

BSP 556 DEVELOPMENTAL BIOLOGY LAB

Course Outcomes:

After successful completion of the course, students will be able to:

CO 1. Develop practical skills using model organisms in developmental biology

CO 2. Gain the skills to isolate and mount the imaginal discs, sex comb, genital plate.

CO 3. Carry out practicals on developmental mutants in *Drosophila* and *Arabidopsis*.

CO 4. Carry out staining techniques for gametes and embryo.

1. Study of model organisms used in developmental Biology.
2. Isolation and mounting of imaginal discs.
3. Structure of sperms and eggs.
4. Isolation and mounting of sex comb and genital plate in *Drosophila*.
5. Study of developmental mutants in *Drosophila* and *Arabidopsis*.
6. Spiral cleavage and general development in snail.
7. Study of hemimetabolous and holometabolous development in insects.
8. Life cycle and metamorphosis in frogs.
9. Structure of *Drosophila* and chick egg.
10. Study of chick embryo by vital staining technique.
11. Developmental stages in frog.
12. Developmental stages in chick.
13. Study of spermatogenesis in rat.

