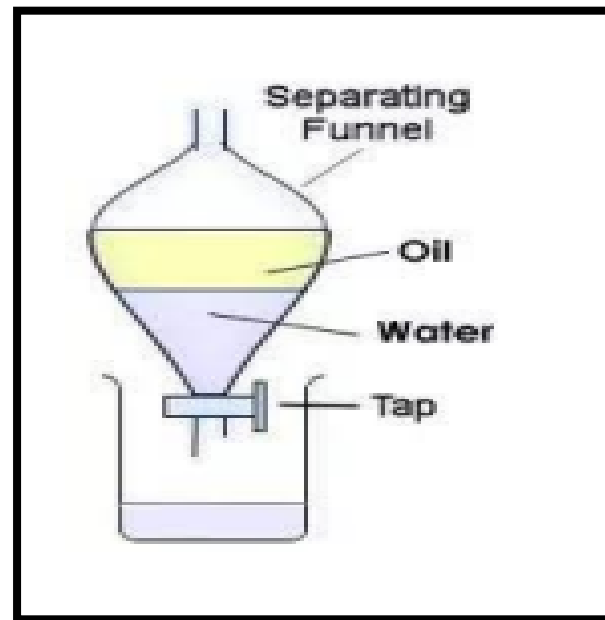


Partition separation using separatory funnel

Ph. Faten Essam

Partition separation using separatory funnel:

- ▶ is a process for the separation of mixtures of immiscible liquids or of a liquid and a solid mixture such as a suspension.



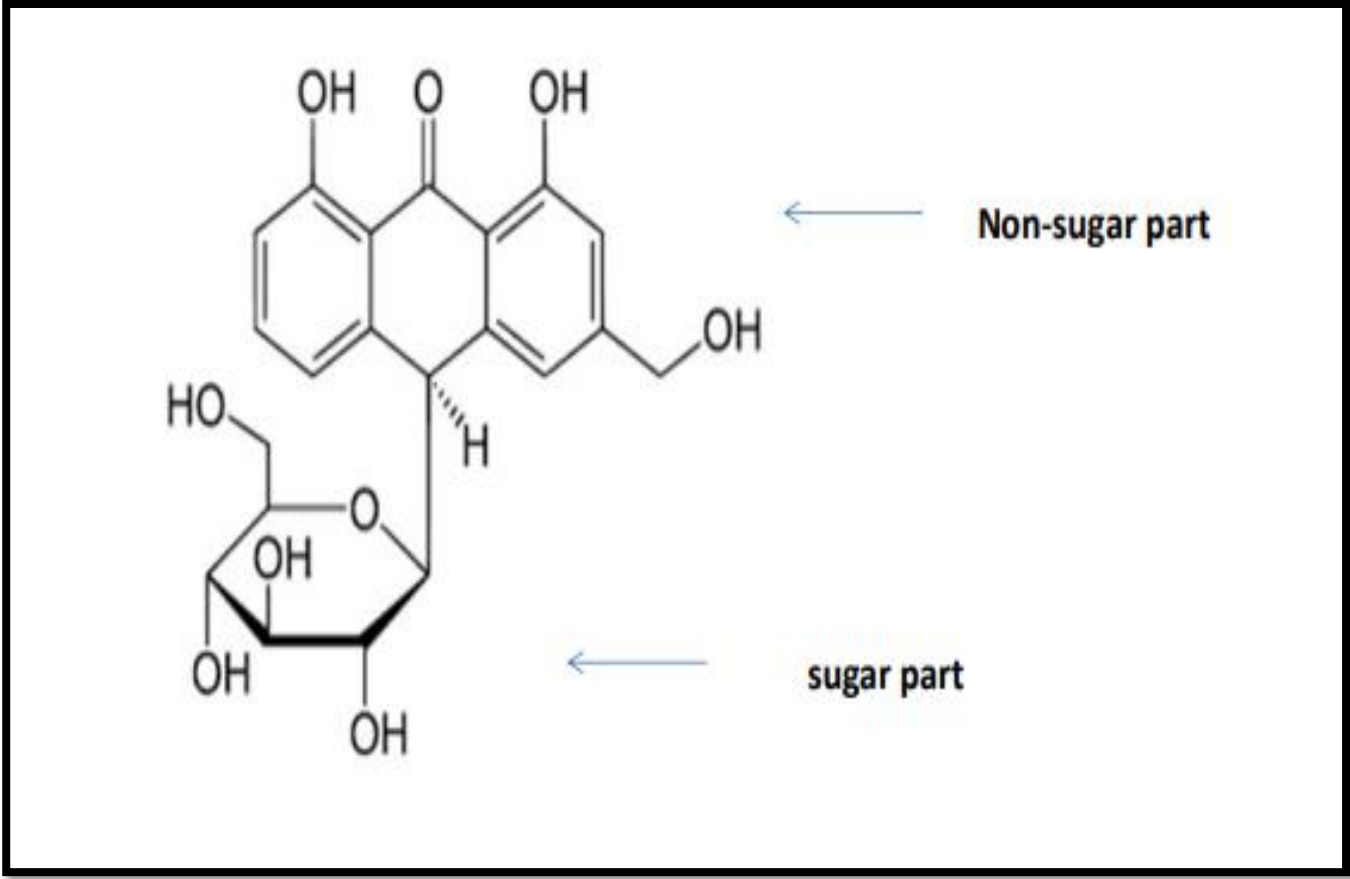
Immiscible liquid separation:

- Takes advantage of differences in density of the liquids.
- A separatory funnel is an alternative apparatus for separating liquid layers. It has a valve at the bottom to allow draining off the bottom layer. It can give a better separation between the two liquids.
- **Example:** separation of mixture of oil and water.

Our experiment is separation of Anthraquinone glycoside from *Cassia acutifolia* the common name for this plant is Senna. Active parts are leaves and fruits or pods

What is Anthraquinone glycoside?

- ▶ Its glycoside compounds and like any glycoside consist of sugar part and non-sugar part
- ▶
- ▶ **Uses in pharmacy:** Senna contain anthraquinone glycoside which called sennosides is a medication used to treat constipation (laxative agent).



Procedure:

1. Prepare plant extract by decoction method using 5 gm of plant leaves Filter the extract then take 10 ml from the filtrate and add to it 2ml of Conc. HCl and heating for 1-2 min
2. Cool the solution and transferred it to the separator funnel then add chloroform to make two layer and shaking to distribute the constituent
3. Collect the organic layer (lower layer) which contain non-sugar part



Pharmaceutical application for Senna:

- ▶ Sennosides Tablet as (laxative agent)

