

The course is designed in such a manner to well equip students with significant interdisciplinary components as per CBCS. Students have exposure to advance technologies of the subject. They are made aware about the social and environmental issues, significance of plants and their relevance to the national economy.

Programme specific outcome:

Core-1:Microbiology and phycology

This course enable students to learn about microbial diversity and Algal diversity of the world.

Core-2:Biomolecules and cell biology

This course teaches students about basics of biomolecules and cells .

Core-3:Mycology and phytopathology

This course helps students to learn about fungi and pathogenic fungi.

Core-4:Archegoniates

Students able to learn about various classes and importance of bryophytes,pteritophytes,and gymnosperms along with evolutionary relationships among the archegoniates.

Core-5:Anatomy of angiosperms

Students will well equipped with anatomical studies and know about different growth stages of plant and plant tissues.

Core-6:Economic Botany

This course enables the students to learn about commercial aspects of the plants and their role in world economy.

Core-7:Genetics

This course will help in making the students to known about inheritance patterns,functioning of genes and basic concept about mutation.

Core-8:Molecular Biology

students able to known the core concepts of replication,transcription,translation and gene expression mechanisms .

Core-9:Plant Ecology and Phytogeography

Students will learn anout ecosystem,factors effecting ecosystem and about the environment.

Core-10:Plant systematics

This course makes students learn about identification,classification and documentation of angiospermic plants.

Core-11:Reproductive Biology of angiosperms

This course aims to teach students about the various reproductive stages of plant and their development.

Core-12:Plant physiology

students learn about the vital physiology of plant and processes.

Core-13:Plant metabolism

students learn about various types of catabolic and anabolic processes of plant.

Core-14:Plant Biotechnology

The students will learn about the Concepts, tools and techniques related to in vitro propagation of plants. Different methods used for genetic transformation of plants, use of Agrobacterium as a vector for plant transformation, components of a binary vector system. Various case studies related to basic and applied research in plant sciences using transgenic technology.

GENERIC ELECTIVE: BOTANY**GE-1:Biodiversity**

students have basic ideas of various types of lower plant groups upto gymnosperms.

GE-2:Plant physiology and metabolism

Students will know about various physiological processes of plants and their metabolic pathways.

DISCIPLINE SPECIFIC ELECTIVE**DSE-1: Analytical techniques in plant sciences**

Students will learn about various techniques used in plant sciences like chromatography, microscopy, spectrophotometry, electrophoresis and basics of biostatistics and their application.

DSE-2:Natural resource management.

They understand the pattern origin, diversification and cultivation of plants in nature. They are able to design the strategies for conservation of these natural resources.

DSE-3:Horticultural Practices and post harvest technology.

This course will help to teach students to learn about horticulture and its applied aspects.

DSE-4:Project work.

The student completing the course is capable to perform short research projects using various tools and techniques in plant sciences and develop scientific temperament and research attitude.