

Homework

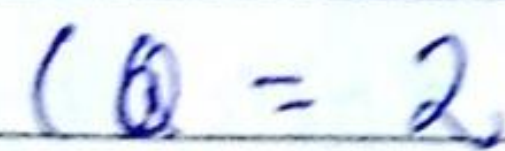
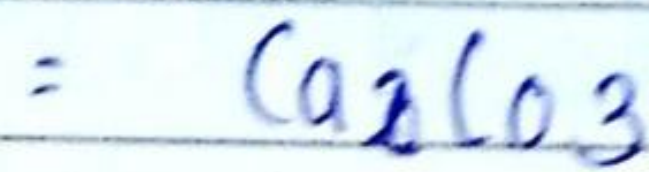
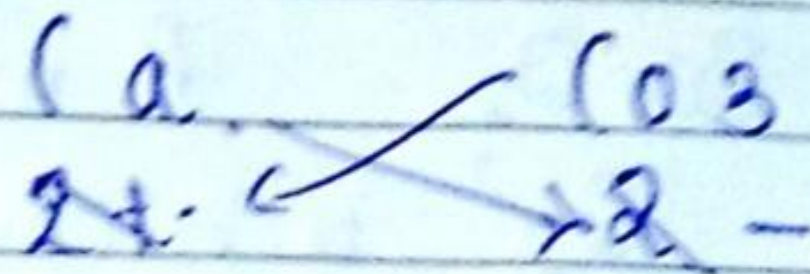
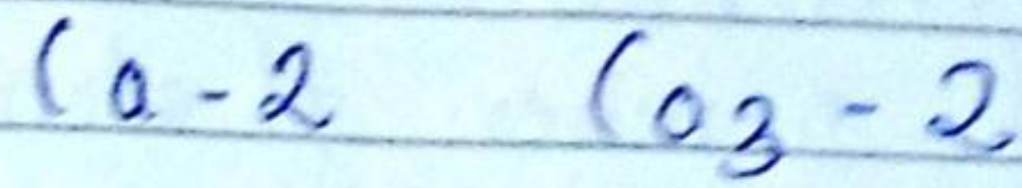
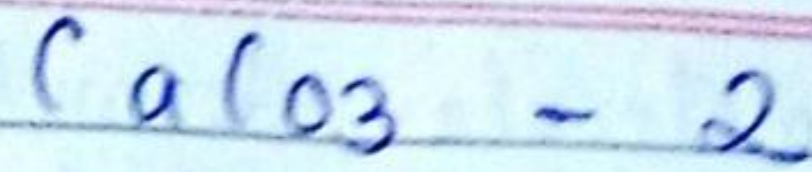
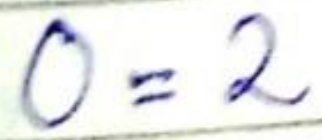
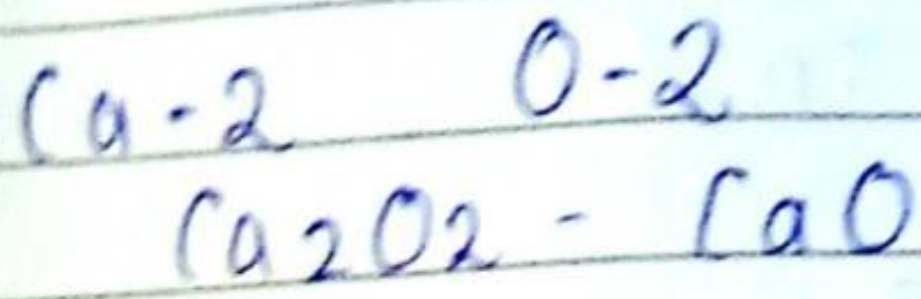
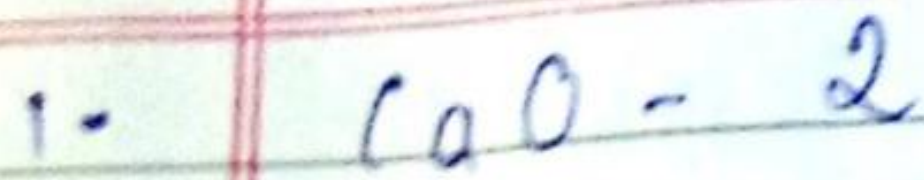
Dt-29/09/2021

