

KIKOBA BENCH MARK EXAMINATION – 2023

Kenya Certificate of Secondary Education

312/1

Paper 1



GEOGRAPHY



September. 2023 – 2 Hours 45 Mins

Name: Index Number:

Candidate's Signature: Date: Class:.....

Instructions to candidates

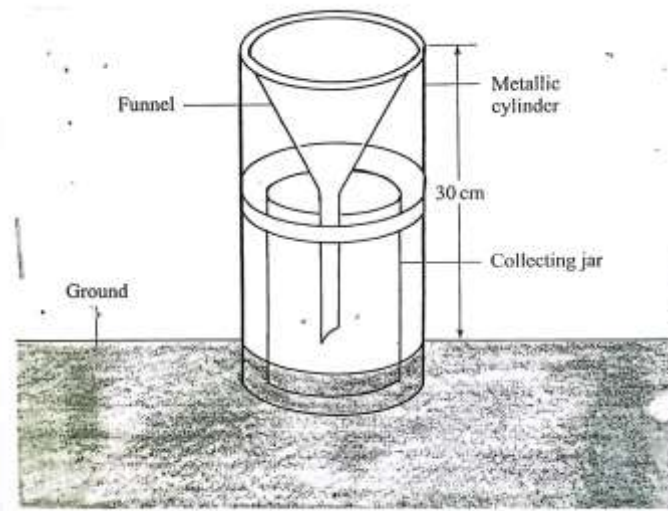
- (i) Write your name and index number in the spaces provided above.
- (ii) Sign and write the date of examination in the spaces provided above.
- (iii) This paper consist of two sections; **A** and **B**
- (iv) Answer all the questions in Section **A**
- (v) Answer question 6 and any two questions from section **B**.
- (vi) The paper consist of 7 printed pages.
- (vii) Candidates should check the question paper to ascertain that all the pages are printed and that no questions are missing.
- (viii) Candidates should answer the questions in English.

For Examiner's Use Only

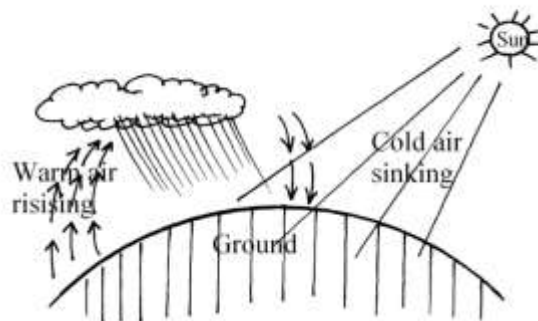
Section	Question	Maximum Score	Candidate's Score
A	1-5	25	
B	6	25	
		25	
		25	
Total Score			

SECTION A (25 marks)*Answer all questions in this section*

- 1 The diagram below represents a weather measuring instrument. Use it to answer question (a)

