MARANDA HIGH SCHOOL

Kenya Certificate of Secondary Education

THE MOCK EXAMINATIONS, 2025

312/1 **GEOGRAPHY** **PAPER 1**

May/June, 2025 **TIME: 2¾ Hrs.**

Name: ……..…… Admission No: ……..…

Stream: …… Signature: ……..……..... **Tuesday, 27th May, 2025; 2:00-4:30pm**

Instructions to Candidates

(a) Write your Name and Admission Number in the spaces provided above.
(b) Indicate your Stream and Sign in the spaces provided.
*(c) This paper consists of two sections; **A** and **B***
*(d) Answer **all** the questions in section **A**.*
*(e) Answer **question 6** and any other **two** questions from section **B**.*
*(f) Answers **must** be written in the spaces provided at the end of question 10.*
(g) This paper consists of 16 printed pages.
(h) Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.
(i) Candidates should answer the questions in English.

For Examiner's Use Only

Section	Questions	Maximum Score	Candidate's Score
A	1–5	25	
B	6	25	
		25	
		25	
		Total Score	

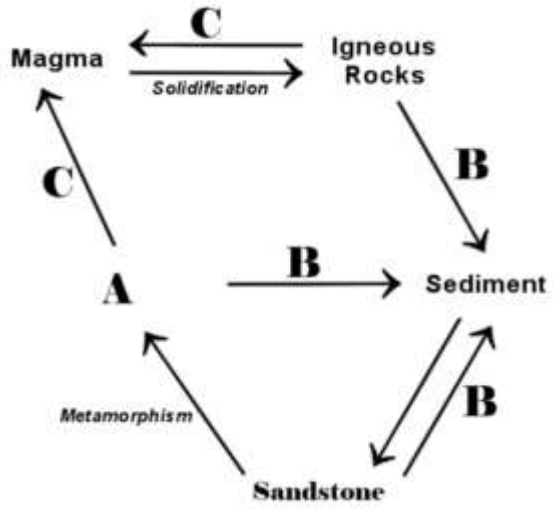
SECTION A

Answer all the questions in this section.

1. (a) What is lunar eclipse? (2 marks)

   (b) Describe how rotation of the earth causes deflection of ocean currents. (3 marks)

2. (a) The diagram below represents a rock cycle. Use it to answer question (a) (i) and (ii).



   (i) Give the name of the rock labelled **A**. (1 mark)

   (ii) Name the processes labelled **B** and **C**. (2 marks)

   (b) State the weaknesses of relative dating as a method of determining the age of a rocks.

   (2 marks)

3. (a) Define the term mass wasting. (2 marks)

   (b) Give ***three*** characteristics of mud flows that can be used to distinguish it from earth movements. (3 marks)

4. (a) Name ***two*** crater lakes in Kenya. (2 marks)

   (b) State ***three*** factors determining the permanence of a Lake. (3 marks)

5. (a) Give ***three*** conditions necessary for formation of fog. (3 marks)

(b) A given mass of air at 30°C can hold 24g/m^3 of water vapour when saturated. Calculate the relative humidity of air at the same temperature if it contains only 6g/m^3 of water vapour. (2 marks)

SECTION B

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

6. You have been provided with the map of Meru (108/3). Use it to answer question 6 (a) to (d).

(a) (i) Give ***two*** indices to adjoining sheets to the western part of Meru map. (2 marks)

(ii) State ***three*** evidences that show that the map of Meru is a topographical map. (3 marks)

(iii) Measure the length of Nanyuki – Isiolo road (A2). Give your answer in kilometers. (2 marks)

(iv) What is the magnetic bearing of the Air photo principal point 59 (grid reference *4520*) from the Air photo principal point 025 (grid reference *3826*)? (3 marks)

(b) Citing evidence from the map, identify ***two*** social services offered in Meru municipality. (4 marks)

(c) (i) Draw a rectangle measuring 12cm by 8cm to represent the area bound between eastings 45 and 48 and northings 21 and 23 on Meru map. (2 marks)

(ii) On the rectangle mark and name:

- Ol Doinyo Sabu (Ndunyu Sabu) hill (1 mark)
- River Kamarai (1 mark)
- Loose surface road (1 mark)

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

7. (a) (i) What is a tsunami? (2 marks)

(ii) Give ***two*** types of surface longitudinal waves. (2 marks)

(b) Explain the following causes of earthquakes.

(i) Vulcanicity (2 marks)

(ii) Energy release in the mantle (2 marks)

(iii) Construction of water reservoirs (2 marks)

(c) (i) Give ***two*** intrusive features of vulcanicity. (2 marks)

(ii) Describe how the following features are formed.

