



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
UNIVERSITY EXAMINATION FOR BACHELOR OF EDUCATION (ARTS)
YEAR 1 SEMESTER 1 2016/2017 ACADEMIC YEAR
NAMBALE LEARNING CENTRE

COURSE CODE: NGE 102

COURSE TITLE: MAP INTERPRETATION AND DESCRIPTIVE STATISTICS

EXAM VENUE: STREAM

DATE: EXAM SESSION:

TIME: 2 HOURS

Instructions:

- 1. Answer Question ONE (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.**

QUESTION ONE

Use the map provided to answer the following questions

- (a) What is the area, in square kilometers, of part of the Forest shown on the map? (5marks)
- (b) What is the general type of relief found within:
- i. Easter part of the map (1mk)
 - ii. Eastings 07 to 15 and Nothings 25 to 27? (1mk)
- (c) Suggest the climate of the area shown on the map. Give two evidences on the map. (3mks)
- (d) State the stage of development of the part of River Yala shown on the map. Give two evidences derived from the map to support your answer. (3mks)
- (e) What is the:
- i. Approximate height of the hill in grid square 1024 and 1124? (1mk)
 - ii. Main reason for low population density to the north-eastern part of the area shown on the map. (1mk)
- (f) Discuss five main economic potentials of the area giving evidence from the map (10mks)
- (g) Calculate the drainage density of the area to the north-east bounded by easting 18 and nothing 24. (5mks)

QUESTION TWO

- (a) Using diagrams, explain the following maps:
- i. Choropleth maps. (2mks)
 - ii. Dot maps. (2mks)
 - iii. Flow-line maps. (2mks)
- (b) State the advantages and disadvantages of each of the four maps in (a) above. (6mks)
- (c) Explain four methods of depicting relief on a map (8mks)

Question Three

- (a) Define the following terms:
- i. Statistics (2mks)
 - ii. Variables (2mks)
- (b) Explain the difference between:
- i. A population and a sample (2mks)
 - ii. Data and information (2mks)
 - iii. Descriptive and inferential statistics (2mks)
 - iv. Qualitative and quantitative variables (2mks)
- (c) Discuss the significance of statistical methods in geography (8mks)

Question Four

- (a) Explain the following types of scale:
- i. Nominal scale (2mks)
 - ii. Interval scale (2mks)
- (b) Describe any three techniques used in sampling (6mks)
- (c) State the advantages of sampling (4mks)
- (d) Explain the following types of lettering in map making:
- i. Point size (2mks)
 - ii. Upright (2mks)
 - iii. Italic (2mks)

Question Five

The following table summarises information on a river basin in an area of a map representing 12square kilometers on the actual ground.

STREAM ORDER	NUMBER OF STREAMS	TOTAL LENGTH
1	38	40.6
2	16	19.8
3	7	10.2
4	2	6.5
5	2	3.1

- (a) Calculate the Bifurcation ratio (R_b) for the 2nd, 3rd, 4th, and 5th order streams (4mks)
- (b) Calculate the mean length of each stream order. (5mks)
- (c) Determine the drainage density of the area. (2mks)
- (d) Draw the drainage basin showing stream order and number of streams as in the table above. (9mks)