**312/1**

**GEOGRAPHY**

**PAPER 1**

**OCT /NOV - 2013**

**TIME: 2 ¾ HOURS**

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

**Geography**

**Paper 1**

**TIME: 2 ¾ hours**

**INSTRUCTIONS TO CANDIDATES:**

* *This paper consists of* ***two*** *sections* ***A*** *and* ***B****.*
* *Answer* ***all*** *the questions in section* ***A****. In section* ***B****, answer question* ***6*** *and any other* ***two*** *questions.*
* ***All*** *answers* ***must*** *be written in the answer booklet provided.*

*This paper consists of 4.printed pages. Candidates should check to ascertain that all pages are printed as indicated and that no questions are missing.*

**SECTION A**

1. (a) Distinguish between an orbit and an axis. (2 mks)

 (b) State **three** proofs that the interior of the earth is hot. (3 mks)

2. (a) What is a **spring**? (1 mk)

 (b)State **four** ways in which a spring may develop. (4 mks)

3. (a) The diagram below represents zones of natural vegetation on a mountain within the tropical

 region.

 Study it and answer questions that follow:

**Savannah grassland**

**1000**

**0**

**2000**

**3000**

**4000**

**5000**

**Bare rock**

**Height in metres**

**X**

**Y**

 (a) Name the vegetation zones marked **X and Y.** (2 mks)

 (b) State **three** characteristics of Mediterranean types of vegetation. (3 mks)

4. (a) Give **two** processes of slow mass wasting. (2 mks)

 (b) State **three** physical conditions that may influence landslides. (3 mks)

5. (a) State **two** ways through which rivers transport its loads. (2 mks)

 (b) The diagram below represents a river captive.



**C**

**A**

**B**

 Name the parts marked **A, B** and **C**. (3 mks)

 **A** ......................................................................................................

 **B** .......................................................................................................

 **C** .......................................................................................................

**SECTION B.**

*Answer question* ***6*** *and any other* ***two*** *questions in this section.*

6. Study the map of Kitale **( 1: 50,000) sheet 75/3** provided and answer the following

 questions.

 a) (i) Name the relief feature found in grid **square 2823**. (1 mk)

 (ii) Determine the distance of road **B 10/2** from Knight’s corner junction with

 **Road C 637** to Kitale. (2 mks)

 (iii) Find the area of **Kiptaberr Forest.** (2 mks)

 b) (i)Calculate the gradient of the slope between point **M** and **N.** (2 mks)

 ii) Identify the highest point in the area covered by the map. (2 mks)

 c) Farmers at Delgany Farm carried out a study at their colleagues’ farm of Longleat

 Estate.

 (i) State **two** reasons why they would need the map of Kitale. (2 mks)

 (ii) Mention **two** methods they would use to collect data. (2 mks)

 (iii) Identify **three** data /information they would collect. (3 mks)

 d) (i) Describe the distribution of settlement in area covered by the map. (4 mks)

 (ii) Citing evidence from the map; identify **two** factors which have influenced the

 growth of forests in Kitale area. (2 mks)

 (iii) State **three** functions of Kitale town. (3 mks)

7. a) (i) What is a rock? (2 mks)

 (ii) Explain the process of formation of mechanically formed sedimentary rocks. (5 mks)

 b) Explain **three** ways in which rocks are significant to the economy of Kenya. (6 mks)

 c) Student from your school carried out a field study on the types of Rocks.

 One of the rock samples they collected was coral.

 (i) Give **three** uses of coral rock. (3 mks)

 (ii) Give **three** reasons why it was important for them to conduct reconnaissance. (3 mks)

 (iii) State **three** problems they are likely to have encountered during the field study. (3 mks)

8. a) (i) What are Earthquakes? (2 mks)

 (ii) Name **three** types of Earthquake waves. (3 mks)

 (iii) State **five** ways in which the Earth crust is affected by Earthquakes. (5 mks)

 b) (i) With the aid of a well-labelled diagram describe how the rift valley is formed by

 tensional forces. (8 mks)

 (ii) State **four** effects of faulting to human activities. (4 mks)

 (iii) Give **two** advantages of studying faulted landscape through field work. (2 mks)

9. a) Name **three** types of desert surfaces. (3 mks)

 b) Explain the following process of wind erosion

 (i) Abrasion (2 mks)

 (ii) Deflation (2 mks)

 (iii)Attrition (2 mks)

 c) With the aid of a diagram, describe how a rock pedestal is formed. (6 mks)

 d) Draw a diagram of an overhead view of a desert basin. On it mark and name the

 following features resulting from water action.

 (i) Alluvial

 (ii) Pedimoment

 (iii) Playa

 (iv) Bajada (5 mks)

10. a) (i) What is climate? (2 mks)

 (ii) Explain **two** effects of climate change on the physical environment. (4 mks)

 b) (i) State **five** characteristics of Inter Tropical Convergence Zone. (ITCZ) (5 mks)

 (ii) Describe how convectional rainfall is formed. (7 mks) (iii) State **three** problems associated with convectional rainfall in the lake region of

 Kenya. (3 mks)