

# **GEOGRAPHY PAPER 1**

## **EXPECTED QUESTIONS IN KCSE**

**Comprises 6 KCSE prediction set exams  
(Class of KCSE March 2022).**

**For Marking Schemes Contact Mr Machuki**  
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**For More e-learning resources contact Kenya  
Educators via the contacts above.**

# PREDICTION 1

Name: \_\_\_\_\_ Index No: \_\_\_\_\_

School: \_\_\_\_\_ Candidate's Sign \_\_\_\_\_

Adm.No \_\_\_\_\_ Date: \_\_\_\_\_

312/1

GEOGRAPHY

Paper 1

FORM 4 2021

Time: 2  $\frac{3}{4}$  Hours

## Instructions to Candidates:

- This paper has two sections: **A** and **B**.
- Answer **all** questions in section **A**
- Answer **question 6** and any **two other** questions from section **B**.
- This paper consist of **4** printed pages
- Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing**
- Candidates should answer the questions in English.**

## FOR EXAMINERS USE ONLY

### SECTION A

| Question number | 1 | 2 | 3 | 4 | 5 | Sub Total |
|-----------------|---|---|---|---|---|-----------|
| Marks           |   |   |   |   |   |           |

Grand total

### SECTION B

| Question number | 6 | 7 | 8 | 9 | 10 | Sub Total |
|-----------------|---|---|---|---|----|-----------|
| Marks           |   |   |   |   |    |           |

### SECTION A

#### *Answer All Questions in This Section*

- (a) What is a Stevenson screen? (2 marks)
  - (b) Name **two** forms of precipitation that commonly occur in Kenya (2 marks)
- (a) State **three** characteristics of the crust (3 marks)
  - (b) Give **three** reasons why the intensity of insolation is higher at equator than at Polar Regions. (3 marks)

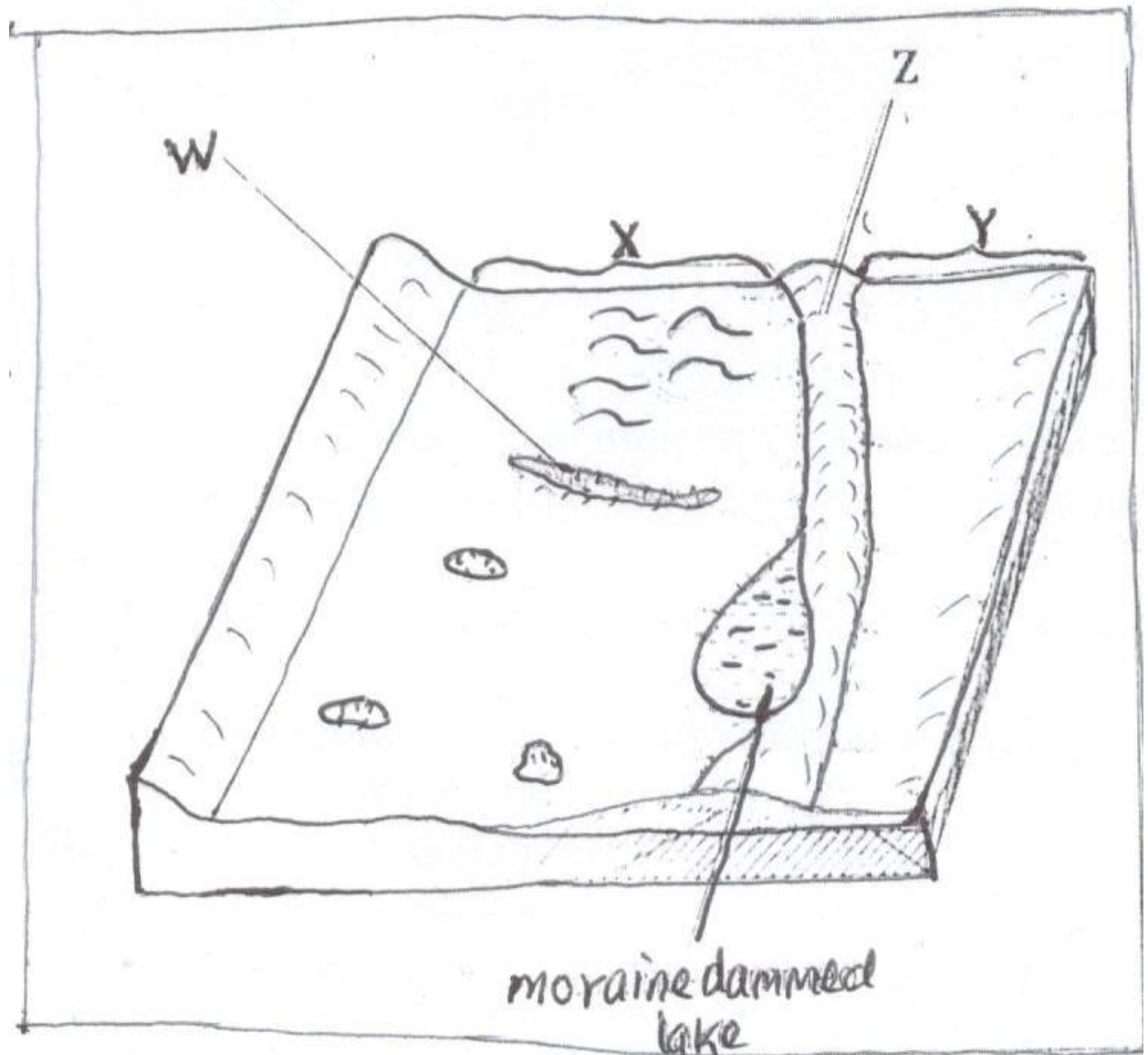
3. (a) Identify **two** theories used to describe the origin of Fold Mountains. (2 marks)  
 (b) Give **three** effects of Fold Mountains on climate. (3 marks)
4. (a) Name **two** types of earth movements that occur within the earth's crust. (2 marks)  
 (b) Name **three** tectonic plates (3 marks)
5. (a) Define faulting (2 marks)  
 (b) State **three** effects of faulting on human environment (3 marks)

## SECTION B

**Answer Question 6 and Any Other Two Questions in This Section**

6. Study the map of Yimbo 1:50,000 (sheet 115/1) provided and answer the following questions
    - a) What is the map name of the extract given? (1 mark)
    - b) Name the type of boundaries in the map extract. (2 marks)
    - c) Calculate the area of Mageta island (2 marks)
    - d) (i) Using a scale of 1cm represent 20M, draw a cross-section from grid reference 270850 to 330850. (4 marks)  
 On it, mark and name the following features:
      - Forest
      - Hill
      - River
      - Swamp
    - (ii) Calculate the vertical exaggeration of the map. (2 marks)
    - e) Describe the long profile of River Yala. (5 marks)
    - f) Citing evidence from the map, explain the factors that influence trade in the area covered by the map. (6 marks)
  7. (a) Define the following
    - (i) Aridity (2 marks)
    - (ii) Wind (2 marks)
  - (b) (i) Explain **three** ways in which wind erodes weathered materials in arid areas. (6 marks)  
 (ii) Name **three** features which develop under arid conditions as a result of wind erosion. (3 marks)
  - (c) State **four** factors which influence wind transportation in desert. (4 marks)
  - (d) (i) Apart from Wadis, name any **three** resultant features of water action in arid areas. (3 marks)  
 (ii) Describe the formation of a Wadi. (5 marks)
8. (a) What is a glacier? (2 marks)  
 (b) Describe how the following glacial erosional processes occur.

