

## Chapter 3: The Earth and its living world

### Q. 1. Fill in the blanks:

- (1) The hydrosphere extends under the water also.
- (2) Rills river are the smallest and rivers are the biggest fresh water sources.
- (3) Huge blocks of ice floating in the sea are called icebergs
- (4) Almost all the water vapour in the atmosphere is contained in the troposphere.
- (5) The layer of the atmosphere which is next to the troposphere is called stratosphere.
- (6) Many lakes and wells get water from springs.
- (7) Kangaroos are found only in Australia

### Q. 2. Write whether the following statements are True or False:

- (1) The sun is not the cause of many natural processes on the earth. False
- (2) We can see rocks split apart by the tree roots. True
- (3) Rills, brooks and streams join each other to form oceans. False
- (4) The huge mass of ice slipping down the slope forms a glacier. True
- (5) One can see elephants and lions only in the polar regions. False
- (6) A water body formed by water collecting naturally is called a lake. True

### Q. 3. In the following sentences, underline the words that refer to landforms:

- (1) Anil lives at the foot of a hill.
- (2) Ria lives in a plateau region.
- (3) We can see many valleys near Lonavala.
- (4) Mount Everest is situated in the Himalayan mountain ranges.
- (5) Ratan can easily climb the hill of Saptashrungi.

### Q. 4. Give any two examples of each:

- (1) Weather-related events: (a) Formations of clouds (b) Rainfall (c) Fog (d) Storms
- (2) Sources of water: (a) Rills and brooks (b) Streams (c) Glaciers (d) Wells and river (e) Lakes and ponds.

### Q. 5. Name the following:

- (1) Five Oceans: Atlantic ocean, Pacific ocean, Arctic ocean, Indian Ocean, Southern Ocean
- (2) Seven Continents: Africa, South America, North America, Antarctica, Asia, Australia, Europe
- (3) Coastal Water Bodies: Sea, Bays, Gulf, Strait, Creek

### Q.6. Answer the following question in one sentence each:

- (1) Write the name of the envelopes of the earth

**Ans.** Atmosphere, Hydrosphere, Lithosphere are the envelopes of the earth

**(2) What is the continent? How many continent are there on the earth?**

**Ans.** A vast continuous stretch of land on the earth is called the continent and there are seven continents on the earth

**(3) What is the glacier?**

**Ans.** The huge mass of ice that slips gradually over the slope at a very slow speed is called a glacier

**(4) What makes the hydrosphere of the earth?**

**Ans.** The water or ice that occupies the earth's surface, ground water and the water vapour present in the atmosphere, together form the hydrosphere of the earth

**(5) Which are the main constituents of the atmosphere?**

**Ans.** Nitrogen, oxygen, water vapour, carbon dioxide and other gases are the constituents of the atmosphere.

**(6) How does ozone gas protect living beings?**

**Ans.** Ultraviolet rays coming from the sun are harmful for living things. But the ozone layer absorbs them and thus protect the living world

**Q. 7. Answer the following questions:**

**(1) What are clouds made up of?**

**Ans.** Clouds are made up of fine droplets of water. The sun's heat evaporates the water to form vapours from the earth's surface. This water vapour rises high up in the atmosphere. At cool heights, it condenses forming fine droplets of water which in turn make the clouds.

**(2) What is meant by 'biosphere'?**

**Ans.** All the living things such as microbes, plants and animals present together in lithosphere, hydrosphere and atmosphere form a biosphere.

**(3) Where do all the weather-related phenomena take place?**

**Ans.** All the weather-related phenomena such as clouds, rains, storms and winds take place in the troposphere because almost all the water vapour found in the atmosphere is in the troposphere.

**(4) Why have special arrangements to be made to ensure that passengers in an aeroplane get enough air for breathing?**

**Ans.** The aeroplanes flies at the higher altitude, where the air pressure is low, making it hard to breathe. Hence, we have to make to ensure that passengers in an aeroplane get enough air for breathing

**(5) In which layer of the atmosphere do we see the rainbow?**

**Ans.** We see rainbow in the layer of troposphere of the atmosphere.

**(6) Mountaineers carry oxygen in cylinders when they climb mountains that are more than 5000 m high. What could be the reason for that?**

**Ans.** As we climb up the heights, the air at the top becomes rare. At the height of 5000 m or more the air is very rare. The oxygen may be limited here. Therefore the mountaineers carry oxygen in cylinders when they climb higher mountains.

**(7) Why are microorganisms important?**

**Ans.** Microorganisms are important because they:

- (a) Help decompose waste and recycle nutrients in ecosystems.
- (b) Aid in digestion and protect against disease in humans.
- (c) Are used to produce medicines, foods, and beverages.
- (d) Clean up environmental pollutants.

**Q.8. Write short notes on:**

**(1) Evaporation:**

**Ans.** The conversion of water into vapour by heat is called evaporation. The sun's heat converts the surface water and percolated water into water vapour. All such vapour enters the atmosphere, condenses and comes back as rain. Thus evaporation is necessary for rainfall. The water cycle keeps on functioning due to evaporation.

**(2) Condensation.**

**Ans.** Condensation is the process in which vapour is changed into water. In nature due to condensation, there is rainfall. The water vapour that reaches the upper layers atmosphere, gets condensed and forms fine droplets of water.

**(3) Water Cycle**

**Ans.** The water cycle is the movement of water on Earth. It starts when water evaporates from oceans and lakes into the air. It then forms clouds and falls back to Earth as rain or snow. The water collects in rivers and lakes, and the cycle starts over. This process helps distribute water and supports life.

**Q. 9. What's the solution?**

**(1) Dark patches appear on the skin after exposure to the sun.**

**Ans.**

- (a) Use sunscreen with high SPF
- (b) Wear protective clothing and hats
- (c) Seek shade during peak sun hours
- (d) Avoid tanning beds
- (e) Apply topical treatments like vitamin C or retinoids

**(2) Make a list of landforms you see in your surroundings and give description of any two of them**

**Ans.** List of landforms near me: Hillocks, plains, mountains

(a) Hillock: Its is a small sized mountain and easy to climb

(b) Plain: It is a flat part of land. It is a playground. We play on it. It doesn't have any slope