

(1) 1) Atoms are indivisible

2) Metals have variable valency

3) Number of atoms present in the element is known as atomicity of the element

4) The combining capacity of an element is its valency

5) Carbon is the element with valency 4

6) The valency of Iron in Fe_2O_3 is 3

11) -1) Atoms → An atom is the smallest particle of an element which exhibits all properties of that particular element.

2) Molecule \rightarrow A molecule is the smallest substance present in a compound. They may or may not exist independently.

3) Valency \rightarrow The combining capacity of an element is known as its valency.

4) Radicals \rightarrow It is atom of an element or a group of atoms of different elements which behaves as a single unit.

5) Basic Radicals \rightarrow They have a positive charge and are also called cations.

1) Valency of Calcium \Rightarrow 2

Valency of O \Rightarrow 2

Valency of OH \Rightarrow 1

Valency of CO_3 \Rightarrow 2

Cl \Rightarrow 1

2) ACID RADICALS

\Rightarrow They have negative charge

\Rightarrow They are also called

\Rightarrow Most of non metallic ions

and groups of non metallic ions with the negative charge

are acid Radicals

BASIC RADICALS

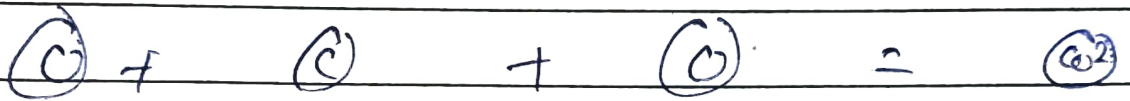
\Rightarrow They have Positive charge

\Rightarrow They are also called cations

\Rightarrow all metallic ions and ammonium ions are basic Radicals.

3) The molecular formula of an element is the symbolic representation of its molecule. It indicates number of atoms present in it

4.) When two atoms or two or more elements join together in a fixed ratio and by mass a molecule of a compound is formed



5.)

ATOMS

They are the indivisible substance present in an element

- They can exist independently

MOLECULES

They are the smallest of a pure substance

- The molecule is a group of two or more atoms.

6.)

The elements which exhibit more than one

valency that means they show variable valency.

example - Non metals like Nitrogen, Phosphorus

show variable valency.

7.)

Molecules

They are the smallest components of a pure substance

→ Consists of two or more elements

Radicals.

→ atom of an element or a group of atoms in a particular element that behaves as a single unit

→ They have 2 classifications - Basic - Acid