

Mineral and Power Resources

Q1. Answer the following questions.

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

Answer: Salt, gold and copper are the three common minerals used every day.

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

Answer: The rocks from which the minerals are derived are known as ores. Some are found in igneous rocks, some in metamorphic rocks while others occur in sedimentary rocks. Ores of metallic minerals are found in igneous and metamorphic rock.

Structures that form large plateaus.

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

Answer: The major producers of natural gas are The United Kingdom and the Netherlands.

(iv) Which sources of energy would you suggest for,

- (a) Rural areas
- (b) Coastal areas
- (c) Arid regions?

Answer:

- (a) Coal, solar energy, biogas and firewood can be used as sources of energy in rural areas.
- (b) Wind energy, petroleum and tidal power can be used in coastal areas.
- (c) In arid regions geothermal power and solar energy are best suited to use.

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

Answer:

1. Turn off the lights, TV and fans when not in use.
2. Turn off the tap properly so that it does not drip
3. Use pressure cooker for cooking
4. Prefer walking or cycling for short distances
5. Use refrigerators, air conditioners and lifts sparingly.

Q2. 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.

Answer: C they are inexhaustible

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

- (a) Bolivia
- (b) Ghana
- (c) Zimbabwe
- (d) Chile

Answer: D Chile

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

- (a) Cooking food in an open pan kept on low flame.
- (b) Soaking the dal for some time before cooking it.
- (c) Cooking food in a pressure cooker.
- (d) Keeping the vegetables chopped before lighting the gas for cooking.

Answer: A Cooking food in an open pan kept on low flame

Q3. Give reasons.

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

Answer: The construction of a huge dam causes large-scale destruction of natural vegetation and wildlife in areas that are submerged. This is not good for the ecosystem. Therefore, the environment Aspects must be carefully observed before construction of huge dams.

(ii) Most industries are concentrated around coal mines.

Answer: Coal is used as a source of energy and power and is also used as a raw material in most industries.

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

Answer: Petroleum is called "black gold", as it is black in color in crude form and derivatives, are extremely valuable as petroleum.

(iv) Quarrying can become a major environmental concern.

Answer: Excavation causes many problems. Fine dust particles spread into the air around a mine site. Dust particles from the mine can cause respiratory problems. Excavation also destroys natural vegetation and thus becomes home to many wild animals.

Q4. Distinguish between the following.

(i) Conventional and non-conventional sources of energy

Answer: Conventional sources of energy are those that have been in common use for a long time. The two main conventional energy sources are Firewood and fossil fuels. Whereas, non- conventional sources of energy are very ordered forms of energy used in modern times. Use of renewable energy sources such as organic waste, sorghum and wind power.

(ii) Biogas and natural gas

Answer: Biogas produced from the conversion of organic waste such as dead plant and animal material, animal dung and kitchen waste is called biogas. Biogas is a mixture of methane And produces a large amount of carbon dioxide and organic manure each year. Whereas, natural gas When crude oil is brought to the surface it is extracted with petroleum deposits.

(iii) Ferrous and nonferrous minerals

Answer: Iron minerals contain iron such as iron ore, manganese and chromites, on the other hand non-ferrous minerals do not contain iron such as gold, silver, copper or lead.

(iv) Metallic and nonmetallic minerals

Answer: Metallic minerals contain bauxite metal in crude form, some examples of manganese. Metallic Minerals. Non-metallic minerals do not contain metals such as limestone, mica and gypsum.