

VI. Answer briefly:

1. Which of the following are pure substances: Mercury, Ice, Milk, Iron, Hydrochloric acid, Merang Brick and Water.
Ans: Pure substances: Iron, Hydrochloric acid, Mercury, Brick and water.

2. Oxygen is very essential for us to live. It forms 21% of air by volume. Is it an element or compound?

Ans: Oxygen is an Element.

3. You have just won a medal made of 22 carat gold. Have you just procured a pure substance or impure substance?

Ans: 22-Carat gold medal is made up of 91.6% gold (Au) and 8.4% of other metals.

4. How will you separate a mixture containing saw dust, Naphthalene and Iron filings?

Ans: i) By using Magnetic separation, Iron filing can be removed from saw dust and naphthalene.

ii) By using sublimation process, we can separate naphthalene from saw dust.

VII. Answer in detail:

3. How is a mixture of common salt, oil and water separated? You can use a combination of different methods.

I. Separation of oil from mixture.

This can be done by using a separating funnel.

A separating funnel is taken. The lid is opened and the given mixture is poured into it.

The funnel is shaken well, oil layer gets floated over the water layer.

The stop cork is opened to collect salty water. After this, oil layer is collected in another beaker.

II. Separation of salt from water:

* The salty water is taken in the distillation flask and heated for boiling.

* The pure water vapour passes through the inner tube of the condenser.

* This on cooling condenses into pure water and gets collected in a receiver.

* The salt is left behind in the flask as a residue which can be collected separately.