



TEXTBOOK EXERCISES



I. Choose the correct answer.

- The separation of denser particles from lighter particles done by rotation at high speed is called _____.
a) Filtration b) sedimentation
c) decantation d) centrifugation
- Among the following _____ is a mixture
a) Common Salt b) Juice
c) Carbon dioxide d) Pure Silver
- When we mix a drop of ink in water we get a _____.
a) Heterogeneous Mixture b) Compound
c) Homogeneous Mixture d) Suspension
- _____ is essential to perform separation by solvent extraction method.
a) Separating funnel b) filter paper
c) centrifuge machine d) sieve
- _____ has the same properties throughout the sample
a) Pure substance b) Mixture
c) Colloid d) Suspension

II. State whether true or false. If false, correct the statement.

- Oil and water are immiscible with each other.
- A compound cannot be broken into simpler substances chemically.
- Liquid – liquid colloids are called gel.
- Buttermilk is an example of heterogeneous mixture.
- Aspirin is composed of 60% Carbon, 4.5% Hydrogen and 35.5% Oxygen by mass. Aspirin is a mixture.

III. Match the following.

Element	Settles down on standing
Compound	Impure substance
Colloid	Made up of molecules
Suspension	Pure substance
Mixture	Made up of atoms

IV. Fill in the blanks.

- A _____ mixture has no distinguishable boundary between its components.
- An example of a substance that sublimes is _____.
- Alcohol can be separated from water by _____.
- In petroleum refining, the method of separation used is _____.
- Chromatography is based on the principle of _____.

V. Answer very briefly.

- Differentiate between absorption and adsorption.
- Define Sublimation.
- A few drops of 'Dettol' when added to water the mixture turns turbid. Why?
- Name the apparatus that you will use to separate the components of mixtures containing two, i. miscible liquids, ii. immiscible liquids.
- Name the components in each of the following mixtures.
i. Ice cream ii. Lemonade
iii. Air iv. Soil