

ANSWER KEY to CHAPTER 1: EARTH AS A PLANET

Q1)(a)What is a galaxy? To which galaxy does our Sun belong?

Ans)The cluster of stars in the sky is called a galaxy.

Our Sun belongs to the Milky Way Galaxy which is also known as the Aakash Ganga

(b)Name two Inner and two Outer planets.**(Any 2)**

Ans)Inner Planets: Earth, Mars

Outer Planets: Jupiter, Saturn

(c)State two conditions which make the Earth a unique planet.**(Any 2)**

Ans)(i) Optimum distance of 148 km from the Sun. When we consider the other planets, those which are too close to the Sun are too hot and those which are further away from the Sun are too cold to sustain life.

(ii)The average temperature on the side of the Earth facing the Sun is 17°C. Hence it is a suitable temperature for life to exist.

(d)Give one reason why nitrogen and carbon dioxide are needed by plants.

Ans)Nitrogen and carbon dioxide are needed by plants for making their food hence they are essential for plant growth.

Q2)(a)Which layer protects the Earth from the ultraviolet rays of the Sun? In which domain of the Earth is this layer found?

Ans)Ozone.

Atmosphere

(b)Define the term 'Biosphere'? What does the Biosphere provide all life forms with?

Ans)The narrow zone of contact between land, water and air, where all life forms exist, is called the Biosphere.

It provides all life forms with the nutrients and resources needed for their survival.

(c)Mention two proofs which have convinced us that the Earth is spherical. **(Any 2)**

Ans) (i) The Sun and other planets - In the Solar System all the heavenly bodies are spherical in shape. Thus the Earth too must be spherical in shape.

(ii) Sunrise and Sunset- Had the Earth been flat in shape, then all places on the flat Earth would have had sunrise and sunset at exactly the same time.

(d)Briefly explain the Hydrological cycle.

Ans) The hydrological cycle takes place through the evaporation of water from water bodies (egs.oceans, seas) which rises as water vapour in the atmosphere. Condensation occurs when the droplets of water vapour form clouds. The clouds lose their water through various forms of precipitation (rain, snow, hail). The water that falls to the earth due to precipitation, is either absorbed by the soil or flows into a water body such as an ocean, sea, and so on. Thus the cycle continues.