JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY

SCHOOL OF BUSINESS AND ECONOMICS
KISUMU LEARNING CENTER
FINAL EXAMINATION, AUGUST 2014

ABA206: BUSINESS STATISTICS
BACHELOR OF BUSINESS ADMINISTRATION

END SEMESTER EXAMS, YEAR 2 SEMESTER 2

2HRS

Instructions:

Answer question **ONE (Compulsory)** any other **TWO** questions.

QUESTION ONE

a)i) When is the mode useful over other averages?**(2mks)**
(**ii**)Giving examples, distinguish between probability and non-probability sampling technique.
(8mks)
b) For a skewed distribution, the mean is 86, the median is 20 and the standard
deviation is 5.Calculate the Pearson's coefficient of skewness and sketch the
Curve.**(5mks)**

c)Classify and find the mean, mode and median of the following 50 observations.
19, 19, 20, 20, 20, 19, 20, 18, 21, 19,
20, 20, 19, 19, 20, 19, 21, 19, 19, 21,
18, 20, 18, 18, 17, 20, 20, 22, 20, 20,
20, 20, 20, 21, 20, 17, 23, 18, 17, 21,
20, 21, 20, 20, 20, 18, 21, 19, 20, 19**(15mks)**

TOTAL MARKS   (30MKS)

QUESTION TWO

a) Distinguish between Histogram and Bar Diagram**(5mks)**

b)In a certain factory a unit of work is completed by A in 10 Minutes, by B in 15 minutes, by C
in 12 minutes and by D in 20 minutes.

i) What is the average number of units of work completed per minute?

ii)At this rate how many units will they complete in an 8-hour day? **(15mks)**

TOTAL MARKS **(30MKS)**

QUESTION THREE

Calculate mean, median, mode and Semi-interquartile range for the following data pertaining to marks in statistics out of 140 marks for 80 students in a class.

Marks more than: 0   20   40   60   80   100   120

No.of Students: 80 76 50   26   18   9   3

TOTAL MARKS **(20MKS)**

QUESTION FOUR

a) Explain the following terms as used in business statistics.

i) Consumer price index**(4mks)**

ii) Random Experiment**(4mks)**

iii) Conditional probability **(4mks)**

b) You are given the following kilowatt hours of electicity consumed by 100 persons in Kisumu city.

Consumption

(in K-Watt hours): 0-10   10-20   20-30   30-40   40-50

No of users   :   6   25   3620   13

Calculate coefficient of variation.   **(8mks)**

TOTAL MARKS   **(20MKS)**

QUESTION FIVE

a)Explain the significance of the study of correlation**(8mks)**

b) Distinguish between the following terms

) Skewness and Kurtosis **(4mks)**

ii) Lorenz Curve and Cumulative frequency Curve   **(4mks)**

iii) Harmonic mean and Geometric Mean   **(4mks)**

TOTAL MARKS (20mks)

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SCHOOL OF BUSINESS AND ECONOMICS

ABA 206: BUSINESS STATISTICS

DURATION: MAY- AUGUST 2014   **LECTURER:**   AGNES OMOLLO

MEETING DAYS: SATURDAYS   **VENUE: KLC**

TIME: 2.00pm-5.00pm   **TOTAL HRS**: 42 HRS

COURSE DESCRIPTION:

This is an introductory course aimed at presenting the key concepts involved in converting mere data into useful information for decision-making.

COURSE OBJECTIVES:

Specifically it will:

- Equip students with statistical skills that are indispensable in any empirical business/economic analysis.
- Enable management scholars to make concrete decisions based on information that results from data
- Enable students to bridge the gap between theoretical foundations of statistics and the need to extract useful decision –making information from data collection.

COURSE COVERAGE

WEEK   TOPIC   CONTACT HOURS

One   NATURE AND SCOPE OF BUSINESS STATISTICS

- Meaning& scope

- Importance (statistics as a tool of management)
- Variables
- The nature of statistical enquiry……………………………………**3hrs**

Two   DATA COLLECTION

- Types of data
- Sources of data
- Instruments of data collection ……………………………………**3hrs**

Three&Four   SAMPLING PROCEDURES AND TECHNIQUES

- Definitions
- Sampling
- Census
- Sampling frame
- Sample Design ………………………………………………………………..**6hrs**

Five& SixDATA PRESENTATION

- Classification
- Presentation
- Frequency distributions ………………………………………………**6hrs**

Seven -Nine   DESCRIPTIVE STATISTICS

- -Measure of central tendency
- -Measures of dispersion
- -Lorenz curves
- -Measures of variation ……………………………………………**9hrs**

Ten& ElevenINDEX NUMBERS

- Construction
- Types
- Laspeyres index
- Paasche index
- Weighted average price index …………………………………**6hrs**

Twelve   PROBABILITY ………………………………......**3hrs**

Thirteen&fourteen CORRELATION AND REGRESSION ANALYSIS

……………………………………………………… **6hrs**

TOTAL: 14WKS   **42Hrs**

TEACHING METHODOLOGY:

Lectures, Class discussions and presentations

COURSE EVALUATION PLAN

Course work   (CATS & Assignments)   30%

Final Exams   70%

Total   100%

BOOKS AND OTHER REFERENCES

1. CroxtonJ.Cowder and Klein (1988)**Applied General Statistics;** Prentice Hall of India.

2. Schaum's Outline Series (1972), **Theory and problems of statistics;** Mc Grew Hill, New York.

3. Lawrence Lapin (1973),**Statistics for modern Business Decision**; Newyork, Harcourt.

4. R.W.Murray and R.W Boxer (1973), **Theory and Problem of Statistics**, New York

5. S.K .Campbell (1987), **Applied Business Statistics**. New York Harper Row Publishers.

6. Harke J.E and A.G (1991), **Understanding Business statistics**, Richard Irwin inc.U.S.A

7. Clark and Reits and D.Cooke, (1991) **A Basic Course in statistic**. Edward Arnold, Grea Britain.

8. J, E.Freund and F.J Williams (1991) **Modern Business statistics**

9. Any other relevant materialsefficiently covering the above contents.
NB. *Please Consult the Librarian for more E-Resources*

Signed…………………………….   Coordinator / CDIR

Signed:………………………..   Dean SB&LS

cc

Deputy Principal (AA)