

312/1  
GEOGRAPHY  
PAPER 1  
JULY/AUGUST 2014  
TIME: 2¾ HOURS

**KIHARU/KAHURO DISTRICT JOINT EXAMINATION - 2014**

Kenya Certificate of Secondary Education  
GEOGRAPHY  
PAPER 1  
TIME: 2¾ HOURS

**INSTRUCTIONS TO CANDIDATES:**

- (a) This paper has **two** Sections **A** and **B**.
- (b) Answer all the questions in Section **A**.
- (c) Answer question **6** and any other **two** questions from Section **B**.
- (d) All answers must be written in the answer booklet provided.
- (e) Candidates should check the question paper to ascertain that all the papers are printed as indicated and no questions are missing.

## SECTION A:

Answer **all** questions from this section.

1. (a) What is a line of longitude? (2mks)  
(b) Give **three** reasons why the earth has a spherical shape. (3mks)
2. (a) Differentiate between magma and lava. (2mks)  
(b) State **three** characteristics of a composite volcano. (3mks)
3. (a) Distinguish between weathering and mass wasting. (2mks)  
(b) State **three** physical conditions that may influence landslides. (3mks)
4. (a) State **three** ways in which wind transport the load. (3mks)  
(b) Briefly describe carbonation as a process of chemical weathering. (3mks)
5. (a) What is vegetation? (2mks)  
(b) State **three** ways in which climate influences desert vegetation. (2mks)

## SECTION B:

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

6. Study the map of Karatina 1: 50,000 (Sheet 121/3) provided and answer the following questions.
  - (a) (i) Name **two** methods that have been used to show relief on the map. (2mks)  
(ii) What is the magnetic variation of the map of Karatina provided? (1mk)  
(iii) Give the latitudinal extent of the area covered by the map extract. (2mks)
  - (b) (i) Reduce the area to the East of Easting 93 and North of Northing 56 by half. (1mk)  
On the reduced map, mark and name the following:-  
- Mt. Kenya forest. (1mk)  
- District boundary. (1mk)  
(ii) What is the scale of your reduced map? (2mks)
  - (c) Citing evidence from the map, state four economic activities in the area. (4mks)
  - (d) Describe the drainage of the area covered by the map. (5mks)
  - (e) Citing evidence from the map explain **three** factors that favour growing of tea in Karatina area. (6mks)

7. (a) (i) Differentiate between weather and climate. (2mks)
- (ii) Describe how the following conditions influence climate of a place. (2mks)
- Altitude.
  - Ocean currents.
- (b) The table below represents rainfall and temperature of station Y. Use it to answer questions (i) and (ii).

**Station Y**

Months	J	F	M	A	M	J	J	A	S	O	N	D
Temperature °C	30	31	31	31	30	29	28	29	29	29	29	30
Rainfall (mm)	250	250	325	300	213	25	25	25	100	275	380	200

- (i) Calculate the mean annual range of temperature of the station. (2mks)
- (ii) Calculate the annual rainfall for station Y. (2mks)
- (iii) Calculate the average rainfall for station Y. (2mks)
- (c) Describe the climatic characteristics of station Y. (6mks)
- (d) (i) Using a well labelled diagram, describe how relief rainfall is formed. (6mks)
- (ii) State **three** significance of weather forecasting to human activities. (3mks)
8. (a) (i) What is a lake? (2mks)
- (ii) Name **three** ways through which lakes are formed. (3mks)
- (iii) List **three** sources of Lake Water. (3mks)
- (b) By use of a diagram describe how L. Victoria was formed. (4mks)
- (c) Explain **two** reasons why some Lakes in the Rift Valley have fresh water. (4mks)
- (d) State **three** economic significance of Lakes. (3mks)
- (e) Students from your school intends to carry out a field study on Lakes.
- (i) State **two** objective for their study. (2mks)
- (ii) Identify **two** methods they will use to record the data collected. (2mks)
- (iii) Which human activity might they have found to be affecting the Lakes? (2mks)
9. (a) (i) What are tides? (2mks)
- (ii) Give **three** causes of ocean currents. (3mks)
- (iii) Name **three** ocean currents along the Western Coast of Africa. (3mks)
- (b) (i) State **three** characteristics of submerged lowland Coast of Africa. (3mks)
- (ii) Explain **three** factors that determine the rate of Coastal erosion. (6mks)
- (c) With the aid of well labelled diagrams, describe the process through which a stack is formed. (8mks)

10. (a) (i) What is soil catena? (2mks)
- (ii) State **three** characteristics of the soils found in the arid regions. (3mks)
- (b) Give **three** factors that determine the colour of the soil. (3mks)
- (c) Describe how laterization occurs. (6mks)
- (d) Explain how the following – farming practices cause soil erosion.
- (i) Burning. (2mks)
- (ii) Continuous application of fertilizer. (2mks)
- (iii) Monoculture. (2mks)
- (e) Students from your school intend to carry out a field study on soils.
- (i) Give **two** equipments or materials they are likely to carry to facilitate their study. (2mks)
- (ii) State **three** follow-up activities they will be involved in. (3mks)