

# GEOGRAPHY FORM ONE

## OPENER EXAM TERM 2 2023

### MARKING SCHEME

1. (a) Give two Greek words from which the term geography was coined. (2mks)
  - Geo
  - Graphien/grapho
- (b) Define the term geography. (2mks)
  - The study of the distribution and the interrelationship of natural and human phenomena on the earth's surface.
2. (a) What is environment? (2mks)
  - All external conditions surrounding an organism and which have influence over its behaviour or activities.
- (b) Describe the following types of environment giving example in each case. (4mks)
  - Physical environment: these are the natural physical conditions such as weather, vegetation, animals, soils, landforms and drainage.
  - Human environment: comprises of human activities such as farming, forestry, mining, tourism and industry among others.
3. (a) Name three main components of the universe. (3mks)
  - Heavenly bodies
  - The earth
  - The sky
- (b) Apart from the moon, give two other natural satellites. (2mks)
  - Titan
  - Triton
  - The Galilean satellites of Jupiter.
4. (a) Explain the relationship between geography and mathematics. (2mks)

- Mathematics principles and formulae are used in geography to calculate distances, areas and population densities.

(b) Name three study areas under human geography. (3mks)

- Agriculture
- Forestry
- Mining
- Fishing
- Wildlife and tourism

*(Accept any other relevant areas)*

5. State five reasons why the study of geography is important. (5mks)

- The learner acquires skills used to study the immediate environment.
- Enables acquisition of skills in reading and interpretation of maps, photographs and statistical data.
- Creates international awareness which facilitates good relations among people.
- Provides a firm foundation for advanced studies in specialised fields like engineering, surveying and remote sensing leading to various careers.
- Learners get to know how methods used to solve problems in other parts of the world can be used to solve problems in one's own environment.
- One acquires positive attitudes and values which enable us to become useful members of the society.

## SECTION B

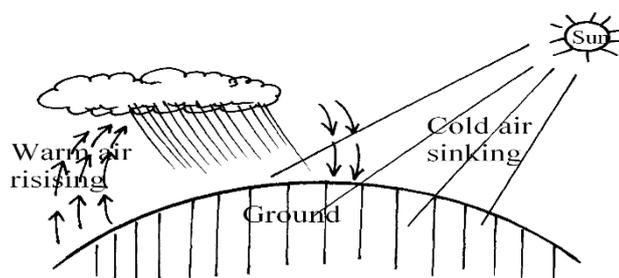
6. (a) (i) What is a weather station? (2mks)

- A place set aside for the purpose of observing, measuring and recording weather elements.

(ii) State four factors considered when citing a weather station. (4mks)

- Open place with free flow of air.
- A place with a wide view of the surrounding landscape and sky.
- Away from buildings, trees and other tall structures.
- Fairly level ground but not absolutely flat.
- A secure place.

(b) The diagram below show the formation of some type of rainfall .Use it to answer questions (i) and (ii)



(i) Name the type of rainfall shown by this diagram. (1mk)

-Conventional

1x1 = (1mk)

(ii) Name the type of cloud marked. (1mk)

-Comululonimbus clouds

1x1 = (1mk)

(iii) List three weather conditions associated with the above named type of rainfall. (3mks)

-Thunderstorm and lightening

-Hailstones

-Warm air near surface in the afternoon hours. 3x1= (3mks)

(iv) Give two factors that influence rainfall. (2mks)

- Relief and air masses
- Forests and water bodies.

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(c) (i) Define the term humidity. (2mks)

- The amount of water vapour or moisture in the atmosphere.

(ii) Name two types of humidity. (2mks)

- Relative humidity.
- Absolute humidity.

(iii) Explain three roles of moisture in the atmosphere. (6mks)

- Indicates the atmosphere's potential to hold moisture hence amount of precipitation a given area is likely to receive.
- Water vapour absorbs radiation hence it regulates the heat loss from the earth.
- Determines amount of energy stored in the atmosphere for the development of storms.

