11 Nature's Treasures

A. Multiple Choice Questions.

1. Different varieties of trees provide food and shelter to
   a. Animals b. Birds c. Insects d. All of these

2. The body does not get enough _____ to perform its functions.
   a. Nitrogen b. Oxygen c. Argon d. Carbon dioxide

3. What is the percentage composition of oxygen in the air?
   a. 78% b. 11% c. 21% d. 8%

4. Which gas makes up the largest portion of air?
   a. Nitrogen b. Oxygen c. Argon d. Carbon dioxide

5. What does air contain in small quantities besides nitrogen and oxygen?
   a. Argon b. Carbon dioxide c. Hydrogen d. All of these

6. Which of the following is NOT a source of freshwater?
   a. Rivers b. Lakes c. Oceans d. Wells

7. Sun plays an important role in _____ of water.
   a. Evaporation b. Running vehicles c. Cooling water d. Cleaning water

8. What makes a firki rotate?
   a. Heat b. Gravity c. Wind d. Light

9. The important rocks are:
   a. Granite b. Sandstone c. Marble d. All of these

10. _____ helps lungs to stay healthy.
    a. Water b. Fresh air c. Lemon d. All of these

11. _____ are natural agents that help in turning and loosening the soil.
    a. Bees b. Plants c. Earthworms d. Sun

12. What is the name of the dark, rich material formed from decaying plants and animals?
    a. Soil b. Clay c. Humus d. Stone

13. What are the main agents that break down rocks to form soil?
    a. Wind, water, and ice b. Sun, water, and living organisms
    c. Plants, animals, and fungi d. Heat, pressure, and gravity

14. Which fossil fuel is mainly used for electricity generation?
    a. Petroleum b. Natural gas c. Coal d. All of these

B. Fill in the Blanks.

Rocks	Solar energy	Soil	Plant roots	Nature's Treasures
Gases	Fossil fuels	Water	India	homes, industries

1. We need _____ for our survival and for making our lives more comfortable.
2. The air which surrounds the Earth is a mixture of _____.
3. _____ is essential and precious for us.
4. _____ is blessed with numerous rivers, streams and lakes.
5. Waste from _____ and _____ pollute Water resources.
6. The energy we get from the Sun is called _____.
7. _____ is a precious treasure that supports biodiversity.
8. _____ helps hold the soil in place and prevents soil erosion.
9. _____ play a vital role in our lives.
10. _____ are found in limited quantities.

C. State true or false.

1. The air in the village is fresh and cooler than in the city. ☐
2. We cannot survive without oxygen for even a few minutes. ☐
3. Water covers two-thirds of the Earth's surface, but most of it is freshwater. ☐
4. Saline water fit for agriculture use. ☐
5. We use heat and light from the moon for various purposes. ☐
6. Forests help in preventing soil erosion. ☐
7. World Water Day is observed on 22nd March every year. ☐
8. CNG is a cleaner fuel than petrol or diesel. ☐
9. Coal and natural gas are renewable resources. ☐
10. Human activities like burning fossil fuels contribute to air pollution. ☐

D. Answer the following questions.

1. What is the composition of air?

Ans. _____

_____

2. What will happen if the amount of oxygen is increased in the air?

Ans. _____

_____

3. What are the different uses of water in daily life?
Ans. _____
_____

4. What is the primary use of solar panels?
Ans. _____
_____

5. What is soil?
Ans. _____
_____

6. What happens to trees in the Chipko Movement?
Ans. _____
_____

7. How are rocks important in construction?
Ans. _____
_____

8. Write two ways to reduce the use of fossil fuels in daily life.
Ans. _____
_____

9. What are obtained from petroleum?
Ans. _____
_____

10. What are the two types of natural resources?
Ans. _____
_____

E. Give reason.

1. Why is oxygen important for living beings?
Ans. _____
_____
_____

2. Why is ocean water not suitable for domestic use?
Ans. _____
_____
_____

3. Why is it important to conserve water?
Ans. _____
_____
_____

4. Why is the Sun considered the ultimate source of energy?
Ans. _____
_____
_____

5. Why is it difficult to regrow forests?
Ans. _____
_____
_____

F. Match the Following.

Column A	Column B	Ans.
1. Moving air	i. Water harvesting	a. ____
2. Paper pin-wheel	ii. Sunlight	b. ____
3. Methods for conserving water	iii. Nellikai	c. ____
4. Long deep holes dug in the ground	iv. Wind	d. ____
5. Helps plants prepare food	v. Trenches	e. ____
6. Indian gooseberries	vi. Firki	f. ____

