

**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF HUMANITIES AND SOCIAL SCIENCES**

**UNIVERSITY EXAMINATION FOR MASTER OF ARTS IN GEOGRAPHY**

**YEAR 1 SEMESTER 1 2016/2017ACADEMIC YEAR**

**MAIN CAMPUS**

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**COURSE CODE: NGE 802**

**COURSE TITLE: QUANTITATIVE TECHNIQUES**

**EXAM VENUE: - STREAM: MA GEOGRAPHY**

**DATE: 25/04/2017 EXAM SESSION: 9.00 – 12.00 NOON**

**TIME: 3 HOURS**

**Instructions:**

1. **Answer any THREE 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.**

**NB: Formulae and Table of critical values of Chi Square are attached at the end**

1. Examine the significance of Quantitative techniques in geographical studies.
2. The following table shows the distribution of fish landed at Usigu Beach over a period of 200 days. Use the data in the table below to answer the questions which follows:

Weight (Kg) Frequency

111 – 120 10

121 – 130 13

131 – 140 24

141 – 150 14

151 – 160 30

161 – 170 40

171 – 180 34

181 – 190 20

1. – 200 15
   1. Estimate the mean, mode, median and mean deviation of the fish landed
   2. Comment on the limitation of mean as a measure of central tendency.
2. A sample of 200 people with malaria disease was selected from BondoSubcounty Hospital. Out of these, 100 were given a new drug and others were not given any drug. The results were as follows:

Number of people

Drug No drug

Cured 65 55

Not cured 35 45

Use a suitable statistical application to test whether the drug is effective or not.

1. Examine critically the philosophical assumption of quantitative paradigm in social science
2. In an investigation into the relationship between the age of the husbands and age of wives at the time of marriage are shown in the figure below:

Age of husbands (in years) Age of Wives (in years)

38 29

35 28

23 18

27 20

33 29

30 27

30 29

28 21

28 27

28 22

Estimate the coefficient of product moment correlation and provide its interpretation.