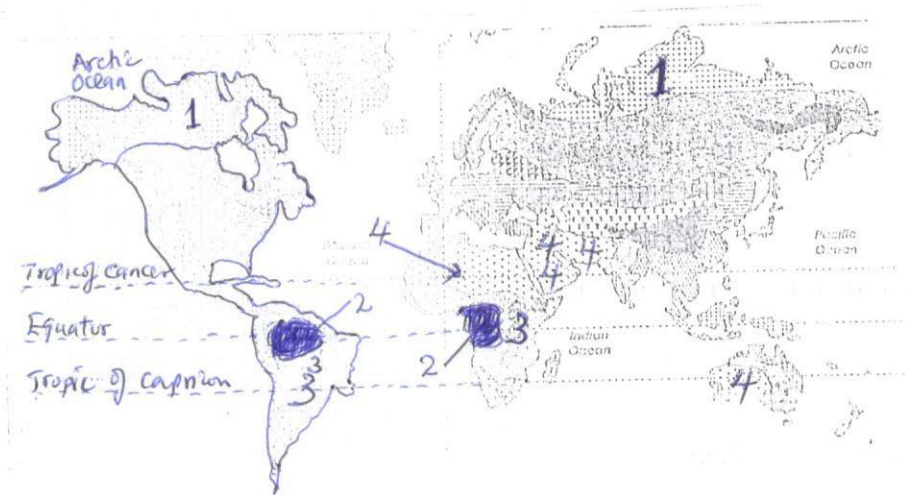
- (i) Plucking (3 marks)  
(ii) Abrasion (3 marks)  
(c) The diagram below shows features on a glaciated lowland.



- (i) Name the features marked **W**, **X**, **Y** and **Z**. (4 marks)  
(ii) Describe how a drumlin is formed. (5 marks)  
(d) Explain **four** negative effects of glaciations in low-land areas. (8 marks)
9. (a) (i) Define weathering (2 marks)  
(ii) Explain the following processes of weathering  
a. Hydration (2 marks)  
b. Oxidation (2 marks)  
c. Frost action (3 marks)

- (b) State **three** conditions that influence the process of Solifluction. (3 marks)
- (c) Describe how an exfoliation dome is formed. (5 marks)
- (d) Explain **four** physical factors that enhance movement of material along the slope due to gravity. (8 marks)

10. (a) Define the term vegetation. (1 mark)
- (b) Explain how the following factors influence the distribution of vegetation.
- (i) Aspect (2 marks)
  - (ii) Relief (4 marks)
- (c) The map below shows world vegetation zone



- (i) Name vegetation type marked 1, 2, 3 and 4. (4 marks)
- (d) Explain **four** ways in which trees in coniferous forests are adapted to the climatic conditions. (8 marks)
- (e) A form four Geography class is planning to carry out a field study in Kakamega forest.
  - (i) State how they would use the following tools during the study.
    - a. A tape recorder (1 mark)
    - b. A sketch map (1 mark)
    - c. A camera (1 mark)
  - (ii) Give **three** methods they would use to collect the data during the study. (3 marks)

## **PREDICTION 2**

**312/1**

**GEOGRAPHY**

**PAPER 1**

**Kenya Certificate of Secondary Education**

### **INSTRUCTIONS TO STUDENTS**

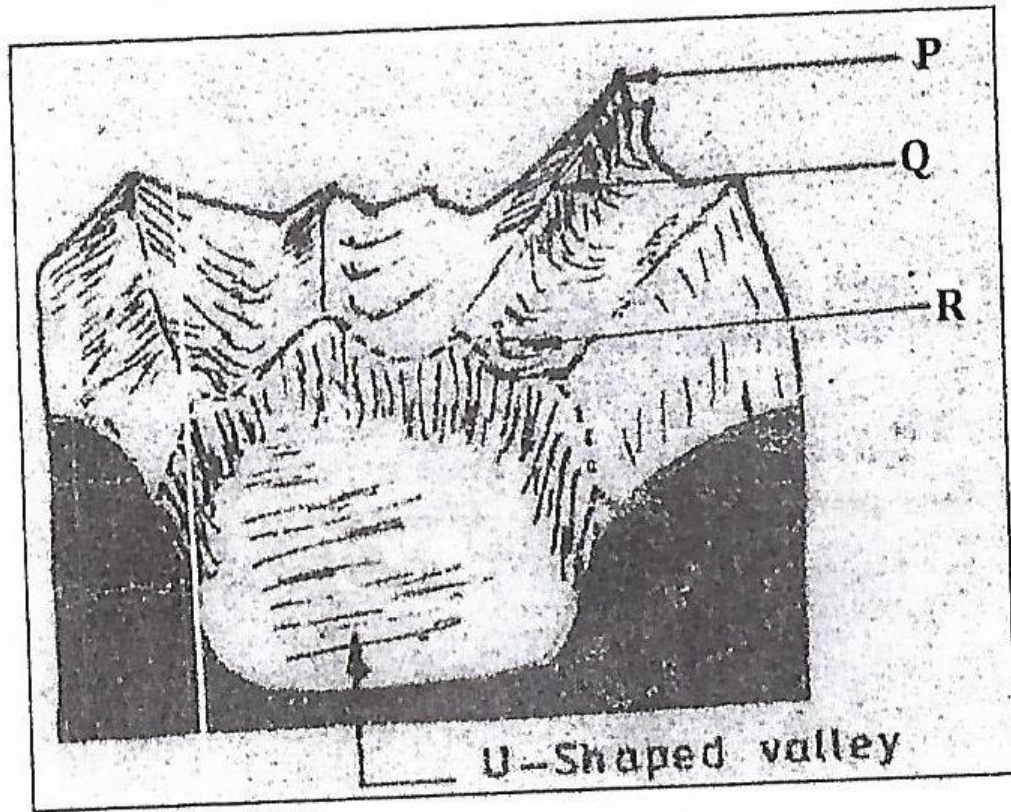
- This paper has two sections **A** and **B**
- Answer **ALL** the questions in section **A**.
- In section **B** answer questions **6** and any other **two** questions.

**SECTION A (25MARKS)**

**Answer all the questions in this section**

1. (a) What is the relationship between Geography and Chemistry? **(2marks)**  
  
(b) Give three reasons why the interior of the Earth is hot. **(3marks)**
2. (a) Distinguish between Vulcanicity and Volcanicity. **(2marks)**  
  
(b) Give two characteristics of basic lava domes. **(2marks).**
3. (a) What is desertification? **(2marks)**  
  
(b) State three negative effects of desertification. **(3marks)**

4. The diagram below shows an upland area.



(a) Name the feature P, Q and R.

(3 marks)

(b) How is a u-shaped valley formed?

(3 marks)

5. (a) State three ways in which lakes are formed.

(3 marks)

(b) Give two characteristics of lakes formed due to faulting.

