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GEOGRAPHY

PAPER 1

JULY / AUGUST 2012

2 $\frac{3}{4}$ HOURS

KISUMU NORTH AND EAST DISTRICT JOINT TEST
Kenya Certificate of Secondary Education 2012

312 / 1

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JULY / AUGUST 2012

Instructions to candidates:

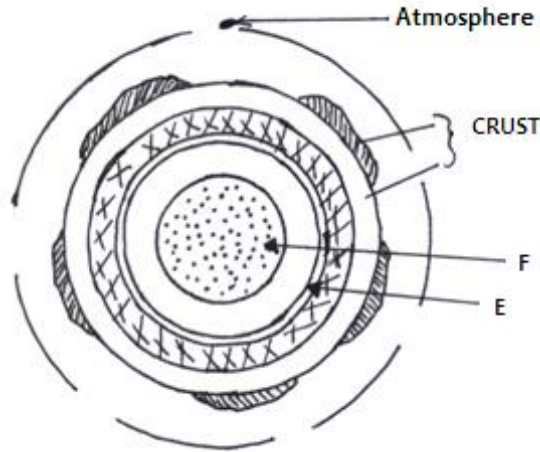
- ❖ This paper has two sections: A and B.
- ❖ Answer **all** the questions in section A.
- ❖ In section B, answer **questions 6** and any other **TWO** questions.
- ❖ All the answers must be written on the answer sheets provided.

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 the questions in this section

1. The diagram below shows the structure of the earth. Use it to answer question (a).



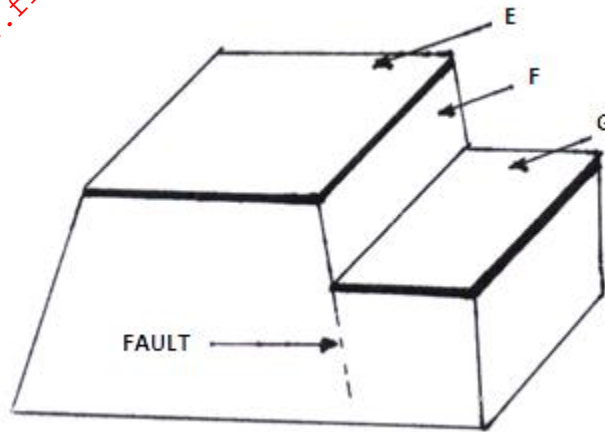
- a) Name the parts marked E and F. (2mrks)
 - b) State **three** characteristics of the troposphere. (3mrks)
2. a) Identify **two** forms of rock metamorphism. (2mrks)
- b) State the extrusive equivalent of the following intrusive igneous rocks.
- i) Granite (1mrk)
 - ii) Diorite (1mrk)
 - iii) Gabbro (1mrk)
3. a) What is a seismic wave. (2mrks)
- b) State **three** ways in which earthquakes affect human activities. (3mrks)
4. a) Differentiate between illuviation and salinization. (2mrks)
- b) State **three** importance of water as a soil property. (3mrks)
5. a) Identify **two** types of deltas. (2mrks)
- b) State **three** conditions that are ideal for the formation of a delta. (3mrks)

SECTION B

Answer questions 6 and any other TWO questions in this section.

6. Study the map of Nkubu 1:50,000 provided and answer the following questions.
- a) i) Give the **six figure grid** reference of the trigonometrical station (other) to the north east of Gikongoro. (1mrk)
 - ii) Measure the length of the dry weather road from the junction at Getaiga to the junction at Kaongo. Give your answer in kilometers. (2mrks)
 - iii) Give the sheet number of the map to the south east of Nkubu. (1mrk)
 - b) i) Using a vertical scale of 1cm represents 40m, draw a cross-section along easting 56 from grid reference 560,830 to grid reference 560,890. (4mrks)
 - On the cross-section mark and label the following.
 - River iraru. (1mrk)
 - Dry weather road. (1mrk)
 - Main track. (1mrk)
 - ii) Calculate the vertical exaggeration. (2mrks)
 - c) Describe the relief of the area covered by the map. (5mrks)
 - d) Form four students from Nkubu School carried out a field study on distribution of settlement in the area covered by the map.
 - i) State two reasons why they had to divide themselves into groups. (2mrks)
 - ii) Identity two settlement patterns they studied. (2mrks)
 - iii) State three follow-up activities they might have carried after the study. (3mrks)
7. a) Differentiate between fissure and vent eruption. (2mrks)
- b) Describe how the following features are formed.
 - i) Batholiths. (6mrks)
 - ii) Volcanic plug (5mrks)
- c) Explain three negative effects of volcanicity on human activities. (6mrks)
- d) You are planning to carry out a field study on features formed by volcanicity on the land scape
 - i) Formulate two null-hypotheses for the studies. (2mrks)
 - ii) Name two drainage features you are likely to study. (2mrks)
 - iii) State two methods you would use to record information during the study. (2mrks)

8. a) i) What is reverse fault (2mrks)
- ii) The diagram below represents an area affected by faulting. Name the parts marked E, F and G (3mrks)



- b) Describe the processes involved in the formation of the following features:
- Fault step. (5mrks)
 - Rift valley by anticlinal arching. (7mrks)
- c) Explain four ways in which block mountains influence climate. (8mrks)
9. a) Name two mountains in East Africa where congelifraction is common. (2mrks)
- b) Describe the following types of weathering:
- Pressure release. (5mrks)
 - Hydration. (4mrks)
 - Oxidation. (4mrks)
- c) Explain **three** ways in which plants cause weathering. (6mrks)
- d) i) what is an avalanche. (1mrk)
- ii) State **three** effects of avalanche. (3mrks)
10. a) i) what is a spring? (2mrks)
- ii) Explain **three** factors that influence the occurrence of underground water. (6mrks)
- b) State **four** condition necessary for the formation of an artesian well. (4mrks)
- c) i) state **four** characteristics of karst scenery. (4mrks)
- ii) With the aid of a well labeled diagram **describe** how a stalactite is formed. (9mrks)