UNIT: 1 - RESOURCES

CLASS: VII

SUBJECT: SOCIAL SCIENCE (GEOGRAPHY)

I. Choose the correct answer

1. Which one of the following is renewable resource?
   a) Gold   b) Iron   c) Petrol   **d) solar energy**

2. Where is the largest solar power project situated in India?
   a) Kamuthi   b) Aralvaimozhi   c) Muppandal   d) Neyveli

3. Which is one of the first metals known and used by man?
   a) Iron   **b) copper**   c) Gold   d) Silver

4. --------is one of the indispensable minerals used in electrical and electronics Industry.
   a) Limestone   **b) Mica**   c) Manganese   d) Silver

5. Electricity produced from coal is called---------------
   a) Thermal Power   b) Nuclear power   c) Solar power   d) Hydel power

II. Fill in the blanks

1. **China** is the largest producer of hydroelectricity.
2. Iron ores found at **Kanjamalai** in Tamil Nadu.
3. **Aluminium** is produced from bauxite ore.
4. **Manganese** is used in making electrical batteries.
5. Petroleum and its derivatives are called **Black Gold.**

III. Match the following

1. Renewable resource   -   Wind energy
2. Metallic resource   -   Iron
3. Non-metallic resource   -   Mica
4. Fossil fuel   -   Petroleum
5. Limestone   -   Sedimentary rock

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

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

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

V. Answer the following

1. Define - Resource.

Anything which can be used for satisfying the human needs is called resource.

2. What are the uses of iron?

❖ Iron is used to manufacture steel and also used in civil engineering like reinforced concrete, griders etc.

❖ It is used to make alloy steels like carbon steels with additives such as nickel, chromium, vanadium, tungsten and manganese.

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

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

4. Name the types of coal based on carbon content.

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

❖ Anthracite

❖ Bituminous

❖ Lignite

❖ Peat

5. Give a short note on Duralumin.

Duralumin is an alloy, a trade name given to the earliest types of the age hard enable aluminum alloys. It is an alloy made up of 90% aluminum, 4% copper, 1 % magnesium and 0.5% to 1 % manganese. Duralumin is a hard, but a lightweight alloy of aluminum

VI. Distinguish the following

1. Biotic resources and abiotic resources

Biotic resources	Abiotic resources
Biotic resources are found in the biosphere which are obtained from living and organic materials.	Abiotic resources are the non-living parts of an environment.
Biotic resources depend on abiotic resources for their survival.	Abiotic resources do not depend on biotic resources for their survival.
Example : Plants, trees, animals, micro organism etc.	Example : Sunlight, temperature, water, soil, air, etc.

2. Renewable resources and non-renewable resources

Renewable resources	Non-renewable resources
Renewable resources can be used again and again throughout its life.	Non-renewable resources cannot be used again and again as it is limited which can be depleted one day.
These resources are present in unlimited quantity.	These resources are present in a limited quantity only.
These resources are pollution free.	These resources are not pollution free.
Example: Solar energy, wind energy and hydropower.	Example: Fossil fuels, iron, copper, gold silver etc.

3. Metallic resources and non-metallic resources

Metallic resources	Non-metallic resources
Metallic resources are the types of resources that are composed of metals.	Non-metallic resources can be described as the resources that do not comprise of metals.
These are hard substances, which are the good conductors of heat and electricity.	These resources are present in a limited quantity only.

These resources are pollution free.	These are not hard substances and are not good conductors of heat and electricity.
Example for metallic resources are iron, copper, gold, bauxite, silver, manganese, etc.	Example for non-metallic resources are mica, limestone, gypsum, dolomite, phosphate, etc.

VII. Give reason

1. **Aluminum has wide range of uses compared to other metals.**

   - ❖ 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.

2. **Water is considered as a great source of energy.**
   - ❖ 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 as a great source of energy.

VIII. Answer in a paragraph

1. **Explain the different types of renewable resources.**

Solar energy:
   - ❖ The sun produces energy in the form of heat and light. Solar energy is not harmful to the environment.
   - ❖ Photovoltaic devices or solar cells, directly convert solar energy into electricity.
   - ❖ India, China, Japan, Italy and States of America are major utilizers of solar energy in the world.

Hydropower:
   - ❖ Hydroelectricity power is the cheapest and most versatile source of energy out of all the know energy.
   - ❖ Hydroelectric power is a renewable resource.

- ❖ China, Canada, Brazil, United States of America, Russia, India, Norway and Japan are some countries producing hydroelectricity. China is the largest producer of hydro-electricity.

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

2. Describe the non-metallic resources.

Non – Metallic resources:
- ❖ Non-metallic resources can be described as the resources that do not comprise of metals.
- ❖ These are not hard substances, and are not good conductors of heat and electricity.
- ❖ Example for non-metallic resources are mica, limestone, gypsum, dolomite, phosphate, etc.

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

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

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

Fossil fuel resources:

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

Coal:

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

Petroleum:

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

Natural gas:

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