



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR
FIRST YEAR FIRST SEMESTER**

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

**BACHELOR OF ARTS IN GEOGRAPHY AND
GEOSPATIAL TECHNIQUES & BACHELOR
OF EDUCATION (ARTS)**

**COURSE CODE: GEO 1103-1
COURSE TITLE: INTRODUCTION TO THE
EARTH'S PHYSICAL
ENVIRONMENTS**

DATE: 31/1/2024

TIME: 1430-1630 HRS

INSTRUCTIONS TO CANDIDATES

Answer **ALL** questions in Section A and any other **TWO QUESTIONS** in Section B. Use Sketches and diagrams wherever they serve to illustrate your answers. Sharing of any materials with other candidates is not allowed.

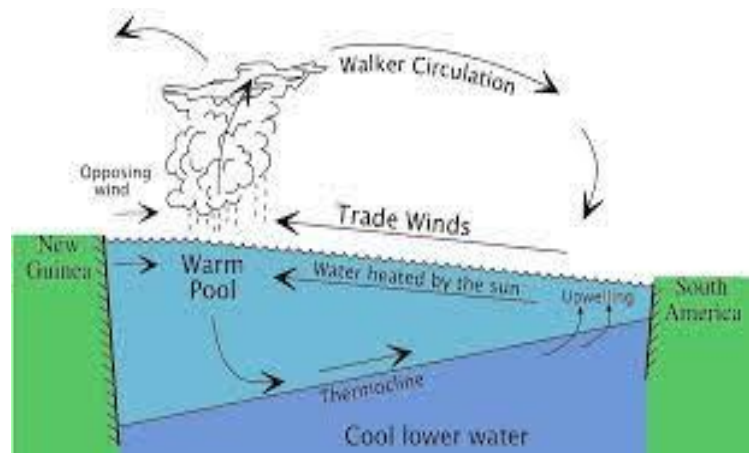
This paper consists of 2 printed pages. Please turn over

SECTION A - 20 MARKS (ANSWER ALL QUESTIONS)

Question One

- (a) Describe one common 'proxy' climate element. (2marks)
- (b) Write short notes on the following;
- (i) Water erosion (2 marks)
 - (ii) Theory associated with lithosphere (2 marks)
- (c) Describe and justify one 'anthroposphere' site that you would recommend for geographers to visit during a course on 'The Earth's physical environment'. (4 marks)
- (d) Describe one features of a pond eco-system (2 marks)
- (e) Explain how one could quantify the performance of the rainy season that we usually experience in our country. (2 marks)

(f) With the aid of the diagram below or otherwise describe the atmospheric and oceanic changes that are expected in the equatorial region during an El-Nino phenomena. (6 marks)



SECTION B - 30 MARKS (ANSWER ONLY TWO QUESTION)

Question Two

Explain, using diagrams, the following;

- a) Rock cycle (5marks)
- b) Bergeron-Findeisen theory (5marks)
- c) Darcy's law (5marks)

Question Three

Using examples Discuss, the difficulties expected among large scale livestock farmers when adapting to climate change. (15 marks)

Question Four

'In a country with heavy rainfall and rugged terrain, a network of many automatic meteorological stations is more suitable than a dense network of ordinary surface stations". Discuss. (15 marks)

Question Five

Describe six anthropogenic factors that affect the quality of top-soil found over a large vegetated surface. [15 marks]

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