# JSUNL TUTORAL ACBSE Coaching for Mathematics and Science

## CLASS IX PRACTICALS FOR SUMMATIVE ASSESSMENT SA-1

Experiment 2. To prepare: a) A true solution of common salt, sugar and alum b) A suspension of soil, chalk powder and fine sand in water c) A colloidal of starch in water and egg albumin in water and distinguish between these on the basis of (a) transparency (b) filtration criterion (c) stability

**Materials Required :** Beaker (250 ml), glass rod, measuring cylinder, common salt, water, starch powder and black board chalk.

### True solution of common salt, sugar and alum :-

#### Procedure:

- 1. Take 100 ml of water in a measuring cylinder and transfer it to a clean 250 ml beaker.
- 2. Add about 1 spoon of NaCl to it. 3. Stir it with the help of a glass rod a clear solution is formed.
- 4. The resulting solution is a true solution.

#### Precaution:

- 1. Common salt should be taken in powdered form.
- 2. Beaker and glass rod should be cleaned before the experiment.
- 3. Stirring should be done in such a way that glass rod does not strike against the sides of the beaker.

#### Suspension:-

#### Procedure:

- 1. Convert half piece of black board chalk into powdered form.
- 2. Take 100 ml water in a measuring cylinder and transfer it to a 250 ml beaker.
- 3. Add powdered chalk to water. 4. Stir vigorously for 5 minutes.
- 5. The resulting mixture is suspension of chalk in water.

**Precaution:** 1. Chalk should be used in powdered form. 2. Beaker and glass rod should be cleaned before the experiment. 3. Stirring should be done in such a way that glass rod does not strike against the sides of the beaker.

Colloid: 1. Take 5 g starch in a 250 ml beaker.

- 2. Add a few drops of water to it and mix with a glass rod to make paste.
- 3. Add 100 ml of water to it with the help of measuring cylinder.
- 4. Heat gently with constant stirring till mixture appears without any visible suspended particle.
- 5. The resulting mixture is colloid of starch in water.

**Precautions:** 1. Starch should be taken in the form of fine powder.

- 2. Beaker and glass rod should be cleaned before the experiment.
- 3. Stirring should be done in such a way that glass rod does not strike against the sides of the beaker.
- 4. Heating of beaker should be done on wire gauge only.