**GEOGRAPHY FORM 1 MARKING SCHEME**

1. **What is Geography? (2mks)**
* It is the scientific study of the earth as the home of mankind
1. **State four reasons why it is important to study Geography (1x4=4mks)**
* It provides knowledge on the environment/it makes us understand the earth we live in
* It creates awareness on social values which create National Unity in our country
* It helps students to manage time properly
* It promotes international awareness which promote International understanding/Cooperation
* It promotes awareness on proper use of resources/environment
* It prepares one for career opportunities
* It promotes development of practical skills and critical thinking/developmental skills
* It provides knowledge on formation and evolution of land forms
1. **a) Name two branches studied in Geography (1x2=2mks)**
* Physical Geography
* Human Geography

 **b) Name three areas studied in practical Geography (1x3=3mks)**

* + Statistical methods
	+ Maps and map work
	+ Field work
	+ Photographic interpretation

 **c) State the relationship between Geography and Mathematics (2x1=2mks)**

* + Mathematical formulae and principles are used in Geography to calculate area, distance, mean, bearing, percentage and density
	+ Geographical concepts are used in calculating direction/bearing in mathematics
	+ Geographical information is analysed and presented using mathematical methods like graphs, tables
1. **a) What is the solar system? (2x1=2mks)**
* The sun, the planets and other celestrial bodies orbiting around it/held together by the force of gravity

 **b) Name four components of the solar system (1x4=4mks)**

* The sun
* The planets
* Natural satellites/moons
* Asteroids
* Meteors/meteorites
* Comets

 **c) State three characteristics of the earth (1x3=3mks)**

* + Is the 3rd planet from the sun
	+ Rotates on its axis 24hrs
	+ Has a thin layer of air around it/atmosphere
	+ Supports plant and animal life
	+ 149 million kms from the sun
	+ Revolves around the sun for 3651/4 or 366 days in a leap year on an elliptical orbit
	+ Have one satellite/moon which revolves round the earth
1. **a) Name two theories that try to explain the origin of the earth and the solar system (1x2=2mks)**
* Nebula cloud theory
* Passing star theory

 **b) Give three weaknesses of the passing star theory (1x3=3mks)**

* Chances of another star passing near the sun are rare/Nil
* Origin of the star and sun are not explained
* The hot gas materials should have dispersed rather than condense
* Materials should have followed the star as it had greater gravitational pull
* The effect of the star setting planets on their orbits would have reduced as the star was moving away.
1. **a) Describe the shape of the earth (2x1=2mks)**
* Earth is oblate spheroid spherical but not a perfect sphere
* Is flattened at the poles and bulges at the equatorial area

 **b) Name the forces that resulted to the spherical shape of the earth (1x3=3mks)**

* + Centrifugal force
	+ Centripetal force
	+ Gravitational force

 **c) State four proofs that explain the spherical shape of the earth (1x4=4mks)**

* + Circumnavigation
	+ Satellite photographs show spherical shape of the earth
	+ Gradual appearance of a ship approaching a port
	+ Eclipse of the moon – Earths shadow casted on the moon appear circular or spherical
	+ All planets appear spherical so the Earth must be spherical
	+ Sun rises on the East and sets on the West
	+ Earth’s horizon appear curved observed from a high point

 **d) Use a well labeled diagram to describe the lunar eclipse (7mks)**

* + The earth, the moon and the sun are in a straight line
	+ The earth is between the sun and the moon
	+ The earth blocks sun’s light from reaching the moon’s surface. This casts a shadow on the moon’s surface which is called lunar/moon’s eclipse
	+ This happens at night and during full moon
	+ It lasts for about two hours as the earth is larger than the moon.



