

## Chapter 16: Water

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

- (1) Substances that have got mixed with the water are **harmful** for living things.
- (2) Waste water contains many **impurities**.
- (3) Sewage water can carry many **microorganisms** that cause diseases.
- (4) Before water is supplied to a town or city, it is **purified**.
- (5) It is **compulsory** for a factory owner to treat water before letting it out.
- (6) A famine is a **natural** disaster.
- (7) **Fodder camps** are set up to take care of domestic animals.

### Q. 2. Answer whether the following statements are True or False. If false, rewrite them after correcting:

- (1) **We get rainwater throughout the year.**
- (2) **During a famine, the government moves people and animals temporarily to safe places.**
- (3) **Water evaporates continuously.**
- (4) **Water pollution is not harmful.**

**Answer:**

- (1) False. We do not get rainwater throughout the year; it usually occurs in certain seasons.
- (2) True. During a famine, the government moves people and animals temporarily to safe places.
- (3) True. Water evaporates continuously.
- (4) False. Water pollution is harmful and affects health, animals, and the environment.

### Q. 3. Answer the following questions:

- (1) **What conditions prevail during a famine?**

**Answer:** Conditions during a famine:

- Severe shortage of food and water.
- Crops fail due to lack of rain.
- Animals die from hunger and thirst.
- People struggle to get enough food and water.

- (2) **What works are undertaken to make water available even after the rainy season?**

**Answer:** Works to make water available after the rainy season:

- Building dams and reservoirs to store water.
- Creating water tanks to hold rainwater.
- Using rainwater harvesting systems.
- Managing water resources for year-round use.

- (3) **Why is it necessary to store rainwater?**

**Answer:** It is necessary to store rainwater because:

- To store water for future use.
- Prevent water scarcity during dry seasons.
- Ensure there's enough water for farming and drinking.
- Help maintain groundwater levels.

- (4) **What is meant by water management?**

**Answer:** Water management means:

- Using water carefully to avoid wastage.
- Storing rainwater in tanks and reservoirs.
- Distributing water properly for all uses.
- Ensuring water is available all year round.

**(5) How does water pollution take place?**

**Answer:** Water pollution takes place when:

- Industrial waste and chemicals are dumped into water bodies.
- Plastic and garbage enter rivers, lakes, and oceans.
- Sewage mixes with clean water sources.
- Oil spills and harmful agricultural runoff enter water.

**Q. 4. Make a tabulation of water purification processes that are carried out at the water- works.**

**Answer:**

Sequential processes	How are they done?	Why are they done?
Settling	Water is left in tanks for particles to sink.	To remove big dirt and sand.
Filtration	Water passes through sand and gravel.	To remove small particles.
Oxygenation	Air is added to the water.	To improve smell and taste.
Chlorination	Chlorine is added to the water.	To kill germs and bacteria.

**What's the solution?**

**(1) Your class will be visiting a lake which is faraway from the city. Arrangements have to be made for the day's drinking water. (Textbook page 79)**

**Answer:** Carry enough clean, filtered water in bottles for everyone in the class, or arrange a water supply in large containers for the day.

**(2) Soil in the garden gets washed away with the water due to the slope of the land. (Textbook page 81)**

**Answer:** Plant grass or build small barriers like stones along the slope to stop the soil from washing away with the water.

**Can you Tell? (Textbook page 78)**

**(3) If at some place, it did not rain for a very long period of time, what would be its effect on the life of people there?**

**Answer:** If it did not rain for a long time, people would face water shortages for drinking and farming. Crops would fail, leading to food scarcity and affecting their livelihoods. This could also cause health problems due to lack of clean water.

Use your brain power! (Textbook page 81)

**(4) How should roads and footpaths be built to make rainwater seep into the ground?**

**Answer:** Roads and footpaths should be built with permeable materials like gravel or porous concrete to allow rainwater to seep into the ground. Adding drains and planting trees along the sides can help direct water to soak into the soil.