KENYA CERTIFICATE OF BASIC EDUCATION

SENIOR SCHOOL ASSESSMENT

TERM 2 ENDTERM ASSESSMENTS 2026

GRADE 10 – GEOGRAPHY

Time: 2 Hours 30 Minutes

LEARNER'S DETAILS

Name: _____. **School:** _____.

Assessment Number: _____. **Date:** _____.

School Code: _____. **Signature:** _____.

INSTRUCTIONS TO CANDIDATES

1. Write your name in the spaces provided above.
2. Write the name of your school and your stream in the spaces provided.
3. Write your admission number and the date of the assessment in the spaces provided.
4. This paper consists of two sections: A and B.
5. Answer all questions in section A and section B.
6. Answer the questions in English.
7. All answers MUST be written in the spaces provided in PAPER.
8. Do NOT remove any page from this question paper.

FOR OFFICIAL USE ONLY

SECTION	SECTION A	SECTION B	% SCORE	EE1	EE2	ME1	ME2	AE1	AE2	BE1	BE2
SCORE RANGE	40 MARKS	50 MARKS		90-100	75-89	58-74	41-57	31-40	21-30	11-20	1-10
POINTS				8 POINTS	7 POINTS	6 POINTS	5 POINTS	4 POINTS	3 POINTS	2 POINTS	1 POINT
LEARNER'S TOTAL SCORE											

SECTION A (30 MARKS)

Answer ALL questions in this section.

1. Study the map of **Kipkabus 1:50,000 (Sheet 104/1)** provided and answer the questions that follow.

(a)

(i) What type of map is Kipkabus?_____ **(1 mark)**

(ii) Identify **two physical features** found in grid square **8336**. **(2 marks)**

_____

_____

(iii) What is the **direction** of **Air Photo Principal Point 87** (grid reference 8338) from **Trigonometrical Station Primary SKP 102**? **(1 mark)**

_____

_____

(iv) Calculate the **area of Chof/Chop Forest**. Give your answer in **square kilometres**. **(1 mark)**

(v) What is the **six-figure grid reference** of **Air Photo Principal 92/KE/17/013**? **(1 mark)**

_____

(b)

(i) Draw a rectangle measuring **12 cm × 8 cm** to represent the area between:

- ✔ **Eastings 80 and 86**
- ✔ **Northings 30 and 37** **(1 mark)**

(ii) On the rectangle, **mark and name** the following features:

- Water hole **(1 mark)**
- Forest **(1 mark)**

- Dry weather road **(1 mark)**

(c)

(i) Describe the **drainage** of the area covered by the map. **(2 marks)**

_____
_____
_____

(ii) Citing evidence from the map, name **two economic activities** carried out in the area. **(2 marks)**

