## Chapter - 5

# **Minerals and Energy Resources**

### (Assertion and Reason Questions)

# In the following questions, a statement of assertion is followed by a statement of reason. Mark the correct choice as:

- **(a)** If Both assertion and reason are true and reason is the correct explanation of assertion.
- **(b)** If Both assertion and reason are true but reason is not the correct explanation of assertion.
- **(c)** If Assertion is true but reason is false.
- **(d)** If Both assertion and reason are false.
- **Q.1. Assertion (A):** Uses of iron brought a radical change in human life.

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

Q.2. Assertion (A): Mining activity is often called a "Killer Industry".

**Reason (R):** Mining helps in agriculture.

**Q.3**. **Assertion (A)**: Iron ore is the basic mineral and the backbone of India.

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

**Q.4**. **Assertion (A)**: Mica is a metallic mineral.

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

**Q.5**. **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.6. Assertion (A): Geological processes of mineral formation is slow

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

**Q.7**. **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.8**. **Assertion (A)**: Natural gas is referred as an environment friendly fuel.

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

**Q.9**. **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.10**. **Assertion (A)**: Conservation of Energy Resources is essential.

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

-X-X-X-

#### ANSWER KEY

- **Q.1**: (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.2**: (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.3**: (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.4**: (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.5**: (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.6**: (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.7**: (a) Both assertion and reason are true and reason is the correct explanation of assertion. The reason justifies the assertion.
- **Q.8**: (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.9**: (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.10**: (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.