

Science

(www.tiwariacademy.com)
(Chapter 3)(Metals and Non - Metals)

Class - 10

Page 53

Question 1:

Define the following terms.

(i) Mineral

(ii) Ore

(iii) Gangue.

Answer 1:

(i) Mineral

The elements or compounds, which occur naturally in the earth's crust, are known as minerals.

(ii) Ore

If minerals contain a very high percentage of a particular metal and the metal can be profitably extracted from it. These minerals are called ores.

(iii) Gangue

Ores mined from the earth are usually contaminated with large amounts of impurities such as soil, sand, etc., called gangue.

Question 2:

Name two metals which are found in nature in the free state.

Answer 2:

The metals which are the least reactive, they are often found in a free state.

For example:

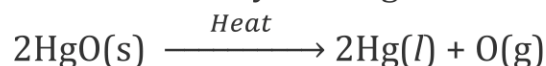
Gold, silver, platinum and copper are found in the free state.

Question 3:

What chemical process is used for obtaining a metal from its oxide?

Answer 3:

- Metals low in the activity series are very unreactive. The oxides of these metals can be reduced to metals by heating alone.



- The metals in the middle of the activity series such as iron, zinc, lead, copper, etc., are moderately reactive. These metal oxides are reduced to the corresponding metals by using suitable reducing agents



- The metals high up in the reactivity series are very reactive. They are separated from their oxides by electrolysis process.