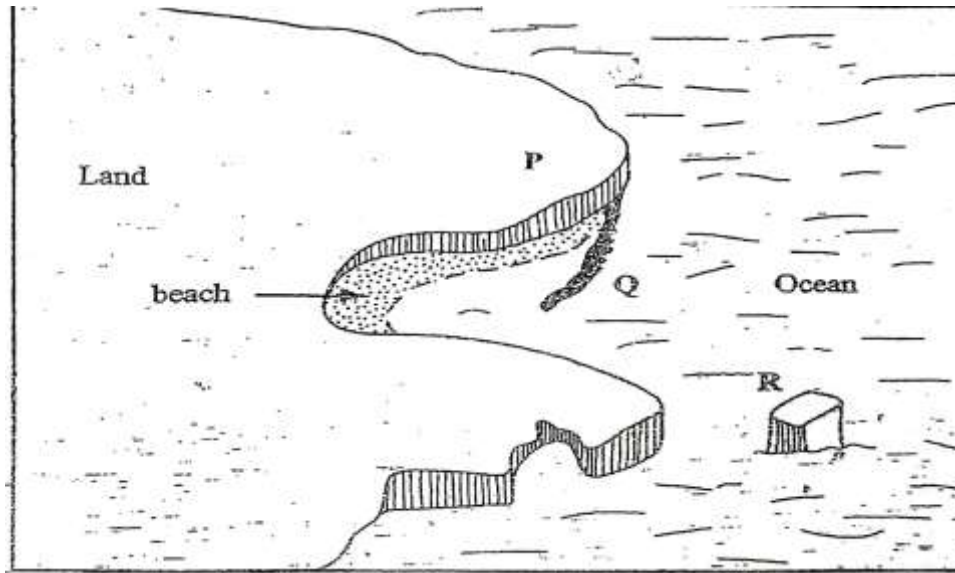


- (a) Which element of weather is measured using the instrument shown above. (1 mark)
- (b) Describe how the above instrument is used. (4 marks)
- 2 (a). How does sea breeze occur. (3 marks)
- (b) State two effects of ocean current on the adjacent coastland. (2 marks)
- 3 The diagram below show the formation of some type of rainfall .Use it to answer question (a)



- (a) Name the type of rainfall shown by this diagram. (2 marks)
- (b) List three weather conditions associated with the above name (a) type of rainfall. (3 marks)

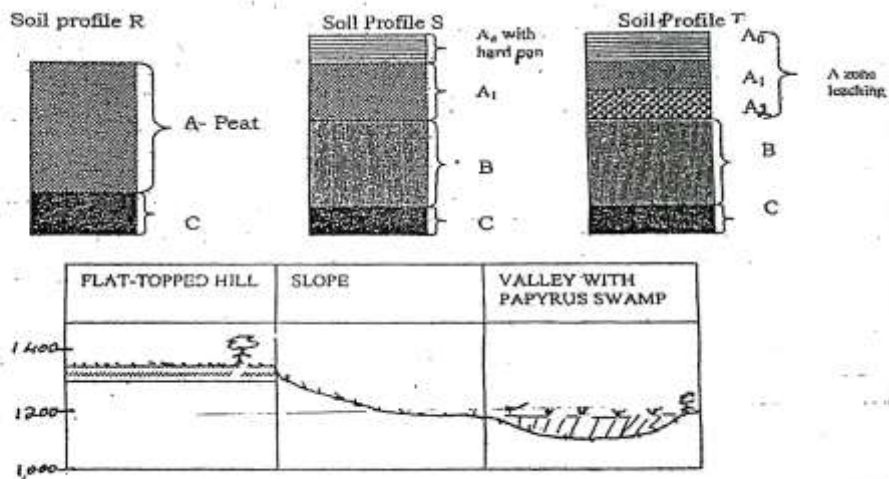
4 The diagram below shows some coastal features.



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

(b) State two conditions necessary for the formation of a beach. (2 marks)

5 The diagram below shows a cross section of a hillside and soil profiles that develop at different parts of the hillside.



(a) Match the soil profiles with the corresponding parts of the hillside where each profile is likely to develop. (3 marks)

(b) Describe podzolization as a process of leaching. (2 marks)