G. Give One-Word Answers.

1. Name the gas in the air that is essential for human survival. :- _____
2. An area with a large number of windmills for generating electricity. :- _____
3. Name the methods an age-old practice of conserving water. :- _____
4. The main source of energy on the Earth. :- _____
5. Large areas with dense growth of various types of plants. :- _____
6. A week-long event celebrated across the country during the month of July. :- _____
7. Name the state where Chipko movement started. :- _____
8. Name the fuel which is used in jet aircraft engines. :- _____
9. Name the petroleum product used to drive heavy vehicles. :- _____
10. Name the gas produce while burning the fossil fuels. :- _____

H. Give answer in words.

1. Write the sources of Freshwater on the earth.

_____

2. Write the use of slate rock and laterite rock.

_____

3. Name some metals are extracted from minerals.

_____

4. Write some fossil fuels formed over millions of years from the remains of plants and animals.

_____

5. Write two use of Natural gas.

_____

6. Write two use of Minerals.

_____

7. Full form of LPG and CNG.

_____

8. Write some natural resources.

_____

9. Write some human-made resources.

_____

10. Write some of the important sources of renewable energy.

_____

I. Difference Between renewable resources and non-renewable resources.

Renewable resources	Non-renewable resources.

J. Circle the odd one out.

1. Nitrogen, Oxygen, Carbon dioxide, Sulphur.
2. Solar energy, Wind energy, Coal, Water.
3. Herb, Shrubs, Diesel, Forest.
4. Wood, LPG, Dung cakes, Kerosene.
5. Electric bulb, Solar panels, Wood, Refrigerator.

K. Answer the following questions in detail.

1. What are the properties of air?
Ans. _____
_____
_____

2. How is wind energy utilized?
Ans. _____
_____
_____

3. What are some ways to reduce water wastage?
Ans. _____
_____
_____

4. How does water become polluted?
Ans. _____
_____
_____

5. Explain the importance of rainwater harvesting.
Ans. _____
_____
_____

6. What role do forests play in nature?
Ans. _____
_____
_____

7. Explain Van-Mahotsav.
Ans. _____
_____
_____

8. What are fossil fuels and how are they formed?
Ans. _____
_____
_____

9. How do plants and trees contribute to the natural process of recycling in ecosystems?
Ans. _____
_____
_____

10. What are step-wells called in Rajasthan and Gujarat, and why were they built?
Ans. _____
_____

Answer

A.

1. All of these
2. Oxygen
3. 21%
4. Nitrogen
5. All of these
6. Oceans
7. Evaporation
8. Wind
9. All of these
10. Fresh air
11. Earthworms
12. Soil
13. Sun, water, and living organisms
14. Coal

B.

1. Nature's Treasures
2. gases
3. Water
4. India
5. homes, industries
6. Solar energy
7. Soil
8. Plant roots
9. Rocks
10. Fossil fuels

C.

1. True
2. True
3. False
4. False
5. False
6. True
7. True
8. True
9. False
10. True

D.

