

## Chapter 3: Minerals and Power Resources

**Question 1:** Answer the following questions.

(i) Name any three common minerals used by you every day.

**Answer:** The three common minerals used by us everyday are:

- Copper in coins and pipes.
- Salts in our food.
- Iron in furniture.

(ii) What is an ore? Where are the ores of metallic minerals generally located?

**Answer:** Ores are those rock from which minerals are extracted or obtained. The ores of metallic minerals are located in igneous and metamorphic rocks formations.

(iii) Name two regions rich in natural gas resources.

**Answer:** The two regions rich in natural gas resources are :-

- Netherlands
- Russia

(iv) Which sources of energy would you suggest for  
(a) rural areas (b) coastal areas (c) Arid regions

**Answer:**

Rural areas :Coal and firewood should be used in rural areas because it is easily available and it can be used for large number of people.

Coastal areas :Wind Energy and Hydel power should be used in coastal areas because they are non polluting and it promotes irrigation and fishing and it is cheap.

Arid regions: Geothermal and solar energy should be used in arid regions.

(v) Give five ways in which you can save energy at home.

**Answer:** The five ways in which we can save energy at home are :

1. We can convert all the organic waste such as dead plant, animal material, animal dung and kitchen waste into a gaseous fuel called biogas.
2. We can use compressed natural gas other than petroleum and diesel because it is eco friendly automobile fuel and it causes less pollution.
3. Switching off all the electrical appliances like lights, fans ; when not in use.
4. Check if there is not any leakage of water in the house.
5. Using pressure cookers for cooking.

**Question 2:** Tick the correct answer.

(i) Which one of the following is NOT a characteristic of minerals?

(a) They are created by natural processes.

(b) They have a definite chemical composition.

(c) They are inexhaustible.

(d) Their distribution is uneven.

(ii) Which one of the following is NOT a producer of mica?

(a) Jharkhand

(b) Karnataka

(c) Rajasthan

(d) Andhra Pradesh

**(iii) Which one of the following is a leading producer of copper in the world?**

(a) Bolivia

(b) Ghana

(c) Chile

(d) Zimbabwe

**(iv) Which one of the following practices will NOT conserve LPG in your kitchen.**

(a) Soaking the dal for some time before cooking it.

(b) Cooking food in a pressure cooker.

(c) Keeping the vegetables chopped before lighting the gas for cooking.

(d) Cooking food in an open pan kept on low flame.

**Answer :-**

(i) (c) They are inexhaustible.

(ii) (b) Karnataka

(iii) (c) Chile

(iv) (d) Cooking food in an open pan kept on low flame.

**Question 3: Give reasons.**

**(i) Environmental aspects must be carefully looked into before building huge dams.**

**Answer :-** Environmental aspects must be carefully looked into before building huge dams because of the following reasons :-

- Large scale destruction of natural vegetation and wildlife.
- Destroys ecology of that area.
- Displaces villagers to other place.
- A large scale deforestation.
- Flood and Earthquakes threats.
- Affects the balance of the ecosystem.

**(ii) Most industries are concentrated around coal mines.**

**Answer :-** Coal is the most abundantly found fossil fuel. It is used as a domestic fuel, in industries, steam engines and to generate electricity. Most industries are built around coal mines so that the cost of transportation is reduced and fuel is easily available.

**(iii) Petroleum is referred to as "black gold".**

**Answer :-** Petroleum is referred to as Black gold because it is very valuable. The refineries process the crude oil and produce a variety of products like diesel, petrol, kerosene, wax, plastics and lubricants.

**(iv) Quarrying can become a major environmental concern.**

**Answer :-** Quarrying is one of the methods of extraction of minerals. Minerals that lie near the surface are simply dug out in quarrying. It affects the land, soil and natural vegetation of that area.

**Question 4: Distinguish between the followings.**

**(i) Conventional and non conventional sources of energy**

Conventional source of energy	Non conventional source of energy:
Conventional source of energy are those which are being used from a long period of time.	Non conventional source of energy are those which are not being commonly used..
Examples are fire Woods and fossil fuels.	Examples are solar energy tidal energy wind energy nuclear energy and biogas.
They causes environmental pollution.	They are environment friendly.

### (ii) Biogas and natural gas

Biogas	Natural gas
It is obtained from the decomposition of organic waste.	It is obtained from the extraction of petroleum.
It is a non-conventional source of energy	It is a conventional source of energy
It is easily available.	It is not easily available.
It is a renewable source.	It is a non renewable source.

### (iii) Ferrous and nonferrous minerals

Ferrous mineral	Non-ferrous minerals
Ferrous minerals are those which contain iron in them.	Non-ferrous minerals do not contain iron in them.
Examples:- iron ore, manganese and chromite	Example:- Limestone

### (iv) Metallic and nonmetallic minerals

Metallic minerals	Non-metallic minerals
Metallic minerals contain metals in the raw form.	They do not contain metals.
Examples:- iron ore, bauxite, manganese ore	Examples:- limestone mica and gypsum.

#### Intext Questions:

**Question :** Identify the Canadian Shield, the Appalachians, Western Cordilleras and Lake Superior with the help of an atlas.

**Answer :-**



**Question :** List uses of any five minerals.

**Answer :-**

1. Copper is a common metal throughout the world. It is used for currency, jewelry, plumbing and to conduct electricity.
2. Gold is the most familiar metal to most people. It is used for jewelry, dentistry, electronics and a host of other applications.
3. Gypsum is a very soft mineral with a variety of uses, most commonly in drywall, also known as sheet rock. It is also used as a fertilizer and road construction.
4. Iron Ore is used in all sorts of construction from vehicles to buildings.
5. Quartz is used in concrete, glass, scientific instruments and watches.