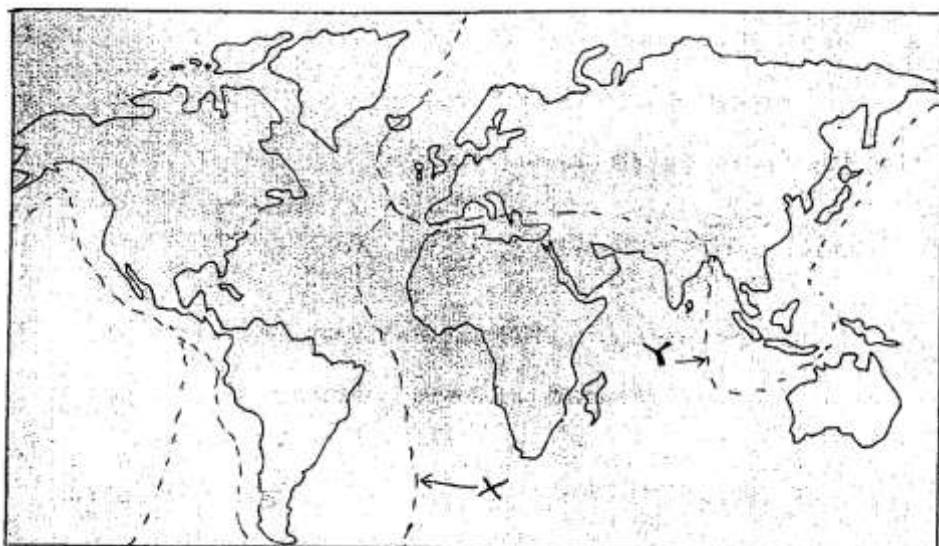
SECTION B

Answer questions 6 and any other two questions in this section

- 6** Study the map of Kisumu East 1:50,000 (sheet 116/2) provided and answer the following questions.
- (a) (i) What type of map is Kisumu East map extract. (1 mark)
- (ii) Give two scales that have been used in the map. (2 marks)
- (iii) Calculate the area covered by Nyando escarpment. (2 marks)
- (iv) Give the latitudinal and longitudinal extent of the area covered by the map. (2 marks)
- (b) (i) Name three human feature found in grid square 0383 (2 marks)
- (ii) What is the direction of flow of river Nyamasaria. (2 marks)
- (c) (i) Using a vertical scale of 1cm to represent 20 meters, draw a cross section along northing 95 between easting 02 and easting 10. (2 marks)
- (ii) On it mark and labell the following:
- Agricultural research station (1 mark)
 - River lielango (1 mark)
 - Main track motorable (1 mark)
 - Scattered trees (1 mark)
 - Houses (1 mark)
- (iii) Calculate the vertical exaggeration (VE) of the cross section you have drawn. (2 marks)
- (d) (i) Citing evidence from the map, explain two factors that may have influenced sugar farming in the area (2 marks)
- (ii) Citing evidence from the map, identify three social services offered in the area covered by the map. (3 marks).

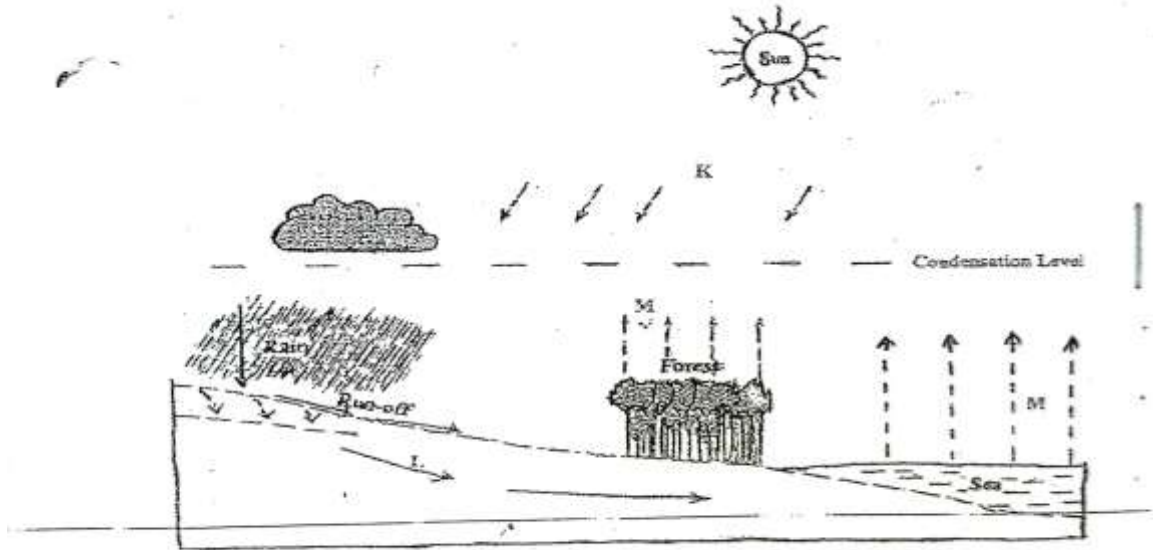


- 7 (a) (i). Define earth movements. (2 marks)
- (ii) Name two types of earth movements that occur within the earth's crust. (2 marks)
- (b) Describe how the following factors cause earth movements
- Convectional currents in the mantle. (2 marks)
 - Magma movements within the earth's crust. (2 marks)
 - . Gravitational force. (2 marks)
- (c) Use the world map below to answer question (ai)



