312 GEOGRAPHY MID-TERM 2 EXAM

# Form 1

# MID-TERM 2 EXAM MARKING SCHEME

GEOGRAPHY FORM ONE <u>MARKING SCHEME</u>

# 1.a) i) What is Geography?

- Study of the earth as a home of humankind/man.

(2 mks)

#### ii) Two Greek words from which the term Geography is derived.

- Geo
- Graphein

(2 x 1 = 2 mks)

#### b) i) Define the term environment.

- Refers to all external conditions surrounding an organism/plant or an animal.

(2 mks)

#### ii) Types of environment.

- Physical environment
- Human/social environment

(2 x 1 = 2 mks)

#### 2. a) Areas of study in practical geography.

- Fieldwork
- Mapwork
- Photograph work
- Statistical methods

(Any 3 x 1 = 3 mks)

#### b) Importance of studying geography.

- The learner is able to learn and explain the origin of the earth, the solar system and the internal structure of the earth.
- Geography helps the learner to develop the skills of observing, reading, analyzing and interpreting maps, photographs, charts, diagrams and statistical data.
- Geography enables the learner to understand and appreciate different environmental influences at work on different societies.
- Study of geography encourages international awareness, interaction and co-operation.
- Geography teaches the learner how to manage time properly by drawing time schedule and adhering to it.
- Geography is a career subject.
- Geography creates awareness in the people on significance of management and conservation of the environment.
- Geography enables the learner to acquire basic skills and knowledge which contributes to local, regional and national development.

(Any 4 x 2 = 8 mks)

(1 mk)

# 3. a) i) Identify the types of rocks in the earth's crust.

- Geology

(1 mk)

- ii) Studying atmospheric conditions of an area.
  - Meteorology
- iii) Study of solar energy.
  - Physics

(1 mk)

- iv) Calculation of areas, distances and densities in geography.
- Mathematics

(1 mk)

#### b) i) Orbit.

- The path that the planet follows as they move round the sun.
- ii)



# 4. a) i) Specific shape of the earth.

- Geoid/Oblate Spheroid

# ii) Forces responsible for the shape of the earth.

- Centrifugal force
- Centripetal force
- Force of gravity/Gravitational force

(3 x 1 = 3 mks)

(1 mk)

# b) Reasons why the earth is believed to be spherical in shape.

- Circumnavigation: it is possible to fly or sail round the earth following one direction and coming back to the same point of origin.
- When a ship is approaching a port, an observer standing on a cliff or any raised ground will first see the smoke and then the other parts of the ship will appear gradually/two ships following each other at a given distance, the nearest will be seen first while the one behind will be seen later.
- During the eclipse of the moon, the shadow of the earth casted onto the moon appears spherical.
- The earth's horizon is always circular.
- Since all other planets, the moon and the sun are round when viewed through a telescope, it follows the earth being one of the planets must also be round.
- Photographs taken by satellite at great distance away from the earth shows that the earth is round.

- The earth rotates from west to east. Therefore the sun appears earlier in the east than in the west.

(Any 4 x 1 = 4 mks)

#### 5. a) Weaknesses of the passing star theory.

- The origin of the passing star and the sun is not mentioned.
- The high temperature material drawn from the sun would disperse rather than condense.
- The chances of another star approaching the sun is minimal.
- The gaseous materials drawn from the sun would continue following the star since it had greater gravitational pull.
- The effects of the star would have stopped by now but the planets are still in motion.

(Any  $3 \ge 1 = 3 \text{ mks}$ )

#### b) Effects of the earth's revolution.

- It causes lunar eclipse
- It causes the four seasons
- It causes varying lengths of day and nights
- It causes changes in the position of the midday sun at different times of the year

(Any 3 x 1 = 3 mks)

#### 6. a) Occurrence of solar eclipse.

- Solar eclipse occurs when the moon lies between the sun and the earth
- The moon's shadow is casted onto the earth



b) Differences between solar eclipse and lunar eclipse.

	Solar eclipse	Lunar eclipse
-	Occurs during the day	- Occurs at night
-	Moon's shadow is casted on the earth	- The earth's shadow is casted onto the moon
-	Occurs when the moon has between the sun and	- Occurs when earth lies between the sun and
	the earth	the moon

7. a) Specific dates of the year when the overhead position of the midday sun is on the following latitudes.

<ul> <li>i) Tropic of cancer</li> <li>21<sup>st</sup> June</li> </ul>	(1 mk)
<ul><li>ii) Tropic of Capricorn</li><li>22<sup>nd</sup> December</li></ul>	(1 mk)
<ul> <li>iii) Equator</li> <li>21<sup>st</sup> March/23<sup>rd</sup> September</li> </ul>	(1 mk)
$60^{\circ} + 40^{\circ} = 100 \sqrt{(1)}$ 100 x 4 = 400 minutes $\sqrt{(1)}$	

 $100 \times 4 = 400 \text{ minutes } \sqrt{(1)} \\ 400 \div 60 = 6 \text{hr } 40 \text{ min } \sqrt{(1)} \\ \hline 7.30 \\ + 6.40 \\ \hline 2.10 \text{ p.m.}} \sqrt{(1)}$ 

#### 8. a) Minerals that makes up the earth's crust.

- Silica

b)

- Magnesium
- Aluminium

(3 x 1 = 3 mks)

#### b) Characteristics of the mantle.

- It is made up of two parts, the upper mantle and the lower mantle
- It is composed of silicate rocks
- The dominant mineral is olivine
- Upper mantle is made up of semi-solid rocks
- Lower/inner mantle is made up of liquid rocks
- Mantle has a density ranging from 3.0 3.3 gm/cc
- Mantle has a thickness of 2900km
- Mantle lies between the crust and the core
- Mantle has a temperature of about 5000°c

(Any 3 x 1 = 3 mks)

# 9. a) Elements of weather.

- Temperature
- Humidity
- Precipitation
- Wind
- Sunshine
- Cloud cover

(Any 4 x 1 = 4 mks)

- b) Factors that determine the amount of solar radiation reaching the earth's surface.
  - Intensity of the sun's radiation in the space

- Transparency of the atmosphere
- Position of the earth on its orbit
- Inclination/angle of the surface on which the sun's rays fall
- Nature of the surface on which the sun's rays fall

(Any 4 x 1 = 4 mks)

10. a)	<ul> <li>The purpose of the following items in a weather station.</li> <li>i) Stevenson screen <ul> <li>For keeping weather recording instruments</li> </ul> </li> </ul>	(1 mk)
	<ul><li>ii) Hygrometer</li><li>- Used for measuring humidity</li></ul>	(1 mk)
	<ul><li>iii) Barometer</li><li>Used for measuring atmospheric pressure</li></ul>	(1 mk)
b)	Main zones of the atmosphere. - Troposphere	

- Stratosphere
- Mesosphere
- Thermosphere/Ionosphere

(4 x 1 = 4 mks)

#### **11. a)** Formation of relief rainfall.

- Moist air rises over hill or mountain
- The moist air expands, cools and condense to form clouds
- Eventually, this leads to rain falling on the windward slope



The rain
 bearing winds lose their
 moisture on the windward
 slopes

 On crossing
 the relief barrier, they
 become dry descending cold
 winds

# b) i) High clouds.

- Cirrus
- Cirro stratus
- Cirro cumulus

#### ii) Significance of weather forecasting.

(3 x 1 = 3 mks)

- It helps to determine the farmers calendar
- It helps to determine suitable clothing for the day
- It influences the fishing habitats
- It helps to determine the time for air and sea travels
- It determines the military activities
- It determine suitable housing

(Any 4 x 1 = 4 mks)

End