PRACTICAL COURSES
BSP 506 ANIMAL PHYSIOLOGY LAB

Course Outcomes:

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

CO 1. Perform experiments to estimate enzyme activity and understand factors affecting enzyme activity

CO 2. Perform experiments on hormonal control of reproductive biology.

CO 3. Perform experiments in muscle physiology and osmoregulation.

CO 4. Conduct qualitative tests for excretoryproducts and demonstrate active transport

1. Gastrointestinal function–
   1.1. Factors affecting enzyme activities in digestion of foodstuffs.
   1.2 Quantitative estimation of Enzyme (amylase)activity.
2. Neuroendocrinology–
   2.1 Effect of hormones on blood glucose inrats.
   2.2 Study of estrous cycle in mice
   2.3 Study of sperm count, sperm morphology and sperm motility
3. Muscle Physiology-
   3.1 Histochemical detection of SDH activity in red and white musclefibres.
4. Osmoregulation-
   4.1 Estimation of Fluid balance in ananimal.
   4.2 Osmotic relationship in animals at the level of cell as wellasentire organism.
5. Excretion-
   5.1 Qualitative tests for excretoryproducts.
   5.2 Demonstration of activetransport.

BSP507 PLANT PHYSIOLOGY LAB

Course Outcomes:

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

CO 1. Realize the importance each nutrient in plant growth through experimentation and observation.

CO 2. Observe mineral deficiency symptoms inplants.

CO 3. Know how to perform the tests for understanding waterrelations.

CO 4. Understand the photosynthesis by conducting some alliedexperiments.

CO 5. Understand the role of growth hormones inplants.

1. Plant nutrition-
   1.1 Observation of mineral deficiency symptoms inplants.
2. Water relations-
   2.1 Experiments to demonstrate the diffusion pressure deficit in plantcell.
   2.2 Determination of stomatal index, stomatal frequency and measurement of stomatalaperture.
   2.3 Determination of waterpotential
3. Photosynthesis -
   3.1 Separation and estimation of chloroplastpigments.
   3.2 Demonstration of Kranz anatomy
4. Growth hormones and their regulation-
   4.1 Experiments to demonstrate the effect of hormones on shootapex.
5. Plant pathology
   5.1 Pathogens in crop plants