(2 marks)

## **SECTION B**

**Answer question 6 and any other TWO questions from this section**

**6. Study the map of Busia (1:50,000) sheet 101/1 provided and answer the following questions.**

(a) (i) Give the latitudinal and longitudinal position of South East corner of the map  
**(2marks)**

(ii) Give two methods that have been used to represent relief. **(2marks)**

(b)(i) What is the length in Kilometres of the All-weather loose surface road (C526) from the road junction at Odiado to the road junction at Bumula. **(2marks)**

(ii) What is the bearing of the road junction at Matayo from the air photo Principal  
**(2 marks)**

(iii) Give three social services that are provided at Funyula. **(3 marks)**

(c) Describe the drainage of the area covered by the map. **(6marks)**

(d)(i) Apart from trading, name two other economic activities in Busia area. **(2marks)**

(ii) Citing evidence from the map, explain three factors that favour trading in the area covered by the map. **(6marks)**

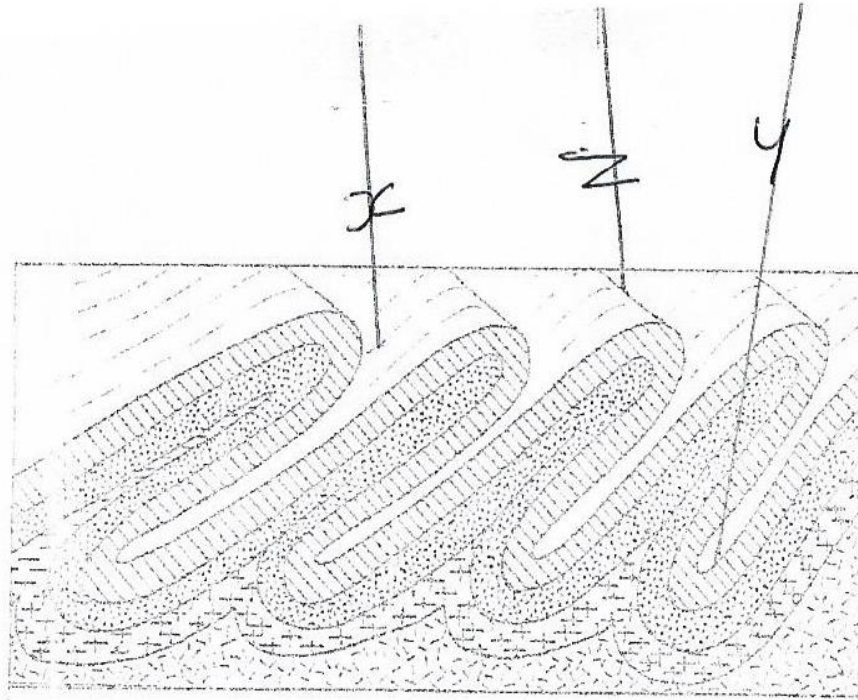
**7. (a)(i) What is folding? **(2marks)****

(ii) Name one country where the following fold mountains are found.

• Andes **(1mark)**

• Atlas **(1mark)**

(b) The diagram below shows a types of fold.



Name the features marked **x**, **y** and **z**

**( 3marks)**

(c) With the aid of a labelled diagram, describe how an overthrust fold is formed.

**(6 marks)**

(d) Explain four effects of fold mountains on climate

**(8marks)**

(e) Four students in your school are planning to study land forms through field work.

Give four reasons why it is important to study the folded landforms through fieldwork.

**(4 marks)**

8. (a) Define the term vegetation

(2marks)

(b) Explain how the following factors influences the distribution of vegetation

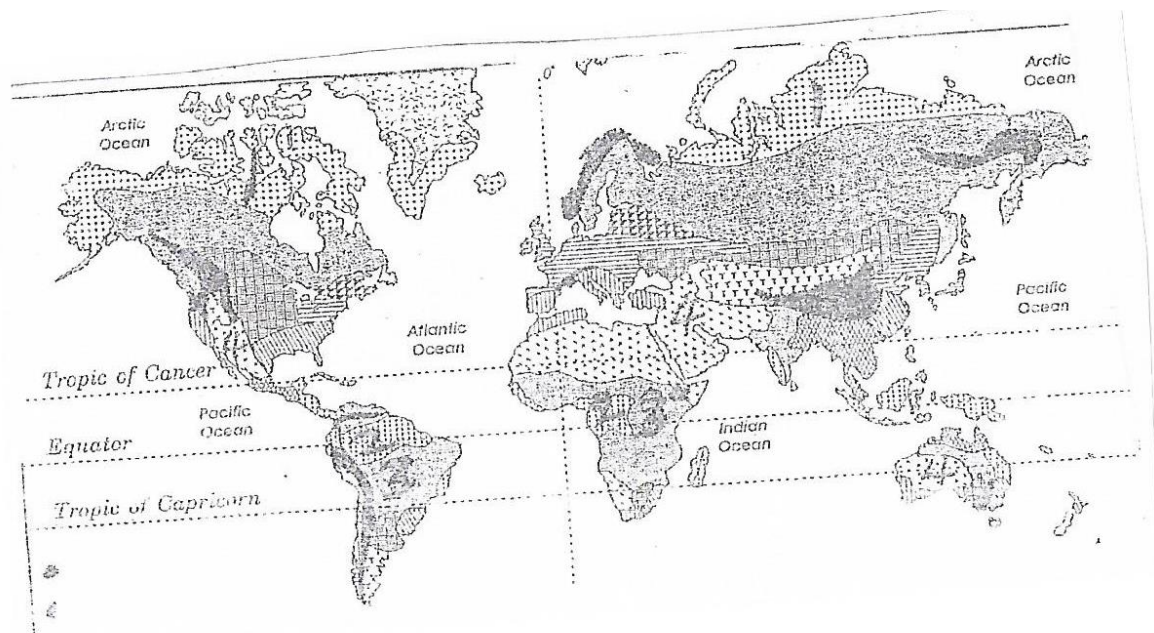
(i) Aspect

(2marks)

(ii) Relief

(3marks)

(c)The map below shows world vegetation zone



(i) Name vegetation type marked 1,2, 3, and 4

(4marks)

(d) Explain four ways in which trees in coniferous forests are adopted to the climatic condition

(8marks)

(e)A form four Geography class is planning to carry out a field study in Kakamega forest.

(i) State how they would use the following tools during the study.

- A tape recorder (1mark)
  - A sketch map (1mark)
  - A camera (1mark)
- (ii) Give three methods they would use to collect the data during the study. (3 marks)
9. (a) (i) Differentiate between river catchment and watershed. (2marks)
- (ii) Describe three processes by which a river transports its load. (6marks)
- (b) Explain three factors that lead to rejuvenation of a river. (6marks)
- (c) Describe each of the following drainage patterns.
- (i) Centripetal drainage pattern (2marks)
- (ii) Superimposed drainage pattern (3marks)
- (e) You are to carry out a field study of a river within the vicinity of your school.
- (i) State two reasons why you need a working schedule. (2 marks)
- (ii) State two characteristics of a river you are likely to observe in its lower course. (2 marks)
- (iii) State two follow up activities you are likely to carry out after the study. (2marks)
10. (a) (i) Name two components of soils. (2 marks)
- (ii) State three characteristics of desert soils. (3 marks)
- (iii) List two factors that contribute to soil leaching. (2 marks)
- (b) Describe how lateralization occurs. (6 marks)
- (c) Explain how the following processes occurs.
- (i) Splash erosion (2 marks)
- (ii) Gulley erosion (2 marks)
- (d) (i) What is soil conservation? (2 marks)

(ii) Explain in three ways of maintaining soil fertility.

**(6 marks)**

# PREDICTION 3

NAME.....

INDEX NO.....

SCHOOL.....

SIGNATURE.....

DATE.....

312/1

GEOGRAPHY

PAPER 1.

TIME  $2\frac{3}{4}$  Hours.

