

## DEPARTMENT OF BOTANY

### Programme outcome

This branch of science enables a huge opportunity regarding the knowledge of:

1. The economic importance of algae, fungi and lichen and some plant diseases with special reference to the causative agents, symptoms, etiology and control measures.
2. Micro preparation of stems, roots and leaf of dicots.
3. About the production of synthetic seeds and their significance.
4. About the role of tissue culture in crop improvement.
5. The economic products with special reference to the botanical name, family, morphology of useful parts and their use
6. Idea on sensory photobiology
7. Applications of biotechnology in plant, animal, human welfare and IPR, biosafety, biopiracy, bioterrorism and bioethics.
8. Study of medical science, paramedical science, bio-technology, forestry, and researches in all such fields.

### Programme specific outcome

In this programme students know about:

1. Basics and importance of microbiology.
2. Bacterial nutrition and growth are very important for their useful for growth and control in diseases.
3. Knowledge on different types of algae and their application on different fields.
4. The basics of cell and its components.
5. Develop an understanding of microbes, fungi and lichens and appreciate their adaptive strategies.
6. Demonstrate proficiency in the experimental techniques and methods of appropriate analysis of bryophytes, pteridophytes, gymnosperms.
7. Examine the internal anatomy of plant systems and organs
8. Evaluate the adaptive and protective systems of plants

14. To analyses the Phyto geography or Phyto geographical division of India
15. To classify plant systematics and recognize the importance of herbarium and virtual herbarium.
16. To interpret the rules of ICN in botanical nomenclature
17. To know the structure and development of dicot and monocot embryos.
18. To understand water relation of plants with respect to various physiological processes.
19. To differentiate anabolic and catabolic pathways of metabolism
20. To interpret the biological nitrogen fixation in metabolism
21. To learn the micro and mega sporogenesis
22. Students will acquire communication, soft skill, social awareness and entrepreneurship skill.
23. It aims for work within the fields of research, public administration, governmental and non-governmental organizations, education and industry.
24. To understand the different classifications of horticultural crops, nursery management, and use of technology in horticulture.
25. To make the students aware about conservation and sustainable use of plants.
26. To address the socio-economical challenges related to plant sciences.

#### Semester-I

##### Core -1 (microbiology and phycology)

###### Course Outcome

1. Microbial world, microbial nutrition, growth and metabolism with practical.
2. Virology and immunology with practical.
3. Bacteria and cyanobacteria and their economic importance
4. Evolutionary significance of prochloron
5. Different types of algae with their ecology and evolution and their role in environment, agriculture, biotechnology and industry

##### Core- 2 (Biomolecules and Cell Biology)

###### Course Outcome

