Chapter :- 2

2. Matter Around us Pure

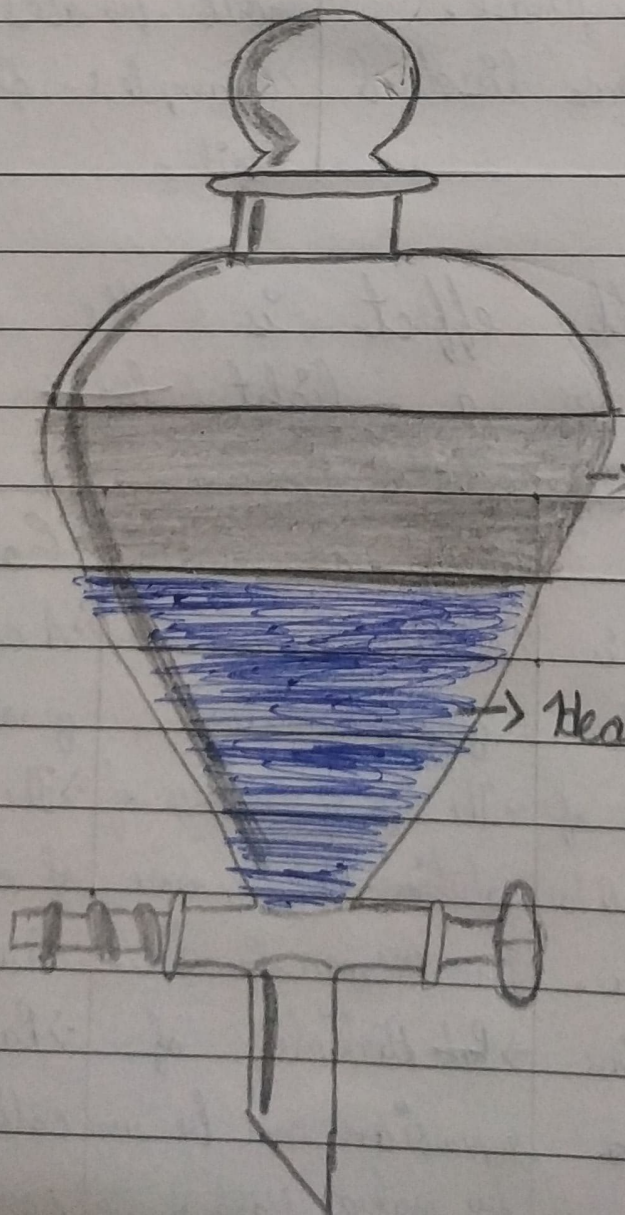
1)

Homogeneous mixture	Heterogeneous mixture
-> All the components of the mixture are uniformly mixed	=> All the components of the mixture are not thoroughly mixed.
-> No separation boundaries are visible.	-> Separation boundaries are visible.
=> It ~~contains~~ consists of a single phase.	-> It consits of two or more phases.
=> Example :- Sugar dissolved in water.	-> Example :- Air, sand and soil.

2) The Tyndall effect is the scattering of light as a light ~~beam~~ beam passes through a colloid.

True solution	Suspension	Colloide
=> A true solution is a homogenous mixture.	=> A suspension is hetero-genous mixture	=> A colloid is a hetero-genous mixture.
=> The size of particles of solution is very small less than 1nm diameter.	=> The size of particles of solution ~~is~~ have more than 1000nm diameter.	-> The size of particles of colloids having dia-meter in between 1 to 1000nm.
=> Particles of solution can't be seen by ordinary microscope.	-> ~~Sol~~ Particles of suspension can be seen by naked eyes.	-> Particles of colloidal solution can be seen by microscope

3) We can separate a mixture of oil and water by separating funnel. First pore the mixture of oil and water in the seperating funnel then keep them undisturbed for 2-3 minutes, as oil and water are two immiscible liquids, they we form two layers. Then slowly open the knob, and just before the oil close the knob. Hence, we have seperated the two immiscible liquid i.e. oil and water.



4) The properties of Colloids are:-

i- A colloid is a heterogenous mixture.

ii- The size of particles of colloids having diameter between 1 nm and 100nm.

iii- They can be seen by microscope.

iv- They can't be seperated by Filtration

v- They can scatter light.

vi- They are less stable than solution

vii- Example :- Blood.

5) We can seperate a mixture of salt, sand and ammonium ~~a~~ chloride by Filtration then Sublimation. First mix them in water, then take a filterpaper and filter the water in an another beaker collect the filtrate, the evaporate the water, to get ~~sal~~ the mixture of salt and ~~ammoni~~ ~~ammo~~ ammonium chloride. Then ~~~~ take ~~a~~ flask and inverter it on a china dish and put the mixture on the china dish and heat them by plugging the other end by cotton ~~~~ ball. After 5-10 min you can see the ~~amm~~ ammonium cholide on the ~~~~ neck of the flask and salt on the china dish.