

NAME ----- INDEX NO-----

DATE \_\_\_\_\_

CANDIDATES SIGNATURE \_\_\_\_\_

**312/1**

**GEOGRAPHY**

**PAPER 1**

**Term 1**

**GEOGRAPHY**

**PAPER 1**

**Term 2**

**INSTRUCTIONS TO CANDIDATES**

This paper has two sections A and B

Answer all the questions in Section A

Answer question 6 and any other two questions from Section B

All answers must be written in the answer booklet provided

**This paper consist of 4 printed pages candidates should check the questions paper to ascertain that all the pages are printed as indicated and that no questions are missing**

**SECTION A: (25 MARKS)**

**Answer all the questions in this section.**

1. a) When the local time is 2.00pm at longitude 45°E, what is the longitude of a place whose local time is 8.00pm? (2mks)

b) Name three forces responsible for the spheroid shape of the earth. (3mks)

2. a) Name the two scales used to measure the intensity of an earthquake. (2mks)

b) State any two human causes of earthquake. (2mks)

3. a) A part from the core name two other layers that make up the internal structure of the earth. (2mks)

b) Give three characteristics of the core. (3mks)

4 a) Name two features formed due to faulting. (2mks)

b) State two effects of faulting on drainage. (2mks)

5. a) Differentiate between weathering and mass wasting. (2mks)

b) State two negative effects of mass wasting. (2mks)

c) What factors determine the speed of mass wasting? (3mks)

## **SECTION B**

**Answer question 6 and any other TWO questions from this section.**

6. Study the map of Migwani 1:50,000 (sheet 151/1) provided and answer the following questions.

(a) (i) What is the altitude of the lowest contour shown on the map? (1 mark)

(ii) Give the six-figure grid reference of Mboni dam. (2 marks)

(iii) What is the length in Kilometres of the All Weather Road Bound Surface C94 from the junction with the Dry Weather Road D502 to Northing 84? (2 marks)

(b) Draw a rectangle measuring 10 cm by 8 cm to represent the area enclosed by Eastings 90 and 00 and Northings 62 and 70. (1 mark)

On the rectangle, mark and name the following features:

(i) Musengo school

(ii) Road E742

(iii) Kitui Hills

(3 marks)

(c) (i) Citing evidence from the map, identify four social services offered in Mutitu (Ndooa) township. (4 marks)

(ii) Describe the relief of the area covered by the map. (6 marks)

(d) Describe the characteristics of the long profile of river Ikoo. (6 marks)

7. (a)(i) Define the term Aridity (2marks)

ii) Name three types of deserts in term of appearance (3marks)

(b) List two factors that contribute to the development of deserts. (2marks)

(c) Explain three factors influencing wind transportation (6marks)

(d) Describe how the following desert features are formed.

(i) Rock pedestal (3marks)

(ii) Zeugen (3marks)

(e) State any six significance of desert feature to human activities. (6marks)

8. a) i) Distinguish between soil profile and soil catena. (2mks)

ii) State two importance of minerals (inorganic matter) in the soil. (2mks)

- iii) Give three importance of humus in the soil (3 mks)
- b. i) Explain how the following factors influence soil formation:
- a) Climate (3mks)
- b) Living organism (3mks)
- c) Describe calcification as a leaching process in soil formation. (3mks)
- d) i) What is soil degeneration? (1mk)
- ii) Identify two types of soil degeneration. (2mks)
- e) Explain three ways in which vegetation protects the soil from degeneration. (6mks)

9. (a)(i) What is a rock? (2 marks)
- (ii) State two reasons why sedimentary rocks are wide spread in the coastal plain. (2 marks)
- b) (i) State four changes that may occur in sedimentary rocks when they are subjected to intense heat and pressure. (4 marks)
- (ii) Describe three processes through which sedimentary rocks change into metamorphic rocks. (6 marks)
- c) Describe how coral rocks are formed. (5 marks)
- d) Suppose you were to carry out a field study of rocks within your school vicinity.
- i) Name three secondary sources of information you would use to prepare for the field study. (3 marks)
- ii) State three activities you would carry out during the field study. (3 marks)
- 10.(a) (i) Differentiate between a spring and a well . (2 marks)
- (ii) State four conditions favouring formation of artesian well. (4 marks)
- b.(i) What is a Karst scenery? (2 marks)
- (ii) Name five features formed on the surface in a Karst area. (5 marks)
- c. With the aid of well labeled diagrams describe how a limestone pillar is formed. (6 marks)
- d) Explain the significance of Karst scenery to human economic activities. (6 marks)