

Chapter 4

Resources

Questions and Answers

I. Choose the correct Answer:

Question 1.

Which one of the following is renewable resource?

- a) Gold
- b) Iron
- c) Petrol
- d) Solar energy

Answer:

- d) Solar energy

Question 2.

Where is the largest solar power project situated in India?

- a) Kamuthi
- b) Aralvaimozhi
- c) Muppandal
- d) Neyveli

Answer:

- a) Kamuthi

Question 3.

Which is one of the first metals known and used by man?

- a) Iron
- b) Copper
- c) Gold
- d) Silver

Answer:

- b) Copper

Question 4.

..... is one of the indispensable minerals used in electrical and electronics industry.

- a) Limestone
- b) Mica

- c) Manganese
- d) Silver

Answer:

- b) Mica

Question 5.

Electricity produced from coal is called

- a) Thermal Power
- b) Nuclear power
- c) Solar power
- d) Hydel power

Answer:

- a) Thermal Power

II. Fill in the blanks:

1. is the largest producer of hydroelectricity.

Answer:

China

2. Iron ores found at.....in Tamil Nadu.

Answer:

Kanjamalai

3.is produced from bauxite ore.

Answer:

Aluminum

4. is used in making electrical batteries.

Answer:

Manganese

5. Petroleum and its derivatives are called

Answer:

Black gold

III. Match the following:

1. Renewable resource	a) Iron
2. Metallic resource	b) Mica
3. Non-metallic resource	c) Wind energy
4. Fossil fuel	d) Sedimentary rock
5.. Limestone	e) Petroleum

Answer:

1. Renewable resource	c) Wind energy
2. Metallic resource	a) Iron
3. Non-metallic resource	b) Mica
4. Fossil fuel	e) Petroleum
5.Limestone	d) Sedimentary rock

IV. Consider the following statement and tick (✓) the appropriate answer

Question 1.

Assertion (A) : Wind power is clean energy.

Reason (R) : Wind turbines do not produce any emissions.

- a) A and R are correct and R explains A
- b) A and R are correct but R does not explain A
- c) A is incorrect but R is correct
- d) Both A and R are incorrect

Answer:

- a) A and R are correct and R explains A

Question 2.

Assertion (A) : Natural gas is found with petroleum deposits.

Reason (R) : It can be used as a domestic and industrial fuel.

- a) A and R are correct and R explains A
- b) A and R are correct but R does not explain A
- c) A is incorrect but R is correct
- d) Both A and R are incorrect

Answer:

- a) A and R are correct and R explains A

V. Answer the following:

Question 1.

Define Resource.

Answer:

The things which can be used for satisfying the human need is called resource.

Question 2.

What are the uses of iron?

Answer:

- Iron is used to make steel.
- It is usable in engineering applications such as the construction of machinery and machine tools, automobiles, large ships, structural components of buildings, bridges etc.

Question 3.

What are the major utilizers of solar energy in the world?

Answer:

India, China, Japan, Italy and the United States of America are the major utilizers of solar energy in the world.

Question 4.

Name the types of coal-based carbon content.

Answer:

Coal is classified into four types based on carbon content. They are:

1. Anthracite
2. Bituminous
3. Lignite
4. Peat.

Question 5.

Give a short note on Duralumin.

Answer:

- Duralumin is a strong, hard, lightweight alloy of aluminum widely used in aircraft construction.
- It is produced by the addition of small quantities of other metals to aluminium, it creates a superior Alloy than pure aluminium.

VI. Distinguish the following:

Question 1.

Biotic resources and abiotic resources

Answer:

Biotic resources:

1. Biotic resources are found in the biosphere which is obtained from living and organic materials.
2. Biotic resources depend on abiotic resources for their survival.
3. Example: Plants, trees, animals, microorganisms etc.

Abiotic resources :

1. Abiotic resources are the non-living parts of an environment.
2. Abiotic resources do not depend on biotic resources for their survival.
3. Example: Sunlight, temperature, water, soil, air, etc.

Question 2.

