



MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS

2023/2024 ACADEMIC YEAR

FIRST YEAR SECOND SEMESTER

**SCHOOL OF NATURAL RESOURCES, ENVIROMENTAL
STUDIES AND AGRICULTURE**

**BACHEOR OF ARTS IN GEOGRAPHY AND
GEOSPATIAL TECHNOLOGIES**

COURSE CODE: GEO 1209-1

**COURSE TITLE: INTRODUCTION TO PRACTCAL
GEOGRAPHY AND FIELDWORK**

DATE: 21/5/24

TIME: 1100-1300HRS

INSTRUCTIONS TO CANDIDATES

Answer **ALL** questions in Section A, and any **THREE** questions in Section B
Use illustrations where appropriate. Some **THREE graph** papers and **TWO tracing** papers have been provided. A **calculator** is required in this examination. Borrowing of any materials from others strictly not allowed.

This paper consists of 3 printed pages. Please turn over

SECTION A (20 MARKS)

Question One

(a) With the aid of examples explain TWO difference between observations and measurements (3 marks)

(b) What is the importance of obtaining stream orders in a basin? (1 marks)

(c) The attached figure (Annex 1) shows the main streams in a hypothetical river basin. The location of rainfall stations is indicated and their respective average annual rainfall values are tabulated below in alphabetical order.

With reference to the diagram, answer the question that follow.

i) Copy the diagram on graph paper and then construct suitable Thiessen polygons (2 marks)

ii) Obtain the areas of each of the polygons (3 marks)

iii) Obtain an estimate of the average annual areal rainfall in the basin (2 marks)

iv) Copy the diagram on another graph paper and then indicate the corresponding annual rainfall values for each station (2 marks).

v) Draw isohyets at a suitable interval on the diagram (2 marks)

vi) Obtain the inter-isohyetal areas (3 marks)

Vii) Obtain another estimate of the areal average annual rainfall over the basin (1 marks)

Viii) Comment on your results (1 marks)

SECTION B (ANSWER ANY TWO QUESTIONS)

Question Two

Describe a one situation in which each of these measures would be the most appropriate

(i) Mode (2 marks)

(ii) Histogram (3 marks)

(iii) Standard deviation (2 marks)

(iv) Trend (3 marks)

Question Three

Describe two common-interest variables that one could use to study the environmental feature listed here;

(i) New bore-hole (3 marks)

(ii) Tree nursery (3 marks)

(iii) Botanical garden (2 marks)

(iv) New water pan (2 marks)

Question Four

A large district has only four temperature stations. The National Weather Services Department has reported that these stations are inadequate. To improve the estimation of areal temperature in the area the government wishes to add more stations. Explain five variables that could be studied and presented to guide in determining the number the location the additional stations. **[10 marks]**

Question Five

“Safety guidelines and ethical considerations are very important while participating in fieldwork to enhance the security of students, staff and the local communities” Discuss. **(10 marks)**

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