

NAME: .....INDEX NO: .....

SCHOOL: .....DATE: .....

## SAMIA SUB-COUNTY JOINT EXAMINATIONS

311/1

**GEOGRAPHY**

**PAPER 1**

**DECEMBER 2021**

**TIME: 2 <sup>3</sup>/<sub>4</sub> HOURS**

### Instructions to candidates

- a. *This paper consist of two sections; **A** and **B***
- b. *Answer **all** questions in section A*
- c. *Answer question **6** and any other **two** questions from section n B*
- d. *All answers must be written in the answer booklet provided*
- e. *Candidates should answer the questions in English*
- f. *Candidates should check the question paper to ascertain all the pages are printed and that no questions are missing.*

<b>Question</b>	<b>Maximum Score</b>	<b>Candidate's Score</b>
<b>Section A</b>		
<b>Question 6</b>		
<b>Question 7</b>		
<b>Question 8</b>		
<b>Question 9</b>		
<b>Question 10</b>		
<b>Total</b>		

**Section A**

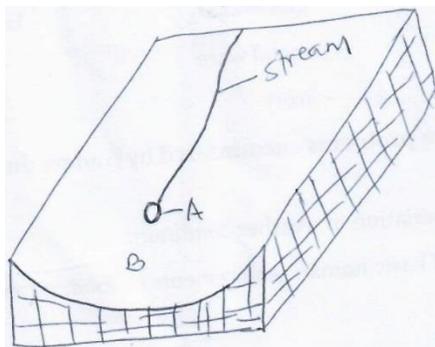
- 1. a) State the uniqueness of Geography as compared to other subjects. (2 marks)
- b) Give three examples of human environment you know. (3 marks)

2. The table below shows rainfall and temperature figures for a given station. Study it and answer question (a)

Months	J	F	M	A	M	J	J	A	S	O	N	D
Rainfall (mm)	80	120	340	150	130	90	100	120	320	120	100	80
Temperature(°C)	28	29	32	31	28	28	29	30	31	30	29	28

- a. Calculate the annual temperature range for the station (1mark)
- b. Describe the climate for the station (4marks)

3. a. The diagram below shows surface features of karst scenery.



- Identify the features marked A and B. (2 marks)
  - b. State three conditions necessary for development of karst scenery. (3 marks)
4. a) Define an earthquake. (2 marks)
- b) State three physical causes of earthquakes. (3 marks)
5. a) Distinguish between aridity and desertification. (2 marks)
- b) State any three solutions to the problem of aridity. (3 marks)

**Section B: Answer question 6 and any other two questions in this section.**

*Answer question 6 and any two questions*

6. Study the map of KIJABE 1:50,000 (Sheet 134/3) provided and answer the following questions.
- a. Use of marginal information.**
- i) Give the representative fraction scale of the map. (1 marks)
  - ii) Identify the vertical interval of the map. (1 mark)
  - iii) What type of road is D398. (1 mark)
  - iv) What is the six-figure grid reference for Mai Mahiu school. (2marks)
- b. Measure the distance of the railway line from the level crossing near Kijabe post office to Kijabe station (2marks)
- c. Describe vegetation of the area covered by the map. (2 marks)
- d. Draw a rectangle measuring 10 x 6 cm to represent the area bounded by eastings 30 and 40 and northing 94 and 00. (2 mark)
- i) On it show; Thicket vegetation, railway line and quarry. (3 marks)
  - ii) Calculate the new scale of the area you've drawn in (b) above. (2 marks)
- e. With evidence identify **three** social services offered in the area. (6 marks)
- f. Name any three artificial drainage features found in the area. (3 marks)
7. a. i. Distinguish between glacial till and fluvio-glacial till. (2 marks)
- ii. Give two reasons why there are no ice sheets in Kenya (2 marks)
- b. Explain three factors that influence the movement of ice from the place of accumulation. (6 marks)
- c. Describe how the following glacial erosional features are formed.
- i) Arete is formed (4 marks)
  - ii) Glacial trough (4 marks)
- d. You carried out a field work on glaciated lowlands.
- i) Mention two methods of data collection you used. (2 marks)
  - ii) Name three glacial depositional features you identified. (3 marks)

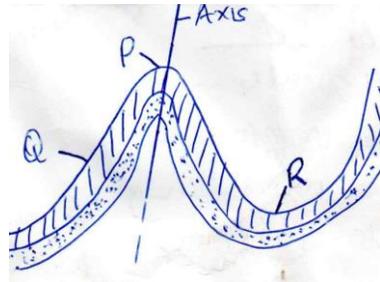
iii) Give two follow up activities that you carried out. (2 marks)

8. a. Differentiate between folding and faulting (2 marks)

b. i. Apart from rift valley, name three features resulting from faulting (2 marks)

ii. Using well labeled diagrams, describe the formation of the rift valley by tensional forces. (8 marks)

c. i) The diagram below shows a fold. Name the parts marked P, Q and R. (3 marks)



ii) Name the fold mountains found in; (4 marks)  
North west Africa  
South America  
Western North America  
Asia

d. State and explain any three effects of fold mountains on the climate of a place. (6 marks)

9. a) (i) State three wind erosion processes (3 marks)

(ii) Give three factors leading to development of deserts. (3 marks)

b) Explain two ways through which wind transports materials in the deserts (4 marks)

c) Describe formation of:-

(i) Wadi (3 marks)

(ii) Seif dune (3 marks)

(iii) Rock pedestal (3 marks)

d) Explain three negative effects of desert land forms (6 marks)

10. a. i. Give three determinants of soil colour (3 marks)

ii. State four ways in which humus improve the quality of the soil (4 marks)

iii. Name two types of soil according to structure. (2 marks)

b. Explain how the following factors influence formation of soil (4 marks)

- Living organisms
- Topography

c. Explain four causes of soil degeneration (4 marks)

d. You intend to carry out a field study on soil erosion around your school.

i. Give two methods of data recording you will use (2 marks)

ii. Identify two causes of soil erosion you are likely to come across. (2 marks)