Renewable resources and non-renewable resources

Answer:

Renewable resources:

1. Renewable resources can be used again and again throughout its life.
2. These resources are present in unlimited quantity.
3. These resources are pollution-free
4. Example: Solar energy, wind energy, and hydropower.

Non-renewable resources:

1. Non-renewable resources cannot be used again and again as it is limited which can be depleted one day.
2. These resources are present in a limited quantity only.
3. These resources are not pollution-free.
4. Example: Fossil fuels, iron, copper, gold silver etc.

Question 3.

Metallic resources and non-metallic resources.

Answer:

Metallic resources:

1. Metallic resources are the types of resources that are composed of metals.

2. These are hard substances, which are good conductors of heat and electricity.
3. Examples of metallic resources are iron, copper, gold, bauxite, silver, manganese, etc.

Non-metallic resources:

1. Non-metallic resources can be described as the resources that do not comprise of metals.
2. These are not hard substances and are not good conductors of heat and electricity.
3. Examples of non-metallic resources are mica, limestone, gypsum, dolomite, phosphate, etc.

VII. Give reason:

Question 1.

Aluminium has a wide range of uses compared to other metals.

Answer:

- Aluminium is light in weight, tough and cheaper, which makes it popular metal for constructional purpose.
- It is mainly used in the construction of aircrafts, ship, automobiles, railway coaches and etc.
- So, Aluminium has wide range of use compared to other metals.

Question 2.

Water is considered a great source of energy.

Answer:

At present, water is used for producing hydroelectric power. Hydroelectricity is generated from moving water with high velocity and great falls with the help of turbines and dynamos. So water is considered a great source of energy.

VIII. Answer in a paragraph:

Question 1.

Explain the different types of renewable resources.

Answer:

Solar energy:

1. The sun produces energy in the form of heat and light. Solar energy is not harmful to the environment.

2. Photovoltaic devices or solar cells, directly convert solar energy into electricity.
3. India, China, Japan, Italy, and the States of America are major utilizers of solar energy in the world.

Hydropower:

1. Hydroelectricity power is the cheapest and most versatile source of energy out of all the know energy. Hydroelectric power is a renewable resource.
2. China, Canada, Brazil, the United States of America, Russia, India, Norway, and Japan are some countries producing hydroelectricity. China is the largest producer of hydroelectricity.

Wind energy :

1. Wind power is clean energy since wind turbines do not produce any emission.
2. In recent years, wind energy has become one of the most economical and renewable energy technologies.
3. Major wind energy-producing countries are United States, China, Germany, Spain, India, United Kingdom, Canada and Brazil.

Question 2.

Describe the non-metallic resources.

Answer:

Non-metallic resources:

1. Non-metallic resources can be described as the resources that do not comprise of metals.
2. These are not hard substances and are not good conductors of heat and electricity.
3. Examples of non-metallic resources are mica, limestone, gypsum, dolomite, phosphate, etc.

Mica:

1. Muscovite and Biotite are the common ores of Mica.
2. It is one of the indispensable minerals used in the electrical and electronics industry.
3. In powder form, it is used for making lubricating oils and decorative wallpapers.

Limestone:

1. Limestone is a sedimentary rock, composed mainly by skeletal fragments of marine organisms such as coral, foraminifera and molluscs.
2. About 10% of sedimentary rocks are limestones. Mostly limestone is made into crushed stone and used as a construction material.
3. It is used for facing stone, floor tiles, stair treads, windows sills, and many other purposes.
4. Crushed limestone is used in smelting and other metal refining process. Portland cement is made from limestone.

Question 3.

What are the different types of fossil fuel resources? Explain them.

Answer:

Fossil fuel resources:

1. Fossil fuel resources are normally formed from the remains of dead plants and animals.
2. They are often referred to as fossil fuels and are formed from hydrocarbon.

Coal:

1. This is the most abundantly found fossil fuel that forms when dead plant matter is converted into peat.
2. It is used as a domestic fuel, in industries such as iron and steel, steam engines to generate electricity.