1. Air is a mixture of gases, primarily nitrogen (78%), oxygen (21%), and argon (0.9%). It also contains small amounts of carbon dioxide, water vapor, and other gases.
2. If the amount of oxygen in the air increased significantly, it could lead to rapid oxidation and combustion, making it difficult for life to survive.
3. Water is used for drinking, cooking, cleaning, bathing, agriculture, and industrial processes.
4. The primary use of solar panels is to convert sunlight into electricity.
5. Soil is a mixture of minerals, organic matter, water, and air. It is formed by the weathering of rocks and the decomposition of organic matter.
6. In the Chipko Movement, people hugged trees to prevent them from being cut down.
7. Rocks are used in construction for building houses, roads, bridges, and other structures.
8. Two ways to reduce the use of fossil fuels are by using public transportation and conserving energy.
9. Petroleum can be refined to produce gasoline, diesel, kerosene, and other products.
10. The two types of natural resources are renewable and non-renewable resources.

E.

1. Oxygen is essential for cellular respiration, a process that provides energy for living organisms.
2. Ocean water is salty and contains minerals that are harmful to humans.
3. Water is a limited resource, and it is important to conserve it to ensure its availability for future generations.
4. The Sun provides energy for almost all life on Earth, including plants, which use sunlight to produce food through photosynthesis.
5. Forests take a long time to grow, and once they are cut down, it is difficult to restore them to their original state.

F.

1. iv 2. vi 3. i 4. v 5. ii 6. iii

G.

1. oxygen
2. Wind Farm
3. Rainwater harvesting
4. Sun
5. Forests
6. Van Mahotsav
7. Uttarakhand
8. Kerosene
9. Diesel
10. carbon dioxide

H.

1. Rivers, lakes, groundwater, and rainwater.
2. slate rock: Roofing tiles, flooring tiles, and blackboards.
   laterite rock: Building materials, bricks, and tiles.
3. Iron, copper, aluminium, and gold.
4. Coal, petroleum, and natural gas.
5. Cooking, heating, and generating electricity.
6. Building materials, jewellery, and electronics.
7. LPG: Liquified Petroleum Gas, CNG: Compressed Natural Gas.
8. Air, water, soil, sunlight, wind, and forests.
9. Roads, bridges, buildings, and machines.
10. Solar energy, wind energy, hydro energy, and geothermal energy.

I.

Renewable resources	Non-renewable resources.
1. Natural resources that can be replenished in a human timescale. 2. Formed through natural processes, such as the Sun's energy and wind, that can be replenished quickly. 3. Renewable Resources are Very expensive.	1. Natural resources that cannot be replenished in a human timescale. 2. Formed through slow geological processes, such as the fossilization of plants and animals, that cannot be duplicated in a human timescale. 3. Cheap as compared to renewable resources but cost can increase over time if the resources become scarce.

J.

1. Sulphur
2. Coal
3. Diesel
4. Wood
5. Refrigerator

K.

1. Air is a mixture of gases, primarily nitrogen and oxygen. It is odorless, colorless, and tasteless. It is essential for life on Earth.
2. Wind energy is utilized by wind turbines to generate electricity. Wind turbines convert the kinetic energy of the wind into mechanical energy, which is then converted into electrical energy.
3. Ways to reduce water wastage:
   Fix leaky faucets.
   Take shorter showers.
   Collect rainwater for reuse.
   Use water-efficient appliances.
4. Water pollution can be caused by various sources, including industrial waste, agricultural run-off, and sewage. These pollutants can harm aquatic life and make water unsafe for drinking.
5. Rainwater harvesting is the collection and storage of rainwater for future use. It helps to conserve water, reduce groundwater depletion, and recharge aquifers.
6. Forests play a crucial role in maintaining ecological balance by absorbing carbon dioxide, producing oxygen, preventing soil erosion, and providing habitat for wildlife.
7. Van Mahotsav is a week-long tree-planting festival celebrated in India to promote afforestation and environmental conservation.

8. Fossil fuels are non-renewable energy sources formed from the remains of plants and animals that lived millions of years ago. They are formed under high pressure and temperature over millions of years.
9. Plants and trees play a vital role in the natural process of recycling by absorbing carbon dioxide from the atmosphere and releasing oxygen through photosynthesis. They also decompose organic matter, returning nutrients to the soil.
10. Step-wells are called "Bawadi" in Rajasthan and "Vav" in Gujarat. They were built to store water during dry seasons and to provide water for drinking, irrigation, and other purposes.