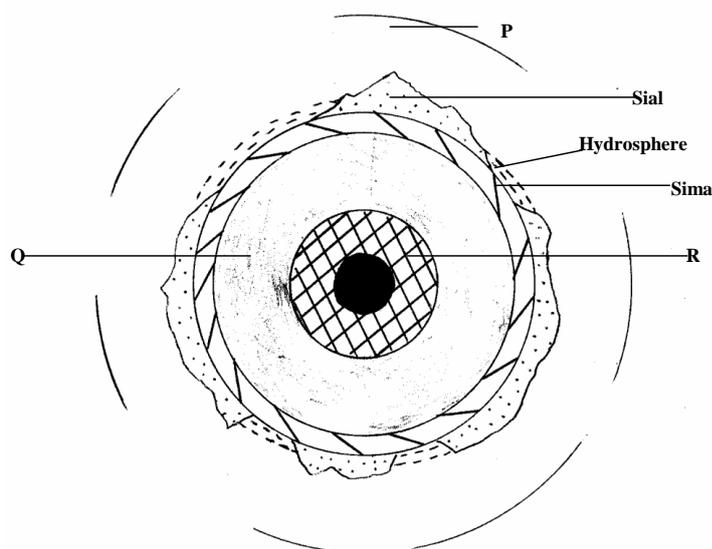
(d) State three factors that influence air temperature. (3mks)

- Latitude of a place.
- Length of the day.
- The altitude of a place.
- Aspect
- Winds
- Distance from the sea.
- Ocean currents
- Cloud cover.

7. (a) **State three** effects of the revolution of the Earth on its Orbit. (3 marks)

- The varying lengths of day and nights at different times of the year.
- Changes in the position of the mid-day sun at different times of the year.
- The four seasons summer, autumn, winter and spring.
- The lunar eclipse. (Any 3 x 1 = 3 marks)

(b) The diagram below shows the structure of the Earth. Use it to answer questions below:



(i) **Name** the parts marked **P,Q** and **R** (3mks)

P – Atmosphere

Q – Mantle / Asthenosphere

R – Core / Barysphere / Centrosphere

(Any 3 x 1 = 3marks)

(ii) **State three** characteristics of the earth's oceanic crust (sima) (3mks)

- It is composed of silica and Magnesium
- It form. The Ocean basic /underlies the continental crust.
- It is darker in colour in colour and has a higher density than the continental crust.

Any 3x1 = 3marks

(iii) State four proofs that the earth is spherical. (4mks)

- It is possible to travel round the earth along a straight line and come back to same place where you started.
- Photographs taken from aerial satellites show a spherical image of the earth.
- When ship is approaching a harbour, smoke is seen first at the horizon followed gradually by the other parts of the ship as it approaches the harbour.
- During lunar eclipse, a spherical-shaped shadow of the earth is cast on the moon.
- All other planets are spherical, earth being spherical it must also be spherical.
- Gradual rising and setting of the sun from the east to the west.
- The earth's horizon appears curved when viewed from a high point.

(b) (i) Identify the shape of the earth. (2mks)

- The shape of the earth is – GEOID or ablate spheroid. **1x2=2mrks.**

(ii) The time at Conakry (Guinea) 10° W is 10.00am. What is the time at Mogadishu 37°E? (2mks)

Longitude difference =  $47^{\circ}$

Time difference =  $47 \times 4 = 188$  minutes

= 3 hrs 08 mins

Time at Mogadishu = 10 am + 3.08

= 1.08pm

(c) (i) Identify **two** types of high level clouds. (2mks)

- Cirrus

- Cirro – cumulus

- Cirro – stratus

*2x1=2mrks*

(ii) Identify any **three** characteristics of troposphere. (3mks)

- It contains the most weather making constituents.

- It is the life supporting layer.

- Temperature decrease with increase in height.

- Pressure falls with increase in height.

- It contains most water vapour, clouds, dust & other pollutants/ very Unstable.