



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION
3RD YEAR 2ST SEMESTER 2018/2019 ACADEMIC YEAR
MAIN CAMPUS
INSTITUTIONAL BASED

COURSE CODE: SCS 324

COURSE TITLE: STATISTICAL ANALYSIS WITH SPSS

EXAM VENUE: MAIN CAMPUS

DATE: 16/08/19 EXAM SESSION: 2.00 – 4.00PM

TIME: 2.00 HOURS

INSTRUCTIONS:

- 1. Answer Question 1 (Compulsory) and ANY other two questions**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

QUESTION ONE – 30 MARKS [COMPULSORY]

- a) Data analysis is a culmination of a set of activities. Using relevant examples discuss these activities [10 Marks]
- b) Variables form an important part of data analysis. However, when describing variables it is important to define its measures. Explain the FOUR measures of variables. [8 Marks]
- c) Using examples elucidate on the difference between measure of central tendency and measure of dispersion. [8 Marks]
- d) Contrast between data view and variable view in SPSS program. [4 Marks]

QUESTION TWO – 20 MARKS

You are selected to be part of a team which is conducting a research on “the effect of e learning on concentration of student in class”

Required

- i) Formulate ONE main objective and THREE specific objectives for this study. [8 Marks]
- ii) Describe the null hypothesis for the study and explain how you would interpret alternative non directional and directional hypothesis for the study above. [8 Marks]
- iii) Define validity and reliability of data. Using relevant examples how you will ensure validity and reliability in this study. [6 Marks]

QUESTION THREE – 20 MARKS

- a) Give a set by step procedure of opening SPSS in windows environment. [5 Marks]
- b) In one of the assignments you are required to measure age of students and their shoe size. Which statistical tool available in SPSS will best suit this study? Give reasons for your answer. [5 Marks]
- c) Based on question b above what procedure will you undertake to yield your results and how will you interpret these results. [10 Marks]

QUESTION FOUR – 20 MARKS

- a) What do you understand by the term data presentation in statistical analysis? [2 Marks]
- b) Explain any FIVE tools that can be used in data presentation. [10 Marks]
- c) Describe the steps you will undertake to present data in SPSS using charts. [8 Marks]

QUESTION FIVE- 20 MARKS

- a) With aid of examples define the following forms of data analysis used in SPSS.
 - i) Multiple Regression [2 Marks]
 - ii) One Way ANOVA [2 Marks]
 - iii) Chi Square [2 Marks]
 - iv) Mann-Whitney Test [2 Marks]
 - v) *t*-tests [2 Marks]
- b) Define sampling error and describe any FOUR of its concepts. [10 Marks]