**Name………………………………………………… Index No. …………………….**

**School ………………………………………………...**

**312/1**

**GEOGRAPHY**

**PAPER 1**

**2 ¾ HOURS**

Kenya Certificate of Secondary Education (K.C.S.E)

# INSTRUCTIONS TO CANDIDATES

* This paper has two sections A and B
* Answer ALL questions in section A.
* In section B answer Question 6 and any TWO questions

*This paper consists of 4 printed pages.*

#### Candidates should check the question paper to ensure that all pages are printed as indicated

*and no questions are missing*

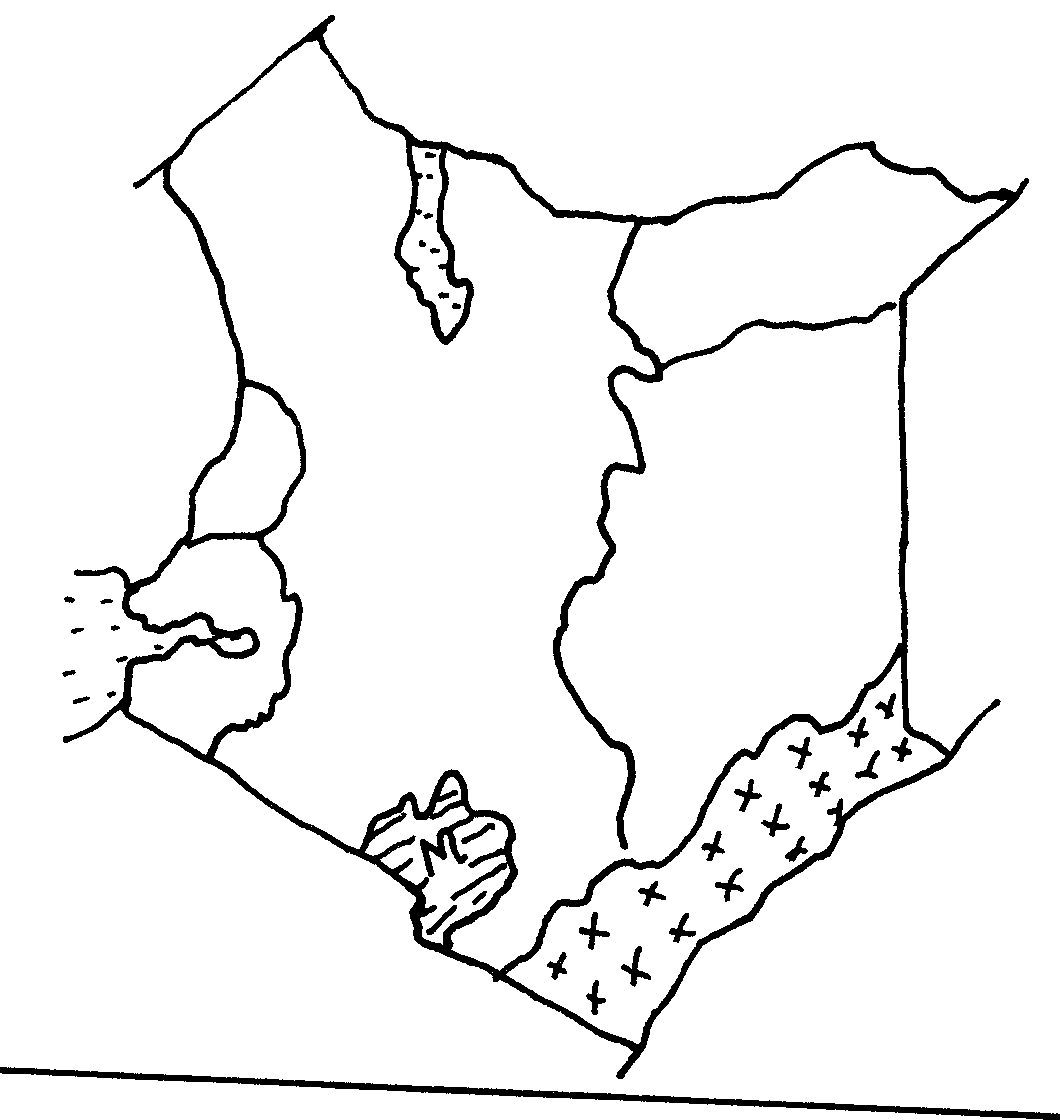
**SECTION A**

**Answer ALL questions from this section**

1. a) Give two characteristics of the Earth. (2mks)

b) Identify three zones of the external structure of the Earth. (3mks)