## Instructions to candidates.

- (a) *White your name and index number in the spaces provided above.*
- (b) *Sign and write the date of the examination in the spaces provided above.*
- (c) *This paper consists of two sections; **A** and **B**.*
- (d) *Answer all the questions in section **A** and question 6 and any other two questions in section **B**.*
- (e) *Answer all the questions in English.*

| SECTION  | QUESTIONS          | MAXIMUM SCORE                       | CANDIDATE'S SCORE |
|----------|--------------------|-------------------------------------|-------------------|
| <b>A</b> | <b>1-5</b>         | <b>25</b>                           |                   |
| <b>B</b> | <b>6</b>           | <b>25</b><br><b>25</b><br><b>25</b> |                   |
|          | <b>TOTAL SCORE</b> |                                     |                   |

**SECTION A. Answer all questions in this section.**

1. (a) Name **two** forces responsible for the shape of the earth (2mks)  
(b) Mention **three** effects of the rotation of the earth (3mks)
2. (a) State **two** types of igneous rocks (2mks)  
(b) Give **three** characteristics of sedimentary rocks (3mks)
3. (a) Differentiate between weathering and mass wasting (2mks)  
(b) State **three** causes of landslides (3mks)
4. a) Give three reasons why it is necessary to study the plate tectonic theory. (3 marks)  
b) Name two types of plate tectonic boundaries. (2 marks)
5. (a) Name two features that are formed on emerged highland coast (2mks)  
(b) State three conditions necessary for the formation of a spit (3mks)

***SECTION B :Answer question 6 compulsory and only other two from the remaining questions.***

6. (a) (i) What type of map is Yimbo Map extract (1mk)  
(ii) Convert the scale of the map to statement scale (1mk)  
(iii) Measure the length of all weather road, loose surface road C 506 from the junction in the grid square 3082 up to where it ends in the grid square 3986. (Give your answer in kilometers)  
(2mks)  
(iv) Calculate the bearing of the Trigonometric station 115 T 27 from the air photo principal point in the grid square 2586 (2mks)
- (b) Draw a rectangle measuring 14cm by 10cm to represent the area enclosed by Eastings 28 and 35 and northing 78 and 83. (6mks)

On the rectangle, mark and name the following features

- All weather roads, loose surface
- Lake Victoria
- Ndate River
- Thicket

- Papyrus swamp

(c) (i) Identify two methods used to show relief of the area covered by the map

(2mks)

(ii) Describe the drainage of the area covered by the map (7mks)

(d) Citing evidence from the map, state two economic activities of the area shown on the map

(4mks)

7.(a) (i) Define continental drift

(ii) Give two significance of plate tectonic boundaries (2mks)

b (i) Apart from tension forces, explain two other process that may cause faulting

(4mks)

(ii) With the aid of well-labelled diagrams, describe the formation of Rift valley through tension forces (6mks)

iii) Mention four positive effect of faulting (4mks)

c) You are planning to carry out a field study on the area affected by faulting

i) State two objectives for your study

ii) State three reasons why it is important to have a reconnaissance survey/pre-visit of the area (3mks)

iii) Give three follow-up activities you are likely to engage in (3mks)

**8. a i)** Define the term glaciation. (2 marks)

ii) Name three types of glaciers. (3 marks)

**b)** Describe how the following features found in upland glaciated landscape are formed.

i) U-shaped valley (5 marks)

ii) Pyramidal peak (5 marks)

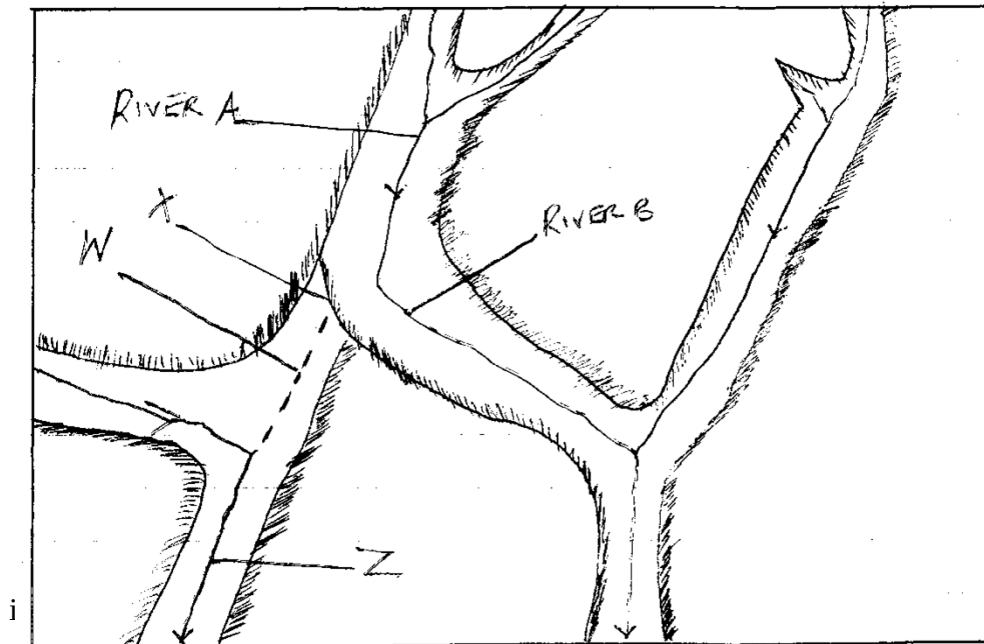
**c)** Explain three significances of upland glaciated features to human activities. (6 marks)

**d)** Suppose you were to carry out a field study of glaciated lowland.

i) State two advantages of using oral interview to collect information during the field study. (2 marks)

ii) Name two features found in glaciated lowland that you are likely to study. (2 marks)

- 9.(a) (i) Differentiate between watershed and catchment area (2mks)  
 (ii) Explain three ways by which a river transports its load (6mks)  
 (b) Study the diagram given below and answer questions that follow



- i  
 ii) Explain the process of river capture (3mks)  
 c) Give three characteristics of a river in its youthful stage (3mks)  
 d) Explain four economic importance of a river to human activities (8mks)
- 10 a, .Define aridity
- i. With an aid of a well labeled diagram describe how a rock pedestal is formed (5mks)
- b ,
- i. Give two process through which wind erodes the earth surface (2mks)  
 ii. Give two wind depositional features found in the desert (2mks)  
 iii. explain two ways through which plants causes weathering in arid and semi-arid areas 4mks
- c. i. Explain the causes of aridity and desertification (6mks)  
 ii. State four measures that can control aridity and desertification ( 4mks)

# PREDICTION 3

NAME.....

INDEX NO.....

SCHOOL.....

SIGNATURE.....

DATE.....

312/1

GEOGRAPHY

PAPER 1.

TIME  $2\frac{3}{4}$  Hours.

