

Master of Science (M.Sc.)

Program Outcomes:

PO₁: **Knowledge and understanding;** of the range of plant diversity with their structure and function and environmental relationships. The evaluation of plant diversity through basic taxonomical research.

PO₂: **Rational abilities;** Assimilate the knowledge and scientific ideas based on wide reading, and research through the internet. Exchange of knowledge and comparative discussion of various topics within the subject. Constructing and testing the hypothesis so that they can develop research attitude..

PO₃: **Practical skills:** Students learn to carry out practical work, in the field and in the laboratory, with minimal risk.

PO₄: **The Botanist and society:** Apply reasoning informed by the contextual knowledge to assess plant diversity, its importance for society, health, safety, legal and environmental issues and the consequent responsibilities relevant to the biodiversity conservation practice.

PO₅. **Environment and sustainability:** Understand the impact of the plant diversity in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO₆. **Ethics:** Apply ethical principles and commit to environmental ethics and responsibilities and norms of the biodiversity conservation.

PO₇. **Scientific Knowledge:** Apply the knowledge of basic science, life sciences and fundamental process of plants to study and analyze any plant form.

PO₈. **Problem analysis:** Identify the taxonomic position of plants, formulate the research literature, and analyze non reported plants with substantiated conclusions using first principles and methods of nomenclature in Botany.

PO₉. **Design/development of solutions:** Design solutions from medicinal plants for health problems, disorders and disease of human beings and estimate the phytochemical content of plants which meet the specified needs for appropriate consideration for the public health.

PO₁₀. **Usage of Modern tools:** Create, select, and apply appropriate techniques, resources, and modern instruments and equipments for Biochemical estimation, Molecular Biology,

Biotechnology, Plant Tissue culture experiments, cellular and physiological activities of plants with an understanding of the applications and limitations

PO₁₁. **Communication:** Communicate effectively on complex biological activities with the community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO₁₂. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.