

17. POLLUTION-ITS IMPACT ON ENVIRONMENT

Let's Test Your Knowledge!

A. Choose the Correct Answer (Page No:96)

1. Air pollution is caused by

- A) Planting trees B) Burning fuels and smoke
C) Saving water D) Using cloth bags

Key: B

Solution: Burning fuels in vehicles, factories, and homes releases harmful smoke and gases into the air, causing air pollution.

2. Biodegradable waste includes

- A) Plastic bottles B) Fruit peels C) Glass jars D) Metal tins

Key: B

Solution: Fruit peels are biodegradable because they decompose naturally by micro-organisms, unlike plastic, glass, or metal.

3. Non-biodegradable waste can be

- A) Reused, recycled, or resold B) Eaten
C) Buried to rot D) Made into compost

Key: A

Solution: Non-biodegradable materials like plastic and metal don't decompose, so we should reuse, recycle, or resell them instead.

4. The Bhopal Gas Tragedy was caused by

- A) Heavy rain B) A chemical factory accident
C) Planting trees D) Noise pollution

Key: B

Solution: The Bhopal Gas Tragedy in 1984 was an industrial disaster where poisonous gas leaked from a pesticide factory.

5. Noise pollution can cause

- A) Hearing loss and stress B) Better sleep
C) Clean water D) Strong soil

Key: A

Solution: Loud noises from traffic and machines can damage hearing and cause stress, anxiety, and sleep disturbances.

B. True or False (Page No:96)

1. Cutting too many trees can lead to air pollution.

Key: True

Solution: Trees clean the air by absorbing pollutants. Cutting them reduces this natural cleaning process, increasing air pollution.

2. Water pollution occurs only in oceans, not rivers.

Key: False

Solution: Water pollution can occur in all water bodies including rivers, lakes, ponds, and groundwater, not just oceans.

3. Soil pollution can be caused by chemical fertilizers and garbage.

Key: True

Solution: Chemical fertilizers and dumping of garbage contaminate soil, making it less fertile and harmful for plants and animals.

4. The 3Rs are Reuse, Recycle, and Resell.

Key: False

Solution: The 3Rs are Reduce, Reuse, and Recycle. These methods help minimize waste and protect the environment.

5. Planting trees and saving water helps protect the environment.

Key: True

Solution: Trees clean air and prevent soil erosion, while saving water conserves this precious resource for future generations.

C. Fill in the Blanks (Page No:97)

1. Pollution is caused by cutting trees, burning fuels, and using ____.

Key: chemicals

Solution: Harmful chemicals from factories, vehicles, and farms pollute air, water, and soil when used carelessly.

2. The three ways to reduce pollution are ____, ____, and ____.

Key: Reduce, Reuse, Recycle

Solution: The 3R method - Reduce waste, Reuse items, and Recycle materials - helps minimize pollution effectively.

3. Harmful gases and smoke in the air cause ____ pollution.

Key: air

Solution: When harmful gases and smoke fill the atmosphere, they create air pollution that affects health and environment.

4. Things that rot naturally like paper and fruit peels are called ____ waste.

Key: biodegradable

Solution: Biodegradable waste decomposes naturally through bacterial action, unlike plastic which remains for years.

5. The chemical disaster in India in 1984 that polluted air, water, and soil is called the ____ Gas Tragedy.

Key: Bhopal

Solution: The Bhopal Gas Tragedy was one of the world's worst industrial disasters where toxic gas leaked from a pesticide plant.

D. Answer the Questions (Page No:97)

1. What is pollution and what are its main types?

Solution: Harmful substances in environment; Air, Water, Soil, Noise pollution
Pollution means adding harmful substances to our environment. The four main types are air, water, soil, and noise pollution.

2. How do human activities like factories, vehicles, and farming chemicals harm the environment?

Solution: Factories and vehicles release smoke; chemicals contaminate soil and water.

Factories and vehicles emit smoke causing air pollution, while farm chemicals seep into soil and water, harming plants, animals, and humans.

3. What are the 3Rs and how do they help reduce pollution?

Solution: Reduce, Reuse, Recycle; they minimize waste and resource use
The 3Rs - Reduce (less consumption), Reuse (use again), Recycle (make new products) - help reduce waste and conserve resources.

4. Name two effects of air pollution on humans.

Solution: Breathing problems, lung diseases

Air pollution can cause respiratory diseases like asthma and bronchitis, and irritate eyes, nose, and throat.

5. Describe the Bhopal Gas Tragedy in brief.

Solution: 1984 chemical gas leak from pesticide factory in Bhopal

In 1984, a poisonous gas leak from a pesticide factory in Bhopal killed thousands and affected many more with long-term health problems.

6. What steps can we take in daily life to protect air, water, and soil?

Solution: Use less plastic, save water, plant trees, use public transport

We can reduce pollution by using cloth bags, saving water, planting trees, using public transport, and practicing the 3Rs.

E. Match the words of Column A to the words of Column B. (Page No:98)

Column A

1. Air Pollution
2. Water Pollution
3. Noise Pollution
4. Soil Pollution

Column B

- a) Caused by smoke from vehicles and factories
- b) Caused by dumping waste and chemicals into rivers
- c) Caused by loud sounds from machines and vehicles
- d) Caused by plastic, waste, and fertilizers

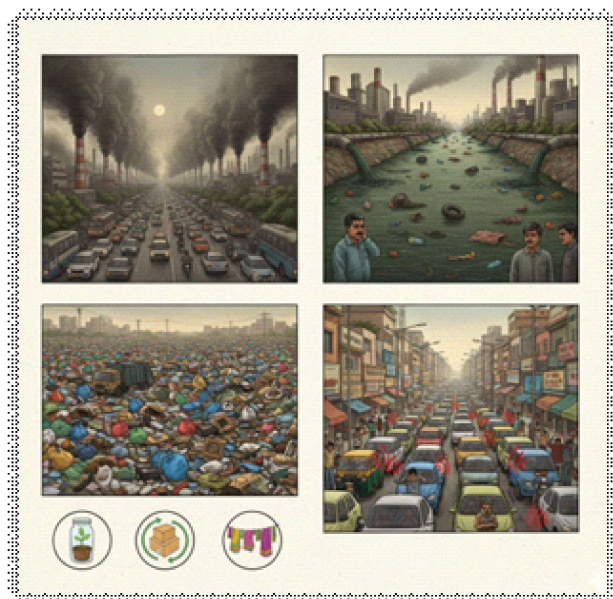
5. 3R's Formula

e) Reuse, Recycle, and Resell

Key: 1-a, 2-b, 3-c, 4-d, 5-e

F. Picture Study (Page No:98)

Instructions:



1. Observe the image showing different types of pollution

2. Identify and label the following:

Solution:

- Air pollution: Factory smokestacks/vehicle exhaust
- Water pollution: Industrial waste in river
- Soil pollution: Plastic waste on ground
- Noise pollution: Loud traffic/construction
- 3Rs examples: Reuse (cloth bag), Recycle (recycling bin), Reduce (using less)

3. Write one line about how each type of pollution harms humans, animals, or plants.

Solution:

- Air pollution: Causes breathing diseases in humans and animals
- Water pollution: Poisonous water kills fish and aquatic plants
- Soil pollution: Chemicals in soil make crops poisonous to eat
- Noise pollution: Loud noises disturb animals and cause human stress

Each pollution type has specific harms - air pollution affects respiration, water pollution kills marine life, soil pollution contaminates food, and noise pollution causes health issues.