

Class : 10

Chapter :- Metals and Non-metals.

I Choose the most appropriate answer.

1. The metal with low density is  
a. Sodium      b. Potassium      c. Lithium      d. Caesium.
2. Which of the following metals forms an amphoteric oxide ?  
a. Potassium      b. Sodium      c. Zinc      d. Calcium.
3. Which of the following metals does not liberate hydrogen from dilute acids ?  
a. Copper      b. Tin      c. Iron      d. Aluminium.
4. Food cans are coated with tin and not zinc because  
a. Zn is costlier than Sn.  
b. Zn has higher melting point than Sn.  
c. Zn is more reactive than Sn  
d. Zn is less reactive than Sn.
5. Alloys are homogeneous mixtures of a metal with a metal or non-metal. Which of the following alloys contain a ~~metal~~ non-metal as one of the constituent ?  
a. Steel      b. Amalgam      c. Bronze      d. Brass.

II Very Short Answer Type Questions.

6. Name one metal which is liquid at room temperature.
7. Name a metal which is soft and can be cut by a knife.
8. Silver can be made into thin wire. What property of silver

Does this indicate ?

- Aluminium easily combines with oxygen but still can be used for making kitchen utensils. Why ?
- What happens when granulated zinc is added to a solution of copper (II) sulphate ?

Generally alloys are used in electrical engineering devices instead of pure metals. Why is it so ?

III Think and answer.

- Why are alloys preferred over metals ? Answer taking Iron as the example.
- Why is hydrogen included in the activity series of metals, although hydrogen is not a metal ?
- The galvanised article is protected from rusting even if the zinc coating is broken. Explain.
- An ore gave sulphur dioxide on heating in air. Outline the steps for conversion of such an ore into metal.
- Why is that aluminium is used as a reducing agent in the thermite process ?
- An element M does not react with dil.  $H_2SO_4$ . M forms an oxide  $MO$  which turns red litmus solution blue. Predict whether M is metal or non-metal. Predict its position in the activity series.
- A metal M has two electrons in the valence shell and a non-metal N has seven valence electrons. Show bonding between M and N giving reason for the same. Predict its solubility.