

**MARKING SCHEME**

1. (a) Define the following terms.
- (i) Geography (2mks)
    - The study of earth as a home of man
  - (ii) Environment. (2mks)
    - It is the eternal conditions that surround living organisms
  - (iii) Solar System (2mks)
    - It refers to the sun and everything related to it.
  - (iv) Identify the two branches of geography (2mks)
    - Physical geography
    - Human geography
2. (a) State FOUR characteristics of planets. (4mks)
- All planets revolve around the sun.
  - Each planet has its own gravitational force maintained by the sun.
  - All planets are spherical.
  - Planets rotate as they revolve.
- (b) List down FOUR weaknesses of the passing star theory. (4mks)
- Chances of another star approaching the sun are minimal.
  - High temperature gaseous material drawn from the sun would disperse rather than condense.
  - The effects of the star that set the planets in orbit around the sun would have reduced by now.
  - The gases would have followed the star since it had a greater gravitational pull.
  - The origin of the star is not mentioned.
3. (a) State how the following forces influence the shape of the earth. (6mks)
- (i) Force of gravity-
    - Force of gravity attracts objects on the earth's surface and materials within the earth towards the centre of the earth thus making the earth to appear round.
  - (ii) Centripetal force
    - Centripetal force pulls the North pole and South pole towards each other, hence
  - (iii) Centrifugal force
    - Centrifugal force aerates bulging at the equator due to variation in rotation towards the equator.
  - (iv) List down five effects of the earth's rotation. (5mks)
    - Causes day and night
    - Causes difference of one hour between meridians 15° apart.
    - Causes deflection of winds and ocean currents
    - Causes variation the speed of air masses
    - Rising and falling of ocean tides.
- b) Highlight three characteristics of the mantle (3mks)
- Made up of Iron and Magnesium Silicates
  - Density of between 3.0 and 3.3g/cc

- Thickness of about 2900km
- Temperature of about 5000°c due to radio activity
- The outer part is an elastic solid
- The inner part is a viscous fluid.