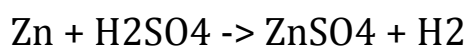
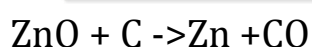


## Chapter- 1

### CHEMICAL REACTIONS & EQUATIONS

1. What is balanced chemical equation? State the law that is followed by balancing a chemical equation.
2. Explain the significance of photosynthesis. Write the balanced chemical equation involved in the process.
3. Why is respiration considered an exothermic reaction? Explain
4. Why walls get white shiny finish after 2-3 days of white washing?
5. What happens if dilute hydrochloric Or sulphuric acid is added to zinc?
6. Write one equation each for decomposition reactions in which energy is supplied in the form of heat, light or electricity.
7. Why are decomposition reactions called the opposite of combination reactions? Justify giving examples
8. Why does the colour of copper sulphate solution change when an iron nail is dipped in it.
9. Compare displacement and double displacement reaction with examples.
10. Explain oxidation and reduction reactions in term of gain or loss of oxygen and hydrogen. Identify the reducing and oxidising agent in the chemical equations.



## Chapter – 2

### ACIDS, BASES & SALTS

1. Show the reaction of a base with a non-metallic oxide and the reaction of acid with a metallic oxide. What these reactions tell about the nature of non-metal oxide and metallic oxide.

2. How sodium zincate is formed?

3. To a solution of sodium hydroxide in a test tube, two drops of phenolphthalein are added.

(i) State the colour change observed.

(ii) If dil HCl is added dropwise to the solution, what will be the colour change?

(iii) On adding few drops of NaOH solution to the above mixture the colour of the solution reappears. Why?

4. How pH value is important in digestion and tooth decay?

5. How are salts formed? Mention the family and pH of the following salts:

Calcium carbonate, Sodium chloride, Ammonium chloride, Potassium sulphate and Sodium bicarbonate

6. How is bleaching powder prepared? For what purpose is it used in drinking water?

7. Name the acid present in ant sting and give its chemical formula. Also, give the common method to get relief from the discomfort caused by the ant sting.

8. List the important products of the Chlor-alkali process. Write one important use of each.

9. Give reasons for the following:

(i) Only one half of water molecule is shown in the formula of plaster of Paris.

(ii) Plaster of Paris is stored in moisture proof container.

(iii) Dry HCl gas cannot change the colour of dry blue litmus paper.

(iv) A milkman add small amount of baking soda in fresh milk

(v) Aqueous solution of sugar, glucose and alcohol do not conduct electricity.

10. How baking soda is used to prepare soft and spongy cake?

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## Chapter - 3

### METALS & NON METALS

1. Why sodium and potassium are stored in kerosene oil.
2. Differentiate metals and non metals on the basis of their chemical properties.
3. Differentiate between calcination and roasting.
4. (A) Why does calcium start floating when it reacts with water? Write the balanced chemical equation of the reaction.  
(B) Name two metals which do not react with water.
5. How are ionic compounds formed? Explain their properties.
6. Show the formation of the given ionic compounds by the transfer of electrons. Also write the ions present in them.  
Sodium chloride, Magnesium chloride, sodium oxide and calcium oxide.
7. Why aluminium is not extracted by the reduction of its Ore? How it is extracted?
8. Zinc is a metal found in the middle of the activity series of metals. In nature, it is found as a carbonate ore,  $ZnCO_3$ . Mention the steps carried out for its extraction from the ore. Support with equations.
9. How copper is extracted from its sulphide ore. How the obtained copper is purified.
10. Give one example of each:
  - (a) only liquid metal
  - (b) only liquid non metal
  - (c) a lustrous non metal
  - (d) metal with very low melting point

(e) non metal with very high melting point

(f) non metal which conduct electricity

(g) most ductile metal

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## Chapter - 4

### CARBON & IT'S COMPOUNDS

1. What are covalent bonds? Explain it's types with examples.
2. Why carbon form so large number of compounds? Explain
3. Write the properties of covalent compounds.
4. Write characteristics of Homologous series. Generate a homologous series of alkene till fourth member.
5. Why carbon compounds are used as fuel? Write chemical reactions to justify your answer.
6. Differentiate between Addition and Substitution reaction exhibit by carbon compounds.
7. How ethanol can be converted into ethene and ethanoic acid? Write the chemical reactions with reaction conditions.
8. Write molecular formula and structures of the following compounds:  
Ethanal, propanone, propanoic acid, ethanol and pentyne
9. What are soaps and detergents? How detergents are better than soap? Explain.
10. How formation of soap micelles help in removing dirt particles from the surface of clothes.