

312/1  
GEOGRAPHY  
Paper 1  
MARCH/APRIL 2013  
Time: 2¾ hours

## MOKASA JOINT EXAMINATION

Kenya Certificate of Secondary Education

312/1

Paper 1

GEOGRAPHY

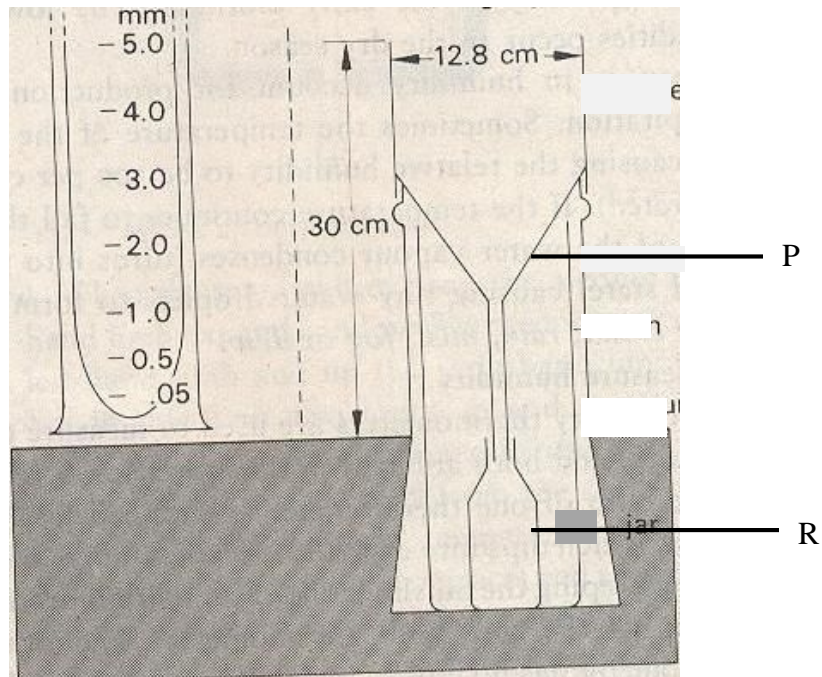
### INSTRUCTIONS TO CANDIDATES

- 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 answers must be written in the answer sheets provided.

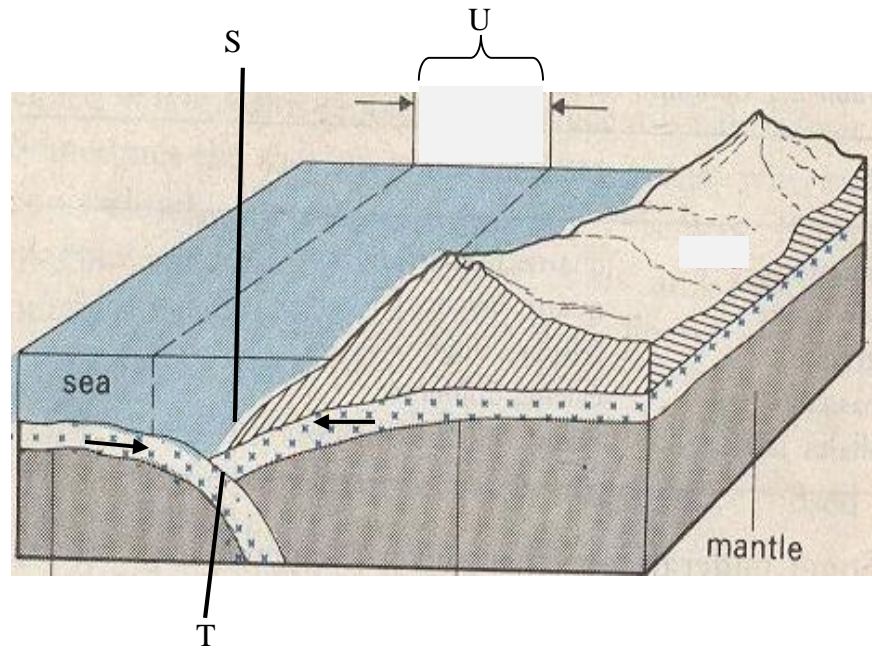
### SECTION A

Answer **all** questions in this section

1. The diagram below represents a rain gauge



- (a) Name the parts marked **P** and **R**. (2 marks)
- (b) Explain how a rain gauge is used to measure rainfall. (3 marks)
2. (a) Name *two* types of earth movements. (2 marks)
- (b) The diagram below represents tectonic plate boundary.