**Diagram = 3mks**

**Text = 4mks**

1. **a) Name two movements of the earth (1x2=2mks)**
* Rotation
* Revolution

 **b) State four effects of earth’s rotation (1x4=4mks)**

* + It causes day and night
	+ It causes deflection of winds and ocean currents
	+ It causes falling and rising of ocean tides
	+ It causes a difference in time at different longitudes
	+ It causes changes in atmospheric pressure over the earth’s surface

 **c) Differentiate summer solstice and winter solstice (2x2=4mks)**

* + Summer solstice is a time of the year when the path of the sun is overhead the Tropical of Capricorn or Cancer and the regions have summer seasons
	+ Winter solstice is a time of the year when the overhead sun is far away from either the Northern or Southern hemisphere and the regions have winter seasons

**d) What is Equinox? (2x1=mks)**

* It is the time of the year when the path of the sun is high and overhead the Equator on 21st March and 23rd September.
1. **a) State three characteristics of the crust (1x3=3mks)**
* Is made of solid or brittle rocks
* Is divided into Sial and Sima
* Sial floats in Sima
* Is rich in Silica, Magnesium, Aluminium and Iron
* Has lighter rocks in Sial 2.7gm/cc
* Has denser rocks in Sima 2.8-3.0gm/cc

 **b) Name three components of the atmosphere (1x3=3mks)**

* + Gases/Air
	+ Water vapour/moisture
	+ Hygroscopic particles/smoke/dust/salt/pollen grains

 **c) Name three layers of the atmosphere (1x3=3mks)**

* + Troposphere
	+ Stratosphere
	+ Mesosphere
	+ Thermosphere/Ionosphere

 **d) State three characteristics of the Troposphere (1x3=3mks)**

* + Is the lowest layer 0-16km upwards
	+ Contains 75% of the total gases in the atmosphere
	+ Is the life supporting layer
	+ Has water vapour/cloud cover
	+ Temperature decreases with increase of Altitude
	+ Pressure decreases upwards
	+ Wind speed increases with increase of height
	+ Separated from stratosphere by tropopause

 **e) Differentiate positive lapse rate and negative lapse rate (2x2=4mks)**

* + Positive lapse rate – Is a decrease in temperature with an increase in height
	+ Negative Lapse rate – Is an increase in temperature with an increase in height
1. **a) Define these terms (4mks)**
2. **Statistics(2x1=2mks)**
* Refers to numerical facts and figures collected and arranged in a systematic order for a specific purpose
1. **Data (2x1=2mks)**
* Refers to information collected and presented in Numerical form

 **b) Name two types of statistical data (2x1=2mks)**

* Discrete data
* Continuous data
* Individual data
* Grouped data

 **c) State three sources of primary data (1x3=3mks)**

* + Interview to resource person
	+ Questionnaires
	+ Observation in the field
	+ Experiments
	+ Measurements
	+ Counting
	+ Collecting samples
	+ photographing

 **d) State three sources of secondary data (1x3=3mks)**

* + Text books
	+ Magazines
	+ Journals
	+ Maps/Atlas
	+ Census reports
	+ Geological maps
	+ Newspapers
	+ Periodicals
	+ Statistical Abstracts
	+ Video tapes
	+ Photographs
	+ Audio tapes

**e) State three advantages of using observation as a method of data collection (1x3=3mks)**

* + Provides first hand information
	+ Helps to collect reliable data
	+ Saves on time
	+ Helps to collect relevant and accurate data
	+ Easy to remember/improves visual memory
	+ Helps to collect data not found in text books
1. **a) Differentiate between weather and climate (4mks)**
* **Weather**: Is the state of the atmosphere of a given place over a short period of time (2x1=2mks)
* **Climate**: Is the average weather conditions of a place recorded over a long period of time (10-30years) (2x1=2mks)

 **b) State three characteristics of a Stevenson’s screen (1x3=3mks)**

* + It has lovoured sides
	+ It is painted white
	+ It has double roofing
	+ It is placed 121cm above the ground level

 **c) State three reasons why data can be inaccurate (1x3=3mks)**

* + Use of defective instruments
	+ Human error
	+ Interference with the instruments by people
	+ Poor citing of a weather station
	+ Extreme/Harsh weather conditions
	+ Natural calamities may damage instruments

 **d) Explain briefly how you can measure rainfall using a rain gauge (4mks)**

* + Remove the water collecting jar from the metal holder/container
	+ Pour the water into a measuring cylinder
	+ Take readings from the measuring cylinder
	+ Record the readings on a table/chart
	+ Interpret the readings and then reset the rain gauge