

OPENER EXAMINATION: TERM 1 2024
MARKING SCHEME
FORM 2
GEOGRAPHY

INSTRUCTIONS.

Answer all questions in the space provided.

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- 1) a) Define the term Environment. (2mks)
 ✓ *Geography is a scientific study of the earth as a home of man.*
- b) Give three subjects related with geography. (3mks)
 ✓ *Agriculture*
 ✓ *Biology*
 ✓ *Chemistry*
 ✓ *Meteorology*
 ✓ *Climatology*
 ✓ *Civil engineering*
 ✓ *Mathematics*
 ✓ *Physics*
 ✓ *Economics*
- 2) a) Name the two main braches of Geography. (2mks)
 ✓ *Physical geography*
 ✓ *Human geography*
- b) Outline the three ways in which a student benefit from learning Geography. (3mks)
 ✓ *Learners are able to learn and explain the origin of the earth.*
 ✓ *Learners develop skills of observations and reading.*
 ✓ *Enable learner to understand and appreciate different environment.*
 ✓ *Geography is a career subject.*
- 3) a) Define the term Solar system. (2mks)
 ✓ *The solar system is made up of the sun with eight planets orbiting around the sun.*
- b) State three major weakness of solar system. (3mks)
 ✓ *Chances of another star approaching the sun is minimal.*
 ✓ *High temperature material drawn from the sun would disappear rather than condense.*
 ✓ *It does not explain where the sun and the passing star came from.*
- 4) a) Give four proofs that the earth is spherical. (4mks)
 ✓ *Circum navigation*
 ✓ *When approaching a part an observer standing on a cliff will not see the ship until it is close.*
 ✓ *The earth rotate from west to east.*
 ✓ *During the eclipse of the moon, the shadow of the earth appears spherical.*
 ✓ *The earth's horizon is always circular.*
- b) The diagram below represents the earth on its axis. Use it to answer questions.

- i. Name the latitude marked G,H, I. (3mks)
- G – ***Tropic of cancer***
- H – ***Equator***
- I – ***Tropic of capricorn***
- ii. What is the angle of inclination of the earth’s axis from its orbit? (1mk)
- $66\frac{1}{2}$**
- iii. State four effects of the rotation of the earth. (4mks)
- ✓ ***Cause day and night***
 - ✓ ***Causes deflection of wind and ocean current.***
 - ✓ ***Cause high and low tides***
 - ✓ ***Causes time difference between longitudes.***

5) The table below represents rainfall and temperature figure for a town in Kenya. Use it to answer the questions that follow.

Month	J	F	M	A	M	J	J	A	S	O	N	D
Temp °c	27	28	28	28	27	25	25	24	25	26	27	26
Rainfall (mm)	25	38	99	140	277	439	277	69	142	201	71	25

- a. i) Calculate the annual range of temperature for the town. (2mks)
- $28^{\circ}C - 24^{\circ}C = 4^{\circ}C$**
- ii) Calculate the total annual rainfall for the town. (2mks)
- $25+38+99+140+277+439+277+69+142+201+71+25 = 1803mm$**
- b. Use the scale 1cm represent 5°C draw a simple line graph to represent the temperature data given above. (5mks)

c. Define the following terms:

i. Negative lapse rate (2mks)

✓ *This is the increase of temperature with the increase in height.*

ii. Positive lapse rate (2mks)

the decrease of temperature with the increase in height.

