

## CBSE TEST PAPER-05

### SCIENCE & TECHNOLOGY (Class-10)

#### Chapter 3. Metal and Non-metals

1. Why is sodium kept immersed in kerosene oil? (1 mark)
2. Name two metals which are found in nature in the free state. (1 mark)
3. What chemical process is used for obtaining a metal from its oxide. (1 mark)
4. Which metals do not corrode easily? (1 mark)
5. What are alloys? (1 mark)
6. Differentiate between metal and non-metal on the basis of their chemical properties. (2 marks)
7. Why copper is used to make hot water tanks and not steel (an alloy of iron). (2 marks)
8. What is an alloy? Name the constituents of 22-carat gold. Why is 24-carat gold converted to 22-carat gold? (2 marks)
9. Why are metals good conductors of electricity? (2 marks)
10. Give two general properties of ionic compounds. (2 marks)
11. Give reasons for the following:
  - (a) Zinc oxide is considered as amphoteric oxide.
  - (b) Non-metals in general do not displace hydrogen from dilute acids.
  - (c) Metals conduct electricity.
11. Show that both air and water are necessary for corrosion of iron.
13. Explain why:
  - (i) iron sheets are coated with zinc.
  - (ii) we apply paint on iron articles.
  - (iii) the galvanized iron article is protected against rusting even if the zinc layer is broken.
14. (i) What is an 'activity series of metals'? Arrange the metals Zn, Mg, Al, Cu and Fe in a decreasing order of reactivity.  
(ii) What would you observe when you put
  - (a) Some zinc pieces into blue copper sulphate solution?
  - (b) Some copper pieces into green ferrous sulphate solution?
  - (c) Name a metal which combines with hydrogen gas. Name the compound formed.(5 marks)