
GEOGRAPHY PAPER 1

KCSE 2011

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3.2 GEOGRAPHY (312)

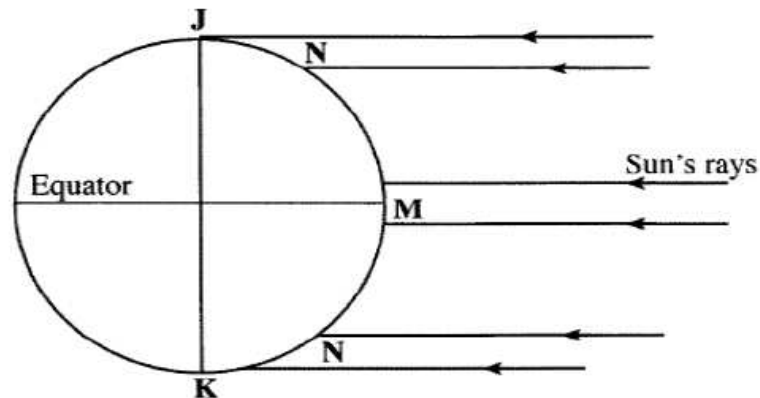
3.2.1 Geography Paper 1 (312/1)

SECTION A

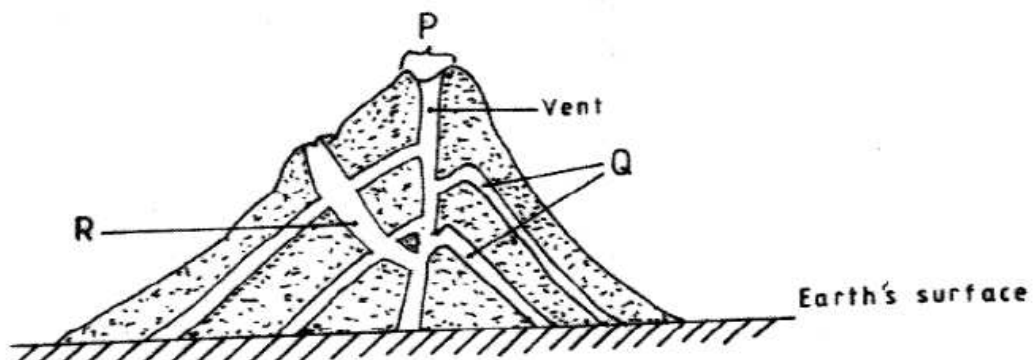
Answer **ALL** the questions in this section.

- 1 The diagram below shows the angles of the sun's rays at different latitudes when the sun is at the equator.

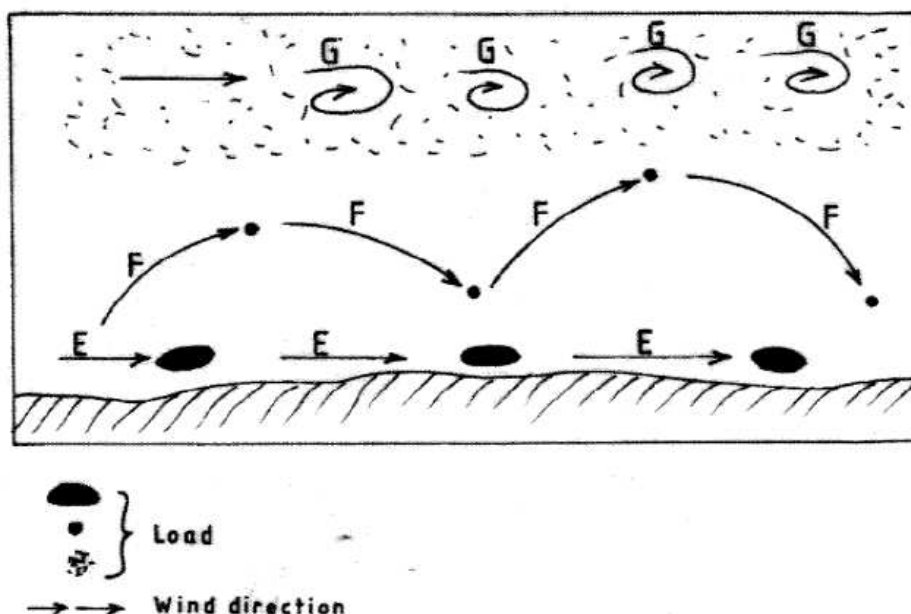
Use it to answer questions (a) and (b).



