

312/1
GEOGRAPHY
Paper 1
TERM 2 2019
Time: 2¾ hours

Kenya Certificate of Secondary Education
312/1
Paper 1
GEOGRAPHY

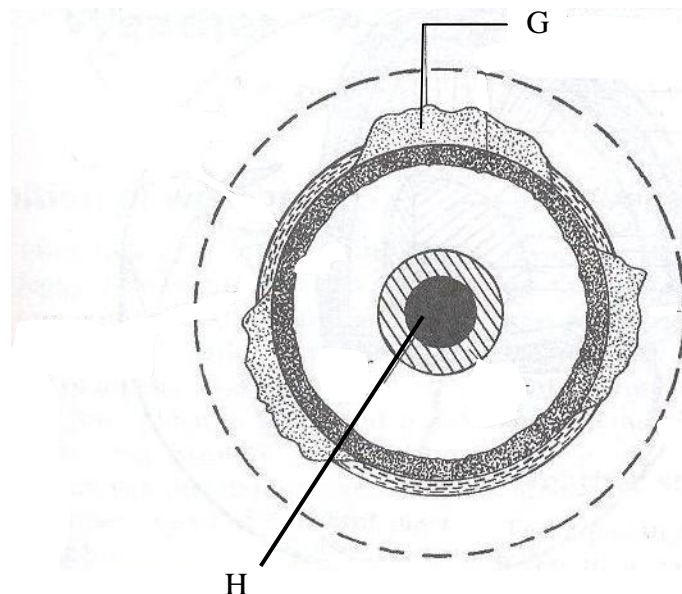
INSTRUCTIONS TO STUDENTS

- 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.

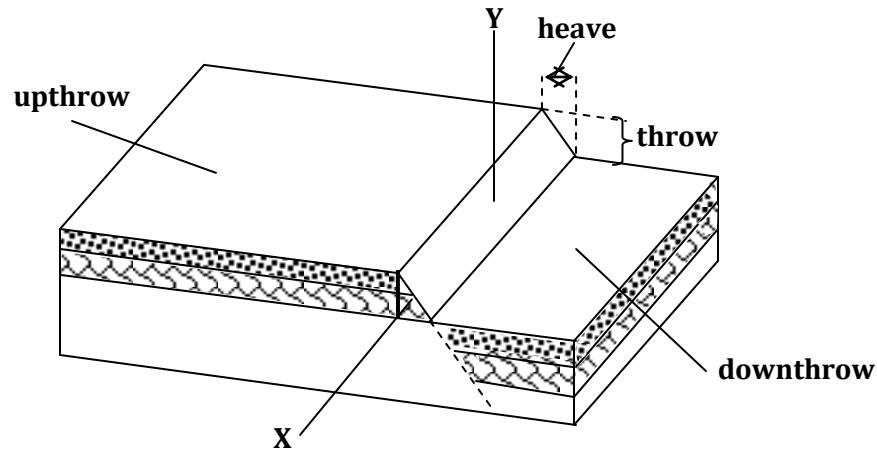
SECTION A

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.



- (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)



- (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)

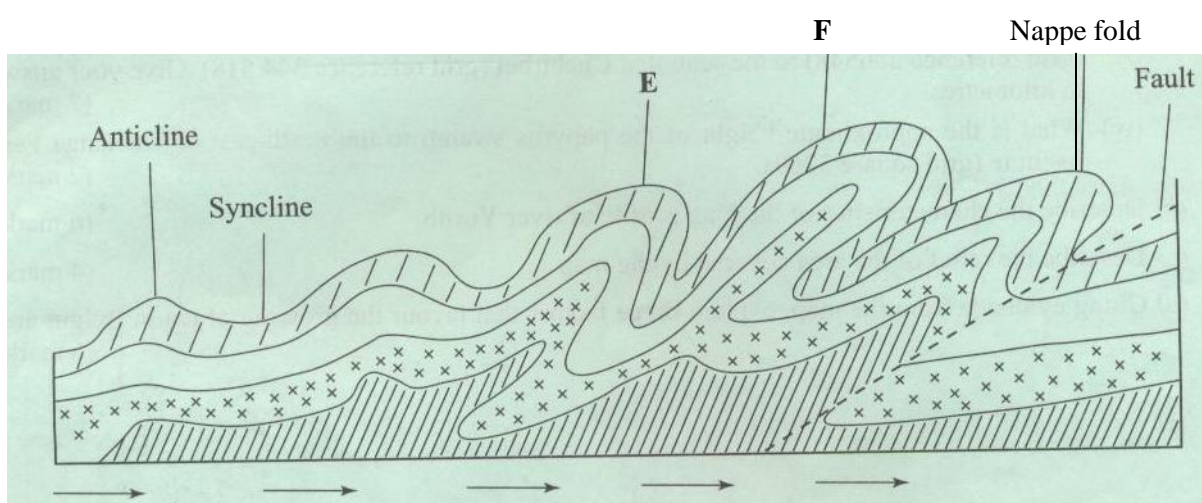
SECTION B

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)

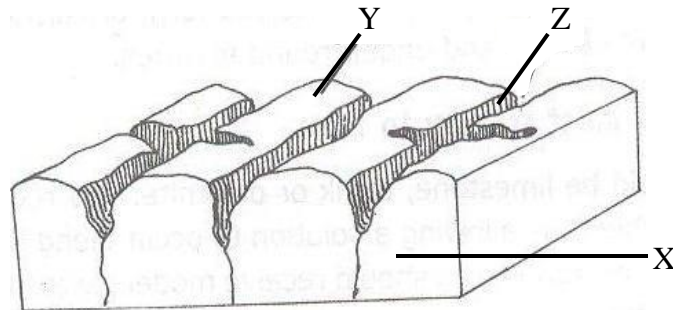
- (iii) What is the length in Kilometres of the All Weather Road Bound Surface C94 from the junction with the Dry Weather Road D502 to Northing 84? (2 marks)
- (b) Draw a rectangle measuring 10 cm by 8 cm to represent the area enclosed by Eastings 90 and 00 and Northings 62 and 70. (1 mark)
- On the 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 were 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).



- (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).



- (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)