

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF EDUCATION UNIVERSITY EXAMINATION FOR THE DIPLOMA BUSSINES ADMINISTRATION FOR 2ND YEAR 1ST SEMESTER 2016/2017 ACADEMIC YEAR

KENDU BAY LEARNING CENTRE

COURSE CODE: BBM 2216

COURSE TITLE : STATISTICS AND QUANTATIVE METHODS IN BUSINESS STUDIES

VENUE:

STREAM:

DATE : EXAM SESSION:

TIME : 1 ¹/₂ HOURS

Instructions:

- 1. Answer question 1 (Compulsory) and any other 2 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.

Q 1. a) Define statistics (5marks)

- b) State five functions of statistics (5marks)
- c) What is the difference between inferential statistics and descriptive statistics **(5marks)**
- d) State the measures of dispersion (5marks)

d) Explain the following concepts as used in statistics **(10 marks)**

- i) Population
- ii) Parameter
- iii) Variable

${f Q2}$ a) Distinguish between mean, mode and median									(10 marks)
b) Calculate the mean and standard deviation from the data below (10 marks)									
Scores	5		6	7	8	9	10	11	12
Frequencies		3	6	9	13	8	5	4	
Q3 . Given the following data.									
2	X	2	3	5	6	8		9	
	Y	6	5	7	8	12	2	11	
a) Calculate the pearson's moment correlation coefficient (10 marks)									
b) Draw a scatter diagram (7								marks)	
c) Comment on the relationship between x and y (3 marks)									

Q4.a) State the procedure in computing chi- square test **(10 marks)**

b) Quinne was administered to 812 persons out of 3248 patients. The number of fever cases is given bellow.

Treatment	Fever	No fever	Total
Quinne	20	792	812
No Quinne	220	2216	2436
Total	240	3008	3248

With the help of chi- square test, test the usefulness of quinne in checking malaria.

The chi-square value at 5% level of significance for 1 degree of freedom is 3.84. (10 marks)

Q5.a) Give at least five uses of index numbers **(10 marks)**

b) Calculate the index number of crime for 2009 with 2008 as the base. (10 marks)

	2008	2009	weight
Robberies	13	8	6
Car theft	15	22	5
Motor cycle theft	249	185	4
Pick pockets	328	259	1
Theft by servants	497	448	2