

# Language of Chemistry

## DPP 1

1. Fill in the blank spaces with the appropriate words given within the brackets.
  - (a) The short hand representation of an \_\_\_\_\_ (element/compound) is called symbol.
  - (b) The substance/substances which take part in a chemical reaction are called \_\_\_\_\_ (reactants/products).
  - (c) A chemical equation does not tell about \_\_\_\_\_ (rate/kind) of chemical reaction.
  - (d) A symbol represents \_\_\_\_\_ (1atom/1molecule) of an element.
  - (e) Chemical \_\_\_\_\_ (symbol/formula) of substance is the symbolic representation of actual number of atoms present in one molecule of a substance.
2. Statements given below are incorrect. Write the correct statements.
  - (a) The valency of ferrous ion is 3 positive.
  - (b) The formula of ammonium dichromate is  $(\text{NH}_4)_2 \text{CrO}_4$ .
  - (c) A chemical equation tells by volume the amount of reactants and products.
  - (d) Valency is the number of hydrogen molecules which combine directly or indirectly with one atom of an element.
  - (e) A chemical equation does not tell about the chemical state of reactants or products.
3. (a) What do you understand by the term "chemical formula"?  
(b) What information is conveyed by the formula  $\text{H}_2\text{O}$  ?

## LAUNGUAGE OF CHEMISTRY DPP 2

Tick the most appropriate answer

1. Symbol represents the short form of a/an
  - a. Molecule
  - b. Elements
  - c. Compound
  - d. Radical
2. Chemical formula is the symbolic representation of actual number of atoms present in one-----of a substance.
  - a. Compound
  - b. Element
  - c. Molecule
  - d. Radical
3. When an element exists as a molecule it consists two or more
  - a. Ions
  - b. Radicals
  - c. Atoms
  - d. Valency
4. The chemical formula of cacium chloride is
  - a. CaCl
  - b. Ca<sub>2</sub>Cl
  - c. CaCl<sub>2</sub>
  - d. Ca<sub>2</sub>Cl<sub>2</sub>
5. What is symbol?
6. What do you understand by the term chemical formula?
7. What qualitative information is given by the formula HCL?
8. What do you understand by the term variable valency?
9. Write the chemical formulae of the following compounds:
  - a. Magnesium sulphate
  - b. Aluminium sulphate
  - c. Aluminium phosphate
  - d. Potassium chlorate
  - e. Potassium nitrate

## LAUNGUAGE OF CHEMISTRY

## DPP 3

1. Statement given below are incorrect. Write the correct statements.
2. Chemical formula of aluminium sulphate is  $\text{Al}_3(\text{SO}_4)_2$ .
3. When magnesium is placed in contact with oxygen, it forms magnesium hydroxide.
4. The substance/substances which take part in a chemical reaction is re known as active substance/substances.
5. When a chemical equation is made concise by using symbols and formulae, then it is called balanced equation.
6. When wood burns in air, then this reaction is violated the law of conservation of mass.
7. (a) What do you understand by the term chemical equation?  
(b) Why should a chemical equation be always balance?
8. Balance the following equations:
  - (a)  $\text{KNO}_3 \rightarrow \text{KNO}_2 + \text{O}_2$
  - (b)  $\text{Mg} + \text{O}_2 \rightarrow \text{MgO}$
  - (c)  $\text{KClO}_3 \rightarrow \text{KCl} + \text{O}_2$
9. (a) State law of conservation of mass.  
(b) What information is conveyed by a balanced chemical equation?
10. The molecular formula of compound aluminium sulphate is
  - (a)  $\text{Al}_2\text{SO}_4$
  - (b)  $\text{Al}(\text{SO}_4)_3$
  - (c)  $\text{Al}_2(\text{SO}_4)_3$
  - (d)  $\text{AlSO}_4$
11. Write the chemical formula of the following compounds:
  - (a) Potassium nitrate
  - (b) Aluminium oxide
  - (c) Calcium sulphate
  - (d) Potassium chloride
  - (e) Ammonium hydroxide
  - (f) Sodium hydroxide
  - (g) Potassium hydroxide
  - (h) Nitric acid