

PRACTICALS

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 basis of
 - i) transparency
 - ii) filtration criterion
 - iii) stability
2. **To prepare**
 - a) a mixture
 - b) a compound
using iron filings and sulphur powder and distinguish between these on the basis of :
 - i) appearance i.e., homogeneity and heterogeneity
 - ii) behaviour towards a magnet
 - iii) behaviour towards carbon disulphide as a solvent.
 - iv) effect of heat.
3. **To carry out the following chemical reactions and record observations. Also identify the type of reaction involved in each case.**
 - i) Iron with copper sulphate solution in water.
 - ii) Burning of Magnesium in air.
 - iii) Zinc with dilute sulphuric acid
 - iv) Heating of Lead Nitrate
 - v) Sodium sulphate with Barium chloride in the form of their solutions in water.
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**
 - i) tap water
 - ii) 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 test (a) the presence of starch in the given food sample (b) the presence of the adulterant metanil yellow in dal.
14. To study the characteristic of spirogyra/Agaricus, Moss/Fern, Pinus (either with male or female conre) 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, bony fish and bird. For each specimen record
 - (a) one specific feature of its phylum
 - (b) one adaptive feature with reference to its habitat.

SCHEME OF EVALUATION

Multiple choice type question written test (School based) : 20 Marks

Hands-on practicals examination (school based) : 20 Marks