_____
_____
_____

2. Four learners (**Amina, Baraka, Chot, and Dan**) collected data on rainfall in **Nanyuki** for four months.

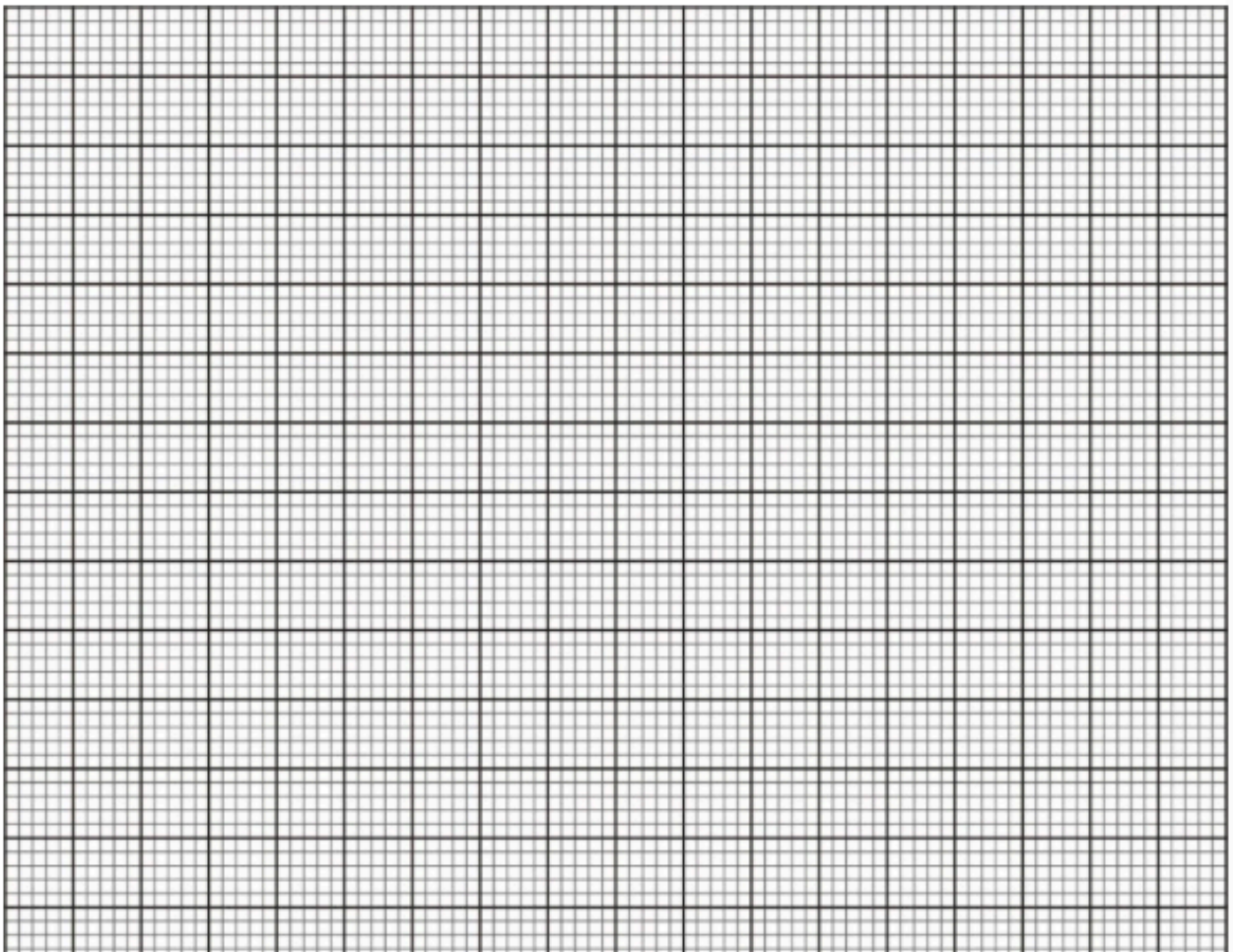
   Amina: January had 50mm.

   Baraka: February had 40mm.

   Chot: March had 120mm.

   Dan: April had 200mm.

(a) **Construct** a simple bar graph to represent this data. [4 Marks]



(b) **Define** the term *Discrete data* as used in statistics. [2 Marks]

_____

_____

3. (a) **Name** the rock samples labeled **A, B,** and **C** based on the mode of formation. [3 Marks]

A

B

C

A: _____
B: _____
C: _____

(b) **Distinguish** between volcanic and plutonic igneous rocks. [2 Marks]

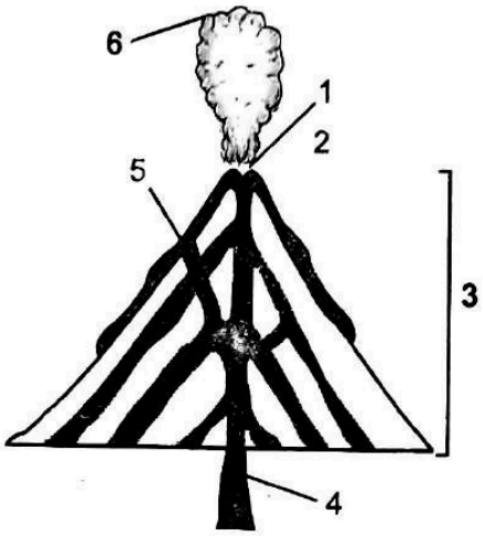
_____

_____

(c) **Mention** two uses of rocks in the Kenyan economy. [2 Marks]

i. _____
ii. _____

4. (a) **Name** the parts labeled **4, 5,** and **6** in the diagram. [3 Marks]



4 -_____.