This is

iii. Zero lapse rate (2mks)

✓ *This is the decrease of temperature with the increase in height.*

6) A student was requested to pick out fourteen numbers randomly from a set of numbers: she picked, 20,37,1,66,42,12,6,15,12,42,100,3,82,42: Calculate:

a) The mean of the data. (2mks)

$$\begin{aligned}
 &= 20+37+1+66+42+12+6+15+12+42+100+3+82+42 \\
 &= \frac{480}{14} \\
 &= 34.29
 \end{aligned}$$

b) The mode of the data. (1mk)

The mode is 42 appears thrice.

c) The median of the data. (2mks)

$$\begin{aligned}
 &1,3,6,12,12,15,20,37,42,42,42,66,82,100 \\
 &\frac{20+37}{2} = 28.5
 \end{aligned}$$

7) a) i) State three types of maps. (3mks)

✓ *Topographical maps*

✓ *Atlas maps*

✓ *Sketch maps*

ii) Give three characteristics of sketch maps. (3mks)

✓ *Must be neat and clear*

✓ *Must have a title*

✓ *Must have a key*

✓ *Must be enclosed in a frame*

✓ *Must have compass direction*

iii) Convert 1:50,000 into statement scale. (2mks)

✓ *If 1km = 100,000cm*

$$? = 50,000$$

$$\frac{1 \times 50,000}{100,000}$$

$$100,000$$

In statement will be 1cm represent 0.5km

- 8) Students of Anestar Boys Lanet intended to conduct a field study in Dondori Market near their school.
- a) State three objectives for your study. (3mks)
 - ✓ *To find out where the dondori market is situated.*
 - ✓ *To find out what commodity is sold in dondori market.*
 - ✓ *To investigate who are the leaders of dondori market.*

 - b) List three method they would use to collect data. (3mks)
 - ✓ *Administrating interviews*
 - ✓ *Questionnaires*
 - ✓ *Observations*
 - ✓ *Taking measurements*
 - ✓ *Taking samples*

 - c) What are the methods used to record data? (4mks)
 - ✓ *Note taking*
 - ✓ *Mapping*
 - ✓ *Field sketching*
 - ✓ *Tabulation*
 - ✓ *Tallying*
 - ✓ *Tape recording*

 - d) What problems are you likely to face during the study? (5mks)
 - ✓ *Researcher may fall sick*
 - ✓ *Responded may become uncooperative*
 - ✓ *Language barrier*
 - ✓ *Transport problems*
 - ✓ *Environmental constraints.*
- 9) a) Define mineral. (2mks)
- ✓ *Mineral is naturally occurring crystalline, inorganic substance with definite chemical composition and physical properties.*
- ii) State four characteristics of minerals. (4mks)
- ✓ *Different mineral have different degree of hardness.*
 - ✓ *Some minerals aggregate into distinct crystal shapes.*
 - ✓ *Different minerals have different colours*
 - ✓ *Minerals have different texture.*
- b) Define rock. (2mks)
- ✓ *A rock is any naturally occurring agglomeration of mineral particles forming part of the earth crust.*
- ii) Give classification of rocks according to the mode of formation. (3mks)
- ✓ *Igneous rocks*
 - ✓ *Sedimentary rocks*
 - ✓ *Metamorphic rocks*
- c) State the significance of minerals rocks. (6mks)
- ✓ *Rocks form spectacular sceneries which act as tourist attraction site.*
 - ✓ *Certain rocks act as water reservoirs and store a lot of water.*
 - ✓ *Rocks provided the parent material for the formation of rich soils.*
 - ✓ *Some rocks are used in the building and construction industry.*
 - ✓ *Minerals and rocks are a source of income to some people.*
 - ✓ *Rocks provide the main record of past environment.*

- 10) a) Define mining. (2mks)
✓ *Mining refers to all attempts to extract valuable minerals either solid, liquid or gas from the earth's crust.*
- b) List factors influencing the occurrence of minerals. (4mks)
✓ *Veins and lodes*
✓ *Beds and seams*
✓ *Weathering products*
✓ *Alluvial or place deposit*
- c) State four influencing exploitation of minerals. (4mks)
✓ *Value of minerals*
✓ *The size of the mineral deposit*
✓ *The quality of the ore*
✓ *The methods of mining*
✓ *Level of technology*
✓ *Availability of capital*
✓ *The cost of transport*
- d) Identify three main method if mining. (3mks)
✓ *Open cast mining*
✓ *Underground mining*
✓ *Alluvial mining*

