(iii) a. $Na_2S$

b. MgO

c. CaOH

d. HCl

e. $H_2SO_4$

4. A radical is an atom of an element or a group of atoms of different elements that behaves as a single unit with a positive or negative charge on it.

(iii) 1. $Mg^{2+}$ valency → 2

2. $CO_3^{2-}$ valency → 2

3. $NH_4^+$ valency → 1

(iv) 1. Sulphate

2. Hydroxide

3. Bicarbonate

4. Dichromate

5. Phosphate

(i) a. common salt → NaCl → sodium, chlorine

b. Sulphuric acid → $H_2SO_4$ → Hydrogen, sulphur, oxygen

c. Sodium Hydroxide → NaOH → Sodium, Oxygen, Hydrogen

d. Ammonia → $NH_3$ → Nitrogen, Hydrogen

(ii) a. Ammonium Sulphate

b. Ferus sulphide

c. Ammonium Hydroxide

# Atoms, Molecules and Radicals

## Worksheet

Date
Page

(I) 1. indivisible

2. variable

3. atomicity

4. valency

5. Sulphur

6. 3

(II) 1. An atom is the smallest particle of an element that exhibits all the properties of that element. It may or may not exist independently but takes part in every chemical reaction.

2. Molecule is the smallest particle of a pure substance (element or compound) which has independent existence.

3. The combining capacity of an element is known as valency.