

# NCERT SOLUTIONS

## CLASS X SCIENCE

### CHAPTER 15 - OUR ENVIRONMENT

#### Short Question

**Q.1. Why is the disposal of improper waste a curse to the environment?**

**Ans.** Improper wastes pollute the air, soil, water and the environment. It also causes harmful effects on the living organisms. For example, Eutrophication is caused due to the passage of waste into the water body killing all the aquatic life in it

**Q.2. Show the common food chain of a pond ecosystem.**

**Ans.** Aquatic plants and phytoplankton's -> Small aquatic animals and larvae and zooplanktons, insects, etc. -> Fish-> Bird

**Q.3. Write down the advantages of using cloth bags instead of using plastic bags during shopping.**

**Ans.** The advantages of using cloth bags instead of using plastic bags are:

- (i) They are washable.
- (ii) They are strong and more durable than plastic bags
- (iii) They are made of biodegradable material.
- (iv) They do not pollute the environment.
- (v) They can be recycled and reused
- (vi) They are capable of carrying more things.

**Q.4. Write down, why the crop fields are known as artificial ecosystems.**

**Ans.** Crop fields are man-made. Abiotic and some biotic components are nourished, maintained and reaped by human beings

**Q.5. An aquarium needs to be cleaned, but we do not clean ponds or lakes. Explain the reason for it.**

**Ans.** An aquarium is an artificial and incomplete ecosystem compared to ponds or lakes, which are self-sustaining, natural and make a complete ecosystem where there is a perfect recycling of materials. Therefore, it needs to be cleaned.

#### Long Questions

**Q.1. Write down four daily life activities that are eco-friendly.**

- Ans.** (i) Gardening
- (ii) Usage of compost
  - (iii) Use of cloth bags instead of plastic bags
  - (iv) Harvesting of rainwater and preventing wastage of resources

**Q.2. Show the flow of energy in an ecosystem. State why it is unidirectional.**

**Ans.** The energy flow in an ecosystem is as follows:

Sun                      Producers                      Herbivores                      Carnivores

Since flow is progressively from one trophic level to another and does not revert, it is said to be unidirectional, i.e. from sun to plants, plants to animals, animals to other animals and organic remains to decomposers. Thus, the available energy decreases in the higher trophic levels making impossible for energy flow in the reverse direction.

**Q.3. Name the wastes which are generated in your house daily. What measures would you take for their disposal?**

**Ans.** The wastage generated daily are kitchen wastes, paper wastes like newspapers, bags, envelopes, plastic bags, vegetable and fruit peels, dust and empty cartons etc. Measures for the proper disposal are:

- (i) Safe disposal of plastic bags.
- (ii) Paper waste can be given for recycling
- (iii) Separation of biodegradable and non-biodegradable recyclable and non-recyclable wastes.
- (iv) Preparation of biodegradable and non-biodegradable recyclable and non-recyclable wastes

(v) Separation of biodegradable and non-biodegradable, recyclable and non-recyclable wastes.

**Q.4.Explain some harmful effects of agricultural practices on the environment.**

**Ans.** Some harmful effects of agricultural practices on the environment are as follows:

- (i) Natural ecosystems and habitats have been damaged during the clearing of land for agriculture.
- (ii) Extensive cropping causes loss of soil fertility.
- (iii) Use of fertilizers change the chemistry of soil and kills useful microbes.
- (iv) Use of non-biodegradable pesticides leads to bio-magnification.
- (v) Use of ground water for agriculture has resulted in lowering water table.

