JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF EDUCATION (ARTS)

1ST YEAR 1ST SEMESTER 2013/2014 ACADEMIC YEAR

REGULAR

COURSE CODE: NGE 102

COURSE TITLE: MAP INTERPRETATION AND DESCRIOTIVE STATICS

EXAM VENUE: LAB 1 **STREAM: (Humanities and social sciences)**

DATE: 24/04/14 **EXAM SESSION: 9.00 – 11.00 AM**

TIME: 2.00 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.**

1. a) Define the following terms and concepts:

i. Model (2 marks)
ii. Modern geography (2 marks)
iii. Statistics (2 marks)
iv. Graph (2 marks)
v. Drainage pattern (2 marks)

b) State and describe four methods of organizing quantitative geographical data. (10 marks)
c) Describe briefly the components of map work citing the scope of use of maps. (10 marks)

2. a) Discuss the role and purpose of descriptive statistics in geographical studies (10 marks)
b) Explain practical use of network analysis in community development programmes.
. (10 marks)

3. a) What is the purpose of drainage basin analysis? (4 marks)
b) State factors that influence drainage density and explain briefly how each factor influences it
. (8 marks)
c) Outline the importance of sampling in statistical inquiry and examine four important sampling methods used by researchers. (8 marks)

4. a) Explain any three methods of measuring connectivity for both planar and non-planar networks (12 marks)
b) Hypothetical data on monthly households' income (in 000 Ksh) in selected households are given in the table below:

6	8	12	14	26	30	35	42
7	8	12	16	28	33	38	42
7	11	13	20	30	34	40	45

Compute i) First and second quartiles (4 marks)
ii) 45^{th} percentile (2 marks)
iii) Semi-inter quartile range (2 marks)

5. a) Describe briefly how settlement patterns on topographic maps are analyzed (10 mks)
b) Given the following hypothetical rainfall (in mm) data, answer the following questions:

Amount (mm)	10-19	20-29	30-39	40-49	50-69
Frequency	5	10	8	4	2

i) How many observations were made? (1 mark)
ii) Compute median and modal rainfall values (7 marks)
iii) Comment on the overall average daily rainfall observed? (2 marks)