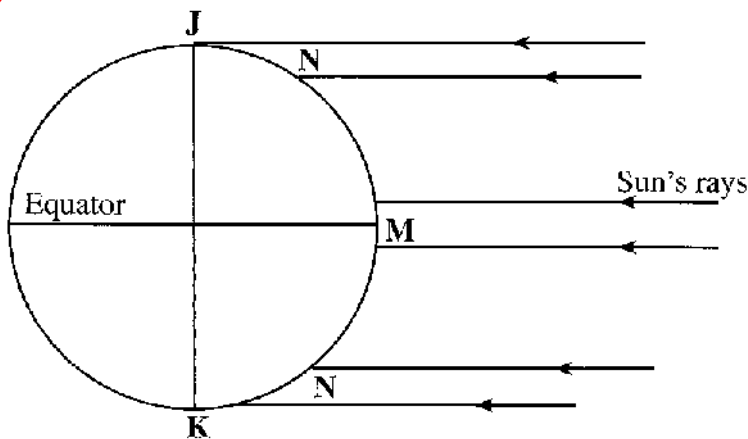# GEOGRAPHY PAPER 1
2011
SECTION A

Answer ALL the questions in this section.

The diagram below shows the angles of the sun's rays at different latitudes when the sun is at the equator.
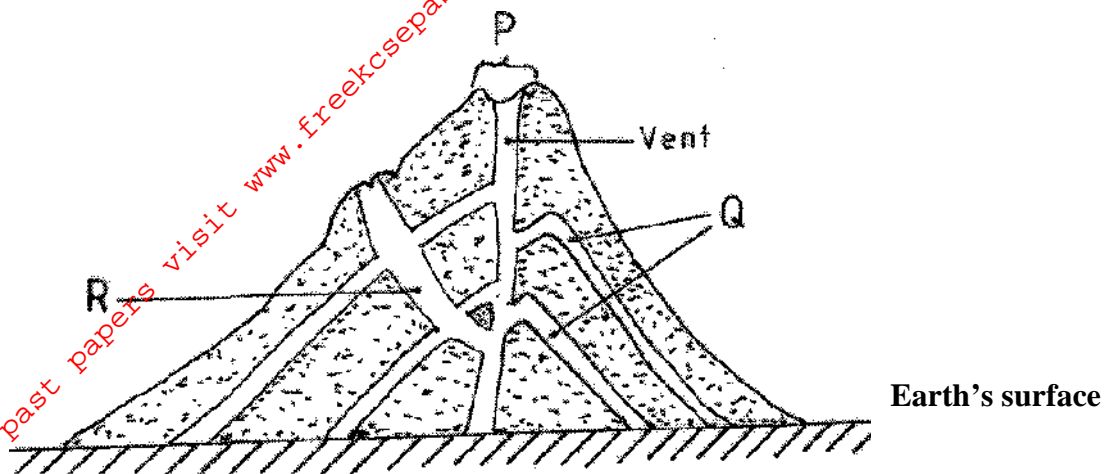Use it to answer questions (a) and (b).

(a)   Name the parts of the earth's surface marked **J** and **K**.   (2 marks)

(b)   Give **two** reasons why the intensity of the insolation is higher at M than at N.   (2

(a)   What is weathering?   marks)

(b)   Give **three** factors that influence the rate of weathering. The   (2

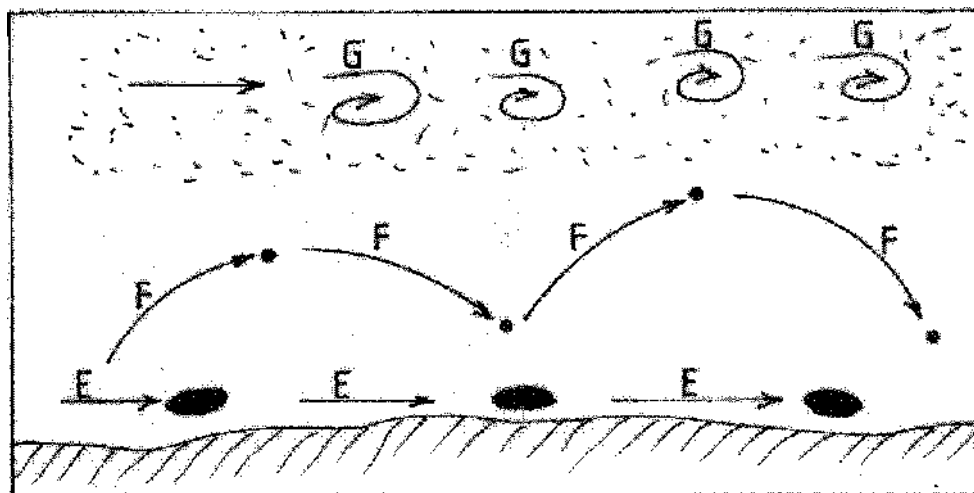   diagram below shows a composite volcano.

Earth's surface

(a) Name the features marked P, Q and R. (3 marks)

(b) How is a parasitic cone formed? (3 marks)

(a) What is land breeze? (2 marks)

(b) Give two ways in which sea breezes influence the adjacent land. (2 marks)

The diagram below shows ways through which wind transports its load.

(a) Name the **three** ways labelled E, F and G.

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(3 marks)

(b)   Name **three** features produced by wind abrasion in arid areas.
       (3 marks)

SECTION B

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

Study the map of Nkubu (1:50,000) sheet 122/ 1 provided and answer the

following questions.

