

IX – Science Practical (Compulsory)

Session 2009-10

LIST OF EXPERIMENTS

Marks: 40 (20+20)

1. 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 bases of
 - i) transparency
 - ii) filtration Criterion
 - iii) stability

2. To prepare

- a) a mixture
- b) a compound

using iron fillings and sulphur powder and distinguish between these on the basis of:

- i) appearance i.e., homogeneity and heterogeneity
- ii) behavior towards a magnet
- iii) behavior towards carbon disulphide a solvent
- iv) effect of heat

3. To study the extent of cooling caused by evaporation on the following liquids using a thermometer and arrange them in the increasing order of the extent of cooling produced

- a) Water (b) Alcohol (c) Ether

4. To verify laws of reflection of sound
5. To determine the density of solid (denser than water) by using a spring balance and a measuring cylinder.
6. To establish the relation between the loss in weight of a solid when fully immersed in
 - a. tap water
 - b. strongly salty water , with the weight of water displaced by it by taking at least two different solids
7. To measure the temperature of hot water as it cools and plot a temperature-time graph
8. To determine the velocity of a pulse propagated through a stretched string / slinky.
9. To prepare stained temporary mounts of (a) onion peel and (b) human cheek cells and to record observations and draw their labeled diagrams.
10. To identify parenchyma and sclerenchyma tissues in plants striped muscle fibers and nerve cells in animals, from prepared slides and to draw their labeled diagrams.
11. To separate the components of a mixture of sand, common salt and ammonium chloride (or camphor) by sublimation
12. To determine the melting point of ice and the boiling point of water
13. To observe the onion peel cells placed in hypertonic solution under the microscope and draw labelled diagram of the same.
14. To study the characteristics of Spirogyra/ Agaricus, Moss/fern, Pinus (either with male or female cone) and an Angiospermic plant. Draw and give two identifying features of groups they belong to.
15. To observe and draw the given specimens – earthworm, cockroach, bonyfish and bird .For each specimen record
 - (a) One specific feature of its phylum.
 - (b) One adaptive feature with reference to its habitat.