**GEOGRAPHY**

**FORM 1**

**END OF TERM 2**

**TIME 2 HOURS**

**INSTRUCTIONS: ANSWER ALL QUESTIONS IN THE SPACES PROVIDED.**

**1a) Define the following terms**

**i) Ecology** (2mks)

Part of the environment that influence development and behavior of living things.

**ii) Pedology** (2mks)

It is the study of soils which helps geography to study type and their formation.

**b) Apart from the sun name four components of the solar system**

-Moon

- Planet

-Comet

- Asteroids /planetoids

- Meteors/Meteorites/Meteorite **(Any 4 x 1 = 4Marks)**

**2) a) Give four characteristics of the earth** (4mks)

* It rotates on its axis 24hrs
* 3rd planet from the sun
* Has a thin layer of air around it/atmosphere
* Support plants and animal life
* 149 Millions kilometers from the sun
* Revolves around the sun following an elliptical orbit for 365 ¼ or

1. days in a leap year.

-Have one satellite /moon which revolves round the earth.

**(Any 4 x 1 = 4Marks)**

**b). Name four major phases of the moon** (4mks)

-New moon

- First quarter

-Full moon

- 3rd quarter **(Any 4 x 1 = 4Marks)**

**3. a)Give three weaknesses of the passing star theory.**

- Chances of another star passing near the sun are rare.

- Origin of the star/sun not explained

-The hot gas material should have dispersed rather than condense.

-The material should have followed the star as it had greater gravitational pull.

-Effect of the star setting planet or their orbits would have reduced as the star

was revolving away.

**(Any 3 x 1 = (3mks)**

**b). Differentiate between geology and geomorphology ( 2 Marks)**

**Geology** is the study of the origin, structure and composition of the earth/study

groups while **geomorphology** is the study of internal and external land forming

processes and land forms **(2 Marks)**

**4a). Name three types of rainfall** (3mks)

i) Orographic rainfall/relief rainfall

ii) Conventional rainfall

iii) Frontal rainfall

**(Any 3 x1 =3mks)**

**b). Identify four types of fog**  (4mks)

Radiation fog

Hill fog

Advection fog

Steam fog

Frontal

Ice fog

**(Any 4 x 1 = 4 Marks)**

**5a (i) What name is given to the shape of the earth (1mk)**

Oblate spheroid /geoid

**ii) Give two dates in a year when the hours of darkness are equal to the**

**hours of light at the poles**

-21st march

-23rd September **(2 x 1 = 2Marks)**

**iii) What is the time at Hola on 40oE when time at Tema on 0O longitude**

**is 12.00 noon.**

The difference between Hola and Tema it is 40°

40° x 4 = 160 minutes 160 min ÷ 60 = 2hrs 40 min

Time at Tema will be 12.00 + 2hr: 40 min = 2.40 PM **(2Marks)**

**6a). Name two types of clouds that give rise to rainfall in tropical region (2mks)**

* Nimbus Clouds
* Nimbo-status **(2 x 1= 2 Marks)**

**b) Identify four elements of weather and the instrument used to measure**

**them**  (8mks)

1. Rainfall – Raingauge

2. Humidity – Hygrometer

3. Air pressure – Barometer

4. Sunshine duration – Sunshine recorder

5. Wind direction - Wind vane

6. Wind speed - Anenometer

7. Rate of evaporation – Evaporimeter

8. Thermometer - Temperature **(Any 4 correctly matched x 2 = 8Marks)**

**c) i).State four apparatus found in Stevenson screen** (4mks)

* Maximum thermometer
* Minimum thermometer
* Sixth thermometer
* Hygrometer – wet bulb and dry bulb thermometer

**( 4 x 1 = 4mks)**

**ii). Outline four conditions that make a Stevenson screen suitable to work (8mks)**

* Painted white for little absorption of solar heat energy.
* Made of wood which is a bad conductor of heat.
* Four legs are made of metallic to prevent termites from destroying the wood
* Well ventilated to allow easier flow of our inside it.
* Raised to prevent contact with temestial radiation.
* Has double roof which act as an insulator to prevent direct heating from the sun

**(Any4 x 2=8mks)**

**The table below show temperature and Rainfall readings for station T. in a month Use it to answer questions**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Month** | **J** | **F** | **M** | **A** | **M** | **J** | **J** | **A** | **S** | **O** | **N** | **D** |
| **Temp oc** | 23 | 24 | 23 | 22 | 19 | 17 | 18 | 19 | 19 | 20 | 22 | 23 |
| **Rainfall** | 109 | 112 | 130 | 76 | 52 | 34 | 28 | 38 | 70 | 108 | 102 | 120 |

1. **(a) i) Calculate annual range of temperature**
2. – 17 = 7oc (2mks)

ii).Calculate the annual rainfall

1. 12+130+76+52+34+28+38+70+108+102+120=979 (2mks)

iii)Calculate mean annual rainfall (2mks)

979 = 81.58mm

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**b). Apart from rainfall give four types of precipitation (4mks)**

- Hail -fog

- Snow - Sleet

- Ice **(Any 4 x 1 = 4Marks)**

**c).Identify three types of field works (3mks)**

* Field excursion
* Field research
* Field study **(Any 3 x 1 = 3Marks)**

**d). State the six field work procedures used while collecting data (6mks)**

* Identifying the topic of study
* Stating objectives
* Formulate hypothesis
* Preparing for the field study
* Carrying out the statistical field study
* Follow up activities **(Any 6 x 1 = 6 Marks)**

**8.a). Outline eight preparation you would make before carrying out a field study. (8mks)**

* + Seek permission from relevant authority
  + Carry out a pre visit /reconnaissance
  + Holding discussion after pre visit
  + Identify methods of collecting data
  + Assemble tools to be used
  + Get information about the study by reading
  + Prepare a working schedule
  + Divide class into smaller groups
  + Make transport arrangements **(8x 1 = 8 Marks)**

**(b). Give four sources of primary data**  (4mks)

-Observation

-Oral interview

-Administering questionnaire

- Measuring

- Counting

-Photographing

- Sampling

- Explanation

- Tasting and smelling **(Any 4 x 1 = 4Marks)**

**c). Highlight four problems you are likely to encounter during the field study (4mks)**

* Language banner
* Adverse weather condition
* Hostility from the respondents
* Dishonest respondents
* Accidents in the field
* Attack by dangerous animals and insects
* Inaccessibility **( Any 4 x 1= 4 Marks )**

**9. a). Give four features of a sketch map 4marks**

-It must have a title

-It must be neat

-Must be enclosed

-It should have a key showing symbols and sign

-It must have compass direction **(Any 4 x 1 = 4 Marks)**

**(b). State three uses of a map**

-To locate places landforms in the earth surface

- To determine size of a particular location

- To provide different information about places

- Used by travellers to find direction to a particular place

- Used to summarize information quickly for future reference **( Any 3 x 1 = 3 Marks)**

**( c). Name three types of scales used in a map**

-Linear Scale

-Representative fraction

-Statement scale **(3 x 1 = 3Marks)**