

Minerals and Energy Resources

Assertion & Reason Type Questions

In the following questions given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and choose the correct option:

- a. Both Assertion (A) and Reason (R) are correct and Reason (R) is the correct explanation of Assertion (A).
- b. Both Assertion (A) and Reason (R) are correct, but Reason (R) is not the correct explanation of Assertion (A).
- c. Assertion (A) is true, but Reason (R) is false.
- d. Assertion (A) is false, but Reason (R) is true.

Q 1. Assertion (A): Geological processes of mineral formation is slow.

Reason (R): Mineral resources are consumed very quickly than they are formed.

Answer : B

Q 2. Assertion (A): Minerals have wide range of colours, hardness, crystal forms and lustre.

Reason (R): Minerals are formed under different physical and chemical conditions.

Answer : A

Q 3. Assertion (A): India is fortunate to have fairly rich and varied mineral resources.

Reason (R): These variations exist largely because of the differences in the geological structure, processes and time involved in the formation of minerals.

Answer : B

Q 4. Assertion (A): Iron ore is the basic mineral and backbone of India.

Reason (R): India is rich in good quality iron ore.

Answer : A

Q 5. Assertion (A): Consumption of energy in all forms has been declining all over the country.

Reason (R): Implementation of economic development plans necessarily require increasing amounts of energy to remain operational.

Answer : D

Q 6. Assertion (A): The energy resources need to be conserved.

Reason (R): The energy resources are being rapidly depleted.

Answer : A

Q 7. Assertion (A): Promotion of energy conservation and increased use of renewable energy sources are the twin planks of sustainable energy.

Reason (R): Energy is a basic requirement for economic development.

Answer : B

Q 8. Assertion (A): Natural gas is considered an environment friendly fuel.

Reason (R): Natural gas is a clean source of energy and has low carbon emission.

Answer : A

Q 9. Assertion (A): Petroleum is the second highest energy source used in India after coal.

Reason (R): Natural occurrence of petroleum in India is associated with anticlines and fault traps of tertiary rocks.

Answer : B

Q 10. Assertion (A): Solar energy has a bright future in India.

Reason (R): It is easy to establish solar plants in urban and rural areas.

Answer : A

Q.11. Assertion (A) : Uses of iron brought a radical change in human life.

Reason (R) : Different kinds of tools were invented by using minerals

Q.12. Assertion (A) : Mining activity is often called a “Killer Industry”.

Reason (R) : Mining helps in agriculture.

Q.13. Assertion (A) : Iron ore is the basic mineral and the backbone of India.

Reason (R) : India is rich in good quality Iron ore.

Q.14. Assertion (A) : Mica is a metallic mineral.

Reason (R) : Mica mineral is the basic raw material for cement industry

Q.15. Assertion (A) : Minerals are an indispensable part of our lives.

Reason (R) : Minerals have a universal use, they are used to manufacture everything we use in our day to day lives.

Q.16. Assertion (A) : Geological processes of mineral formation is slow

Reason (R) : Minerals resources are consumed way quickly than they are formed.

Q.17. Assertion (A) : Thermal power stations are located on or near the coalfields.

Reason (R) : Coal is a bulky material, which loses weight on use as it is reduced to ash. Hence, heavy industries and thermal power stations are located on or near the coalfields.

Q.18. Assertion (A) : Natural gas is referred as an environment friendly fuel.

Reason (R) : Natural gas contains low carbon dioxide emissions.

Q.19. Assertion (A) : Increased use of fossil fuels creates a healthy environment.

Reason (R) : Fossil fuels such as coal, oil and gas are easily obtained from natural resource.

Q.20. Assertion (A) : Conservation of Energy Resources is essential.

Reason (R) : Energy is a basic requirement for economic development.

ANSWER KEY 11 to 20

Q.11 : (a) Both assertion and reason are true and reason is the correct explanation of assertion. Revolution in agriculture-different type of tools invented like axe, hook, plough etc., revolution in industry-different tools and machines like spinning and also revolution in transportation- bullock- cart, ships, boats etc brought a radical change in human life

Q.12 : (c) Assertion is true but reason is false. Mining is a source a deforestation, high risk is involved, water sources get contaminated and mining doesn't help in agriculture.

Q.13 : (a) Both assertion and reason are true and reason is the correct explanation of assertion. Iron ore is the basic mineral and the backbone of industrial development.



India is rich in good quality iron ores. Iron ore is exported largely from India, however the reason does not justify the assertion.

Q.14 : (d) Both assertion and reason are false. Mica is a mineral made up of a series of plates or leaves. It is a non-metallic mineral and it is used in electric and electronic industries.

Q.15 : (a) Both assertion and reason are true and reason is the correct explanation of assertion. Minerals are found in varied forms in nature. Even the food that we eat contains minerals. Almost everything we use, from a tiny pinto a towering building or a big ship, all are made from minerals.

Q.16 : (b) Both assertion and reason are true but reason is not the correct explanation of assertion. Mineral formation is slow as it requires millions of years to be created but are used very quickly in comparison.

Q.17 : (a) Both assertion and reason are true and reason is the correct explanation of assertion. The reason justifies the assertion.

Q.18 : (a) Both assertion and reason are true and reason is the correct explanation of assertion. Natural gas is considered an environment friendly fuel because of low carbon dioxide Emissions.

Q.19 : (d) Both assertion and reason are false. Increased use of fossil fuels causes serious environmental problems. Hence, there is a pressing need to use renewable energy sources like solar energy, wind, tide, biomass and energy from waste material.

Q.20 : (a) Both assertion and reason are true and reason is the correct explanation of assertion. Energy saved is energy produced, the economic development plans implemented since Independence necessarily required increasing amounts of energy to remain operational.