

## LSE-08 (L): Laboratory Courses-II

### List of Experiments

1. Test for the Viability of Seeds
2. Measurement of Rate of Oxygen Uptake in Plants
3. Separation of Leaf Pigments by Chromatography
4. Photoreduction of Dyes by Isolated Chloroplasts
5. Effect of Light Quality and Intensity on Photosynthesis
6. Induction of Nitrate Reductase by Nitrate Ions and Light
7. Microscopic Observations of the Opening and Closing of Stomata
8. Measurement of Water Potential of a Plant Tissue
9. Induction of  $\alpha$ -Amylase Synthesis in Barley Grains By Gibberellic Acid
10. To Observe Elongation of Coleoptile by Treatment With 2,4-D
11. To Trace the path of Pollen Tube
12. To Observe the Germination of Pollen Grains Using a Hanging Drop Preparation
13. To Make Preparation of Stages in the Development of Embryo of *Raphanus sativus*
14. To Dissect Out Endosperm Haustoria from *Cucumis sativus*
15. Studies on Male and Female Gametophytes of Angiosperms
16. To Study Some Important Dicot and Monocot Families
17. Survey of Digestive Enzymes in Cockroach
18. Determination of Rate of Oxygen Consumption in Cockroach Using a Respirometer
19. Observations on the Microcirculation in the Web of Frog
20. Estimation of Haemoglobin, Total RBC and WBC in Human Blood
21. Tests for Excretory Products of Animals of Different Habitats
22. Recording a Muscle Twitch in frog
23. Study of Reproductive and Endocrine Organs in Rat/Mouse
24. Preparation of Vaginal Smears in Rat/Mouse
25. Study of Prepared Slides of the Developmental Stages of Frog
26. Staining and Mounting of Blastoderm of Chick Embryo
27. Studies on Chick Embryo Using Prepared Slides
28. An Exercise to Demonstrate the Role of Natural Selection in Evolving Adaptations
29. An Exercise to Demonstrate the Role of Natural Selection in Fixing Favoured Adaptations and Eliminating Maladaptations
30. An Exercise to Illustrate the Concept of Genetic Drift
31. Project Work on Herbarium
32. Collection, Identification and Preservation of Insects