## Instructions to candidates.

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| <b>B</b> | <b>6</b>           | <b>25</b><br><b>25</b><br><b>25</b> |                   |
|          | <b>TOTAL SCORE</b> |                                     |                   |

**SECTION A. Answer all questions in this section.**

1. (a) Name **two** forces responsible for the shape of the earth (2mks)  
(b) Mention **three** effects of the rotation of the earth (3mks)
2. (a) State **two** types of igneous rocks (2mks)  
(b) Give **three** characteristics of sedimentary rocks (3mks)
3. (a) Differentiate between weathering and mass wasting (2mks)  
(b) State **three** causes of landslides (3mks)
4. a) Give three reasons why it is necessary to study the plate tectonic theory. (3 marks)  
b) Name two types of plate tectonic boundaries. (2 marks)
5. (a) Name two features that are formed on emerged highland coast (2mks)  
(b) State three conditions necessary for the formation of a spit (3mks)

***SECTION B :Answer question 6 compulsory and only other two from the remaining questions.***

6. (a) (i) What type of map is Yimbo Map extract (1mk)  
(ii) Convert the scale of the map to statement scale (1mk)  
(iii) Measure the length of all weather road, loose surface road C 506 from the junction in the grid square 3082 up to where it ends in the grid square 3986. (Give your answer in kilometers)  
(2mks)  
(iv) Calculate the bearing of the Trigonometric station 115 T 27 from the air photo principal point in the grid square 2586 (2mks)
- (b) Draw a rectangle measuring 14cm by 10cm to represent the area enclosed by Eastings 28 and 35 and northing 78 and 83. (6mks)

On the rectangle, mark and name the following features

- All weather roads, loose surface
- Lake Victoria
- Ndate River
- Thicket

- Papyrus swamp

(c) (i) Identify two methods used to show relief of the area covered by the map

(2mks)

(ii) Describe the drainage of the area covered by the map (7mks)

(d) Citing evidence from the map, state two economic activities of the area shown on the map

(4mks)

7.(a) (i) Define continental drift

(ii) Give two significance of plate tectonic boundaries (2mks)

b (i) Apart from tension forces, explain two other process that may cause faulting

(4mks)

(ii) With the aid of well-labelled diagrams, describe the formation of Rift valley through tension forces (6mks)

iii) Mention four positive effect of faulting (4mks)

c) You are planning to carry out a field study on the area affected by faulting

i) State two objectives for your study

ii) State three reasons why it is important to have a reconnaissance survey/pre-visit of the area (3mks)

iii) Give three follow-up activities you are likely to engage in (3mks)

**8. a i) Define the term glaciation. (2 marks)**

ii) Name three types of glaciers. (3 marks)

**b) Describe how the following features found in upland glaciated landscape are formed.**

i) U-shaped valley (5 marks)

ii) Pyramidal peak (5 marks)

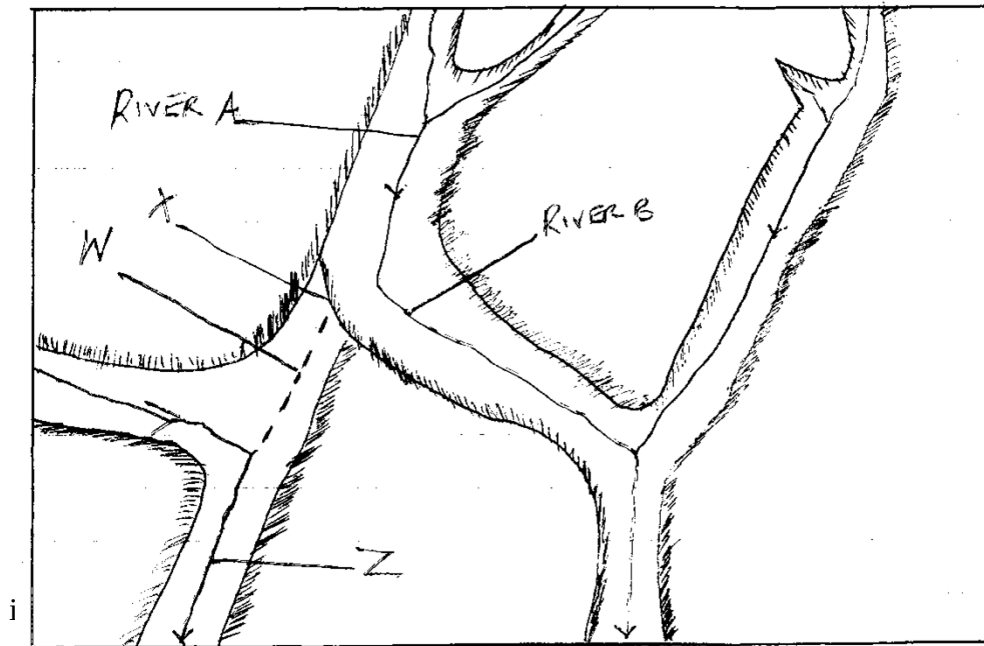
**c) Explain three significances of upland glaciated features to human activities. (6 marks)**

**d) Suppose you were to carry out a field study of glaciated lowland.**

i) State two advantages of using oral interview to collect information during the field study. (2 marks)

ii) Name two features found in glaciated lowland that you are likely to study. (2 marks)

- 9.(a) (i) Differentiate between watershed and catchment area (2mks)  
 (ii) Explain three ways by which a river transports its load (6mks)  
 (b) Study the diagram given below and answer questions that follow



- i) Explain the process of river capture (3mks)
- c) Give three characteristics of a river in its youthful stage (3mks)  
 d) Explain four economic importance of a river to human activities (8mks)
- 10 a, .Define aridity
- i. With an aid of a well labeled diagram describe how a rock pedestal is formed (5mks)
- b ,
- i. Give two process through which wind erodes the earth surface (2mks)  
 ii. Give two wind depositional features found in the desert (2mks)  
 iii. explain two ways through which plants causes weathering in arid and semi-arid areas 4mks
- c. i. Explain the causes of aridity and desertification (6mks)  
 ii. State four measures that can control aridity and desertification ( 4mks)

## PREDICTION 4

Name: ..... Index No: .....dm No.....

Candidate Signature: ..... Date: .....Class.....

3/2/1

GEOGRAPHY

Paper 1

Time 2 hours 45 min.

### KCSE PREDICTION 4 Kenya Certificate of Secondary Education

#### Instructions to Candidates

- a) Answer all questions in section A.
- b) In section B, Answer question 6 and any other **two** questions from the remaining questions.
- c) Answer all questions using the answer booklet provided.
- d) Candidate should check that all pages are printed and no questions are missing.

#### For Examination use only.

|              | Maximum Score | Candidate Score |
|--------------|---------------|-----------------|
| Section A.   | 25            |                 |
| Question 6   | 25            |                 |
| Question 7   | 25            |                 |
| Question 8   | 25            |                 |
| Question 9   | 25            |                 |
| Question 10  | 25            |                 |
| <b>TOTAL</b> | <b>100%</b>   |                 |



## SECTION A

*Answer all the questions in this section.*

1. a) Differentiate a Star from a Natural satellite. (2mks)  
b) State three weaknesses of the Passing Star Theory. (3mks)
2. a) Give three ways in which igneous rocks can be classified. (3mks)  
b) Describe how Dynamic metamorphism leads to formation of metamorphic rocks. (2mks)
3. a) Outline three agents of Weathering. (3mks)  
b) State how topography influences Weathering of rocks. (3mks)
4. a) State the factors that influence river deposition. (3mks)  
b) Describe radial drainage pattern. (2mks)
5. a) What is Glaciation? (2mks)  
b) State three factors that influence glacial erosion. (3mks)

