3.2 Determination of percent viability of seeds by germinationmethod.
3.3 Germination inducers andinhibitors
3.4 Determination of β-amylase activity in germinatingseeds.
3.5 Effect of salinity on seedgermination.

4. StressPhysiology-
4.1 Plant responses against salinity and metalstress
4.2 Radioisotope methodology and its principles (GM Counter and Scintillationunter)

BSP 556 DEVELOPMENTAL BIOLOGY LAB

Course Outcomes:

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

CO 1. Develop practical skillsusing model organisms in developmental biology
CO 2. Gain the skills to isolate and mount the imaginal discs, sex comb, genitalplate.
CO 3. Carry out practicals on developmental mutants in Drosophila andArabidopsis.
CO 4. Carry out staining techniques for gametes and embryo.

1. Study of model organisms used in developmentalBiology.
2. Isolation and mounting of imaginaldiscs.
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 ininsects.
8. Life cycle and metamorphosis infrogs.
9. Structure of *Drosophila* and chickegg.
10. Study of chick embryo by vital stainingtechnique.
11. Developmental stages in frog.
12. Developmental stages inchick.
13. Study of spermatogenesis in rat.

BSP 557 PROJECT WORK

Course Outcomes:

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

CO 1. Carry out a research-based study - select a problem, frame the objectives, conduct literature review, tabulate, represent and interpret the results.
CO 2. Do field work for collection of samples, questionnaire-based surveys.
CO 3. Apply research methodologies, techniques and tools to conduct lab- / field-basedresearch
CO 4. Understand different types of standard methods of citation and references.
CO 5. Write the dissertation, presentand interpret the researchdata scientifically.
CO 6. Build up the capacity to carry out a research projectindependently.
CO 7. Get skilled to be appointed/absorbed based on the theme of the projectwork.
