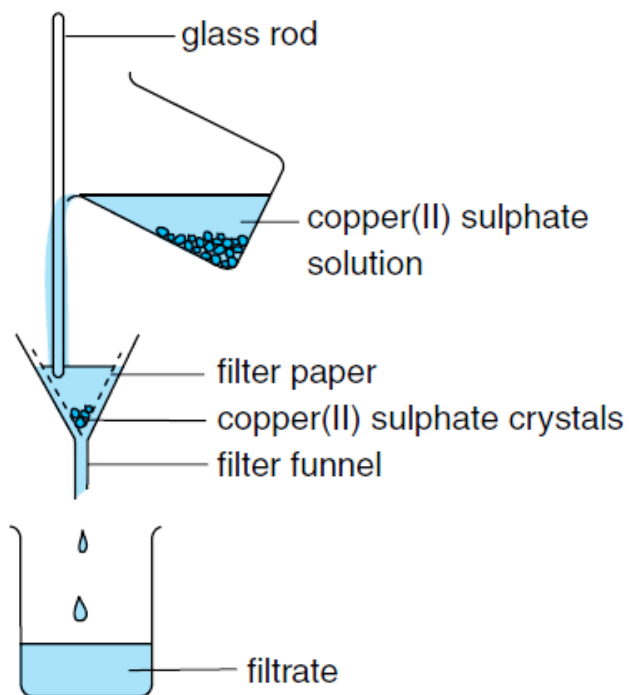


**Quiz (Separation Methods Part I)**

1. A student performed an experiment to prepare hydrated copper(II) sulphate crystals. After slow evaporation of the copper(II) sulphate solution at room temperature, some crystals formed.
  - (a) Draw a labelled diagram of the set-up for the separation of the crystals from the copper(II) sulphate solution.
  - (b) Describe briefly how the crystals are washed and dried.
  
2. For the following pairs of miscible liquids, state whether simple distillation or fractional distillation should be used to separate them.
  - (a) methanol (b.p. = 64.6°C) and ethanol (b.p. = 78.3°C)
  - (b) methanol (b.p. = 64.6°C) and butan-2-ol (b.p. = 99.5°C)

## Suggested Answer

1. (a)



(b) Wash the crystals two or three times with a little cold distilled water. Then dry them by gently pressing them between pieces of filter paper.

2. (a) Fractional Distillation  
(b) Simple Distillation