## SECTION B

**Answer Question 6 and Any Other two Questions in this Section.**

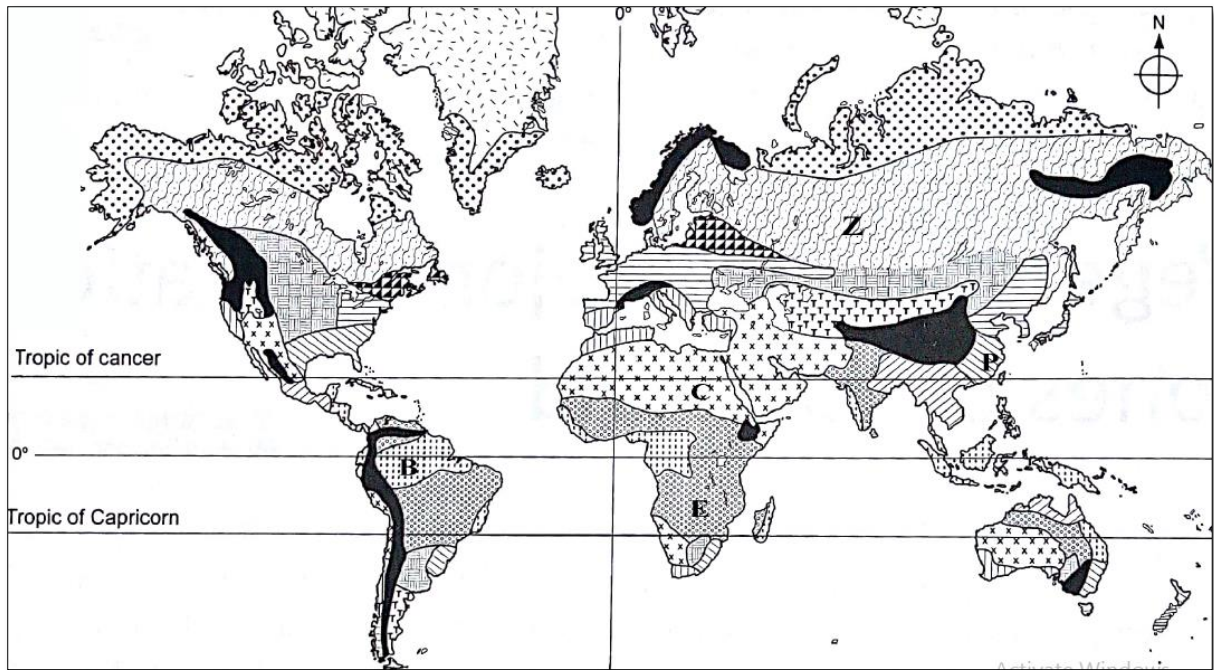
**6.** Study the map of Yimbo (**Sheet 115/1** provided and use it to answer the questions the following questions.

- (a) (i) identify the latitudinal extent of the area covered by the map. (1 mark)  
(ii) Give the six-figure grid reference of Ramogi hill. (1 mark)
- (b) (i) Convert the ratio scale of the map into statement scale. (2 marks)  
(ii) Calculate the area covered by Lake Victoria to the east of **Easting 30** in square kilometres (2 marks)
- (c) (i) Draw a cross-section along the **Northings 90** and between the **Eastings 30** and **36**, using a vertical scale of **1 cm represent 50 m.** (4 marks)

On the cross-section, mark and name:

- Thicket vegetation (1 mark)
- Kapiyo school (1 mark)
- River (1 mark)

- (ii) Calculate the vertical exaggeration of the drawn cross-section. **(2 marks)**
- (d) (i) Citing evidence, identify **two** economic activities carried out in the Yimbo area. **(2 marks)**
- (ii) Describe how relief has influenced the distribution of settlements in the area covered by the map. **(4 mark)**
- (iii) Describe the drainage of river Yala **(4marks)**
7. a) Distinguish between orogenic and epierogenic earth movements. **(2marks)**
- b) Give any **three** features associated with the extension boundary. **(3marks)**
- c) Describe how the following theories causes earth's movements
- i) Convectional currents **(4marks)**
- ii) Gravitative pressure **(4marks)**
- d) State **four** characteristics of the Great Gregory Rift Valley. **(4marks)**
- e) Explain **four** effects of faulting on physical environment. **(8marks)**
8. (a) Differentiate between derived and cultivated vegetation. **(2 marks)**
- (b) Explain how the following factors influence vegetation distribution in Kenya:
- (i) Living organisms **(2 marks)**
- (ii) Precipitation **(2 marks)**
- (c) The map below shows the global distribution of vegetation. Study and use it to answer the questions that follow.



(i) Identify the vegetation labelled **B**, **C** and **Z**. (3 marks)

(ii) Describe the adaptive characteristics of the vegetation labeled **E** on the map. (6 marks)

(d) Your class is to planning to undertake a field study on vegetation in Mau forest;

(i) State **three** preparations you would carry out. (3 marks)

(ii) Give **three** sampling techniques you would use. (3 marks)

(iii) Identify **four** challenges you are likely to face during the actual field study. (4 marks)

9. a) i) Differentiate between Aridity and Desertification. (2marks)

ii) Explain the following processes of wind erosion.

- Abrasion (2mks)

- Deflation. (2mks)

b) With a well labelled diagram, describe the formation of a Mushroom block. (5mks)

c) i) State three factors which influence wind transport. (3mks)

ii) Give three characteristics of a Barchan. (3mks)

d) Marsabit Boys high school went for a field study near their school on action of water in arid areas.

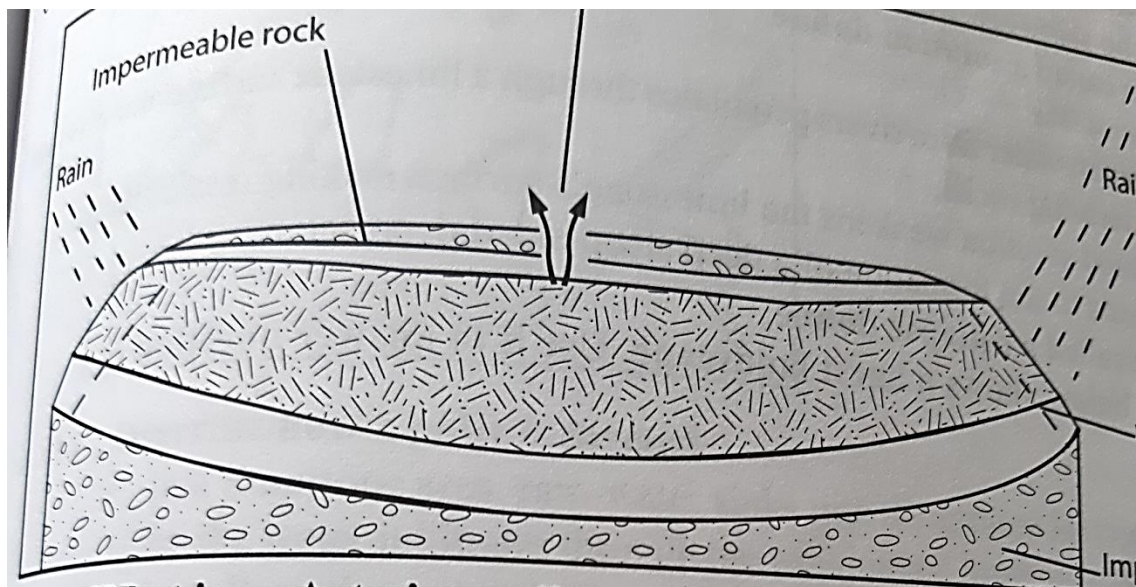
i) Give three reasons why they required a route map. (3mks)

ii) State three problems they are likely to encounter while in the field. (3mks)

iii) Name two features they are likely to observe. (2mks)

10. a) State three factors necessary for the development of Karst scenery. (3mks)

b. The diagram below shows an Artesian Basin. Use it to answer the question (i) and (ii).



i) Name the parts marked S and T. (2mks)

ii) State three ideal conditions for the formation of an artesian well. (3mks)

iii) Explain how a Doline is formed. (4mks)

c) i) Give reasons why some lakes are fresh. (3mks)

ii) Describe how a tarn is formed. (5mks)

d) Explain two negative effects of lakes. (4mks)

# PREDICTION 5

NAME: .....CLASS:.....

