

OPENER EXAMS 2023**FORM ONE****GEOGRAPHY****MARKING SCHEME**

1. Define the following terms:

i. Geography

- It is the scientific study of the distribution and inters relationship of natural and human phenomena on the earth's surface in relation to man.

- It is the study of the earth as the home of man.

2x1=2 mks

ii. Environment

All external conditions surrounding an organism and which influence their behavior.

2x1=2 mks

b. Identify **three** areas studied in human geography.

- Population and demography

- Fishing

- Land reclamation and rehabilitation

- Agriculture

- Transport and communication

- Tourism

- Trade

- Industry

3x1=3

mks

c. Identify **three** areas that are studied in practical Geography.

- Map work

- Photography

- Statistical methods

3x1=3

mks

d. Explain **four** reasons why geography is studied in Kenyan schools.

(8mks)

-It helps to develop skills e.g time management.

- It enables learners to understand/ appreciate different environmental influences.

-It encourages international awareness and co-operation.

-It helps the learner to appreciate important social values like cooperation.

-It promotes positive attitude towards protection and conservation or resources.

-It leads to development of careers like teaching, surveying, and piloting etc.

-It helps learner to learn the art of time management.

-It enables learners to explain the origin and formation of the earth and the landforms.

Any

4x2=8mks

e. Name **four** disciplines that relate with geography.

- History

- Geology

- Mathematics

- Biology

- Agriculture
- Physics
- Chemistry
- Medicine
- Engineering

Any 4x1=mks

2. a. Identify three components of the solar system.

- The sun
- Planets
- Moon
- Meteors
- Meteorites
- Asteroids

Any 3x1=3mks

b. Apart from the passing star theory, name two other theories that explain the origin of the solar system.

- Big bang theory
- Supernova theory
- Creation theory
- Nebula Cloud theory

Any 2x=2mks

c. Explain the origin of the earth according to the Passing Star Theory.

- A star with greater gravitational pull passed near the sun
- It attracted large quantities of gaseous materials from the sun
- The material split, cooled, and condensed to form planets
- The planets were set in orbit by passing star

(4x1= 4mks)

d. Mention four weaknesses of the passing star theory.

- If another star approaches the sun, it would melt down.
- Chances of another star approaching the sun are minimal
- High temperature material drawn from the sun would disperse rather than condense.
- It does not explain the origin of the sun and the passing star came.

e. What is an orbit?

- it is a path followed by a body which revolves around another body.

(2x2=2mks)

3. a. Identify the shape of the earth.

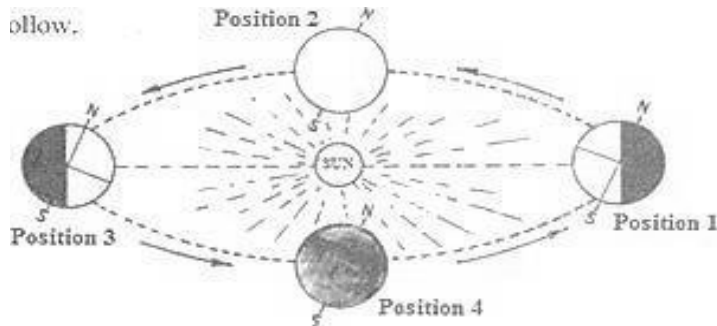
- Oblate spheroid/Spherical
- (2x1=2mks)

b. Which three forces are responsible for the shape of the earth identified above?

- Centrifugal force
- Centripetal force
- Gravitational force
- Coriolis force

(3x1=3mks)

c. Use the diagram below on movement of the earth to answer the questions that follow.



- i. What type of earth movement is shown on the above diagram?
 - Revolution (1x1=1)
- ii. If the earth takes 366 days to make one complete revolution during a leap year, how long will it take to move from position 1 to 4?
 (3mks)
 - $366 \div 3 = 91 \frac{1}{2}$ days / 91.5 days.
 - $366 - 91.5 = 274.5$ days
 (3x1=3mks)
- iii. Which season is experienced in the northern hemisphere when the earth is in **position 2**?
 - Winter
 (1x1=1)
- d. If the local time in Nairobi on longitude 37 east is 10.00 p.m. What will the time be at Buchanan Liberia on longitude 10 west?
 - $10 = 4$ minutes
 - $470 \times 4 = 188$ minutes = 3 hrs. 5 minutes
 - Buchanan is 3hrs 8 minutes behind Nairobi,
 - Time is 6.52 am (3x1=4mks)