**312/1**

**GEOGRAPHY**

**PAPER 1**

**JULY 2024**

**TIME: 2 HOURS 45 MINUTES**

**SUKELLEMO JET JOINT EXAMINATION**

**Kenya Certificate of Secondary Education**

**312/1**

**GEOGRAPHY**

**INSTRUCTIONS TO STUDENTS**

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

**For Examiner's Use Only**

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| --- | --- | --- | --- |
| **Section** | **Questions** | **Maximum Score** | **Candidate’s Score** |
| A | 1-5 | 25 |  |
| B | 6 | 25 |  |
| 7 | 25 |  |
| 8 | 25 |  |
| 9 | 25 |  |
| 10 | 25 |  |
| **Total Score**  |  |

**SECTION A: (25 MARKS)**

**ANSWER ALL QUESTIONS**

1. (a) What is Solar System. (2marks)

 (b) State **three** characteristics of the core. (3marks)

2. (a) Differentiate between a rock and a mineral. (2marks)

(b) Describe the formation of mechanically sedimentary rocks. (2marks)

3. Describe how Gravitative pressure causes earth movements. (5marks)

4. (a) What is River rejuvenation. (2marks)

 (b) Identify three ways in which a river transports its load. (3marks)

5. (a) Name two processes of wind erosion the desert areas. (2marks)

 (b) State three reasons why wind erosion is effective. (3marks)

**SECTION B**

**ANSWER QUESTION 6 AND ANY OTHER TWO**

6. Study the map

1. (i) Identify the index to adjoining sheet to the south East of Mumias. (1mark)

 (ii) Calculate the area of Nyanza province in the area covered by the map.

 (2marks)

 (iii) Give the longitudinal extent of the area covered by the map. (2marks)

1. Calculate the direction of Indagalasia school from air photo principal point 54 to the south of Buduma. (2marks)
2. (i) Describe the drainage of the area covered by the map. (5marks)

(ii) Explain three factors that favour crop farming in the area covered by the map. (6marks)

1. Draw a rectangle measuring 14cm by 8 cm to represent the area to east of easting 60 and north of northing 40. (1mark)

On the rectangle, mark and label the following.

1. All weather loose surface. (1mark)
2. River Nzoia (1mark)
3. Mwira School. (1mark)
4. Citing Evidence from the map Identify three social functions of Butula Muandas area (3marks)

7. (a) (i) What is a climax vegetation? (2 marks)

(ii) State four characteristics of the Mediterranean type of vegetation

(4 marks)

(b) Explain three factors which influence the distribution of vegetation in Kenya.

(6 marks)

(c) Give Reasons why Tundra region has scanty vegetation. (3 marks)

(d) Write the names of the grasslands found in the following areas (3 marks)

(i) East Africa

(ii) Canada

(iii) Argentina

(e) You are required to carry out a field study of the vegetation within the local environment:

(i) Apart from identifying the different types of plants, state three other activities you will carry out during the field study. (3 marks)

(ii) Give three reasons why it would be necessary to sample out part of the area covered by the vegetation for the study (2 marks)

(iii) List three methods they may have used to collect data (2marks)

8. (a) (i) What is mass wasting . (2marks)

 (ii) Explain three factors influencing mass wasting. (6marks)

(b) (i) Identify three processes of rapid mass wasting. (3marks)

 (ii) Describe the process of solifluction. (5marks)

(c) State effects of soil creep to the environment. (4marks)

(d) Students of Sunshine conducted a field study in an area affected mass wasting

1. Identify three methods that might have been used to control soil erosion

(3marks)

(ii) State two follow up activities that they would have engaged in after the study. (2marks)

9. (a) (i) Differentiate between Karst Scenery and Karst Region. (2marks)

 (ii) Identify two sources of underground water. (2marks)

(b) (i) Explain how the following factors influence the occurrence of underground

 water.

- Nature of the rock - Gradient of the land (2marks)

 (ii) State four conditions that are necessary for the formation of an artesian well

 (4marks)

(c) (i) Explain three conditions that are necessary for development of Karst Scenery (6marks)

 (ii) Give two reasons why there are few settlements in karst region (2marks)

(d) Students from Light Academy carried out a field study in a karst landscape.

(i) State two methods they would have used to record data (2marks)

(ii) State three importance of studying a karst landscape through field work. (3marks)

10. (a) (i) Distinguish between an Ocean and a Sea. (2marks)

 (ii) Identify three factors that influence the level of salinity in Ocean water.

(3marks)

 (b) Explain three causes of horizontal movement of ocean water. (6marks)

(c) Using a well labelled diagram describe the formation of a cuspate foreland.

(6marks)

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