INDEX NO.....

312/1

GEOGRAPHY

PAPER 1

TIME: 2  $\frac{3}{4}$  HOURS

## KCSE PREDICTION 5

### INSTRUCTIONS:

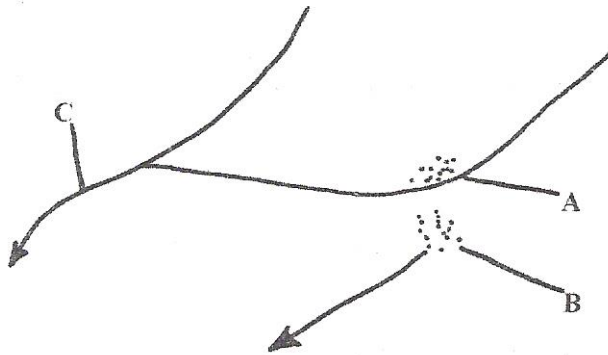
1. The paper comprises of 2 sections A and B.
2. Attempt **all** question in section A.
3. In section B, answer question 6 and choose any other two questions.
4. Use separate answer sheets for section A and each question in section B.

*This paper consists of 4 printed pages. Candidates should check the question paper to ensure that all pages are printed as indicated and no questions are missing.*

## SECTION A

### Answer all questions in this section

1. a) Identify **Two** forces responsible for the spherical shape of the earth. (2 marks)  
b) Give **Three** reasons why the interior of the earth is still hot. (3 marks)
2. a) Outline **Two** characteristics of the troposphere. (3 marks)  
b) Apart from cloud cover, identify **Two** other factors which influence the amount of solar radiation received on the earth's surface. (2 marks)
3. a) What is river rejuvenation. (2 marks)  
b) The diagram below represents a river capture,



- Name the features marked A, B, C. (3 marks)
4. a) Name a place in Kenya where tarns are found. (1 mark)  
b) Describe how a tarn is formed. (4 marks)
  5. (a) Give **two** main zones of the atmosphere. (2 marks)  
(b) What is?  
(i) Zero lapse rate. (2 marks)  
(ii) Negative lapse rate. (2 marks)

## SECTION B:

### Answer question 6 any other two questions from this section.

6. Study the map of Migwani 1:50,000 (sheet 151/1) provided and answer the following questions.
  - (a) (i) What is the altitude of the lowest contour shown on the map? (1 mark)  
Give the **six-figure** grid reference of Mboni dam. (2 marks)
  - (iii) What is the length in Kilometres of the All Weather Road Bound Surface C94 from the junction with the Dry Weather Road D502 to Northing 84? (2 marks)

**b)** Draw a rectangle measuring 10 cm by 8 cm to represent the area enclosed by Eastings 90 and 00 and Northings 62 and 70. **(1 mark)**

On the rectangle, mark and name the following features:

**(i)** Musengo school

**(ii)** Road E742

**(iii)** Kitui Hills **(3 marks)**

**(c) (i)** Citing evidence from the map, identify **four** social services offered in Mutitu (Ndooa) township. **(4 marks)**

**(ii)** Describe the relief of the area covered by the map. **(6 marks)**

**(d)** Describe the characteristics of the long profile of river Ikoo. **(6 marks)**

**7. a)** State **three** characteristics of the inter-tropical convergence zone (ITCZ). **(3 marks)**

**b)** With the aid of a well labeled diagram describe how relief rainfall is formed. **(6 marks)**

**c)** State **five** characteristics of the hot desert climate. **(5 marks)**

**d)** You are required to carry out a field study to determine the relationship between climate and vegetation in your district.

**i)** Give **three** reasons why you would need the map of the district. **(3 marks)**

**ii)** Name **two** sampling techniques you are likely to use during the field study. **(2 marks)**

**iii)** Give **two** reasons why sampling would be appropriate for this field study. **(2 marks)**

**iv)** State **four** methods you would use to record data during the field study. **(4 marks)**

**8. a) (i)** What is a lake? **(2 marks)**

**(ii)** State **three** factors that determine the permanency of a lake. **(3 marks)**

**b)** Describe how Lake Kanyaboli was formed. **(6 marks)**

**c)** Explain **four** causes of salinity of lake Magadi. **(8 marks)**

**d)** Explain **three** negative effects of lakes on human activities. **(6 marks)**

**9. (a)** State **four** causes of mechanical weathering. **(4 marks)**

**(b) (i)** Describe the carbonation process of chemical weathering. **(3 marks)**

**(ii)** Name **two** rocks that can be weathered through the carbonation process. **(2 marks)**

**(iii)** Name **two** features that can be formed on the earth's surface as the carbonation process of weathering takes place. **2 marks)**

**(c) (i)** What is an exfoliation dome? **(1 mark)**

**(ii)** Describe how an exfoliation dome is formed. **(3 marks)**

**(d)** Explain **three** ways in which weathering positively influence man's activities and **two** negative effects of weathering. **(10 marks)**

**10. (a)** What is the difference between faulting and folding? **(2 marks)**

(b) Name

(i) **Two** types of faults.

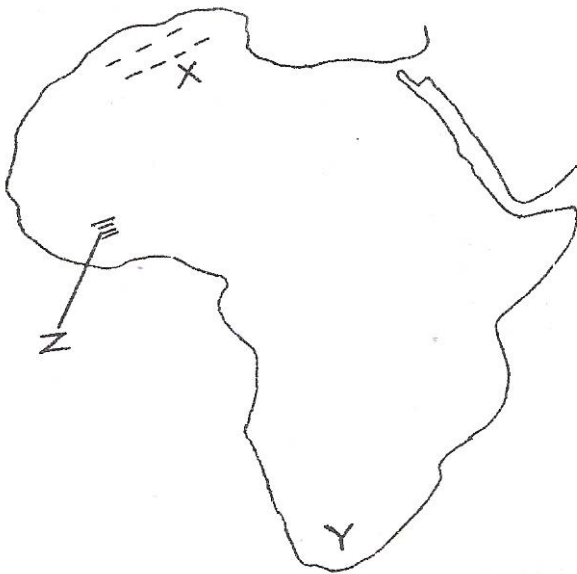
(2 marks)

(ii) **Three** types of folds.

(3 marks)

On the outline map of Africa provided name the fold mountains marked X, Y, Z

(3 marks)



(c) With the aid of well labeled diagrams, **describe** the formation of Fold Mountains.

(10 marks)

(d) (i) What is the name given to the period of mountain building?

(1 mark)

(ii) Identify **four** main mountain building periods ever known in history.

(4 marks)



# PREDICTION 6

NAME.....CLASS.....ADM:.....

SCHOOL..... INDEX NUMBER.....

312/1

GEOGRAPHY Paper 1

TIME: 2¾ HOURS

## KCSE PREDICTION 6

*Kenya Certificate of Secondary Education*

**312/1**

**GEOGRAPHY Paper 1**

### 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.
- All the answers must be written on the foolscaps provided.
- Candidates must answer the questions in English.