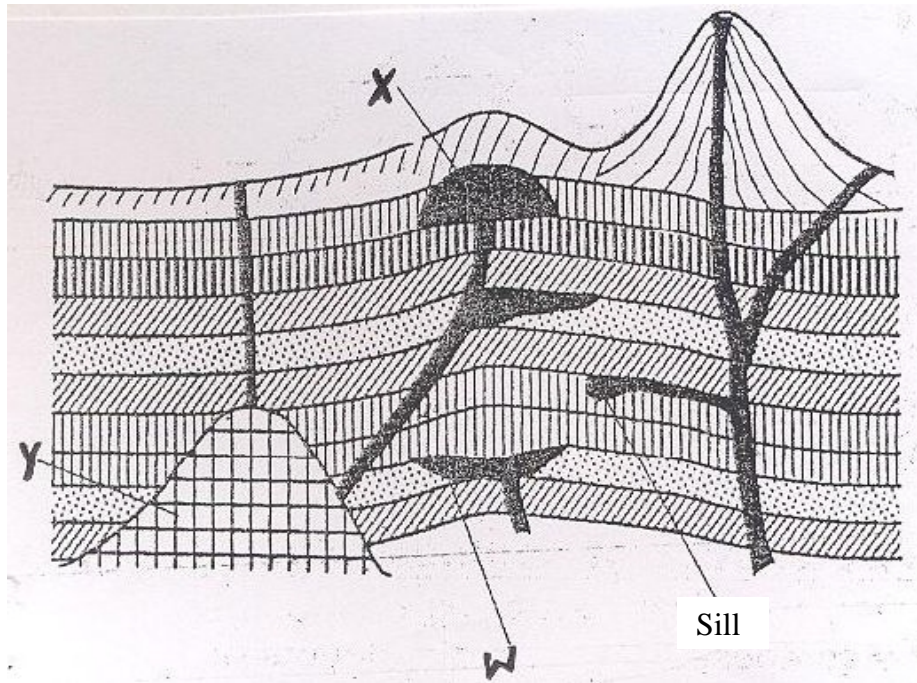
- (i) Name the features marked **S**, **T**, and **U**. (3 marks)
3. (a) Differentiate between seismic focus and epicenter. (2 marks)
- (b) Name *two* types of surface longitudinal waves. (2 marks)
4. (a) State *two* ways through which a river transports its load. (2 marks)
- (b) State *three* conditions necessary for the formation of a delta. (3 marks)
5. (a) Name *two* main types of underground water. (2 marks)
- (b) How is a limestone pillar formed? (4 marks)

