

TARA GOVERNMENT COLLEGE (A), SANGAREDDY

DEPARTMENT OF BOTANY

UG-Course Outcomes

I Sem-Microbial Diversity and Lower Plants

On completion of the course students are able to

1. To gain knowledge about microbial biodiversity
2. Understand the diversity and life cycle patterns of algae, fungi, bryophytes and pteridophytes.
3. To know about the various plant diseases and their control measures.
4. To explore economic importance of algae and fungi.
5. To know the evolution of sporophytes of bryophyte and stelar evolution in pteridophytes.

II Sem-Gymnosperms, Taxonomy of Angiosperms and Ecology

On completion of the course students are able to

1. To gain the knowledge about the life cycles and the economic importance of gymnosperms.
2. To understand about the geological time scale.
3. To understand about the diversity of the plants, their description, identification, nomenclature and their classification including recent advances in the field of plant taxonomy.
4. To understand the ecological relationships between the plants and their environments.
5. To compare the ecological adaptations of hydrophytes, mesophytes and xerophytes.

III Sem- Plant Anatomy and Embryology

On completion of the course students are able to

1. To gain knowledge of plant cells, tissues and tissue systems and their functions.
2. To identify and compare the differences in the anomalous secondary growth of dicots and monocots.
3. To understand the structure of anther, ovule and pollen grains.
4. To gain knowledge about the micro And mega sporogenesis.
5. To understand and gain knowledge about the economic importance of wood.

IV Sem- Cell Biology, Genetics and Plant Physiology

On completion of the course students are able to

1. To understand and describe the organization, structure and functions of a cell and cell organelles.
2. To know about the significance of meiosis.
3. To have knowledge of the nature and functions of genes and the processes of inheritance.
4. To understand the various physiological processes in plants.
5. To explain the role of nutrients and the phytohormones in the growth and development of plant.

V Sem-Biodiversity and Conservation

On completion of the course students are able to

1. To understand the role that biodiversity plays in conservation science.
2. To understand the current threats to the biodiversity.
3. To understand the role and the principles of operation of different types of protected areas.
4. To develop a deeper concern for the biodiversity and its conservation.
5. To understand the role of plants in human welfare.

VI Sem-Tissue Culture and Biotechnology

On completion of the course students are able to

1. The students will learn about the concepts, tools and the techniques related to the *in vitro* propagation of the plants.
2. The students will have the scientific understanding of the subject and also have the good knowledge of application of recombinant DNA technology.
3. To know about the gene cloning and the cloning vectors.
4. To explain the construction of c DNA library and their applications.
5. To compare the pros and cons of the transgenic plants on the environment.