

# COURSE LEARNING OUTCOMES

## B.sc. THIRD YEAR

### BOTANY

At the end of paper :-

- Student will learn about the mechanism and physiology life processes in plants. It will focus on the plant nutrient uptake and translocation, photosynthesis, respiration and nitrogen metabolism.
- Students will be able to understand the various physiological life processes in plants and various mechanisms such as channel or transport proteins involved in nutrient uptake in plants.
- They will also gain about the various uptake and transport mechanisms in plants.
- They will understand the role of various hormones, signaling compounds, thermodynamics and enzyme kinetics.
- Understand the process of photosynthesis and respiration in higher plants
- Understand the structure, biosynthesis and significance of Bio-molecules.
- Students will get to know in detail about DNA content, structure, forms and its replication and mutation. It will provide comprehensive understanding regarding c value paradox, cot curve, and DNA Repair Mechanisms .
- Understand about fine structure of gene, genetics of bacteria and virus, and gene expression in eukaryotes.
- Students will get to know about different form of RNA and their function. This also provides knowledge about RNA synthesis and processing.
- Understand the overall concepts of Transcription, Translation.
- Learn about breeding systems, techniques of Hybridization, apoptosis etc.