**312/1**

**Geography**

**Paper 1.**

**August/ September 2022.**

**Time:2 hours**

**MOKASA 2 JOINT EXAMINATION**

**Kenya Certificate of Secondary Education.**

**312/1**

**Paper 1.**

**Geography**

**INSTRUCTIONS TO THE CANDIDATES.**

* This paper has two sections **A** and **B.**
* Answer **ALL** questions in section **A**. in section **B** answer question **6** and any other **TWO** questions.

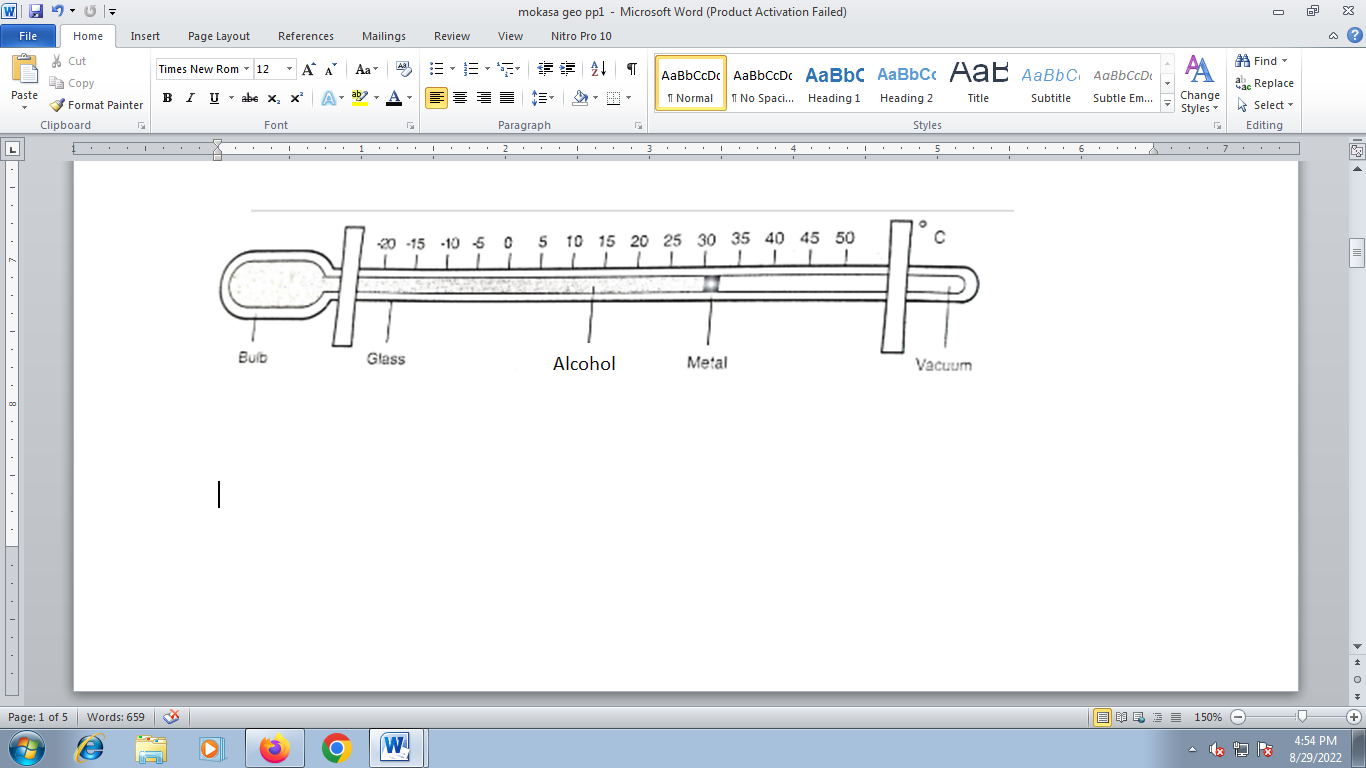
**SECTION A**

Answer **all** questions in this section.

1. (a) Name ***two*** types of environment. (2 marks)

(b) List ***three*** main branches under physical geography. (3 marks)

1. Use the following weather instrument to answer the questions that follow.



(a) Name the above instrument. (1 mark)

(b) Describe how the instrument above works. (4 marks)

1. (a) Give ***two*** types of sedimentary rocks. (2 marks)

(b) State ***three*** characteristics of sedimentary rocks. (3 marks)

1. The diagram below represents zones of natural vegetation on a mountain in Africa. Use it to answer questions **A** and **B.**

Snow and bed rock

5000

Y

Height in meters

4000

X

3000

W

2000

1000

Savanna

0

(a) Name the vegetation zones marked **W, X** and **Y**. (3 marks)

(b) Give ***two*** uses of Savannah vegetation. (2 marks)

1. (a) What is soil erosion? (2 marks)

(b) Name ***three*** types of soil erosion. (3 marks)

***SECTION B***

*Answer question* ***6*** *and any other* ***TWO*** *questions in this section.*

1. Study the map of Nyeri 1:50,000 (sheet 120/4) provided and answer the following questions.

(a) (i) Give the ***six figure*** grid reference of the forest Guard Post at grid square 5059. (2 marks)

(ii) What is the magnetic variation of the map? (2 marks)

(b) (iii) What is the general direction of the flow of river Chanya? (1 mark)

(c) (i) Using a vertical scale of ***1cm*** to represents ***50m;*** draw a cross section along Northing 64 from Easting 68 to Easting 78. On it mark and label the following.