2. Use the map of Kenya below showing the distribution of rocks to answer question 9.



a) Identify the type of rocks found in the places marked M and N. (2mks)

b) State three characteristics of minerals. (3mks)

3. a) List three factors that influence soil creep. (3mks)

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

4. a) Define the term soil catena. (2mks)

b) Apart from soil texture, name three other properties of soil. (3mks)

5. a) Name one are in Kenya which is not predominantly covered by derived vegetation. (1mk)

b) Describe four characteristics of the Mediterranean type of vegetation. (4mks)

**SECTION B.**

**Answer question 6 and any other two questions from this section**

6. Study the map of Nyahuru 1:50,000 (sheet 105/4) provided and answer the following questions.

a) (i) Give the four Grid Square of the Trigonometrical TFS8-2458. (2mks)

(ii) What is the direction of pump House (grid reference 032 087) from the Quarry (grid reference 067068). (2mks)

(iii) Identify three natural vegetations in the area covered by the map. (3mks)

b) Using a vertical scale of 1cm representing 100m, draw a cross-section along line XY. (3mks)

On it mark and label: (4mks)

1. A river
2. A ridge
3. District boundary
4. The seasonal swamp.

c) (i) Identify the major drainage pattern in the area represented on the map. (1mk)

(ii) What relief feature on the map may have influenced the drainage system? (1mk)

d) (i) Citing evidence from the map name four economic activities carried out by Nyahururu people west of easting 00. (4mks)

(ii) If one dot (.) represents 65 people, calculate the number of persons living in grid square. 1301. (2mks)

e) Form four students conducted a field study in the upper course of river Tana, name three features they might have identified. (3mks)

7. a) Differentiate between a sill and a dyke. (2mks)

b) (i) Describe the formation of a lava plateau. (4mks)

(ii) Draw a diagram of a composite volcano and on it label the following features:

1. Crate
2. Conlet
3. Layers of Ash. (4mks)

iii) Name three composite volcanoes in Kenya. (3mks)

c) Explain four effects of faulting on the physical environment. (8mks)

d) Identify four characteristics of Rift Valley lakes. (4mks)

8. a) (i) What is a rock? (2mks)

(ii) Describe two types of igneous rocks. (6mks)

b) Briefly describe two processes through which igneous rocks change into metamorphic rocks. (4mks)

c) Give an example of each of the following types of sedimentary rocks.

(i) Chemically formed sedimentary rocks. (1mk)

(ii) mechanically formed sedimentary rocks. (1mk)

(iii) organically formed sedimentary rocks. (1mk)

1. Five form four students conducted a field study on rocks within the local environment of their school.

(i) Formulate four objectives that could have used in their study. (4mks)

(ii) State three advantages of using sampling as a method of collecting data for such a study. (3mks)

(iii) State three reasons why it was important for the students to make a reconnaissance before the actual field study. (3mks)

9. a) (i) What is a lake. (1mk)

(ii) Identify three external land forming processes which lead to the formation of lakes. (3mks)

b) (i) Give two ways in which lakes influence the natural environment and human activities. (2mks)

(ii) State five economic importance of lake Naivasha in Kenya. (5mks)

c) (i) Define the term Karst scenery. (2mks)

(ii) State three factors which influence the development of a karst scenery. (3mks)

d) (i) List five characteristics of features which form in limestone landscape. (5mks)

(ii) Form four students conducted a field study within a limestone landscape. Name four surface features they are likely to identify (4mks)

10. a) (i) Differentiate between aridity and desertification. (2mks)

(ii) Briefly explain three physical causes of aridity. (6mks)

b) (i) State three negative effects of desertification. (3mks)

(ii) Briefly explain use of chlorofluorocarbons causes climatic change. (4mks)

c (i) Define the term soil degeneration. (2mks)

ii) Identify three agents of soil erosion. (3mks)

iii) Name three types of soil classification by soil order. (3mks)

iv) State two merits of mulching in conserving soil. (2mks) 