

1-11
5.10 21

Home Assignment

Date _____
Page _____

1.) Expand IUPAC.

Ans. IUPAC is International Union of Pure and Applied Chemistry.

2.) Differentiate between compounds and mixtures.

Ans.

Compound

Mixture

1. A compound is a pure substance.

1. A mixture is an impure substance.

2. Compounds are always homogeneous.

2. Mixtures ~~are~~ may be homogeneous or heterogeneous.

3. Formation of compound involves change in energy.

3. Formation of mixture does not involve change in energy.

4. Compounds have specific properties which differ from the properties of their constituent elements.

4. Mixtures do not have any specific set of properties. They exhibit properties of their components.

3) What do you mean by separation? On what factors the principle of separation depends.

Ans. The process by which constituents of a mixture are set apart from one another to get pure substances is called separation. The principle of separation depends upon the:

- type of mixture
- characteristic properties ~~of~~ of mixture, such as size, shape, colour, density, melting point, boiling point, solubility, ability to sublime, volatility, magnetic nature, ~~boiling point~~, ~~solub~~ etc.

4) Mention any three characteristics of a mixture.

Ans. The three major characteristics of mixture are:

- ① Components are loosely held together without any chemical force acting on them or between them. Hence components retain their individual properties.
- ② They do not have any fixed amount of components. i.e. They can have their components in varying proportions.

4) Components of mixtures can be separated by simple physical methods.

5) What are metalloids? Give examples.

Ans- Metalloids are the elements which show some properties of metals and some of non-metals. They are hard solids. Example boron, silicon, arsenic, antimony etc.

6) Write a short note on Noble gases

Ans- Noble gases are the elements which do not react chemically with other elements or ~~so~~ compounds, so they are known as noble or inert gases. They are found in air, in traces. There are only 6 noble gases - helium, neon, argon, krypton, xenon and radon.