

Ashwattan Geo Notes ;)

Q.1- What is the importance of minerals in our lives?

- Minerals are an indispensable part of our lives
- Almost everything we use, from a tiny pin to a towering building or a big ship, that are all made from minerals.
- The railway lines and the tarmac (paving) of the roads, too are made from minerals.
- Cars, buses, trains, aeroplanes are manufactured from minerals and run on power resources derived from the Earth.

Q.2- What is the need for conservation of minerals?

- We are rapidly consuming mineral resources that require millions of years to be created and concentrated.
- The geological processes of mineral formation are so slow that rates of replenishment are infinitely small in comparison to its consumption.
- Continued extraction of ores leads to increasing costs as mineral extraction comes from greater depths along with decrease in quality

Mineral resources are therefore, finite and non-renewable.

Q.3- How can minerals be conserved?

- We must make use of minerals in a planned and sustainable manner.
- Improved technologies need to be constantly evolved to allow the use of low grade ores at low cost.
- Recycling of metals, using scrap metals and other substitutes are steps in conserving ore mineral resources for the future.

Q.4- What is the importance of Ferrous metals?

- They account for about three-fourth of the total value of the production of metallic minerals.
- They provide a strong base for the development of metallurgical industries.
- India also exports substantial quantities of Ferrous minerals after meeting the internal demands.

Q.5- What types of iron ores are found in India? 😊

- Magnetite- It is the finest iron ore with a very high content of iron upto 70%. It has excellent magnetic qualities and is valuable in the electrical industry.
- Hematite- It is the most important industrial iron ore in terms of the quantity used but has a slightly lower iron content than magnetite i.e., 50%

Q.6- What are the various uses of petroleum? 😞

- Petroleum or mineral oil is the next major energy resource in India after coal.
- It provides fuel for heat and lighting, lubricants for machinery and raw materials for a number of manufacturing industries.
- Petroleum refineries act as a nodal industry for synthetic textile, fertilizer and numerous chemical industries.

Q.7- Give a brief description of the HVJ pipeline.

- The 1700 KM long Hazira- Vijaipur- Jagdishpur cross country gas pipeline links Mumbai high with fertilizer, power and industry complexes in western and northern India.
- This artery has provided an impetus to India's gas production.
- The power and fertilizer industries are the key users of natural gas.

Q.8- How is nuclear energy or atomic energy produced?