



**JARAMOGI OGINGA ODINGA UNIVERSITY
OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION 2013/2014**

**3rd YEAR 1st SEMESTER EXAMINATION FOR THE
DEGREE OF BACHELOR OF EDUCATION ARTS WITH
IT (SCHOOL BASED)**

MAIN

COURSE CODE: NGE 301

TITLE: QUANTITATIVE METHODS

DATE: 2/5/2013

TIME: 11.00-13.00PM

DURATION: 2 HOURS

INSTRUCTIONS

- 1. This paper contains FIVE (5) questions**
- 2. Answer question 1 (Compulsory) and ANY other 2 Questions**
- 3. Write all answers in the booklet provided**

1. (a) The data below show the number of tonnes of sugar cane obtained by farmers during harvesting period. Use the data to answer the questions that follow.

Class	1 – 8	9 – 16	17 – 24	25 – 32	33 – 40
Frequency	15	12	7	5	1

- (i) Construct a frequency polygon based on the above data. (6 marks)
- (ii) Compute: Mean and Standard deviation. (4 marks)
- (b) Write explanatory notes on the following:
- (i) Reliability (5 marks)
- (ii) Probability Concept (5 marks)
- (iii) Level of Significance (5 marks)
- (iv) Correlation Analysis (5 marks)
2. Compare and contrast Stratified and Multistage sampling techniques. (20 marks)
3. The following are scores of two students in CAT test:
- Meshack:** 10, 12, 9, 10, 11, 8, 14, 13, 11, 15, 14, 12.
- Emilly:** 14, 13, 14, 16, 9, 14, 11, 13, 12, 14, 12, 9.
- (a) Test at 5% significance level whether there is a difference between the means in their marks. (18 marks)
- (b) State two (2) limitations of the test in (a) above. (2 marks)
4. Critique the relevance of hypothesis testing in social science research. (20 marks)
5. Discuss the rationale of quantitative techniques in geographic studies. (20 marks)