5 - _____.

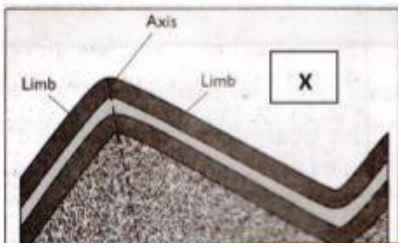
6 - _____.

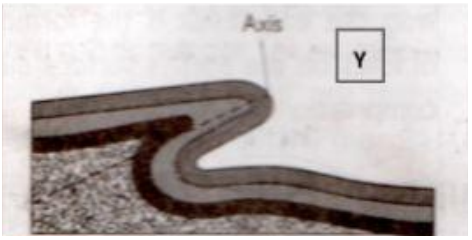
(b) **State** two negative effects of volcanic eruptions on the environment. [2 Marks]

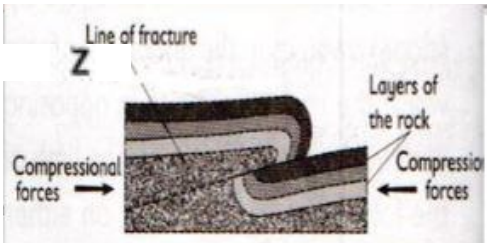
i. _____

ii. _____

5. (a) Identify the types of folds represented by the diagrams marked X, Y and Z. (3 marks)







X: _____

Y: _____

Z: _____

(b) With the aid of well labelled diagrams, describe how Fold Mountains were formed. [4 Marks]

(c) **Name** one Fold Mountain in Africa. [1 Mark]

_____

SECTION B: [50 MARKS]

Answer all questions in this section.

6. The Grade 10 class at **Kanga Senior School** visited the **Olkaria Geothermal Power Plant**.

(a) **Name** the type of renewable energy source shown in the picture below. [1 Mark]

_____

(b) **Explain** three factors that influenced the location of this energy project in the Rift Valley. [3 Marks]

i. _____
ii. _____
iii. _____

(c) Grade 10 Geography learners were **Comparing** Jua Kali industries in Kenya and Car Manufacturing in Japan:

(i) **List** two characteristics of Jua Kali industries. [2 Marks]

i. _____
ii. _____

(ii) **State** one major difference in the level of technology used. [2 Marks]

_____
_____

(d) **Describe** two ways in which industrialization leads to environmental pollution in cities like **Nairobi**. [4 Marks]

i. _____
ii. _____
iii. _____

7. (a) **Identify** the mining method shown in the illustration above. [1 Mark]

(b) **Name** the mineral mined at **Bamburi** in Mombasa using the method above. [1 Mark]

_____

(c) Below are descriptions from three learners regarding mining:

Learner 1: This mineral occurs in deep horizontal layers.

Learner 2: This method involves using water under high pressure.

Learner 3: This is a precious stone mined in Botswana.

Identify the mining method described by Learner 2 and the mineral mentioned by Learner 3. [2 Marks]

_____
_____
_____

(d) **Explain** three problems facing the mining industry in Kenya. [6 Marks]

i. _____
ii. _____
iii. _____

(e) **State** two ways of rehabilitating a derelict mining site. [2 Marks]

i. _____
ii. _____

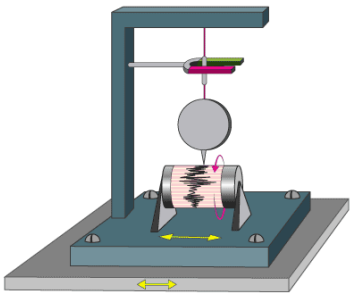
(f) **True/False:**

Mining is a non-renewable economic activity. (_____) [1 Mark]

(g) **Define** Adit mining. [2 Marks]

