

Lesson at a Glance

- Environment in our basic life **support system**. It provides the air we breathe, the water we drink, the food we eat and the place where we live. Thus, environment is the most important aspect of our life.
- The **natural** environment consists of land, water, air, plants and animals. It refers to both **biotic** and **abiotic** conditions existing on the earth.
- While biotic refers to the world of living organisms, such as plants and animals, abiotic refers to the world of non-living elements, such as land.
- The human environment refers to the activities, creations and interactions among human beings.
- Domains of environment—**Lithosphere, hydrosphere, atmosphere and biosphere**.
- Lithosphere is the solid portion of the earth where we live. It is the domain that provides us forests, grasslands for grazing, land for agriculture and human settlements. It is where we find several minerals.
- Hydrosphere refers to the waterbodies like rivers, lakes, seas, oceans, etc. that exist on the earth.
- Atmosphere is the thin layer of air that surrounds the earth. It protects us from the harmful rays and searching heat of the Sun. It consists of gases, dust and water vapour.
- Biosphere or the living world is comprised of plant and animal life. It is a narrow zone of the earth where land, water and air interact with each other to support life.
- The relation between the living organisms as well as the relation between the organisms and their surroundings form an **ecosystem**.
- An ecosystem can be found in lakes, mountains, oceans, pond, etc.
- Human beings modify natural environment as per their needs.

■ IN-TEXT QUESTIONS SOLVED ■

- Q. 1. Look at your surroundings. Make a list of uses that the land in your neighbourhood is being put to.

(NCERT Textbook, page 3)

- Ans. • Agriculture
• Roads
• Industries
• Shops
• Bakery
• Institutions
• Residential buildings.

- Q. 2. Where does the water you use in your home and school come from? Make a list of different uses of water in our daily life. Have you seen anyone wasting water? How?

(NCERT Textbook, page 3)

- Ans. The water that we use in our home and school comes from Delhi Jal Board connection.

List of uses of water

- Drinking
- Washing
- Cleaning
- Bathing
- Sewage disposal
- Cooking

Yes, I have seen several people who waste water in various ways. They keep water tap on while brushing their teeth. I usually see overflowing water tanks over many roofs. Everyday, I see many people washing their car and also the roads in front of their houses. Nobody bothers to turn off the taps flowing beside roads.

- Q. 3. Observe the sky while coming to school. Make a note whether the day is cloudy, rainy, sunny, foggy, etc.

(NCERT Textbook, page 3)

- Ans. The day is cloudy. It has become very pleasant. Clouds are becoming darker and it will rain soon. The weather is now cool and comfortable because temperature has gone down.

- Q. 4. Talk to some elderly person in your neighbourhood and collect information about:

1. The trees in his/her neighbourhood when he/she was your age.
2. The indoor games he/she played.
3. His/her favourite fruit at your age.
4. How did they make themselves comfortable during hot summers and cold winters?

Display your answers on a wall/bulletin board.

(NCERT Textbook, page 5)

- Ans.**
1. The trees of Mango, Guava, Papaya, Litchi, Pomegranate, etc.
 2. Ludo, Chess and Carom board.
 3. Mango, Guava and Apple.
 4. During hot summers they used to sit under the Shade of huge Banyan tree.

During cold winters they used to sit by the side of fire. They also took warmth from the sun by sitting under it.

■ TEXTBOOK QUESTIONS SOLVED ■

- 9. 1.** Answer the following questions briefly.
- (i) What is an ecosystem?
 - (ii) What do you mean by natural environment?
 - (iii) Which are the major components of the environment?
 - (iv) Give four examples of human-made environment.
 - (v) What is lithosphere?
 - (vi) Which are the two major components of biotic environment?
 - (vii) What is biosphere?

- Ans.**
- (i) All plants, animals and human beings depend on their immediate surroundings. They are also interdependent on each other. This relation between the living organisms as well as the relation between the organism and their surroundings form an ecosystem.
 - (ii) Natural environment consists of land, water, air, plants and animals. Thus, natural environment refers to both biotic (plants and animals) and abiotic (land) conditions that exist on the earth.
 - (iii) The major components of the environment are—natural (land, air, water, living things), human made

- (buildings, parks, bridges, roads, industries, monuments, etc.) and human (individual, family, community, religion, educational, economic, etc).
- (iv) Four examples of human-made environment—buildings, parks, bridges and roads.
 - (v) Lithosphere is the solid crust or the hard top layer of the earth. It is made up of rocks and minerals and covered by a thin layer of soil. It is an irregular surface with various land forms such as mountains, plateaus, plains, valleys, etc.
 - (vi) Plants and animals are the two major components of biotic environment.
 - (vii) Biosphere is a narrow zone of the earth where land, water and air interact with each other to support life. Thus, plant and animal kingdom together make biosphere, i.e., the living world.

- 9. 2.** Tick the correct answer.

- (i) Which is not a natural ecosystem?
 - (a) Desert
 - (b) Aquarium
 - (c) Forest.
- (ii) Which is not a component of human environment?
 - (a) Land
 - (b) Religion
 - (c) Community.
- (iii) Which is a human made environment?
 - (a) Mountain
 - (b) Sea
 - (c) Road.
- (iv) Which is a threat to environment?
 - (a) Growing plant
 - (b) Growing population
 - (c) Growing crops.

- Ans.** (i)—(b), (ii)—(a), (iii)—(c), (iv)—(b).

- 9. 3.** Match the following:

- | | |
|-------------------|--|
| (i) Biosphere | (a) blanket of air which surrounds the earth |
| (ii) Atmosphere | (b) domain of water |
| (iii) Hydrosphere | (c) gravitational force of the earth |
| (iv) Environment | (d) our surroundings |
| | (e) narrow zone where land, water and air interact |

- Ans.** (i)—(e), (ii)—(a), (iii)—(b), (iv)—(d).

Q. 4. Give reasons:

- (a) Man modifies his environment.
- (b) Plants and animals depend on each other.

Ans. (a) Man modifies his environment to fulfil his needs and make his life comfortable. He also modified his environment to adopt himself to the natural surroundings.

- (b) Plants and animals depend on each other for their own sake. Plants release oxygen that animals breathe and absorb carbon dioxide that animals release.

Q. 5. Activity

Imagine an ideal environment where you would love to live. Draw the picture of your ideal environment.

Ans. Students are expected to do this activity themselves. However, a sample is given below:



Fig. 1.1. Ideal Environment.

