

(c) Distinguish between the following pairs.

(1) Ferrous and non-Ferrous Minerals

<u>Ans:</u>	<u>Ferrous Mineral</u>	<u>Non-Ferrous Minerals</u>
①	Ferrous minerals contains iron-like elements.	① Non-ferrous minerals do not contain iron-like elements, but contain some other metals.
②	Examples: Manganese and chromite	② Examples: Aluminium, copper, lead, tin, gold, silver

(2.) Metallic and Non-Metallic minerals.

<u>Ans</u>	<u>Metallic Minerals</u>	<u>Non-Metallic Mineral</u>
①	Metallic minerals contain metal in raw form.	① the Non-metallic do not contain metals.
	examples: iron ore, Bauxite and manganese	examples: Mica, gypsum and limestone.

(3) Conventional and Non-Conventional sources of energy

Ans

Conventional

① Conventional sources of energy are those which have been used for a long time.

② they are exhaustible or non-renewable.

examples: Coal, petroleum, Natural gas, firewood and hydel power.

Non-Conventional

① Non-Conventional sources of energy are solar energy, wind energy, tidal energy, biogas and geothermal.

② they are inexhaustible and renewable.

(E) Answer the questions in about 20-30 words

(1) Define mineral. How is it different from an ore?

Ans: Minerals are naturally occurring inorganic substances, which consist of one or more elements, while the ore is a large concentration of a particular mineral in a rock.

(2) List out the different uses of natural gas.

Ans:- Uses of natural gas are as follows:

- (1) It is used as domestic fuel and to
- (2) It is used to generate electricity.
- (3) It is a source of energy for the industries
- (4) It is used as a transport fuel (CNG).

③ what are the different types of coal found in the world.

Ans:- There are four main types of coal found in the world and they are: (i) Anthracite (ii) Bituminous (iii) Lignite (iv) Peat

④ write a note on conservation of mineral resources.

Ans:- All minerals and conventional sources of energy are exhaustible, once they are consumed. They cannot be replaced or renewed. Therefore, planned utilisation of these resources is important, so that we have sufficient supplies for future generations. We should utilise suitable substitutes and alternatives to conserve minerals.

⑤ Give two uses of copper.

Ans:- Uses of copper:-

- (a) It is largely used for making wires in the electrical industry due to its property of electrical conductivity.
- (b) It is also used for making utensils and alloys like brass, bronze and German silver.

(F) Answer the questions in about 50-60 words.

(1) Discuss the advantages and disadvantages of hydro power plants.

Ans:- The advantages and disadvantages of hydro power plants are listed below:-

→ Advantages :- (a) It is a clean, ~~bi~~ non-polluting source of energy which gives electricity at a much cheaper cost than other sources.

(b) 20% of the world's electricity comes from hydel power.

→ Disadvantages:

(a) It has higher initial costs of construction

(b) Limited Reservoirs or limited availability

(c) These hydel plants have environmental impact.

(2) Why are bituminous and anthracite considered to be very good quality coal? Also, why is coal an important industrial resource?

Ans: Bituminous and anthracite are considered to be very good quality coal because they have more than 70% carbon content in it. Coal is an important industrial resource due to its fuel used properties, in industries for making steel and iron and also used in generating electricity. Coal is used in the chemical industry.

3) 'Solar Energy' is the most abundant source of energy? Give your comments.

Ans:- Yes, Solar energy is the most abundant source of energy. Because the main source of this energy is the sun, and the sun is available for many upcoming years. Each day the earth receives so much amount of energy from the sun which equals to 30 years of the combined fossil fuel energy usage. Sun is always available and there is a big area of insulation available for solar panels to soak up even in the cloudy days.

(4) why is mining limited to the sites where minerals are found?
Explain the different ways of mineral extraction.

Ans:

Mining limited to the sites where minerals are found because it depends on sufficient concentration of the ore, easy accessibility of the area and availability of the required technology.

→ there are three different ways of mineral extraction:

(a) Open pit mine:

when a mineral ore is located close to the earth's surface, it is taken out by removing the surface layer. this is called an open pit mine.

(b) Shaft Mine: when mineral deposits occur under the earth's surface, a deep hole called a shaft, has to be dug to reach them; called shaft mine.

(c) Deep wells: oil and natural gas are extracted from deep well, which are made by drilling into the earth.

Ques: (5) why does wind energy have tremendous potential for development in Gujarat, Maharashtra, Tamil Nadu, and Odisha?

Ans:- Gujarat, Maharashtra, Tamil Nadu and Odisha have great potential for wind energy development because of their proximity to the sea and good air pressure.

→ Here are some other reasons why wind energy has potential in these states:

(1) There is consistent wind flow in these areas