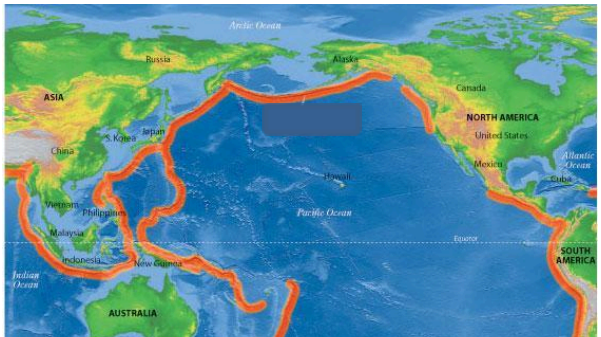
_____
_____

8. (a) **Name** the instrument used to record the intensity of earthquakes as shown in the image. [2 Marks]



_____

(b) **Identify** the major earthquake zone shaded on the world map. [2 Marks]



_____

(c) **Explain** how tectonic plate movements cause earthquakes. [4 Marks]

i. _____
ii. _____
iii. _____
iv. _____

(d) **List** three disaster preparedness strategies for people living in earthquake-prone areas. [3 Marks]

i. _____
ii. _____
iii. _____

(e) Grade 10 learners discussed about **Geographic Information Systems (GIS):**

(i) **Name** the four components of GIS they likely discussed. [4 Marks]

i. _____
ii. _____
iii. _____
iv. _____

(ii) **Describe** how a farmer in **Narok** can use GPS (Global Positioning System) to improve productivity. [4 Marks]

i. _____
ii. _____
iii. _____
iv. _____

(iii) **Match** the following geospatial terms to their correct definition: [4 Marks]

Term	**Definition**
1. Remote Sensing	A. Locating points using satellites.
2. GPS	B. Collecting data from a distance (e.g., satellites).
3. Hardware	C. The actual computer and scanner.
4. Data	D. The information collected for analysis.

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MARKING SCHEME

GEOGRAPHY - GRADE 10

SECTION A: [30 MARKS]

1. Study the map of Kipkabus 1:50,000 (Sheet 104/1) provided and answer the following questions..

a) (i) What type of map is Kipkabus? 1mk

- ***Topographical map***

(ii) Identify two physical features found in grid square 8336. 2mks

- ***River***
- ***River valley***
- ***Seasonal swamp***
- ***Woodland***
- ***Bamboo***

(iii) What is the direction of photo air principle point87 in grid reference8338 from trigonometrical station primary SKP 102 2mks

- ***North west/ 298^0 + 2^0/ N62^{0}W + 2^0***

(iv) Calculate the area of Chof/ Chop forest. Give your answer in square kilometres. 2mks

