

MOMALICHE 3 CYCLE 6

Kenya Certificate of Secondary Education

312/1

- GEOGRAPHY -

Paper 1

Sept. 2021-2³/₄hours

Name Admission Number
Signature Class and Stream
Date

Instructions to candidates

- (a) Write your name and admission number in the spaces provided above.
 - (b) Sign and write the date of the examination in the spaces provided above.
 - (c) This paper consists of two sections; **A** and **B**.
 - (d) Answer **all** questions in section **A**.
 - (e) Answer **question 6** and any other **two** questions from section **B**.
 - (f) Answers **must** be written in the spaces provided at the end of question 10.
 - (g) **This paper consists of 13 printed pages.**
 - (h) **Candidates should check the question paper to ascertain that all papers are printed as indicated and that no questions are missing.**
 - (i) **Candidates should answer all questions in English.**
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For Examiner's Use Only

Section	Questions	Maximum Score	Candidates Score
A	1-5	25	
B	6	25	
		25	
		25	
Total Score			

SECTION A

Answer all the questions in this section.

1. (a) What is the shape of the earth? (1 mark)

(b) State **two** reasons why the earth has the spherical shape (4marks)

2. (a) Give the **two** dates in a year during which the number of hours of darkness and daytime is equal in both the north and south poles.

(2marks)

(b) Why do the lengths of days and nights vary from part of the earth to another?

(3marks)

3. (a) Name **two** scales used to measure the intensity of an earthquake.

(2marks)

(b) Give **three** natural causes of earthquakes

(3marks)

4. State **five** factors that influence mass wasting. (5marks)

5. (a) What is the difference between an ice sheet and an iceberg?

(2marks)(b) Name **three** types of glacial moraines.

(3marks)

SECTION B

Answer question 6 and any other two questions from this section

6. Study the map of Kijabe 1:50,000 (Sheet 134/3) provided and answer the following questions
- (a) (i) What is the approximate height of the top of Kijabe hill?
(2marks)
- (ii) Measure the length of Nairobi-Naivasha railway line from Landhies (257978) to the level crossing near Kijabe station (308984). Give your answer in kilometres.
(2marks)
- (iii) Which relief feature on the map may have created problems in the construction of the railwayline?
(2marks)
- (b) Describe the drainage of the area covered by the map.
(6marks)
- (c) Explain how relief has influenced the distribution of settlement in the area covered.
(6marks)
- (d) Citing evidence from the map, state three economic activities carried out in the area covered by the map.

(6marks)

(e) What is the latitudinal extend of the area covered by the map.

(1mark)

7. (a) Describe the following characteristics of minerals.

- | | |
|---------------|-----------|
| i. Colour | (2marks) |
| ii. Cleavage | (2marks) |
| iii. Hardness | (2 marks) |

(b) (i) Give **two** types of igneous rocks.

(2marks)

(ii) Explain **three** conditions necessary for the growth of coral polyps.

(6marks)

(c) Sate **four** uses of rocks.

(4marks)

(d) You are planning to carry out a field study on the rocks within your school environment.

(i) Give two secondary sources of information you would use to prepare for the field study

(2marks)

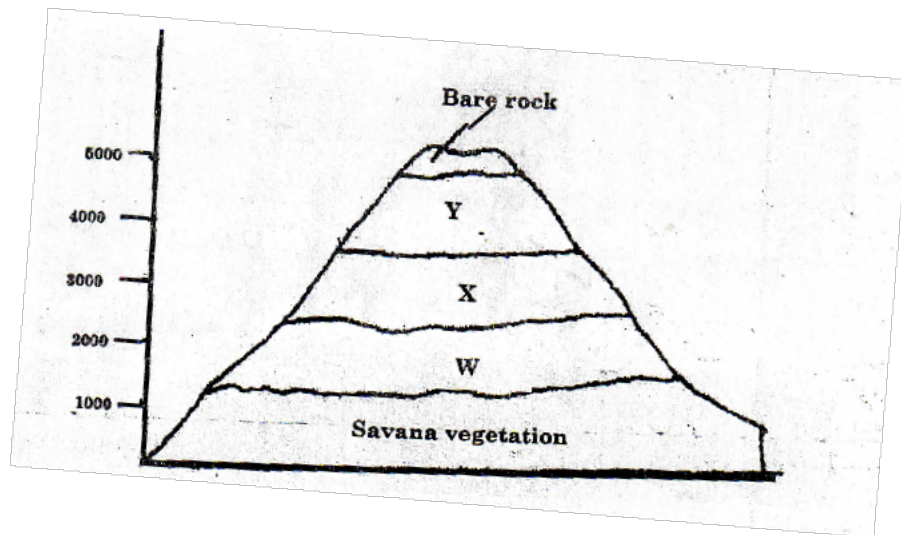
(ii) State why you need the following items during the field study.

- A fork jembe (1mark)
- Bag (1mark)

(iii) Suppose during the field study you collected marble, sandstone and granites, classify each of these samples according to its mode of formation

- Marble (1mark)
- Sandstone (1mark)
- Granites (1mark)

8. The diagram below represents zones of natural vegetation on mountain in Africa.
Use it to answer question **(a) i and (a) ii**



(a) (i) Name the vegetation zones marked W, X and Y.

(1mark)

(ii) Describe the characteristics of the savannah vegetation.

(6marks)

(iii) Name the temperate grasslands found in the following countries.

(3marks)

- Canada
- Russia
- Australia

(b) Explain **three** causes of the decline of the areas under forest in Kenya

(6marks)

(c) You are supposed to carry out a field study on the uses of vegetation in the area near your school.

(i) State three reasons why it would be necessary to visit the area before the day of study.

(3marks)

(ii) Give **four** uses of vegetation you are likely to identify during the study.

(4marks)

9. (a) (i) What is a river divide? (2marks)
(ii) Describe **three** ways by which rivers transport their load. (6marks)
- (b) State the characteristics of a river in its old stage. (6marks)
- (c) Describe each of the following drainage pattern and system;
(i) Super-imposed drainage system (3marks)
(ii) Centripetal drainage pattern (2marks)
- (d) You have planned to carry out a study of a river in its youthful stage.
(i) State **two** ways in which you would prepare for the study (2marks)
(ii) Name **two** features you are likely to study (2marks)
(iii) List **two** problems you are likely to experience during the study. (2marks)
10. (a) (i) What is soil Catena? (2marks)
(ii) Draw a well labelled diagram to show a well-developed soil profile. (5marks)
(iii) State **three** characteristics of soils found in the arid regions of Kenya. (3marks)
- (b) Give **three** factors that determine the colour of the soil (3marks)
- (c) Describe how laterization occurs. (6marks)
- (d) Explain how the following farming practices cause soil degeneration.
(i) Burning. (2marks)
(ii) Continuous application of fertilizer on farm lands (2marks)
(iii) Monoculture (2marks)