**SECTION B:**

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

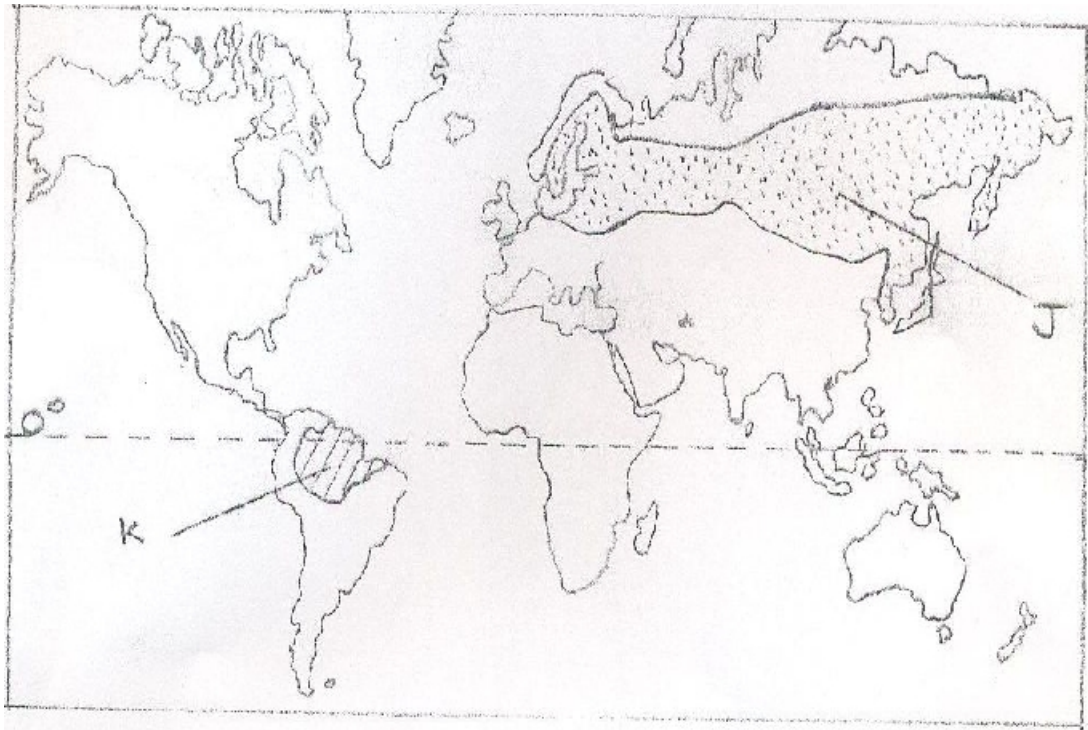
6. Study the map of Nkubu 1:50,000 (sheet 122/1) provided and answer the following questions.
- (a)
    - (i) Give the six figure grid reference of the Trigonometrical station near Kaguru Farmers training centre. (2 marks)
    - (ii) What is the bearing of the Air Photo Principal Point (15) at KATHIGU from the cattle dip at Kanyakine? (2 marks)
    - (iii) Measure the distance of the Dry Weather Road E783 from the road junction at Getauga to the road junction at Kaongo. (2 marks)
  - (b) Draw a rectangle 13cm by 10cm to represent the area to the West of Easting 50 and to the north of Northing 90. (1 mark)  
  
On the rectangle, mark and name;
    - (i) Forest (1 mark)
    - (ii) River Thingithu (1 mark)
    - (iii) Uruku Prison (1 mark)
  - (c) Describe the relief of the area covered by the map. (5 marks)
  - (d)
    - (i) Citing evidence from the map, give *four* economic activities carried out in Nkubu area. (4 marks)
    - (ii) Explain *three* factors which have influenced the distribution of settlements in the area covered by the map. (6 marks)
7. (a) Distinguish between Magma and Lava (2 marks)

- (b) The diagram below shows intrusive volcanic landforms. Use it to answer the questions that follow.



- (i) Name the features marked: **W**, **X** and **Y**. (3 marks)
- (ii) Describe how a sill is formed (4 marks)
- (c) (i) Name *two* features that result from fissure eruption (2 marks)
- (ii) List *two* types of lava (2 marks)
- (d) (i) With the aid of a well- labelled diagram, describe how a composite volcano is formed (6 marks)
- (ii) Explain the significance of Volcanic features to human activities. (6 marks)

