

**FORM 1 GEOGRAPHY**  
**MARKING SCHEME**

- 1a. The study of relationship between man and his environment. (1x3 marks)
- b. Main branches of Geography
- ✓ Physical Geography
  - ✓ Human Geography
- 2a. Asteroids! Planetoids
- ✓ These are small planet like objects that orbit around the sun between planet mars and Jupiter (1x2 marks)
- Comets
- ✓ These are heavenly bodies revolving around the sun in their own orbit. Each comet has a head and a long tail (1x2 marks)
3. Planets
- ✓ Mercury
  - ✓ Venus
  - ✓ Mars
  - ✓ Jupiter
  - ✓ Saturn
  - ✓ Uranus
  - ✓ Neptune (1x7 marks)
4. Two weakness of the passing star theory.
- ✓ Chances of another star approaching the sun are minima.
  - ✓ High temperature material drawn from the sun or from the star.
  - ✓ It does not explain where the sun and the passing star came from (2x1 marks)
5. Physics
- ✓ Through Physics geographers are able to explain differences in our pressure, vertical and horizontal movements of air, evaporation and condensation, all processes resulting from heat energy transfer. (1x 2 marks)
- History
- ✓ Geographers require historical knowledge on how the earth was formed, the distribution of people and their past economic activities (1x 2 marks)
- 6a. Mohonovicic discontinuity! Mono-discontinuity
- b. Characteristics of the core
- ✓ It is composed of dense rocks made up of iron and nickel
  - ✓ Can be divided into two the outer core and the inner core.
  - ✓ Outer core is semi- molten
  - ✓ Inner core is said to be solid due to high pressure.
  - ✓ Outer core temperature 4000°c- 5000°c
  - ✓ Inner core temperatures are between 5000oc — 6000oc any (1x 5 marks)
- 7.
- ✓ Centrifugal causes bulging
  - ✓ Centripetal causes flattening of the poles
- b. Circumnavigation
- ✓ If one takes a fast flying aeroplane you can back where you started

- ✓ The sun rises in the East and sets in the West.
- ✓ During the lunar eclipse the earth casts a spherical shadow.
- ✓ All other planets are round the earth is one of them.
- ✓ Photographs taken very high from space shows the earth are spherical.

- ✓ Telescopic observations show that the earth is spherical.
- ✓ The earth horizon is always circular.

(Any 1 x 5 marks)

8. Revolution is the movement of the earth within a period of 365 1/4 days while rotation is the movement of the earth on its axis within 24 hours.

(1 x 2 marks)

9a. 100°E

$$100^{\circ} - 60^{\circ} = \frac{40^{\circ} * 4}{60 \text{ mins}} = \frac{160}{60} = 2 \text{ Hr } 40 \text{ Min}$$

10.00

+2.40

12.40 pm

(1\*3 marks)

b. 30° West

$$60^{\circ} + 30^{\circ} = \frac{90^{\circ} * 4}{60} = \frac{360^{\circ}}{60} = 6 \text{ hrs}$$

10.00

-6.00

4.00 am

10 a. It is a wooden box found in a weather station where some weather instruments are kept e.g. Thermometer

2 marks

- ✓ Metal stands- to prevent attack from termites.
- ✓ Double boarding — to prevent isolation.
- ✓ 121 cm above the ground to avoid terrestrial radiation.

11. How it works.

- ✓ When the temperature rises the mercury expands and pushes the metal index forward.
- ✓ When the temperature falls the mercury contracts leaving the index behind.
- ✓ The maximum temperature reached is shown at the end of metal index that was in contact with the mercury.
- ✓ After taking the readings the thermometer is set by bringing the metallic index into contact with Mercury (any 4x1)

b. Diurnal range of temperature

- ✓ It is the difference between the maximum temperature of the day and minimum temperature of the day.

Mean monthly temperature

- ✓ It is the sum of the mean daily temperature divided by the number of days in a month /
- $$\frac{\text{Sum of mean daily temperature}}{\text{Number of days in a month}}$$

Mean annual temperature

- ✓ It is the sum of the mean monthly temperature divided by number of months in a year.

Sum of mean monthly temperature

12

12. Four seasons

- ✓ Summer
- ✓ Autumn
- ✓ Winter

- ✓ Spring (4 marks)
- 1 3a. Humidity is the amount of moisture in the atmosphere (1x2)

b. Importance of humidity

- ✓ The amount of moisture in the air determines the amount of precipitation.
- ✓ Water vapour absorbs radiation, hence regulates the heat loss from the earth.
- ✓ The amount of water vapour determines the amount of energy stored in the atmosphere for development of storms Any 2\*1 2marks

c. Formulae

Relative humidity

$$RH = \frac{\text{Absolute humidity}}{\text{Actual amount of moisture the air can hold in a given temperature}} * 100\%$$

14. Frost refers to ice crystals that are deposited on objects on the ground (1x2)

Mist is a mass of tiny water droplets suspended immediately above the ground (1\*2 marks)

Sleet is a mixture of rain and snow. 1\*2 marks

15. Sea Breeze

- ✓ It occurs during the day.
- ✓ The land gets heated faster than the sea during the day.
- ✓ Low pressure develops over the land.
- ✓ Over the sea/ocean high pressure develops.
- ✓ Cool air from the sea blows onto the land to replace the rising warm air (1x4 marks)

16a. High clouds

- ✓ Cirrus
- ✓ Cirro-cumulus
- ✓ Cirro — Stratus

b. Characteristics of cumulus clouds.

- ✓ Convex cloud with large white globular masses.
- ✓ Has a clear outline with the horizontal base.
- ✓ has protruding tops that are dome shaped.
- ✓ Has thick vertical development. (Any 2x1 marks)

17a. Weather forecasting

- ✓ This is the prediction of the weather situation for a given place within a short period of time like an hour/a month/ a year. (1x 2 marks)

b. Importance of weather forecasting

- ✓ Helps to determine the farmer's calendar
- ✓ Helps to determine suitable clothing
- ✓ Helps to determine suitable housing
- ✓ Helps to determine fishing habits
- ✓ Helps to determine time for air and sea travels.
- ✓ Helps to plan sporting activities
- ✓ Helps in planning military activities.

18. Layers of the temperature

- ✓ Troposphere
- ✓ Stratosphere
- ✓ Mesosphere
- ✓ Thermosphere

(1x 4 marks)

19.

- ✓ Aneroid Barometer

[Ecolebooks.com](http://Ecolebooks.com)

- ✓ Anemometer
- ✓ Sunshine recorder! Campbell stoke sunshine recorder