CBSE TEST PAPER-03

SCIENCE & TECHNOLOGY (Class-10)

Chapter 3. Metal and Non-metals

1. Name two metals which are found in nature in free state. (1 mark)
2. Which type of oxides are formed when non-metals combine with oxygen? (1 mark)
3. An element X reacting with oxygen forms an oxide X_2O. The oxide is soluble in water and turns blue litmus red. State whether the elements X is a metal or a non-metal? (1 mark)
4. Write the name the process in relation to metallurgy whereby an ore is heated strongly in absence of air. (1 mark)
5. What is an alloy? (1 mark)
6. You must have seen tarnished copper vessels being cleaned with lemon or tamarind juice. Explain why these sour substances are effective in cleaning the vessels. (2 marks)
7. How is calcinations different from roasting? (2 marks)
8. Show the formation of MgO by the transfer of electrons. (2 marks)
9. Explain why, Zinc metal can displace copper from copper sulphate solution but copper cannot displace zinc from zinc sulphate solution. (2 marks)
10. Give reason for the following:
    Concentrated sodium hydroxide solution can not be stored in aluminium containers. (2 marks)
11. (i) Explain what corrosion of iron means. (3 marks)
    (ii) Why is it that aluminium which is more reactive than iron dies not corrode like iron?
    (iii) How is corrosion of iron prevented by coating it with a layer of oil.
12. Which is produced is our stomach? What happens if there is an excess of acid in the stomach? How can its effect be cured? (3 marks)
13. Give reasons: (3 marks)
    (a)Platinum, gold and silver are used to make jewellery.
    (b) Sodium, potassium and lithium are stored under oil.
    (c) Aluminium is a highly reactive metal, yet it is used to make utensils for cooking.
14. What is an alloy? How is an alloy made? List two purposes of making alloys. (5 marks)
    Mention the constituents and two properties of each of the following alloys:
    (i)Stainless steel (ii)Brass