Chemistry

- (1) Neutral
- (2) Positive
- (3) Atomicity
- (4) Valency
- (5) Carbon
- (6) 2 and 3

(i) Define the following

- (a) **Atoms:** The smallest particle of matter that may or may not exist independently is known as Atom.
- (b) **Molecule:** The group of atoms bounded together. The smallest particle of a substance that has all physical and chemical properties of that substance.
- (c) **Valency:** It is the combining power of an element or a radical. The number of hydrogen atoms that will combine with or displace one atom of that element or radical.
- (d) **Radical:** A radical is an atom, molecule or ion that has an unpaired valence electron.
- (e) **Basic Radical:** Radical having positive charge and are also called anions. All the metallic ions and ammonium ion are basic radical.



2. Acid Radical

Basic Radical

1) They have negative charge and are called anions

1) They have positive charge and are called cations

2) ~~All~~ metallic ions and ammonium ion are basic

2) All metallic ion and ammonium ion are basic radical.

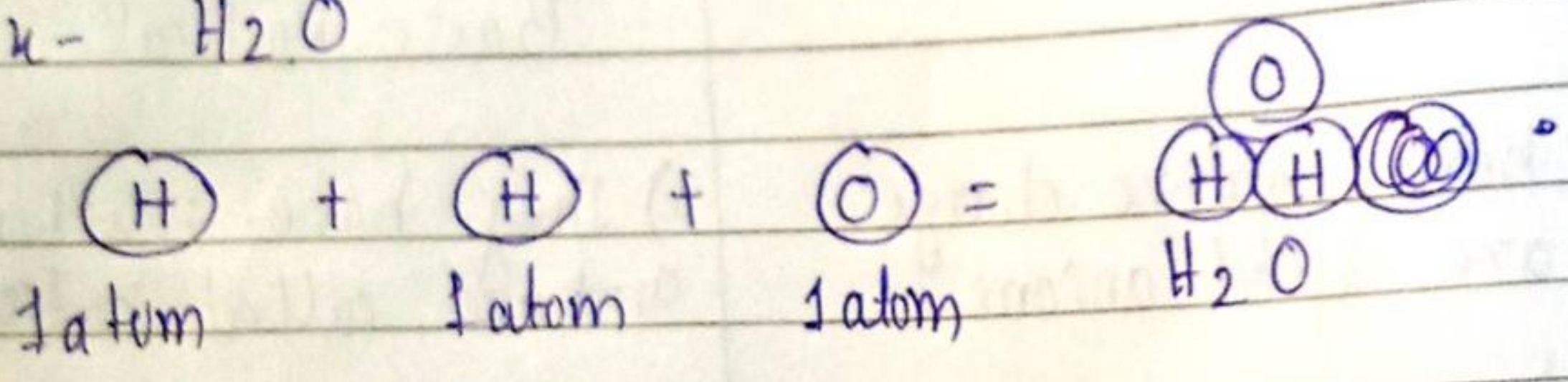
2) All non metallic ions and groups of non metallic atoms with ne

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

Ex- O_2 A molecule of Oxygen is represented by ' O_2 ' which indicates that two atoms of Oxygen join to form one molecule of Oxygen.

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

Ex- H_2O



5. Atoms	Molecules
(i) Atoms is the smallest particle of an element that exhibits all the properties of that element	• A molecule is the smallest particle of a pure substance.
(ii) It may or may not exist independently but takes part in every chemical reaction	(ii) It exist independently. It exist all the the properties of that pure substance

6. Certain Elements Exhibit more than one valency that show Variable Valency.

Example - ~~N~~ Nitrogen show valency of 3 and 5.

7.

Molecule	Radicals
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(i) A molecule is the smallest particle of a substance

(i) A radical is an atom of an element or a group of different element that behaves as a single unit with a +ve or -ve charge on it.

(ii) Molecule doesn't carry any charge

(ii) Radical carries either +ve or -ve charge