Area = 1 + 12/2
= 1 + 6
= 7 km^2

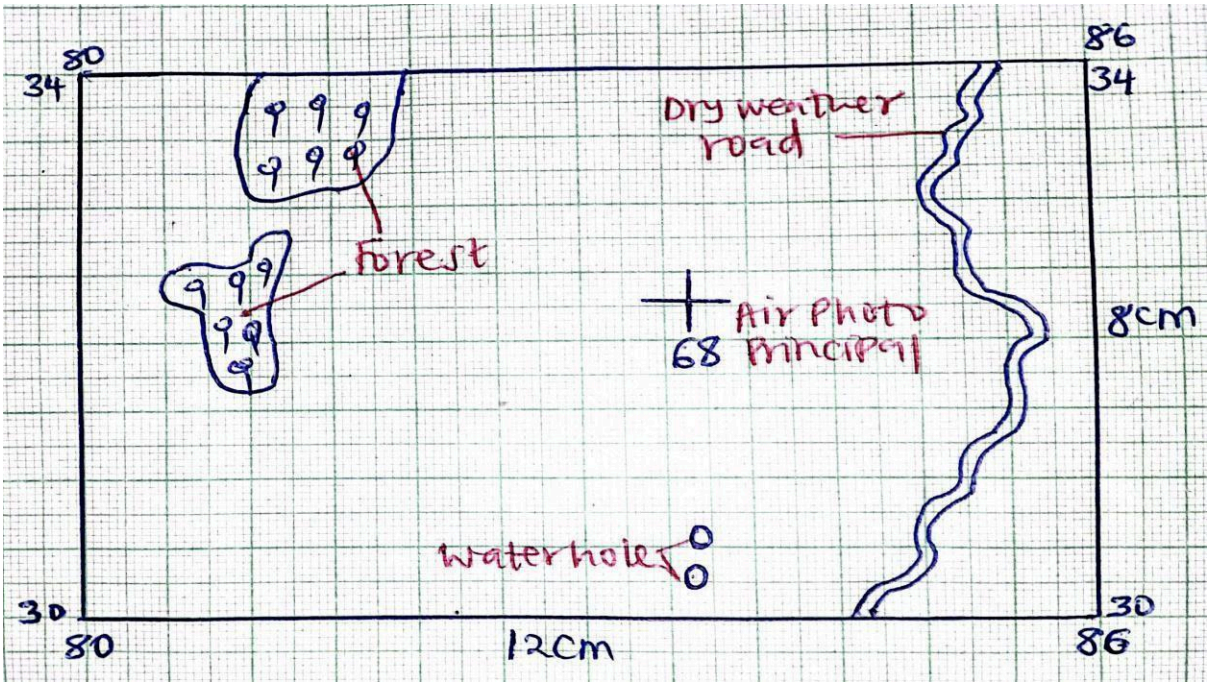
(v) What is the six-figure grid reference of the air photo principal 92/KE/17/013? 2mks

- ***981293***

b) (i) Draw a rectangle measuring 12cm x 8cm to represent the area between eastings 80 and 86 and northings 30 and 37. 1mk

(ii) On the rectangle, mark and name

- Water hole 1mk
- Forest 1mk
- Dry weather road 1mk



c) (i) Describe the drainage of the area covered by the map. 6mks

- ***There are many permanent rivers.***
- ***The main rivers are R. Kimwarer/ R. Kiptunoi.***
- ***There are lakes.***
- ***There are seasonal swamps.***
- ***There is papyrus swamp.***
- ***R. Kimwarer and its tributaries form dendritic pattern.***
- ***R. Yathine forms trellised pattern.***
- ***There are water holes.***
- ***There are dams/ pond.***
- ***Most of the rivers are originating from Keiyo escarpment***

(ii)Citing evidence from the map name two economic activities carried out in the area. 6mks

ECONOMIC ACTIVITY	**EVIDENCE**
Transportation	***Roads/ railway line***
Trading	***Shops***
Wattle cultivation	***Wattle plantation***
Lumbering/ Milling/ Processing	***Saw mills/ mills***
Communication	***Post office***
Forestry	***Forest/ forest center***

2:

(a) **Simple Bar Graph:** 1 mk for the Title, 1 mk for Y-axis (Rainfall in mm), 1 mk for X-axis (Months), 1 mk for accurately plotted bars. (4 mks)

(b) **Discrete data:** Data that can only take specific, separate values (e.g., number of students) and cannot be measured in fractions. (2 mks)

3:

(a) **A:** Igneous rocks; **B:** Sedimentary rocks; **C:** Metamorphic rocks. (3 mks)

(b) **Volcanic:** Formed on the surface, cool rapidly, have small crystals. / **Plutonic:** Formed deep underground, cool slowly, have large crystals. (2 mks)

(c) Construction (ballast), cement manufacturing (limestone), ornamental/jewelry, tourist attractions. (2 mks)

4:

(a) (3 mks)

4 - Magma

5 - Vent

6 - Ash cloud

(b) Destruction of property/life, air pollution (volcanic ash), acid rain, disruption of air transport. (2 mks)

Question 5: Folding

(a) (3 mks)

