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Question 1:

Write down the formula of

(i) sodium oxide

(ii) aluminium chloride

(iii) sodium suphide

(iv) magnesium hydroxide

Answer 1:

(i) Sodium oxide → Na_2O

(ii) Aluminium chloride → $AlCl_3$

(iii) Sodium suphide → Na_2S

(iv) Magnesium hydroxide → $Mg(OH)_2$

Question 2:

Write down the names of compounds represented by the following formula:

(i) $Al_2(SO_4)_3$

(ii) $CaCl_2$

(iii) K_2SO_4

(iv) KNO_3

(v) $CaCO_3$

Answer 2:

(i) $Al(SO_4)_3$ → Aluminium sulphate

(ii) $CaCl_2$ → Calcium chloride

(iii) K_2SO_4 → Potassium sulphate

(iv) $CaCO_3$ → Calcium carbonate

Question 3:

What is meant by the term chemical formula?

Answer 3:

The chemical formula of a compound means the symbolic representation of the composition of a compound. From the chemical formula of a compound, we can know the number and kinds of atoms of different elements that constitute the compound. For example, from the chemical formula CO_2 of carbon dioxide, we come to know that one carbon atom and two oxygen atoms are chemically bonded together to form one molecule of the compound, carbon dioxide.

Question 4:

How many atoms are present in a

(i) H_2S molecule and

(ii) PO_4^{3-} ion?

Answer 4:

(i) In an H_2S molecule, three atoms are present; two of hydrogen and one of sulphur.

(ii) In a PO_4^{3-} ion, five atoms are present; one of phosphorus and four of oxygen.