(a)   (i) Give the latitudinal and longitudinal position of the North East corner
of the map extract   (2 marks)

(ii) Give **two** methods used to represent relief on the map. (2 marks)

(iii)What is the relief feature found,at the top of Kirui Hill within Mt.
Kenya forest.
(1 mark)

(iv) Apart from administration, give **three** other services that are
provided at Nkubu
Divisional Headquarters.   (3 marks)

(b)   (i) What is the length in kilometers of the all-weather bound surface road
from
the bridge at Nkubu water works (509935) to the road junction near
Gitimbi
(509995)?   (2
marks)

(ii)   State **three** problems that may be encountered during construction of roads
in
the area covered by the map..   (3 marks)

(c) Citing evidence from the map, give **three** reasons why cattle rearing is
widespread in
Nkubu area.   (6 marks)

(d) Describe the drainage of the area covered by the map.
(6 marks)

7.   (a)   (i)   State **three** conditions that are necessary for siting a weather station.
(3 marks)

(ii)   Give **four** reasons why weather forecasting is important.   (4 marks)

(b)The table below shows the temperature and rainfall figures for a weather station in Kenya. Use it to answer question (b) and (c).

Month	J	F	M	A	M	J	J	A	S	O	N	D
Mean monthly	16.2	16.5	17.1	17.1	16.1	15.2	15.2	15.0	16.0	16.1	16.1	16.3
Rainfall 2 125 mm	100	104	175	232	323	218	196.	231	196	152	127	71

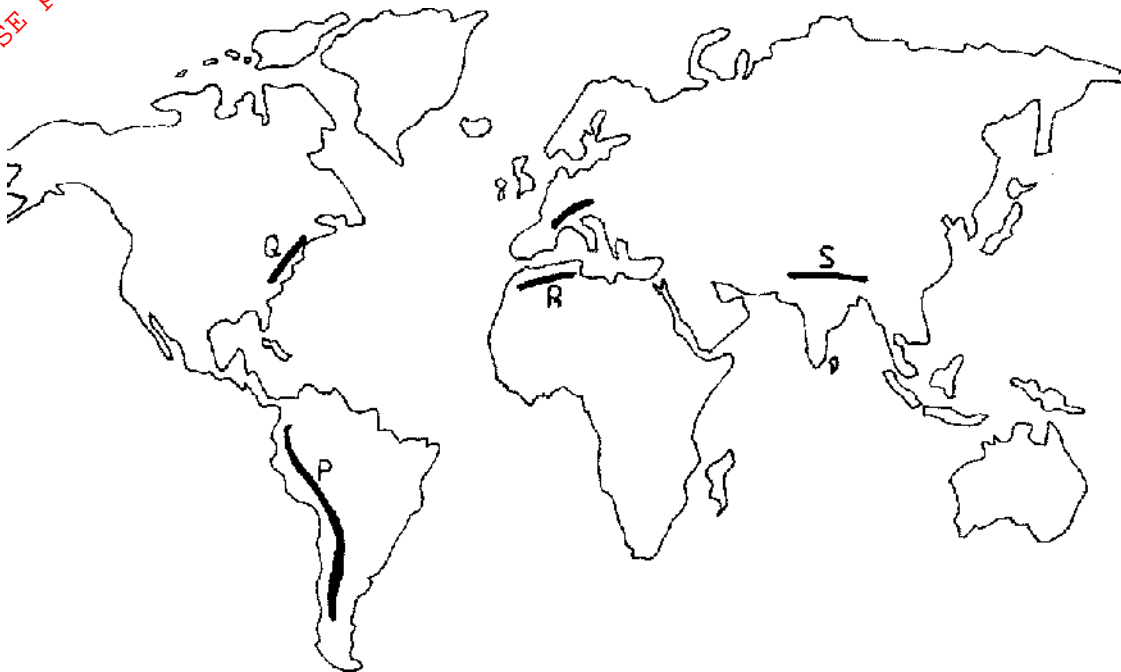Source: Kenya Meteorological Department

Calculate:

(i) The mean annual temperature for the station.   (2 marks)

(ii)   The annual range of temperature for the station.   (2 marks)

(c)   (i) On the graph paper provided, draw a bar graph to represent the rainfall figures

for the station. Use a vertical scale of 1cm to represent 20mm. (5 marks)

(ii)   Describe the characteristics of the climate experienced at the weather station.

(3 marks)

(d)   Suppose you visited a weather station for a field study on weather;

(i) Give **three** methods you would use to collect data.   (3 marks)

(ii) State **three** advantages of studying weather through fieldwork. (3 marks)

8.   The map below shows the location of some mountain ranges.

(a)   Name the ranges marked P, Q, R and S.   (4 marks)

(b)   (i) Apart from fold mountains, name **three** other features resulting from folding.
(3 marks)

(ii)   With the aid of labelled diagrams, describe how fold mountains are formed.

(10 marks)

(c)   Explain the significance of fold mountains to human activities.   (8 marks)

9.   (a)   (i) what are tides?   (2 marks)

        (ii)   Give **three** causes of ocean currents.   (3 marks)

        (iii)   Name the **three** ocean currents along the western coast of Africa.   (3 marks)

    (b)   (i)   State **three** characteristics of submerged lowland coasts.   (3 marks)

        (ii)   Explain **three** factors that determine the rate of coastal erosion.   (6 marks)

    (c)   With the aid of labelled diagrams, describe the process through which a stack is formed.

                                    (8 marks)

10   (a)   (i)   What is a lake?

                                    (2 marks)

        (ii)   Name two crater lakes in Kenya.   (2 marks)

    (b)   Describe how the following lakes are formed.

(i)   corrie lake   (4 marks)

(ii)   oasis   (4 marks)

(iii)   lagoon   (4 marks)

(c)   (i)   **Give three** reasons why some lakes in Kenya have saline

water.   (3 marks)

(ii)   Explain how each of the following has affected lakes in

Kenya:

• deforestation   (2 marks)

• industrialisation   (2 marks)

• water needs.   (2 marks)