CLASS IX PRACTICALS FOR SUMMATIVE ASSESSMENT SA-1

Experiment 7. To separate the components of a mixture of sand, common salt and ammonium chloride (or camphor) by sublimation.

Materials Required : A funnel (glass), a china dish, a beaker (250 ml) Cotton plug, tripod stand, burner, wire gauge, filter paper and clamp stand.

Procedure : Sand, common salt and ammonium chloride form a heterogenous mixture and hence can be spearated by simple physical methods of separation the right order of separation is sublimation, filtration and evaporation various steps are.

i. Separation of Ammonium chloride by sublimation:

1. Take mixture of ammonium chloride, sand and common salt in china dish.

2. Set up an apparatus for sublimation as shown in fig (a)

3. Heat the mixture of china dish, ammonium chloride will be separated on the walls of inverted glass funnel.

ii. Spearation of sand by flteration :

1. The residue left in china dish in above step is sand and common salt.

2. Dissolve this aesidue mixture in water. Common salt will dissolve but not sand.

3. Set up as apparatus shown in fig (b) to filter snad from the mixture.

4. Sand is separated as residua leaving filtrate behind.

iii. Recovery of common safe by evaporation :

1. Heat the filterate left in above step to evaporate the water as shown fig ©

2. Let the sample of common salt to dry.

Result : Using the methods of separation in this sequence sublimation filtration and evaporation the ammonium chloride, sand and common salt have been separated respectively from their sample.

Precaution :

1. Heating sublimation & evaporation should be done carefully.

2. Care in required while fitting so the filter paper does not tear off.