
CBSE TEST PAPER-04

CLASS – X Science (Metals and Non-Metals)

1. Zone refining is used for the (1)
 - (a) concentration of an ore
 - (b) Reduction of metal oxide
 - (c) Purification of metal
 - (d) Purification of an ore
2. Which of the following processes is used for the concentration of Bauxite (1)
($\text{Al}_2\text{O}_3 \cdot 2\text{H}_2\text{O}$)
 - (a) Froth floatation
 - (b) Leaching
 - (c) Liquation
 - (d) Magnetic separation
3. During smelting, an additional substance is added which combines with (1)
impurities to form a fusible product. It is known as
 - (a) Slag
 - (b) Mud
 - (c) Gangue
 - (d) Flux
4. The lustre of a metal is due to (1)
 - (a) is high density
 - (b) its high polishing
 - (c) its chemical inertness
 - (d) Presence of free electrons.
5. In the thermite process, the reducing agent is (1)
 - (a) Nickel
 - (b) Zinc
 - (c) Sodium

(d) Aluminium

6. Metals are included in the reactivity series. Why hydrogen is kept in the series through it is not a metal? (2)
7. Why are metals generally lustrous? (2)
8. Corrosion of metals is not always harmful. Illustrate. (2)
9. Why does copper not liberate hydrogen on reacting with dilute sulphuric acid? (2)
10. Write the equation for the reaction of (3)
 - (a) Iron with steam
 - (b) Calcium with water
 - (c) Potassium with water
11. Define the following terms: (3)
 - (a) Minerals
 - (b) Ores
 - (c) Gangue
12. Pratyush took sulphur powder on a spatula and heated it. He collected the gas evolved by inverting a test tube over it. (3)

What will be the action of gas in

 - (1) Dry litmus paper?
 - (2) Moist litmus paper?

Write a balanced chemical equation for the reaction taking place?
13. Write any three differences between metals and non-metals on the basis of chemical properties? (3)
14. (1) Write electron dot structure for sodium, magnesium and oxygen? (5)
(2) Show formation of Na_2O and MgO by the transfer of electrons?