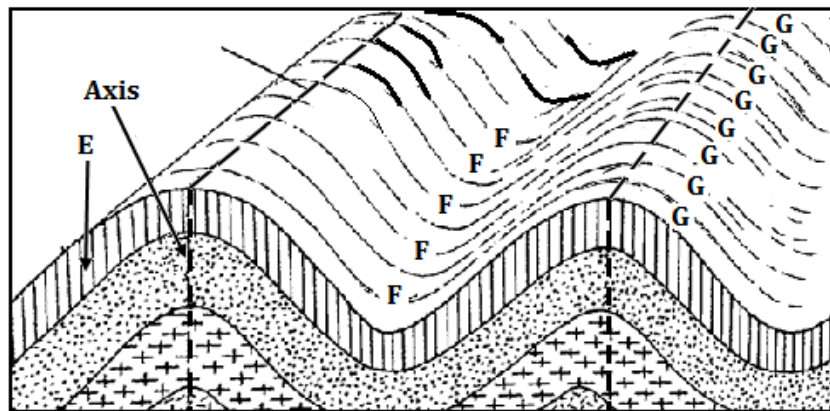
### **FOR EXAMINER'S USE ONLY**

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

*This paper consists of 4 printed pages. Candidates should check the question paper to ascertain that all pages are printed as indicated and that no pages are missing.*

## SECTION A (Answer all questions from this section)

1. (a) Give the **two** main types of eclipses. (2 marks)
- (b) State **two** characteristics of the oceanic crust. (2 marks)
2. (a) Outline **two** ways in which clouds are classified. (2 marks)
- (b) State **three** ways in which wind affects the weather of a place. (3 marks)
3. (a) Define the term folding. (2 marks)
- (b) The diagram below represents parts of a fold. Name the parts marked E, F and G. (3 marks)

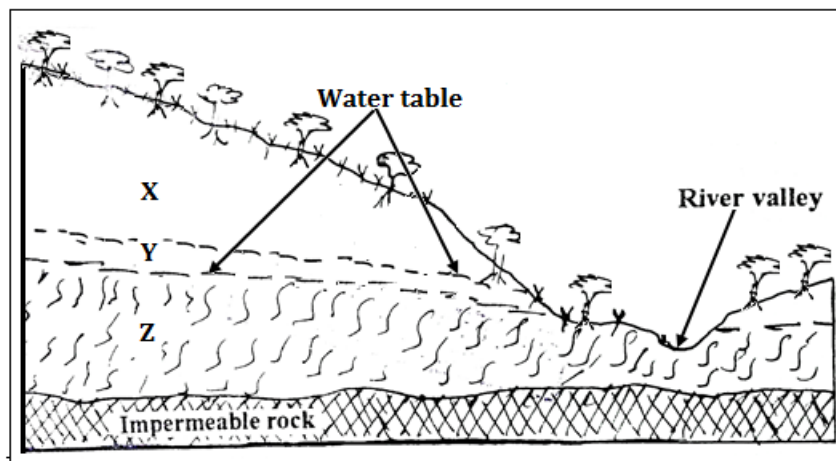


4. (a) Give **two** examples of mechanically formed sedimentary rocks. (2 marks)
- (b) List **three** types of rock metamorphism. (3 marks)
5. (a) What is mechanical weathering. (2 marks)
- (b) Give **three** causes of chemical weathering. (3 marks)

## SECTION B (Answer question 6 and any other two questions)

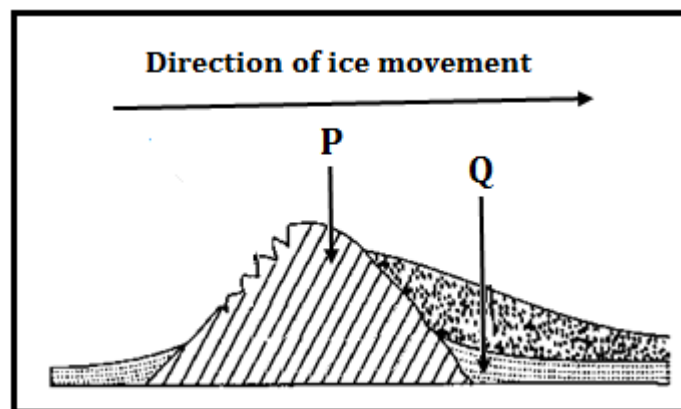
6. Study the map of Yimbo provided and use it to answer the following questions.
  - (a) (i) Convert the map scale to a statement scale. (2 marks)
  - (ii) Give **two** evidences of water transport in the area represented. (2 marks)
  - (iii) In which hemisphere is the area covered by the map located? (1 mark)
  - (b) (i) What is the area in square kilometres of the region representing Busia district on the map? (2 marks)
  - (ii) Name **two** types of swamps in the area covered by the map. (2 marks)
  - (c) (i) Identify **four** types of natural vegetation in the area covered by the map. (4 marks)

- (ii) Citing evidence from the map, give **two** economic activities carried out in the area covered by the map. (4 marks)
- (d) (i) Using a vertical scale of 1cm to represent 20 metres, draw an accurate cross section along northing 83 from easting 26 to easting 32. On the cross section, mark and name: a hill, a river and Road C 506 (6 marks)
- (ii) Calculate the vertical exaggeration of the cross section. (2 marks)
7. (a) What is faulting? (2 marks)
- (b) Give **two** differences between normal and reversed faults. (4 marks)
- (c) (i) Apart from escarpments, list **four** other features formed due to faulting. (4 marks)
- (ii) With the aid of well labelled diagrams, describe how a horst is formed. (7 marks)
- (d) Explain **four** ways in which features resulting from faulting influences human activities. (8 marks)
8. (a) Differentiate between natural and secondary vegetation. (2 marks)
- (b) (i) List **four** main types of natural vegetation in Kenya. (4 marks)
- (ii) Explain **four** factors that influence the distribution and type of natural vegetation in Kenya. (8 marks)
- (c) Describe the characteristics of tropical monsoon forests. (5 marks)
- (d) You intend to carry out a field study on natural vegetation in your sub county.
- (i) State **three** reasons why you would prepare a route map. (3 marks)
- (ii) Outline **three** characteristics of vegetation that you would study. (3 marks)
9. The diagram below shows a vertical section through the zones of underground water.



- (a) (i) Name the parts zones marked X, Y and Z (3 marks)
- (ii) State **three** major sources of ground water. (3 marks)
- (b) Explain how the following factors influences the presence of underground water.
- (i) Amount of rainfall (2 marks)
- (ii) Nature of rocks in an area (2 marks)
- (iii) Slope gradient (2 marks)
- (c) Explain **four** conditions that lead to the formation of an artesian well. (8 marks)
- (d) Your class is planning to carry out a field study in a Karst landscape.
- (i) Give **two** reasons why it is important to seek permission from the school administration. (2 marks)
- (ii) State **three** challenges that you are likely to encounter during the field study. (3 marks)

10. The diagram below shows a glacial erosional feature in lowlands.



- (a) (i) Name the parts marked P and Q. (2 marks)
- (ii) Outline **four** factors that influence glacial deposition in lowlands. (4marks)
- (b) Explain how the following processes of glacial erosion occur.
- (i) Plucking. (4 marks)
- (ii) Abrasion. (2 marks)
- (c) Describe how a fiord is formed. (7 marks)
- (d) Explain **three** ways through which glaciation influences agriculture. (6 marks)