- (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 marks)
- 2 (a) What is weathering? (2 marks)
- (b) Give **three** factors that influence the rate of weathering. (3 marks)
- 3 The diagram below shows a composite volcano.



- (a) Name the features marked **P, Q** and **R**. (3 marks)
- (b) How is a parasitic cone formed? (3 marks)
- 4 (a) What is land breeze? (2 marks)
- (b) Give **two** ways in which sea breezes influence the adjacent land. (2 marks)
- 5 The diagram below shows ways through which wind transports its load.



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

- 6 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)

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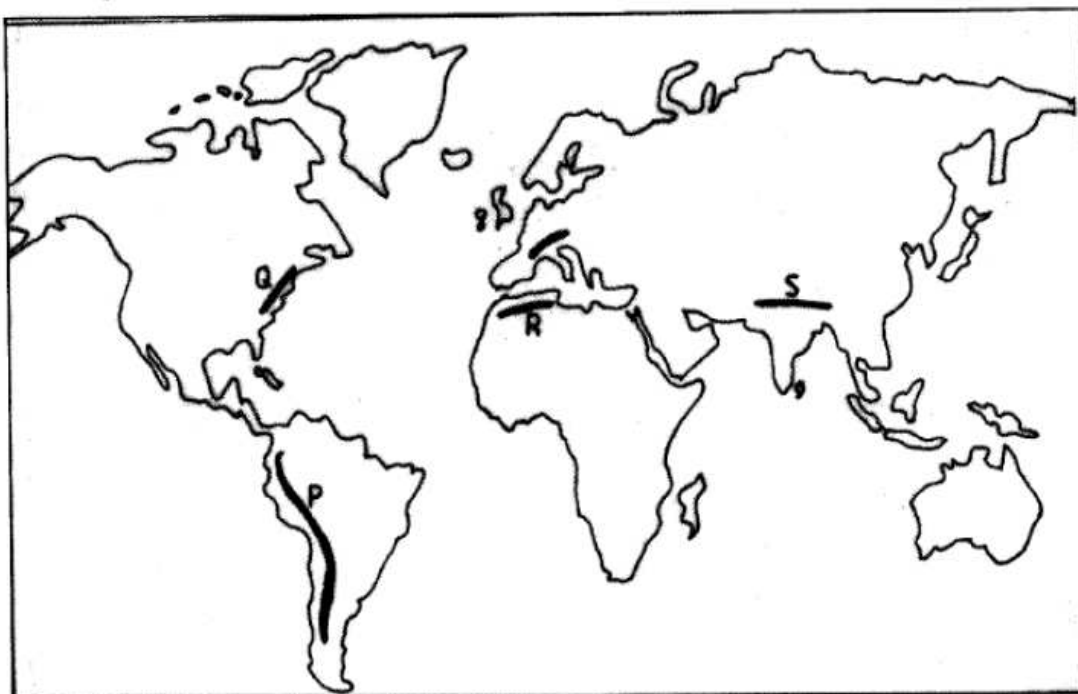
- (a) (i) State **three** conditions that are necessary for siting a weather station. (3 marks)
- (ii) Give **four** reasons why weather forecasting is important. (4 marks)
- (b) The table below shows the temperature and rainfall figures for a weather station in Kenya. Use it to answer question (b) and (c).

Month	J	F	M	A	M	J	J	A	S	O	N	D
Mean monthly temperature in °C	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 2125 mm	100	104	175	232	323	218	196	231	196	152	127	71

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)