**GEOGRAPHY FORM 1 MARKING SCHEME**

**MWAKICAN END OF TERM 2 EXAM 2016.**

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)**

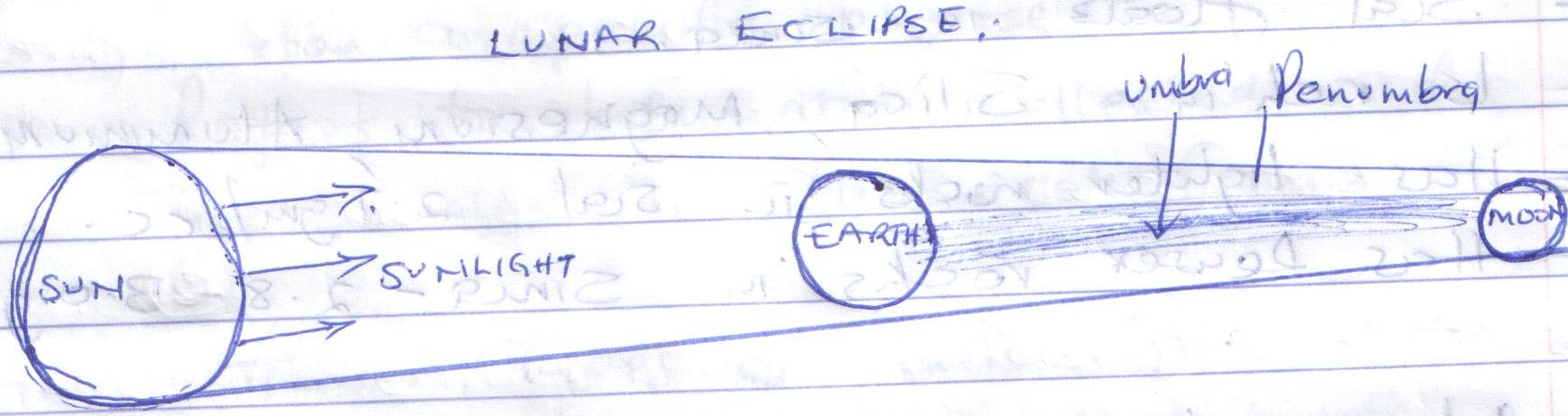
* + Centrifugal force
  + Centripetal force
  + Gravitational force

**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