GEOGRAPHY

PAPER 1

JULY / AUGUST 2012

2 ¾   HOURS

KISUMU NORTH AND EAST DISTRICT JOINT TEST

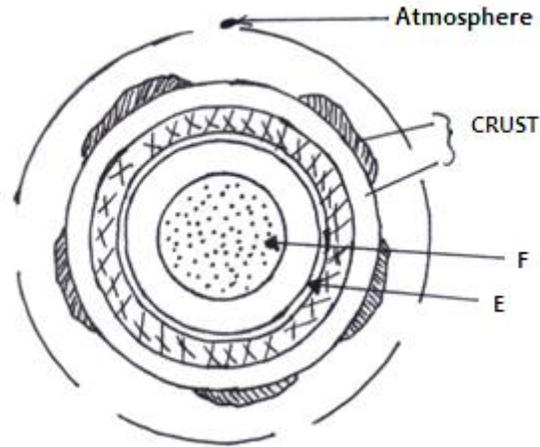# Kenya Certificate of Secondary Education 2012

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).
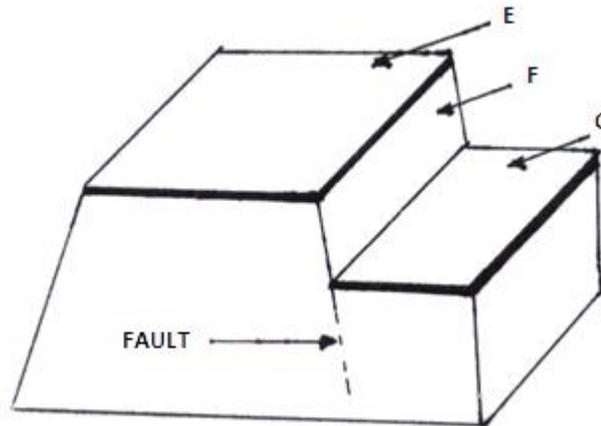

   a) Name the parts marked E and F.   (2mrks)
   b) State **three** characteristics of the troposphere.   (3mrks)

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 t**hree** conditions that are ideal for the formation of a delta. (3mrks)

2

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 rep[resents 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)

3

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:

i) Fault step. (5mrks)

ii) 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:

i) Pressure release. (5mrks)

ii) Hydration. (4mrks)

iii) 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)

4