- Geysers (3 marks)
- Lava plateau (4 marks)

(d) Explain the negative effects of vulcanicity. (6 marks)

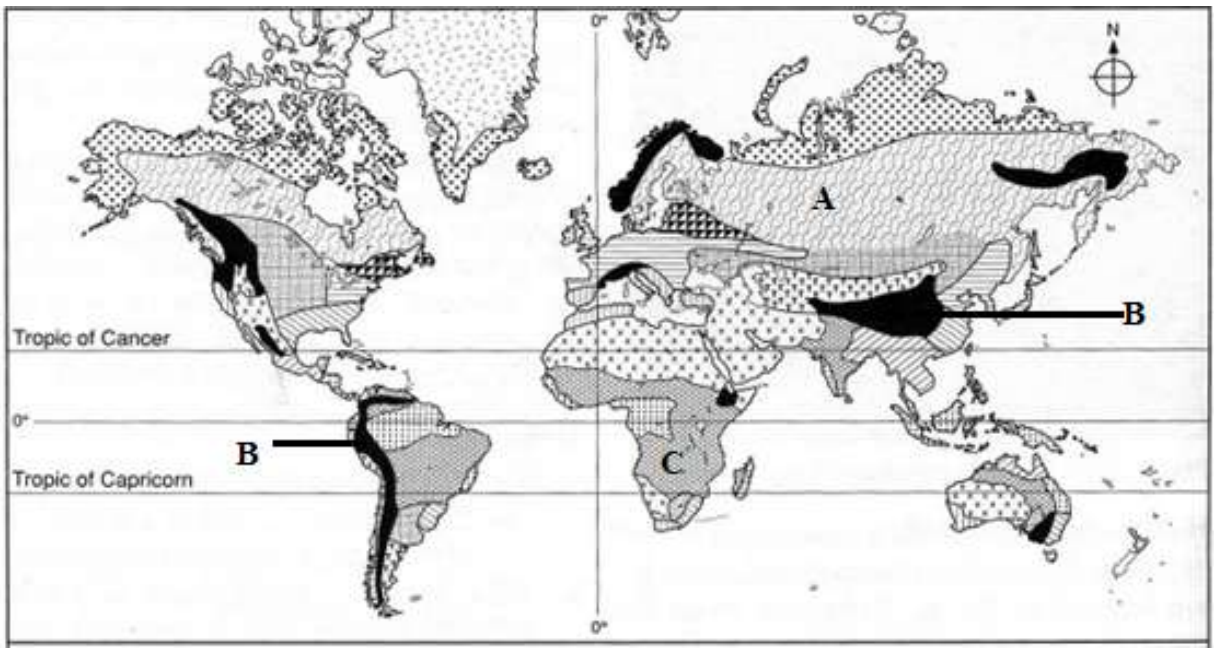
8. (a) (i) Define semi-natural vegetation. (2 marks)

(ii) Give ***three*** processes of vegetation growth influenced by temperature. (3 marks)

(b) (i) A part from forests, identify ***two*** other vegetation regions of Kenya. (2 marks)

(ii) State ***three*** human factors causing decline of forests in Kenya. (3 marks)

(c) The map below shows vegetation zones of the world.



(i) Identify the zones marked **A**, **B** and **C**. (3 marks)

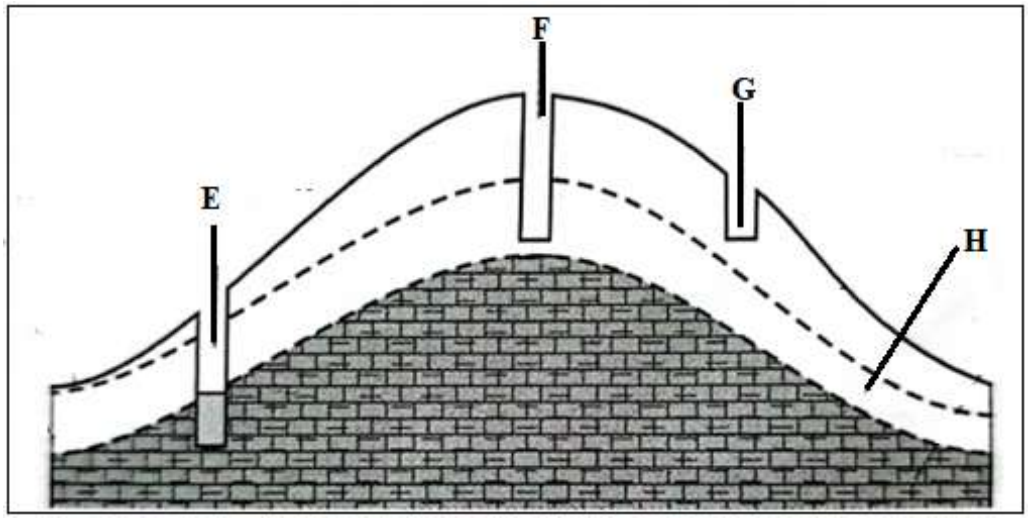
(ii) Explain ***three*** adaptations of the tropical desert vegetation. (6 marks)

(d) Explain ***three*** significance of vegetation to agricultural activities. (6 marks)

9. (a) (i) Identify ***two*** types of springs. (2 marks)

(ii) Give ***three*** factors which influence the occurrence of ground water. (3 marks)

(b) The diagram below shows different types of wells.