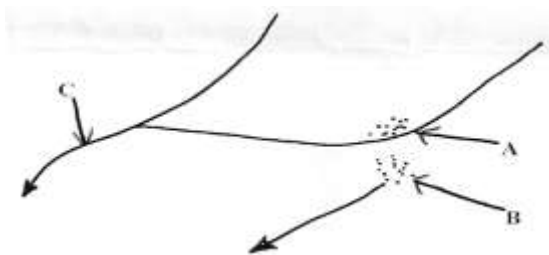
- (i) Name the tectonic plate boundary marked X and according to the plate tectonics theory. (2 marks)
- (ii) Give three effects of the movement of tectonic plates (3 marks)
- (d) (i) What is an earthquake. (2 marks)
- (ii) Identify two types of earthquake waves. (2 marks)
- (iii) Identify the scales used to measure:
- the intensity of earthquakes (1 mark)
 - the magnitude of earthquakes (1 mark)
- (e) Describe two effects of earthquakes on built up areas. (4 marks)

8 (a). The diagram below shows a hydrological cycle..



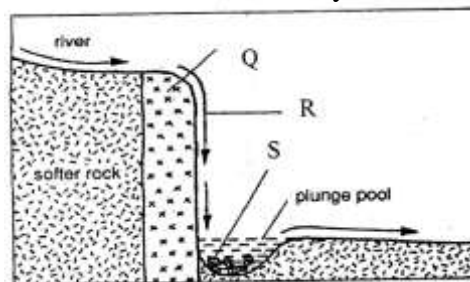
- (i) What do the arrows labeled K,L and M on the cycle represent. (3 marks)
- (ii) State three factors which influence the occurrence of surface runoff. (3 marks)
- (iii) Distinguish between river divide and a drainage basin. (2 marks)

(b) The diagram below represents a river capture.



- (i) Name the parts marked A, B and C. (3 marks)
- (ii) Give two factors that influence the occurrence of river capture. (2 marks)

(c) The diagram below shows a feature formed by erosion along the river course. .



- (i) Name the parts marked Q, R and S. (3 marks)

- (ii) Give **three** ways in which a waterfall may be formed. (3 marks)
- (iii) State **two** economic significance of a waterfall. (2 marks)
- (d) Describe the following river erosion processes
- Hydraulic action by compression air action. (2 marks)
 - Solution (2 marks)
- 9 (a) Describe the following characteristics of minerals
- Luster (2 marks)
 - Cleavage (2 marks)
 - Hardness (2 marks)
- (b) (i) Describe three ways in which sedimentary rocks are formed (6 marks)
- (ii) Give three characteristics of sedimentary rock (3 marks)
- (iii) State four conditions that favor the growth of coral polyps (4 marks)
- (c) Explain the significance of rocks to the economy of Kenya under the following sub headings:
- tourism (2 marks)
 - energy (2 marks)
 - water (2 marks)
- 10 (a) (i) Define folding (2 marks)
- (ii) Apart from anticlinorium and synclinorium complex, name three other types of folds. (3 marks)
- (iii) Draw a labeled diagram to illustrate parts of a fold. (5 marks)
- (b) Name the young fold mountains found in the following continents.
- (i) Africa (1 mark)
 - (ii) Europe (1 mark)
 - (iii) Asia (1 mark)
 - (iv) North America (1 mark)
 - (v) South America (1 mark)
- (c) Explain five effects of fold mountains on human activities (10 marks)

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