

BCM SCHOOL BASANT AVENUE LUDHIANA
CLASS - X SUBJECT - SOCIAL SCIENCE
Practice Assignment
Answer Key

Chapter - Minerals and Energy Resources

1. Assertion–Reason:

A: Minerals are exhaustible resources.

R: They take millions of years to form and cannot be renewed in a short time.

- a) Both A and R true, and R explains A
- b) Both A and R true, but R does not explain A
- c) A true, R false
- d) A false, R true

Answer: (a) Both A and R are true, and R explains A.

2. Which one of the following combinations is incorrectly matched?

- a) Balaghat – Manganese
- b) Zawar – Lead and Zinc
- c) Khetri – Copper
- d) Mayurbhanj – Bauxite

Answer: (d) Mayurbhanj – Bauxite

3. Choose Odd one out:

- a) Copper b). Bauxite
- c) Limestone d) Iron ore

Answer: (c) Limestone

4. How is energy a basic requirement for economic development? Explain.

Answer: Energy is essential for economic development because it powers industries, transportation, agriculture, and domestic needs. It enables the operation of machines, manufacturing of goods, and overall economic activities. Without adequate energy, industrial growth and modernization cannot take place, slowing down a country's development.

5. A rural village in Rajasthan depends mainly on cattle dung and wood for energy.

Assess how the introduction of a biogas plant would affect agricultural productivity, household health, and local ecology.

Answer: The introduction of a biogas plant in the rural village would have multiple positive impacts:

1. Agricultural Productivity:

The slurry left after biogas production is a rich organic manure that improves soil fertility and increases crop yield.

2. Household Health:

Biogas provides clean fuel for cooking, reducing smoke and indoor air pollution, thus preventing respiratory diseases among women and children.

3. Local Ecology:

It reduces the cutting of trees for firewood and prevents deforestation, helping conserve the environment and maintain ecological balance.

6. Minerals take millions of years to form. Explain why exploring new reserves alone cannot ensure their long-term availability. Suggest three measures to conserve mineral resources in India.

Answer: Three Conservation Measures:

Recycling: Reuse metals like iron, copper, and aluminium.

Substitution: Use alternative materials or advanced technology to reduce mineral use.

Sustainable Mining: Adopt regulated, eco-friendly mining to minimize wastage and environmental damage.

7. SOURCE BASED QUESTION

Conventional energy sources such as coal, petroleum, and natural gas are limited and non-renewable. Overuse has caused depletion and pollution. Non-conventional sources like solar, wind, geothermal, and tidal energy are cleaner and renewable. India is investing in non-conventional energy to ensure sustainable development.

Qi. What do you mean by conventional sources of energy?

Answer: Conventional sources of energy are those which have been in common use for a long time, such as coal, petroleum, and natural gas. They are non-renewable and can get exhausted with continuous use. (1 mark)

Qii. Why is there a shift from conventional to non-conventional sources of energy?

Answer: There is a shift because conventional sources are depleting rapidly and causing environmental pollution, whereas non-conventional sources are renewable, cleaner, and eco-friendly. (1 mark)

Qiii. How can the use of non-conventional sources help India achieve sustainable development?

Answer: Non-conventional energy sources reduce dependence on fossil fuels, minimize pollution, and ensure a continuous supply of energy for future generations — promoting economic growth without harming the environment. (2 mark)