

## 14. CONCERNS OF ENVIRONMENT

### Let's Test Your Knowledge!

#### A. Choose the Correct Answer (Page No:63)

1. The cutting down of trees is called:

- a) Pollution      b) Deforestation      c) Reforestation      d) Conservation

**Key:** B

**Solution:** Deforestation means the large-scale clearing or cutting down of forests.

2. Using waste materials to make new items is called:

- a) Reducing      b) Recycling      c) Reusing      d) Dumping

**Key:** B

**Solution:** Recycling is the process of converting waste materials like paper and plastic into new products.

3. The main cause of air pollution is:

- a) Planting trees   b) Vehicle smoke      c) Cleaning roads      d) Growing crops

**Key:** B

**Solution:** Smoke from vehicles, factories, and burning fuels releases harmful gases and particles into the air, causing pollution.

4. Which of these is not a type of pollution?

- a) Air      b) Water      c) Soil      d) Food

**Key:** D

**Solution:** Air, Water, and Soil are all types of environmental pollution. "Food" is not a category of pollution, though it can be contaminated by pollution.

5. The method of managing waste properly is called:

- a) Deforestation      b) Waste Management  
c) Pollution      d) Transportation

**Key:** B

**Solution:** Waste Management is the collection, transportation, and disposal of garbage, sewage, and other waste products in a proper way.

#### B. True or False (Page No:64)

1. Deforestation helps increase rainfall.

**Key:** False

**Solution:** Deforestation reduces rainfall. Trees release water vapor into the air, and cutting them down disturbs the rain cycle, leading to less rain.

2. Air pollution is caused by smoke and dust.

**Key:** True

**Solution:** Yes, smoke from vehicles and factories, along with dust from construction

sites, are major causes of air pollution.

### **3. Recycling helps in reducing waste.**

**Key:** True

**Solution:** Correct. Recycling turns old waste into new products, which means less garbage is sent to landfills.

### **4. Using plastics saves the environment.**

**Key:** False

**Solution:** Most plastics are not biodegradable and cause pollution. Reducing plastic use is better for the environment.

### **5. We should switch off lights when not in use.**

**Key:** True

**Solution:** Yes, switching off lights and fans saves electricity, which in turn helps conserve natural resources used to produce that electricity.

## **C. Answer the Following Questions (Page No:64)**

### **1. What is the environment?**

**Solution:** The environment is everything that surrounds us, including living things (plants, animals) and non-living things (air, water, soil).

It is our natural world, which provides us with all our basic needs.

### **2. What are the main causes of pollution?**

**Solution:** The main causes are vehicle and factory smoke (air pollution), chemical waste from industries (water pollution), and the overuse of plastics and pesticides (soil pollution).

Human activities are the primary source of all types of pollution.

### **3. What happens when too many trees are cut down?**

**Solution:** It leads to deforestation, which causes less rainfall, soil erosion, loss of animal habitats, and an increase in air pollution.

Trees are essential for a healthy environment, and cutting them down has serious consequences.

### **4. Explain the 3Rs of waste management.**

**Solution:** The 3Rs are:

Reduce: Use less of something to create less waste.

Reuse: Use an item again instead of throwing it away.

Recycle: Convert waste materials into new products.

Following the 3Rs helps us manage our waste and protect the environment.

### **5. How can children help in protecting the environment?**

**Solution:** Children can help by planting trees, saving water and electricity, recycling paper and plastic, and not littering.

Even small actions by children can make a big difference in keeping our planet clean

and green.

## D. Picture Study (Page No:65)



### 1. Observe a picture of a polluted river.

#### • What do you see floating in the water?

**Solution:** You would see plastic bottles, polythene bags, and other garbage floating in the water. The water might look dirty and foamy.

The picture would show solid waste dumped into the river.

#### • How does this pollution affect animals and people?

##### **Solution:**

**Animals:** Fish and other water animals can get sick, trapped, or die from eating the plastic or living in dirty water.

**People:** Polluted water can cause diseases like cholera and typhoid when used for drinking or bathing. It also makes the river water unfit for any use.

Water pollution harms the health of all living beings that depend on the river.

### 2. Describe how this pollution affects animals and people.

**Solution:** Water pollution harms both animals and people. Animals living in the river suffer as their home becomes poisonous and filled with dangerous trash, leading to sickness and death. For people, the polluted river becomes a source of disease and is no longer useful for daily needs like drinking, cleaning, or fishing, which affects their health and

livelihoods.

In short, a polluted river is harmful to all living things that depend on it.

## 15. NATURAL DISASTERS

### Let's Test Your Knowledge!

#### A. Choose the Correct Answer (Page No:73)

**1. The instrument used to measure earthquakes is called a:**

- a) Barometer      b) Seismograph      c) Thermometer      d) Hydrometer

**Key:** B

**Solution:** A seismograph is a special instrument that detects and records the shaking of the ground during an earthquake.