Petroleum:

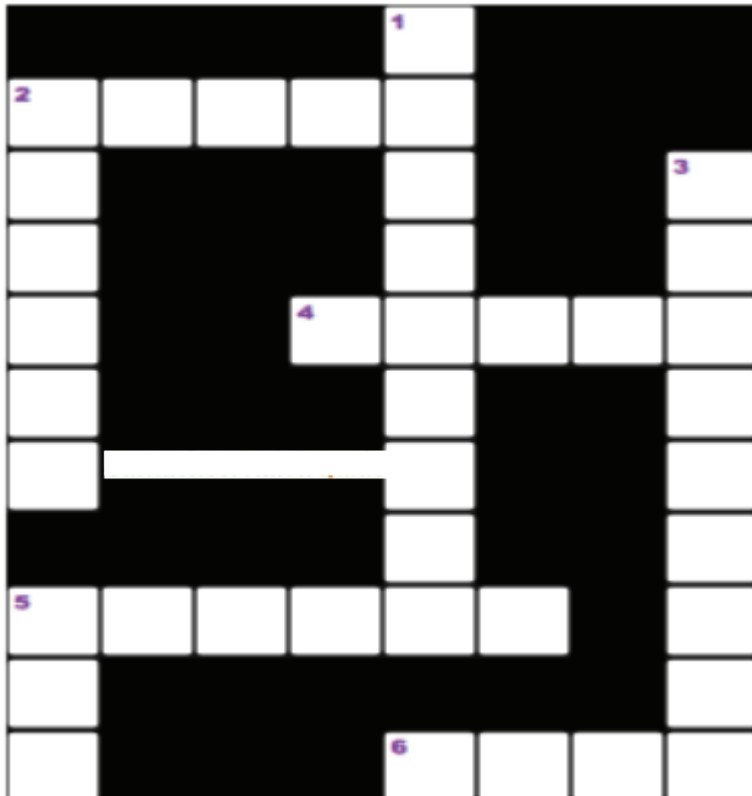
1. Petroleum is found between the layers of rocks and is drilled from oil fields located in Offshore and coastal areas.
2. Petroleum and its derivatives are called Black Gold as they are very valuable.

Natural gas:

1. Natural gas is found with petroleum deposits and is released when crude oil is brought to the surface.
2. It can be used as a domestic and industrial fuel.

IX. Activity:

2. Crossword puzzle



Across

2. The leading coal producers of the world.

Answer:

China

4. Considered as a great source of energy.

Answer:

Water

5. Precious metal like gold.

Answer:

Silver

6. Used as an insulating material in the electrical industry.

Answer:

Mica

Down

1. Used in making electrical batteries.

Answer:

Manganese

2. Good conductor of heat and electricity.

Answer:

Copper

3. The largest producer of gold in India.

Answer:

Karnataka

5 . Produces energy in the form of heat and light.

Answer:

Sun

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N				⁶ M	I	C	A

Important Questions and Answers

I. Choose the Correct Answer:

Question 1.

Bhatra Nangal Dam is situated in

- a) Punjab
- b) Hariyana
- c) Gujarat
- d) Orissa

Answer:

- a) Punjab

Question 2.

Which is the fourth most element in Earth's crust?

- a) Silica
- b) Zypsum
- c) Iron
- d) Copper

Answer:

- c) Iron

Question 3.

Aluminium is produced from which ore?

- a) Maganese
- b) mica
- c) Bauxite
- d) Anthraxite

Answer:

- c) Bauxite

Question 4.

Which is the world's leading silver producer?

- a) India
- b) Mexico
- c) South Africa
- d) Srilanka

Answer:

- b) Mexico

Question 5.

Which is steel, greyed hard, shiny and brittle metal?

- a) Manganese
- b) Mercury
- c) Silver
- d) Zinc

Answer:

a) Manganese

II. Fill in the blanks:

1. energy is not harmful to the environment.

Answer:

Solar

2. Hydroelectricity is generated from.....water.

Answer:

moving

3.resources that are once consumed and cannot be replaced.

Answer:

Non – renewable

4.is the world's number one country in the production of copper.

Answer:

Chile

5.is a rare and precious metal.