8. Use the map below to answer questions a (i) and (ii).

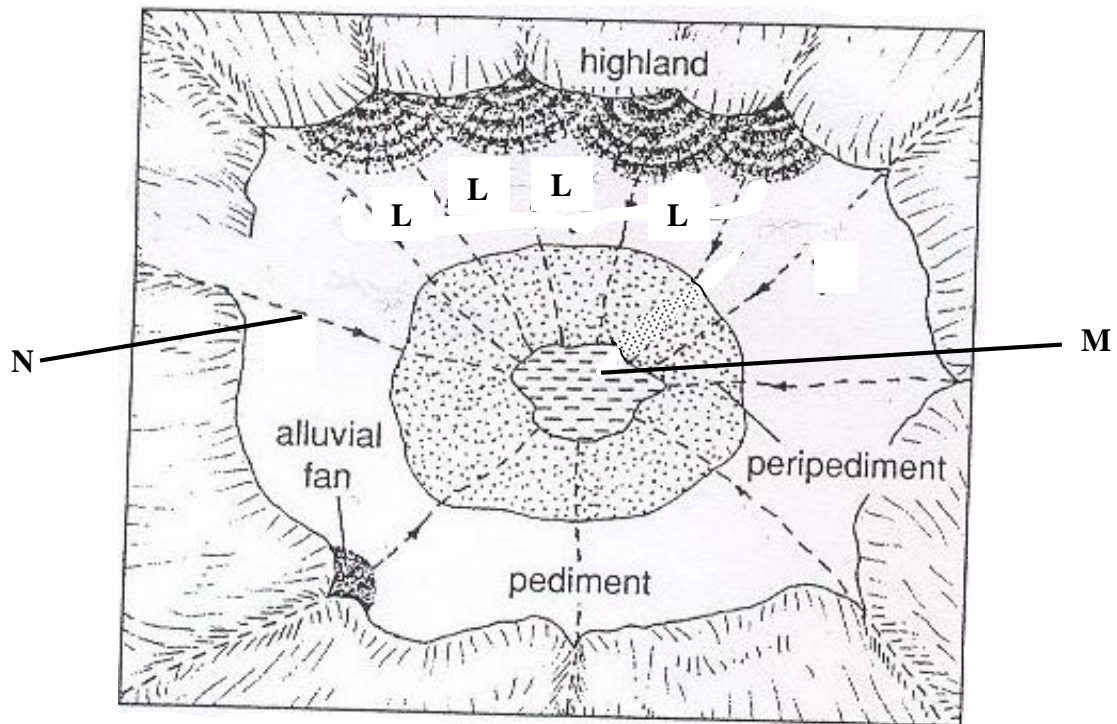


- (a) (i) Name *three* natural types of forests marked **J** and **K**. (2 marks)
- (ii) Explain how the vegetation marked **J** is adapted to the climatic conditions. (6 marks)
- (b) Explain how the following factors influence distribution of vegetation.
- (i) Soils (2 marks)
- (ii) Wind (2 marks)
- (iii) Slope (2 marks)
- (c) State *five* characteristics of tropical savanna grasslands. (5 marks)
- (d) A group of geography students are planning to carry out a field study on vegetation in Nandi County.
- (i) State *three* reasons why sampling would be appropriate for this study. (3 marks)



- (ii) Apart from collecting samples, state *three* other primary methods they would use to collect data on vegetation while in the field. (3 marks)
9. (a) Name *two* types of glaciers which are found on mountains in East Africa. (2 marks)
- (b) Explain how the following factors influence erosion by a glacier.
- (i) Nature of the underlying rock. (2 marks)
- (ii) Speed of the glacier. (2 marks)
- (iii) Thickness and weight of ice. (2 marks)
- (c) With the aid of labeled diagrams, describe how an arête is formed. (6 marks)
- (d) (i) Describe the process through which a roche moutonnée is formed. (5 marks)
- (ii) Explain the significance of glaciated features to human activities. (6 marks)
10. (a) Identify *three* processes of wind erosion in desert areas. (3 marks)
- (b) Explain *three* factors influencing wind deposition in arid areas. (6 marks)

- (c) The diagram below shows some features found in a desert landscape. Use it to answer the following questions:



- (i) Identify the landscape shown in the diagram. (1 mark)
- (ii) Name the features marked L, M and N. (3 marks)
- (iii) Describe how feature marked L is formed. (4 marks)
- (d) Explain *four* negative effects of deserts to human activities (8 marks)