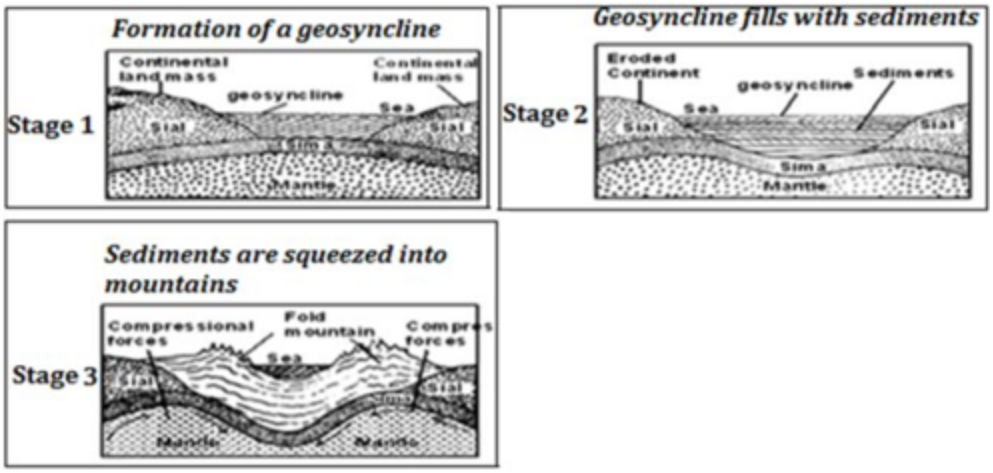
X - Assymetrical fold

Y - Overfold

Z - Overthrust fold

(b) Formation of a fold mountain (4 mks)

- ✔ Initially, earth movements led to the formation of an extensive depression called a geosyncline.
- ✔ The geosyncline was filled with water to form an extensive ocean.
- ✔ The surrounding continental land masses were intensely eroded.
- ✔ Sediments were transported by rivers and glacier and deposited into the geosyncline in layers.
- ✔ Over many years of deposition, thick layers developed whose weight caused the geosyncline to sink inwards.
- ✔ Sinking of the geosyncline triggered compressional forces that drew the surrounding continental land masses towards each other. Compression forces could have also been caused by convection currents in the mantle.
- ✔ The intense compressional forces squeezed the layers of sediments bending upwards to form Fold Mountains.



(c) **Atlas Mountains** (North Africa) or **Cape Ranges** (South Africa). (1 mk)

SECTION B: [50 MARKS]

6:

(a) **Geothermal Energy**. (1 mk)

(b) Proximity to hot magmatic rocks (heat source), presence of fault lines in the Rift Valley, availability of underground water, stable terrain. (3 x 2 = 6 mks)

(c) (i) Small capital investment, labor-intensive/manual skill, uses recycled materials. (2 mks) (ii) Kenya: Simple/manual technology; Japan: High technology/robotics/automation. (2 mks)

(d) Discharge of chemical waste into rivers (e.g., Nairobi River), toxic smoke emissions lowering air quality. (4 mks)

7:

(a) **Open-cast mining** (or Quarrying). (1 mk)

(b) **Limestone**. (1 mk)

(c) Learner 2: **Alluvial / Placer mining**; Learner 3: **Diamond**. (2 mks)

(d) Unstable global market prices, lack of capital for modern machinery, poor transport infrastructure, environmental degradation concerns. (3 x 2 = 6 mks)

(e) Filling up quarries (landfilling), tree planting/reforestation, creating recreational parks or fish ponds. (2 mks)

(f) **True**. (1 mk)

(g) **Adit mining:** A method of extraction involving a horizontal tunnel driven into the side of a hill or mountain to reach a mineral seam. (2 mks)

8:

(a) **Seismograph** (or Seismometer). (1 mk)

(b) **Pacific Ring of Fire**. (1 mk)

(c) As tectonic plates slide past or collide with each other, tension builds up. The sudden release of this energy creates seismic waves that shake the earth. (4 mks)

(d) Building earthquake-resistant structures, conducting emergency drills, installing early warning systems. (3 mks)

(e) (i) **Hardware, Software, Data, Users** (or Methods). (4 mks)

(ii) Precision soil mapping, tractor guidance for planting, monitoring crop health via satellite imagery. (3 mks)
(iii) **1-B, 2-A, 3-C, 4-D**. (4 mks)