

16. NATURAL RESOURCES

Let's Test Your Knowledge!

A. Choose the Correct Answer (Page No:82)

1. Which of the following is a renewable resource?

- a) Coal b) Petroleum c) Forest d) Natural gas

Key: C

Solution: Forests are renewable because trees can be replanted and grown again within a human lifetime, unlike coal, petroleum, and natural gas which take millions of years to form.

2. What percentage of air is oxygen?

- a) 50% b) 21% c) 78% d) 10%

Key: B

Solution: The air we breathe is mainly made of nitrogen (78%) and oxygen (21%). The remaining 1% is other gases.

3. Which of the following is a non-renewable resource?

- a) Wind b) Solar energy c) Coal d) Water

Key: C

Solution: Coal is a fossil fuel that takes millions of years to form. Once used up, it cannot be replaced in a short time, making it non-renewable.

4. Who invented the diesel engine?

- a) Rudolf Diesel b) Gottlieb Daimler c) James Watt d) Henry Ford

Key: A

Solution: The diesel engine is named after its inventor, Rudolf Diesel.

5. Which component makes up the largest percentage of air?

- a) Nitrogen b) Oxygen c) Carbon dioxide d) Helium

Key: A

Solution: Nitrogen is the most abundant gas in our atmosphere, making up about 78% of the air.

B. True or False (Page No:82)

1. Air is a renewable resource.

Key: True

Solution: Yes, the gases in the air are constantly being recycled and reused in nature, so air is considered a renewable resource.

2. 97% of Earth's water is available for drinking.

Key: False

Solution: 97% of Earth's water is salt water in the oceans. Only a tiny fraction (about

3%) is fresh water, and even less is available for drinking.

3. Soil is made up of minerals, water, air, and humus.

Key: True

Solution: Correct. Soil is a mixture of weathered rock minerals, water, air, and humus (decayed organic matter).

4. Coal causes no pollution when used as fuel.

Key: False

Solution: Burning coal releases harmful gases and ash into the air, which causes a lot of air pollution.

5. Diesel is a refined form of mineral oil.

Key: True

Solution: Yes, diesel is a fuel obtained by refining crude oil (mineral oil).

C. Answer the Following Questions (Page No:82)

1. What are natural resources? Give two examples.

Solution: Natural resources are materials from nature that are useful to humans.

Examples: Water, Forests, Air, Soil, Sunlight (Any two).

These are things provided by nature that we use to meet our needs.

2. Differentiate between renewable and non-renewable resources.

Solution:

Renewable: Resources that can be replaced naturally in a short time (e.g., solar energy, wind).

Non-renewable: Resources that take millions of years to form and cannot be quickly replaced (e.g., coal, petroleum).

The key difference is the time it takes for nature to replenish them.

3. What is the composition of air?

Solution: Air is a mixture of gases: mainly Nitrogen (78%), Oxygen (21%), and small amounts of Carbon Dioxide, Argon, and other gases.

While oxygen is vital for life, nitrogen is actually the most common gas in the air.

4. Why is water considered a precious natural resource?

Solution: Water is precious because it is essential for all life forms. Only a very small amount of the Earth's water is fresh and available for drinking, farming, and industry.

Without clean, fresh water, plants, animals, and humans cannot survive.

5. Explain how coal and petroleum cause environmental pollution.

Solution: When coal and petroleum are burned in vehicles, power plants, and industries, they release harmful gases and particles. These cause air pollution, smog, and acid rain, and contribute to global warming.

The smoke from burning these fossil fuels dirties the air and harms the environment.

D. Picture Study (Page No:83)



1. What are natural resources, and why are they important?

Solution: Natural resources are materials and substances found in nature that are essential for life and human activities. They are important because they provide us with everything we need to live, such as the air we breathe, the water we drink, the food we eat, and the energy we use.

Our survival and development depend entirely on natural resources.

2. What is the difference between renewable and non-renewable resources?

Solution:

Renewable resources can be used again and again because they are replenished by nature quickly (e.g., sunlight, wind, water).

Non-renewable resources exist in limited amounts and take millions of years to form, so they can run out if used too much (e.g., coal, petroleum, natural gas).

We must use renewable resources wisely and conserve non-renewable ones because they will not last forever.