

Natural Resources: Exercise Questions

Q.1 Why is the atmosphere essential for life?

Sol. The atmosphere is very essential for every living organisms because it maintains an appropriate climate for sustaining life by carrying out the following activities:

- (i) Atmosphere maintains the average temperature of the Earth fairly constant during day time.
- (ii) It prevents the escape of heat from the Earth into outer space during night time and keeps the earth warm.
- (iii) Atmosphere consist of various many gases like Oxygen, Nitrogen, Carbon di oxide etc. which are very essential for living of plants, animals and microorganisms.
- (iv) Atmosphere prevents us from dangerous ultra violet rays which are come from Sun.

That's why the atmosphere is very essential for life.

Q.2 Why is water essential for life?

Sol. Water is very essential for life because of the many reasons:

- (i) Plants needs water for make food by the process of photosynthesis.
- (ii) The most biological activities like respiration, digestion etc. occur when nutrients are dissolved in water.
- (iii) Transportation of biological substances from one part to another part needs water as a medium.
- (iv) All living beings are composed of 70% of water.

That's why water is essential for life.

Q.3 How are living organisms dependent on the soil? Are organisms that live in water totally independent of soil as a resource?

Sol. All living organisms are dependent on soil directly and indirectly. Plants get the water and nutrients to prepare their food from the soil. Soil provides mechanical support to the plants. While organisms depend on plants for food and other requirements. Carnivores depend upon herbivores, which depend upon plants for food. In this way, all the organisms depend on soil directly or indirectly.

Organisms that are living in water are not totally independent of soil as a resource. These aquatic organisms depend on aquatic plants for food and other requirement. These aquatic plants gets their require minerals or nutrients from the soil for their sustenance. So, without the minerals from the soil to the water bodies, it is impossible to imagine aquatic life.

Q.4 You have seen weather reports on television and in newspapers. How do you think we are able to predict the weather?

Sol. The weather is studied by the meteorological department of the government. They collects data on the various elements of weather such as high and low temperatures, maximum and minimum humidity, rainfall, wind speed, etc. They study these elements by using various instruments like -The highest and lowest temperature of a day is measured by a thermometer known as the maximum–minimum thermometer. Rain fall is measured by an instrument known as the rain gauge. Wind speed is measured by anemometers. BY using these collected data, we are able to predict the weather.

Q.5 We know that many human activities lead to increasing levels of pollution of the air, water-bodies and soil. Do you think that isolating these activities to specific and limited areas would help in reducing pollution?

Sol. Yes definitely, Isolating human activities to specific areas would help in reducing levels of pollution. Because air is the one medium through which pollutants spread into the various sources like water and soil. One example of isolation of human activity, making of industries in isolated regions will control or reduce the pollution to some extent. The pollution caused by these industries will not contaminate air, water resources, agriculture land, etc.

Q.6 Write a note on how forests influence the quality of our air, soil and water resources.

Sol. Forests influence the quality of air, soil, and water resources by the following ways.

- (i) Forests maintain the balance of carbon dioxide and oxygen in the atmosphere. The increased amount of carbon dioxide is balanced by a larger intake of carbon dioxide by plants during the process of photosynthesis and a large amount of oxygen is released.
- (ii) The roots of plants bind the soil tightly and prevent the soil from eroding away by the wind, water, etc. In this way, forests prevent soil erosion.
- (iii) In the process of transpiration, a huge amount of water vapour goes into the atmosphere and condenses to form clouds. These clouds cause rainfall and help in the replenishment of water resources.