SCHOOL OF BUSINESS MANAGEMENT & ECONOMICS

DIPLOMA IN BUSINESS MANAGEMENT

COURSE CODE: DBM 004

COURSE TITLE: QUANTITATIVE

TECHNIQUES

DATE: 25TH APRIL, 2019 TIME: 1100 -

1300HRS

INSTRUCTIONS TO CANDIDATES

Answer Question ONE and any other THREE Questions.

DBM 004: Quantitative Techniques

QUESTION ONE

- a. Explain the meaning of the term Quantitative Techniques. (2marks)
- **b.** State and explain three types of Quantitative Techniques. (6marks)
- c. Differentiate the following terms as used in Quantitative Techniques.

(6Marks)

- i. Population and Sample.
- ii. Census and Survey.
- iii. Statistic and Parameter.
- d. Explain three shortcomings of quantitative techniques in decision making process.(6Marks)
- e. The data below illustrate the sales in thousands made by 10 companies whose names are provided in alphabets;

| Company | Sales in Thousands |
|---------|--------------------|
| | ('000) |
| A | 21 |
| В | 12 |
| С | 32 |
| D | 14 |
| Е | 21 |
| F | 12 |
| G | 16 |
| Н | 13 |
| Ι | 17 |
| J | 31 |

Used the table to determine

| i. | The most frequent sales | (1Mark) |
|------|-------------------------|----------|
| ii. | The median sales | (2Marks) |
| iii. | The average sales | (2Marks) |

QUESTION TWO

a. Discuss the stages of statistical inquiry. (10Marks)

b. Explain four ways in which statistical data can be classified. (5Marks)

QUESTION THREE

a. State five reasons behind sample survey as opposed to complete

enumeration. (5Marks)

b. Explain five importances of Quantitative Techniques. (10Marks)

QUESTION FIVE

a. State three characteristics of a binomial distribution. (3Marks)

b. Give five characteristics of a normal distribution. (5Marks)

c. What is the relationship between a Bernoulli and a Binomial distribution.

(2Marks)

d. State five uses of Index Numbers. (5Marks)

QUESTION FIVE

a. The table below shows the distribution of the number of portfolios invested in by Mr. Kamau.

| Number of | Frequency |
|------------|-----------|
| Portfolios | |
| 2 | 4 |
| 4 | 7 |
| 7 | 12 |
| 8 | 10 |
| 12 | 9 |
| 13 | 5 |
| 17 | 3 |

Use the table to determine

- i. Median number of portfolios invested in by Mr. Kamau. (3Marks)
- ii. The modal of portfolios invested in by Mr. Kamau. (1Mark)
- iii. The mean of portfolios invested in by Mr. Kamau. (5Marks)
- iv. Standard deviation of the number of portfolios invested in by him.

(6marks)

//END