* All weather road
* A hill.
* River. (7 marks)

(ii) Calculate the vertical exaggeration of the cross section. (2 marks)

(iii) Determine the intervisibility of the cross section. (1 mark)

(d) Citing evidence from the map, identify ***three*** social services offered in the area covered by the map. (6 marks)

(e) Explain ***two*** ways relief has influenced the distribution of settlement in the area covered by the map. (4 marks)

7. (a) (i) Define the term volcanicity. (2 marks)

(ii) Name ***two*** active volcanoes in Kenya. (2 marks)

(b) (i) Differentiate between solfatara and moffete. (2 marks)

(ii) Identify ***two*** areas in Kenya where geysers are found. (2 marks)

(c) (i) A part from batholiths, name ***three*** features resulting from intrusive vulcanicity. (3 marks)

(ii) With the aid of a diagram describe how a batholith is formed. (6 marks)

(d) Explain ***four*** negative effects of vulcanicity. (8 marks)

8. (a) (i) What is weathering? (2 marks)

(ii) Give ***three*** factors influencing the rate of weathering (3 marks)

(b) Name ***three*** processes of slow mass wasting. (3 marks)

(c) (i) A part from block disintegration, list ***four*** other physical weathering processes. (4 marks)

(ii) Describe how block disintegration occurs. (5 marks)

(d) Explain ***four*** significance of weathering to human activities. (8 marks)

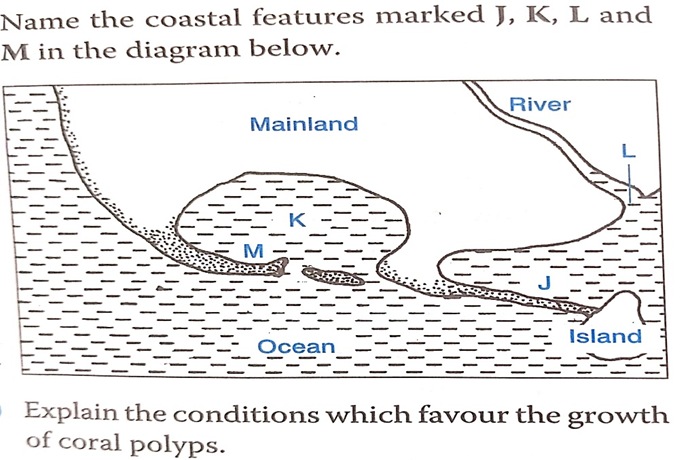
9. (a) (i) Define the term ocean (2 marks)

(ii) Name ***three*** types of coasts (3 marks)

(b) (i) List ***three*** features that result from wave erosion (3 marks)

(ii) Describe the longshore drift. (3 marks)

(c) The diagram below shows coastal features resulting from wave deposition



(i) Name the features marked **J, K** and **M.**  (3 marks)

(ii) Describe how the feature marked **M** is formed (5 marks)

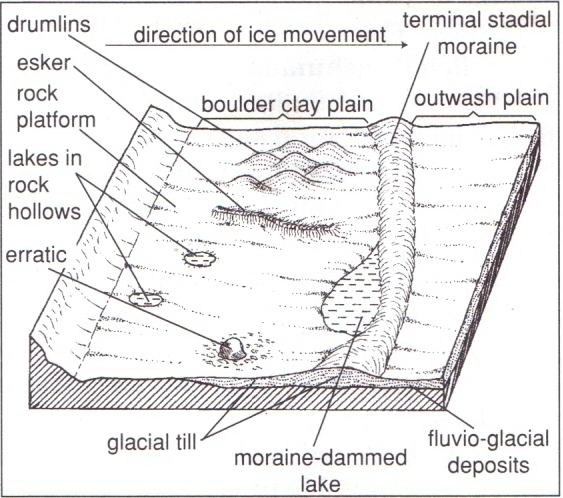
(iii) State ***three*** conditions that favor for the growth of coral polyps. (3 marks)

(c) State ***three*** significances of coastal features to human activities. (3 marks)

10. (a) (i) Differentiate between an ice sheet and an ice berg. (2 marks)

(ii) Name ***three*** types of glacial moraines. (3 marks)

(b) The diagram below shows features resulting from glaciation in a low land area.



**Esker**

**N**

**M**

**L**

**Y**

(i) Name the features marked **X, Y** and **Z.** (3 marks)

(ii) Describe how a terminal moraine is formed. (4 marks)

(c) Your class carried out a field study on glacial erosional features in a glacial lowland area.

(i) Give **two** methods of collecting data you could use. (2 marks)

(ii) State ***three*** importance of dividing into groups. (3 marks)

(d) Explain ***four*** economic significance of glaciation in lowland areas. (8 marks)