Department of Botany POs / COs

PROGRAMME OUT COMES:

- Student is able to understand and analyze morphological, anatomical and reproductive behavior of both non-flowering and flowering plants.
- Student is able to understand different metabolic processes happening in plant cell
- Student can analyze the pattern of inheritance and have the knowledge regarding the molecular basis of inheritance.
- Student will have a knowledge regarding the complexity of ecosystem and importance of bio diversity and its conservation.
- Student is able to understand the process of vertical gene transfer and process of plant tissue culture, organ culture and micropropagation

COURSE OUT COMES:

SEMESTER –I
MICROBIAL DIVERSITY AND LOWER PLANTS -I

On the completion of the course, Students will be able to:

- Student will have knowledge regarding the origin of life and how the evolution has progressed by studying the different earlier life forms.
- By studying the thallus structure and life cycles of non-flowering plants he can understand how the complexity has been increased during the process of evolution.
- Student can analyse different plant communities basing on their vegetative and reproductive structures.

SEMESTER –II
GYMNOSPERMS, TAXONOMY OF ANGIOSPERMS AND ECOLOGY –II

On the completion of the course, Students will be able to:

- By studying the earlier seed bearing plants Gymnosperms he can understand the process of evolution forming the flowering plants.
- The student can compare the morphological and evolutionary trends among the flowering plants. He can identify and assign the plants to their respective systematic position.
- Student can conceptualize the nature, ecosystem, their behaviour and complexity.

SEMESTER –III
ANATOMY AND EMBRYOLOGY –III

On the completion of the course, Students will be able to:

- Student can understand anatomical features of different plant organs microscopically.
- Student can ascertain how the environmental conditions and adaptive behaviour of plants led to anatomical changes in plant organs.
- Student can be in a position to understand the basic embryological behaviour of Angiosperms like gametogenesis, fertilization and development of embryo in Angiosperms.
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SEMESTER –IV

CELL BIOLOGY & PLANT PHYSIOLOGY -IV

On the completion of the course, Students will be able to:

- Student will have knowledge regarding the plant cell structure, cell division, and behaviour of chromosomes during cell division.
- Student will understand the pattern of inheritance and also have knowledge regarding Mendelian and non Mendlian pattern of inheritance. He will also have an idea regarding the molecular basis of inheritance.
- Student will have the knowledge regarding the different physiological processes happening in plant and how various bio chemical molecules interact and function

SEMESTER –V
BIO DIVERSITY

On the completion of the course, Students will be able to:

- Student will have the knowledge regarding the concept of biodiversity and its importance to humankind. He will also have knowledge regarding the geographical regions of world and India with reference to their biological diversity and ecological sensitivity.
- Student will also have knowledge regarding the conservation of bio diversity both in situ and ex situ.
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SEMESTER –VI
PLANT TISSUE CULTURE

On the completion of the course, Students will be able to:

- Student is able to understand the phenomena of totipotency, plant tissue and organ culture and the process of micropropagation.
- Student will have the basic knowledge regarding the rDNA technology and the methods of producing transgenic plants. He will understand the process of vertical gene transfer.