**312/ 1**

**GEOGRAPHY**

**PAPER 1**

**OCTOBER/NOVEMBER 2013**

**2 ¾ Hours**

**KATHIANI SUB - COUNTY FORM FOUR ENTRANCE EXAMINATION**

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

**312/ 1**

**GEOGRAPHY**

**Paper 1**

**OCTOBER/NOVEMBER 2013**

**2 ¾ Hours**

**INSTRUCTION TO CANDIDATES**

This paper consists of **two** sections **A** & **B.**

Answer **ALL** questions in section **A**. In section **B** Answer **QUESTION 6** and **ANY OTHER TWO** questions.

All answers must be written in the answer sheets provided.

*This paper consists of 3 printed pages.*

*Candidates should check the question paper to ensure that all the pages are printed as indicated and no questions are missing.*

**SECTION A**

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

1. The diagram below represents the earth on its own axis. Use it to answer question (a)

 M North Pole

 N 66 ½ 0 N

 23 ½ 0 N

 00 Equator

 23 ½ 0 S

 South pole 66 ½ 0S

1. Name the latitudes marked M and N. (2marks)
2. State three effects of the movement of the earth around the sun. (3marks)

2. (a) What is climate change? (2marks)

 (b) Name three gases that are responsible for global warming. (3marks)

3. (a) Identify two natural causes of the earthquakes. (2marks)

 (b) State three negative effects of earthquakes in build up areas. (3marks)

4. (a) What is river rejuvenation? (2marks)

 (b) The diagram below shows a river capture.

 

Name the features marked X, K and N. (3marks)

5. (a) Name two causes of faulting. (2marks)

 (b) State three features associated with faulting. (3marks)

 **SECTION B**

 ***Answer question 6 and any other two from this question.***

6. Study the map extract of Kitale (1:50,000) provided and answer the question that follow.

 (a) (i) Give the six figure grid reference of the Junction of the road C640 and C638. (2marks)

 (ii) What is the bearing of the trigonometrical station 75S6 to the west of the map from the road

 junction in square (3121) (2marks)

 (b) (i) To which direction does the Koitobos river finally flow? (2marks)

 (ii) Identify four drainage features found in the map extract. (4marks)

1. Calculate the area of the Kiptaberr forest North East of the extract. Give your answer in Km2.

(2marks)

1. Citing evidence from the map, state four factors that influence human settlement in the area covered by the map. (8marks)
2. Students of Kitale High school carried out field study along river Koitobos.

(i) State three features the students are likely to see along the river. (3marks)

(ii) What problems are they likely to face. (2marks)

7. (a) (i) What is a desert? (2marks)

 (ii) List three classifications of deserts according to the nature of their surface. (3marks)

 (b) Explain three ways through which wind erodes desert surfaces. (6marks)

 (c) By use of well labeled diagrams describe how a barchan is formed. (6marks)

 (d) Explain four positive significance of desert landforms to human activities. (8marks)

8. (a) (i) Define natural vegetation. (1mark)

 (ii) State four characteristics of natural vegetation found in tropical rain forests. (4marks)

(b) Explain four ways in which vegetation found in arid areas adapts to environmental conditions of the region. (8marks)

(c) Write the names of the grasslands found in the following areas.

 (i) East Africa. (1mark)

 (ii) Canada. (1mark)

 (iii)Argentina. (1mark)

(d) (i) Give two reasons why Tundra region has scanty vegetation. (2marks)

 (ii) State two topographical factors that influence vegetation distribution. (2marks)

(e) State five economic importance of vegetation. (5marks)

9. (a) (i) State four main components of soil. (4marks)

 (ii) Differentiate soil profile from soil Catena. (2marks)

 (b) Explain the process of Salinization. (4marks)

 (c) (i) What is soil degradation. (1mark)

 (ii) Explain four causes of soil degradation. (8marks)

 (d) Explain three effects of soil in plants. (6marks)

10. (a) (i) Differentiate magma from lava. (4marks)

 (ii) Describe how a sill is formed. (4marks)

 (b) (i) Name two features that result from fissure eruption. (2marks)

 (ii) List three types of lava. (3marks)

 (c) With the aid of a well labelled diagram describe how a composite volcano is formed. (6marks)

 (d) Explain three positive significance of volcanic features to human activities. (6marks)