Answer:

Gold

6. field is one of the deepest mines of the world located in India.

Answer:

Kolar Gold

7. is the world's leading bauxite producer.

Answer:

Australia

8.is the world's leading producer of manganese.

Answer:

South Africa

9.and.....are the common ores of mica.

Answer:

Muscovite and Biotite

10. is the world's top producer of Mica.

Answer:

China

11. Fossil fuels are formed from.....

Answer:

hydro carbon

12.in china is the largest hydroelectricity project in the world.

Answer:

Three Gorges Dam

13. Tehri Dam is situated in in India.

Answer:

Uttarakhand

14. The leading coal producers of the world is

Answer:

China

15.energy is not harmful to the environment

Answer:

Solar

III. Match the following:

1. Mexico	a) China
2. Manganese	b) South Africa
3. Bauxite	c) Australia
4. Mica	d) Silver

Answer:

1. Mexico	b) South Africa
2. Manganese	a) China
3. Bauxite	d) Silver
4. Mica	c) Australia

IV. Consider the following statement and tick (✓) the appropriate Answer:

Question 1.

Assertion (A) : Wind Aluminum is a popular metal for construction purposes.

Reason (R) : Aluminium light in weight tough and cheaper,

- a) R is not the correct explanation of A
- b) R is the correct explanation of A
- c) A is correct and R is wrong
- d) (A) and (R) are Correct

Answer:

- b) R is the correct explanation of A

V. Answer the following:

Question 1.

What is the importance of resources?

Answer:

- Natural resources satisfy the daily needs of man such as food, clothing, and shelter.
- It also contributes to boosting up a nation's economy.

Question 2.

Name major wind farms in India.

Answer:

- Muppandal
- Jaisalmer
- Brabmanvel
- Jalgaon
- Damanjodi.

Question 3.

Which is the clean energy? Why?

Answer:

Wind power is clean energy because wind turbines do not produce any emissions.

Question 4.

Point out any 5 Hydroelectricity projects.

Answer:

1. Tehri dam
2. Srisilam Dam
3. Nagarjuna Sagar Dam
4. Sardar Sarovar Dam
5. BhakraNangalDam.

Question 5.

What is limestone?

Answer:

Limestone is a sedimentary rock composed mainly of skeletal fragments of marine organisms such as coral, foraminifera and mollusks.

VI. Distinguish the following:**Question 1.**

Differences between Manganese and Mica

Answer:**Manganese**

1. Manganese is a steel greyed, hard, shiny, and brittle metal
2. The common ores of manganese are pyrolusite Manganese Psilomelane and Rhodochrosite
3. Manganese is used in electrical batteries disinfecting liquids bleaching powder, Fertilizer, etc.
4. South Africa is the world's leading producer of Manganese

Mica:

1. Insulating soft metal
2. The common ores of mica are muscovite and Biotite
3. Mica is used in the electrical industry making lubricating oil and decorative wallpapers
4. China is the world's top producer of Mica

VII. Give reason:

Question 1.

Wind power is clean energy.

Answer:

Wind Turbines do not produce any emissions. In recent years, wind energy is one of the most economical and renewable energy technologies so wind power is clean energy.

VIII. Answer in a paragraph:

Question 1.

Classify and explain the resources based on origin.

Answer:

On the basis of origin, resources may be divided into two types. They are

1. Biotic resources
2. Abiotic resources

Biotic resources:

- Biotic resources are found in biosphere materials.
- It includes forests, crops, birds, animals, fishes, man and fossil fuels.

Abiotic resources:

- Abiotic resources that come from non-living, nonorganic material.
- Ex: land, water, air, sunlight, gold, copper, silver, etc.

Question 2.

Which is called Black Gold? Describe it.

Answer:

- Petroleum and its derivatives are called Black Gold. It is found between the layers of rocks and is drilled from oil fields located near coastal areas. It produces a variety of products like diesel, petrol, kerosene, wax, plastics, etc.
- The chief petroleum-producing countries are Saudi Arabia, Iran, Iraq, and Qatar.
- Digboi in Assam, Bombay High are the leading producers of petroleum in India.