Course Code	Course Name	Credits
26ZY154	GENETICS AND ENTTOMOLOGY LAB	02

Objective

To provide practical knowledge on the principles of genetics, chromosomal studies, insect morphology, classification and economically important insects.

Practicals

1. Study of Mendelian inheritance using genetic problems.
2. Verification of monohybrid and dihybrid ratios using suitable examples.
3. Study of linkage and crossing over through numerical problems.
4. Preparation and observation of salivary gland chromosomes/Drosophila chromosomes.
5. Study of sex-linked inheritance and pedigree analysis.
6. Identification of chromosomal aberrations using charts and models.
7. Observation of mitosis and meiosis from temporary slides.
8. Study of mutant forms in Drosophila.
9. Collection and preservation of insects using standard methods.
10. Study of external morphology of insects.
11. Identification and classification of insects up to order level.
12. Observation of mouthparts and appendages of different insects.
13. Study of larval and pupal forms of insects.
14. Identification of beneficial insects such as honey bees and silkworms.
15. Identification of agricultural pests and household insects.
16. Study of insect metamorphosis through charts and specimens.
17. Preparation of insect collection box and maintenance of records.
18. Study of social organization in honey bees and termites.
19. Observation of insect galls, mines and plant damage symptoms.
20. Field collection and identification of local insect fauna.

Students are required to perform and record at least eight experiments in the laboratory manual as part of the course requirements.