**312/1**

**GEOGRAPHY**

**Paper 1**

**MARCH/APRIL 2015**

**Time: 2¾ hours**

**MOKASA JOINT EXAMINATION**

**Kenya Certificate of Secondary Education**

**312/1**

**Paper 1**

**GEOGRAPHY**

**INSTRUCTIONS TO STUDENTS**

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

**SECTION A**

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

1. (a) What is the relationship between Geography and Chemistry? (2 marks)

 (b) The diagram below shows the internal structure of the earth.

G

H

 (i) Name the parts marked **G** and **H**. (2 marks)

 (ii) Name the dominant mineral in the mantle. (1 mark)

2. (a) Differentiate between absolute and relative humidity. (2 marks)

 (b) State the significance of humidity in the atmosphere. (3 marks)

3. The diagram below shows some features formed by faulting. (2 marks)

**heave**

**Y**

**upthrow**

**throw**

**downthrow**

**X**

 (a) Name the parts marked **X** and **Y**. (2 marks)

 (b) State ***three*** effects of faulting on drainage of an area. (3 marks)

4. (a) Identify ***two*** scales used to measure the intensity of an earthquake. (2 marks)

 (b) Give ***three*** major earthquake zones of the world. (3 marks)

5. (a) State ***two*** ways in which plants cause weathering. (2 marks)

 (b) Describe the process of weathering through oxidation. (3 marks)

**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) Describe the following characteristics of minerals:

* Texture (1 mark)
* Tenacity (1 mark)

 (ii) Describe how extrusive igneous rocks are formed. (4 marks)

 (b) For each of the following rocks, name the resultant rock that forms after metamorphism.

 (i) Sandstone (1 mark)

 (ii) Limestone (1 mark)

 (iii) Granite (1 mark)

 (c) Explain ***three*** economic significance of rocks in Kenya. (3 marks)

 (d) Students carried out a field study on rocks around their school.

 (i) State ***two*** importance of stating the objectives for their study. (2 marks)

 (ii) Give ***three*** reasons why they prepared a route map of the study area. (3 marks)

 (iii) Give ***three*** activities that the students where involved in during the field study. (3 marks)

8. (a) (i) What is an orogeny? (2 marks)

 (ii) Give ***two*** factors that influence the folding process of rocks. (2 marks)

 (b) The diagram below shows some types of folds. Use it to answer the question (i) and (ii).

**F**

Nappe fold

 (i) Name the types of folds marked **E** and **F**. (2 marks)

 (ii) Describe how an overthrust fold is formed. (4 marks)

 (c) Name the countries in which the following fold mountains are found.

 (i) Atlas (1 mark)

 (ii) Alps (1 mark)

 (iii) Himalayas (1 mark)

 (iv) Andes (1 mark)

 (d) (i) Apart from fold mountains, name ***three*** other features resulting from folding. (3 marks)

 (ii) Explain ***four*** ways in which fold mountains influence climate. (8 marks)

9. (a) (i) Differentiate between a marine delta and a Lacustrine delta. (2 marks)

 (ii) Explain ***three*** conditions necessary for the formation of a delta. (6 marks)

 (iii) State ***three*** significance of deltas to man. (3 marks)

 (b) (i) What is a braided channel? (2 marks)

 (ii) State ***four*** conditions necessary for the formation of a braided channel. (4 marks)

 (c) With the aid of well labelled diagrams, describe how an ox-bow lake is formed. (8 marks)

10. (a) What is Karst scenery? (2 marks)

 (b) State ***four*** factors which influence the development of a karst landforms. (4 marks)

 (c) The diagram below shows a feature in a Karst landscape. Use it to answer question (i) and (ii).

Z

 Y

X

 (i) Name the parts marked **X, Y** and **Z**. (3 marks)

 (ii) Describe how the features marked **Y** and **Z** are formed. (5 marks)

 (d) (i) Define a lake. (2 marks)

 (ii) Name ***two*** types of lakes which are formed by volcanic activity. (2 marks)

 (iii) State ***three*** reasons why some lakes are salty. (3 marks)

 (iv) Explain ***four*** ways in which lakes are of significance to human activities. (4 marks)