# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

# **UNIVERSITY EXAMINATIONS 2015/2016**

JANUARY – APRIL, 2016 SEMESTER

# THIRD YEAR SECOND SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION WITH INFORMATION TECHNOLOGY

(KENDU BAY LEARNING CENTRE)

SCS 324: STATISTICAL ANALYSIS USING SPSS

# **INSTRUCTIONS:**

- ♦ This paper contains two sections namely SECTION A and SECTION B.
- ♦ Section A carries 30 marks and each question in Section B carries 20 marks.
- ♦ Answer ALL QUESTIONS in section A and ANY TWO questions in Section B.

# **SECTION A: Compulsory.**

### **QUESTION ONE (30 MARKS)**

- a) These questions require short answers. Answer all of them. (20 marks)
  - i. Which window do the results of your analysis appear?
  - ii. Which view is being used to create and define the various characteristics of variables?
  - iii. Which menu item contains the split file and select cases command?
  - iv. What are the two main windows in SPSS?
  - v. Which menu item is used to create bar graphs and scatter plots?
  - vi. Name the tab in which rows represent individual cases and columns represent variables in your data?
  - vii. Which menu item contains procedures to manipulate variables?
  - viii. Name the tab where, rows represent variables and column represent characteristics of variables?
    - ix. Which view is used for entering and viewing data?
    - x. Which menu would you select to run a statistical procedure?

- b) What are the major differences that exist between an excel spreadsheet and the data editor in SPSS? (6 Marks)
- a) When defining a variable in SPSS data editor's variable view, certain considerations/rules need to be taken to ensure that variable name is correctly defined. (4 Marks)

# **SECTION B: Answer any Two Questions.**

### **QUESTION TWO (20 MARKS)**

- a) Define what is meant by the Regression Analysis, and when is it fit to be used in analyzing data? (4 Marks)
- b) Given a set of data, how would you go about performing correlation and regression procedures, in order to come up with a linear relationship model for two variables X and Y. Illustrate steps using SPSS data file. (10 Marks)
- c) Interpret the following output from a correlation procedure in SPSS.

(6 Marks)

### **Correlations**

		Respondent's Occupation	Household income per month in Kshs.		
Respondent's Occupation	Pearson Correlation	1	626**		
	Sig. (2-tailed)		.000		
	N	120	120		
Household income per month in Kshs.	Pearson Correlation	626**	1		
	Sig. (2-tailed)	.000			
	N	120	120		

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

# **QUESTION THREE (20 MARKS)**

- a) Define the following attributes (6 Marks)
  - (i). Mode
  - (ii). Range
  - (iii). Variance
- b) Explain what we mean by the following statements; (6 Marks)
  - i. Bi-variate
  - ii. Multi-variate
- c) Explain the process of obtaining the table below and give the brief analysis of the information in the table as given. (8 Marks)

Gender of the Respondent \* Level of Education of the respondents Cross tabulation Count

						Post-		
		Primary	Secondary	Diploma/	Bachelor	Graduate		
		Certificate	Certificate	Certificate	's Degree	Degree	Others	Total
Gender of the Respondent	Male	0	33	15	9	6	3	66
	Female	12	9	15	15	3	0	54
Total		12	42	30	24	9	3	120

# **QUESTION FOUR (20 MARKS)**

- a) Explain the role of the following features in the variable view window of an SPSS data editor. (12 Marks)
  - i) Type
  - ii) Decimals
  - iii) Label
  - iv) Value
  - v) Align
  - vi) Measure
- b) Give the procedure that can be followed in SPSS to arrive at frequency tabulation together with measures of central tendencies. (8 Marks)

# **QUESTION FIVE (20 MARKS)**

- a) Differentiate between *descriptive* and *inferential* statistics. (8 Marks)
- b) Variables are classified in four categories. Briefly describe what these four categories are? (12 Marks)
  - 1) Nominal or classificatory scale (Variable)
  - 2) The ordinal or ranking scale
  - 3) Interval variables
  - 4) Ratio variables