**2. The hot molten rock that flows out of a volcano is called:**

- a) Magma      b) Lava      c) Ash      d) Crust

**Key:** B

**Solution:** Magma is molten rock inside the Earth. When it erupts and flows onto the surface, it is called lava.

**3. Tsunamis are caused by:**

- a) Heavy rainfall   b) Volcanic eruption   c) Underwater earthquake   d) Windstorm

**Key:** C

**Solution:** Tsunamis are giant sea waves most often caused by powerful underwater earthquakes that shift the ocean floor.

**4. The National Disaster Response Force (NDRF) works under:**

- a) Ministry of Health  
b) National Disaster Management Authority (NDMA)  
c) Indian Navy  
d) State Police

**Key:** B

**Solution:** The NDRF is the special force in India that conducts rescue operations during disasters, and it works under the NDMA.

**5. A long period without rainfall leading to water shortage is called:**

- a) Flood   b) Cyclone   c) Drought   d) Landslide

**Key:** C

**Solution:** A drought is a natural disaster characterized by a long period with little or no rain, leading to severe water scarcity.

#### B. True or False (Page No:73)

**1. Earthquakes are measured using a thermometer.**

**Key:** False

**Solution:** A thermometer measures temperature. Earthquakes are measured using a seismograph.

**2. Lava turns into solid rock after cooling down.**

**Key:** True

**Solution:** Yes, when the hot, liquid lava cools down, it hardens and becomes solid igneous rock.

**3. Cyclones are circular movements of high-speed winds.**

**Key:** True

**Solution:** Correct. A cyclone is a huge storm with very strong winds that move in a circular pattern around a calm center.

**4. Floods occur only because of earthquakes.**

**Key:** False

**Solution:** Floods are mainly caused by heavy rainfall, overflowing rivers, or cyclones, not by earthquakes.

**5. NDMA and NDRF help in managing disasters in India.**

**Key:** True

**Solution:** Yes, the NDMA plans for disaster management, and the NDRF is the team that carries out rescue operations.

**C. Answer the Following Questions (Page No:73)**

**1. What is a disaster?**

**Solution:** A disaster is a sudden, serious event that causes great damage, loss, and destruction to people, property, and the environment.

It is an event that overwhelms a community's ability to cope using its own resources.

**2. What causes an earthquake?**

**Solution:** Earthquakes are caused by the sudden release of energy in the Earth's crust, which makes the ground shake. This happens when tectonic plates under the Earth's surface move and collide.

The Earth's surface is made of giant plates that are always moving slowly; when they slip suddenly, it causes an earthquake.

**3. What is a tsunami and how does it occur?**

**Solution:** A tsunami is a series of enormous ocean waves. It occurs mostly due to an underwater earthquake, landslide, or volcanic eruption that displaces a large amount of water.

A big movement under the sea pushes the water upward, creating powerful waves that travel to the coast.

**4. What are the effects of floods on humans and the environment?**

**Solution:**

On Humans: Can cause drowning, spread water-borne diseases, and destroy homes and crops.

On Environment: Causes soil erosion, pollutes water sources, and damages ecosystems.

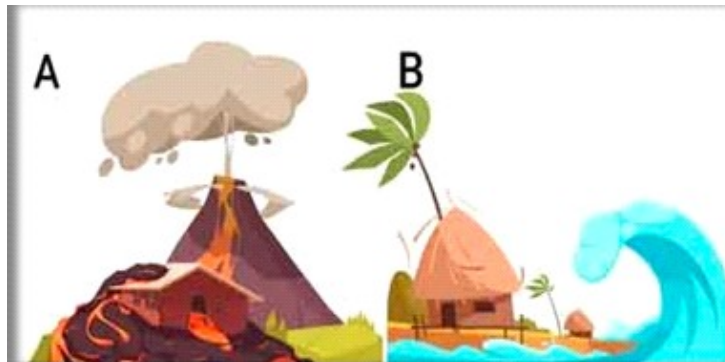
Floods damage almost everything in their path, affecting both people and nature.

**5. What is the role of a child during a disaster?**

**Solution:** A child's role is to stay calm, follow instructions from adults and teachers, help other children, and share important safety information learned in school with their family.

Children can be brave helpers by knowing what to do and listening carefully to stay safe.

**D. Picture Study (Page No:75)**



**1. What is dangerous about volcanic eruptions.**

**Solution:** Volcanic eruptions are dangerous because of:

1. Hot lava flows that burn and bury everything in their path.
2. Poisonous gases and thick ash that can make it hard to breathe and pollute the air and water.

The extreme heat, toxic smoke, and falling rocks from an eruption can destroy towns and forests and harm people's health.

**2. Describe picture A. Are they volcanoes in your country?**

**Solution:** (General description for a volcano picture) The picture shows a tall, mountain-like structure with smoke, ash, and hot lava erupting from its top. The surrounding area is covered in dark ash.

There are no active volcanoes in mainland India. The only active volcano in Indian territory is the Barren Island volcano, located in the Andaman and Nicobar Islands.