

SHORT ANSWER TYPE QUESTIONS

Question 1. Name and describe briefly methods of extraction. Answer: Mining, drilling and quarrying are methods of extraction. Mining is a process of extraction of taking out minerals from rocks under the earth's surface.

- 1. Open cast mining: In this, minerals lying at shallow depths are taken out by removing the surface layer.
- 2. Shaft mining: In this, deep bores (called shafts) are made to reach mineral deposits lying at large depths.
- 3. Drilling: In this, deep wells are bored to take out minerals.
- 4. Quarrying: It is the process of extraction in which minerals lying veiy close to the surface are extracted just by digging them out.

Question 2. Where are minerals found?

Answer: Minerals are found in different types of rocks. Metallic minerals are usually found in igneous and metamorphic rocks that form large plateaus. Examples: iron ore is found in north Sweden, copper and nickel in Canada. In igneous and metamorphic rocks in South Africa, iron, nickel, chromites and platinum are found. Nonmetallic minerals are found in sedimentary rock formations. Limestone deposits are found in France. Mineral fuels such as coal and petroleum are found in sedimentary strata.

Question 3. Describe the mineral distribution in North America. Answer: The mineral deposits in North America are found in three zones: the Canadian region in the north of the Great Lakes, the Appalachian region and the Rocky Mountains in the West. Iron ore, nickel, gold, uranium and copper are mined in the Canadian Shield Region, coal in the Appalachian region. Western Cordilleras have vast deposits of copper, lead, zinc, gold and silver.

Question 4. Write common uses of minerals.

Answer: Minerals are important in many industries. Minerals used in gems are usually very hard. These are then set in varying styles of jewellery. Iron and copper are metals used in almost everything. Copper is present in everything from coins to pipes and electricity wires. Silicon, obtained from the mineral quartz, is the base of computer industry. Aluminium, obtained from bauxite ore, and its alloys are used in aeroplanes due to their light weight. Aluminium is also used in kitchen cookware.

Question 5. How is hydroelectricity, produced?

Answer: Hydroelectricity is produced from the energy possessed by water falling from great heights. River water is stored in dams. When rain water or river water falls from heights, it flows over turbine blades placed at the bottom of the dam. The moving blades are connected to a generator which produces electricity from this energy. This electricity is called hydroelectricity. The water discharged after its production is used for irrigation.