Answer the following questions:

1. Name any three common minerals used by you everyday.

Ans: Salt, Gold and Copper are common minerals used everyday.

2. What is an ore? Where are the ores of metallic minerals generally located?

Ans: Rocks from which minerals are mined are known as ores. The ores of metallic minerals are generally located in igneous and metamorphic rocks.

3. Name two regions rich in natural gas resources.

Ans: Russia, Norway, UK and Netherlands are the major regions rich in natural gas.

4. Which sources of energy would you suggest for
   (a) rural areas- Biogas
   (b) coastal areas- Tidal energy
   (c) Arid regions- wind and solar energy
5. Give five ways in which you can save energy at home.

Ans: Five ways in which energy can be saved at home:

- switching off lights fans and other electrical appliances when not in use.
- Using energy efficient devices such as LED bulbs and tubes.
- Using energy efficiently while cooking.
- Unplugging electrical devices when not in use.
- By checking to it that electrical devices are operating efficiently, such as defrosting refrigerator regularly.

Give reasons

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

- Dams create imbalance in the earth equilibrium.
- Deforestation leads to environmental pollution.
- People become displaced
- Cities/villages/towns may required shifting causing lot of hardship for the people.
- Earthquake threats.

2. Coal is used as a source of energy and raw material in many industries. To reduce the transportation cost **most of of the industries are concentrated around coal mines.**
3. **Petroleum is referred to as Black gold because** it is black in colour in the crude form and its derivatives are extremely valuable as petroleum itself. Today it is almost inevitable in our day to day life. A variety of products like kerosene, diesel, petrol, wax, plastics, lubricants etc. are produced from these mineral resources.
4. **Quarrying can become a major environmental concern** because of the following reasons:

- It may destroy the humus of soil which is much required for the growth of plants and crops.
- It produces a lot of noise pollution due to use of explosives at times in order to break the huge chunks of rocks.
- In the process of quarrying lot of dust is generated which causes air pollution and also occupational hazards.
- Blasting done in the process of quarrying generate vibration which damage in the nearby buildings, dams or any other similar structure.

Distinguish between the following: i.)conventional and nonconventional sources of energy

Conventional sources of energy

- Conventional sources of energy are traditional sources of energy which have been used commonly for long time.
- They are generally exhaustible.
- They creates pollution.
- Examples are fossil fuels, fire wood.

Non conventional sources of energy

- They are non traditional sources of energy and not used commonly.
- Generally they are inexhaustible.
- They are non polluting.
- Examples are solar energy, wind energy, nuclear energy.

ii) Biogas and Natural gas

Biogas

- The gas which formed by using organic wastes such as dead plant and animal matter, animal dung and kitchen waste.
- It is non conventional sources of energy.
- These are easily available, especially in rural areas.
- Biogas is polluting. It causes greenhouse effect as it releases carbon dioxide.
- It is used as a domestic fuel for cooking and lighting.

Natural gas

- Natural gas generally found along with Petroleum and gets released when crude oil is brought to the surface.
- It is conventional sources of energy.
- It is not easily available. Very few countries have sufficient natural gas reserves of their own.
- It is cleaner fuel.
- It is used as a domestic as well as an industrial fuel.

iii.) Ferrous and nonferrous minerals

Ferrous mineral

- A metallic mineral that contains iron. example: iron ore, manganese.

Non ferrous mineral

- A metallic mineral that does not contain iron. Example: gold, silver.

Iv.) Metallic and non-metallic minerals

Metallic minerals

- A mineral containing metal in a raw form is called metallic mineral.
- Example: bauxite, iron ore.

Non metallic minerals

- A mineral does not containing metal is known as non metallic mineral.
- Example: limestone, gypsum.