

- 1. What happens when sulphur di- oxide reacts with water? Give the chemical reaction involved.**

Ans: When sulphur dioxide reacts with water, sulphurous acid is formed.



- 2. Why lemon pickle cannot be stored in an aluminum foil?**

Ans) Aluminium reacts with the citric acid present in the lemon. Hence, lemon pickles can't be stored in aluminium vessels.

- 3. What happens when dilute sulphuric acid is poured on a copper plate?**

Answer: When dilute sulphuric acid is poured on a copper plate it reacts with copper to form copper sulphate and hydrogen. As a result the copper gets eroded this takes place according to the following equation:

Sulphuric acid + Copper --> Copper sulphate + Hydrogen.

- 4. Why copper cannot displace zinc from zinc sulphate solution?**

(Ans) Copper is less reactive than zinc. Hence, copper cannot displace zinc from zinc sulphate solution.

- 5. Why immersion rods for heating liquids are made up of metallic substances?**

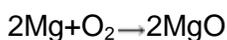
(Ans) Metals are good conductors of heat. Hence, immersion rods for heating liquids are made up of metallic substances.

- 6. What happens when iron nails are dipped in water in a test tube for a week? ks (2)**

Ans) When iron nails are dipped in water in a test tube for a week, a brown layer gets deposited on the iron nails, which is known as rust.

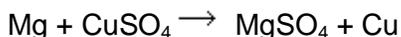
- 7. What happens when magnesium ribbon is burnt in air?**

Ans) When metals burn in air, the formation of their oxide takes place. Hence, when Magnesium reacts with air, magnesium oxide is formed.



- 8. In a chemistry experiment, a student by mistake put some magnesium strips in blue coloured copper sulphate solution. What change will he observe in the colour of the solution? Write the reaction also.**

Ans: When magnesium strips are added to the blue coloured copper sulphate solution, the colour of the solution disappears because magnesium is more reactive than copper. It displaces copper from copper sulphate solution.



- 9. What happens when iron reacts with oxygen and water? Give the chemical reaction involved.**

(Ans) Iron oxide is formed and hydrogen gas is produced. The chemical reaction that takes place is:



10. What happens when copper vessel is exposed to moist air for a long time? Give the chemical reaction that takes place.

(Ans) When copper vessel is exposed to moist air for a long time, it acquires a dull green coating. The green material is a mixture of copper hydroxide and copper carbonate. The following chemical reaction takes place:



11. Why gold is preferred in making jewellery?

(Ans) Gold is preferred in making jewellery because it is

(i) lustrous. (ii) highly malleable. (iii) ductile.

12. What happens when dilute sulphuric acid is poured on a zinc plate? Write the chemical reaction that takes place.

(Ans) Zinc is more reactive than hydrogen. Hence, it displaces hydrogen from sulphuric acid and forms zinc sulphate. The chemical reaction that takes place during the process is given by



13. Why metals are used in making aeroplanes, bridges, satellites etc.?

(Ans) Due to their hardness, metals are preferred in making aeroplanes, bridges, etc.

14. What will happen when ash of magnesium is dissolved in water? Is the solution acidic or basic? What effect does litmus show in case of oxides of metals?

(Ans) When ash of magnesium is dissolved in water then magnesium hydroxide is formed.



Hence, the solution is basic in nature. The oxides of metals are basic in nature.

Therefore, their aqueous solutions turn red litmus blue.

15. (a) You must have seen in the laboratory that sodium metal is always stored in kerosene oil. Why we do so?

(b) Name a non-metal that is very reactive and is stored in water.

(Ans) (a) Sodium metal is very reactive. It reacts vigorously with air and water and a lot of heat is generated. Therefore, it is kept in kerosene.

(b) Phosphorous