(i) Name the parts labelled **G** and **H**. (2 marks)

(ii) Identify the ideal well for a semi-arid area. (1 mark)

(c) Describe how the following features are formed in a limestone region.

(i) Grikes and Clints (4 marks)

(ii) Dolina (5 marks)

(d) Members of your class are planning to conduct a field study in a karst region.

(i) State ***two*** reasons why you would need a map of the area of study. (2 marks)

(ii) Give ***three*** methods you're likely to use to record data during the study. (3 marks)

(iii) Identify ***three*** factors that would limit the field work activity in the area. (3 marks)

10. (a) (i) Define the term leaching. (2 marks)

(ii) State ***two*** factors that contribute to the leaching of soils. (2 marks)

(b) (i) Give ***three*** factors influencing soil formation. (3 marks)

(ii) State ***three*** importance of soil texture. (3 marks)

(c) (i) Identify ***three*** causes of chemical degeneration in soils. (3 marks)

(ii) State ***four*** advantages of mulching. (4 marks)

(d) Explain the effects of soil erosion on water sources. (8 marks)

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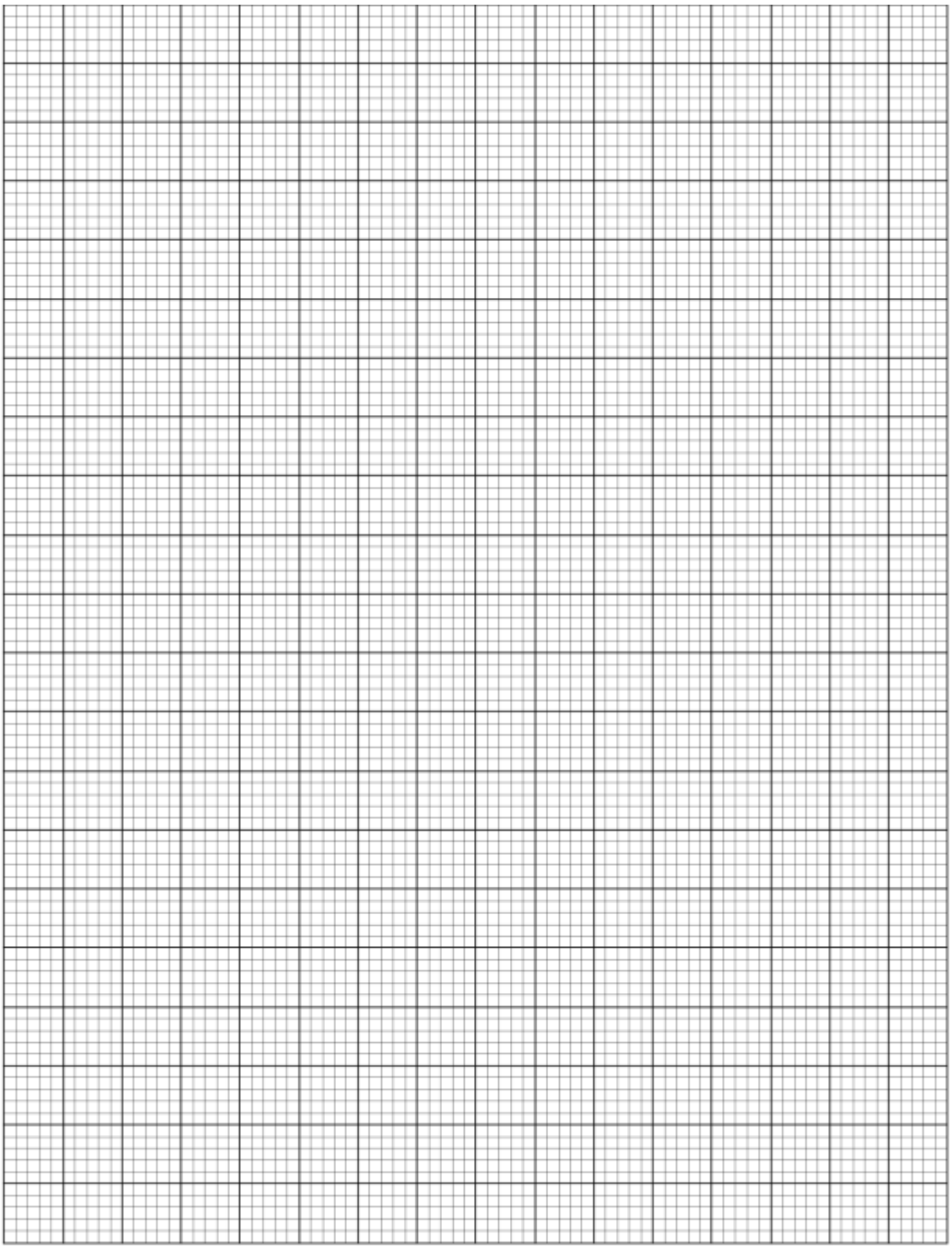

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