

Department Botany

Program outcomes, Programme Specific Outcomes & Course Outcomes

Programme Outcomes, Programme Specific Outcomes & Course Outcomes of the B.Sc. Botany programme is designed as per Gauhati University B.Sc. Botany Syllabus

Programme Outcomes (PO)

Sl. No	Program	Outcomes
1	B. Sc. Botany	Knowledge of structural, functional and ecological diversity of plants.
2		Plant systematics and classification including phyto-geographical regions of India and major biomes of the world
3		Knowledge on microbes and their importance in agriculture and medicine
4		Application of computer and bioinformatics for biological data analysis.
5		Knowledge on morphology, uses and economic importance of plants
6		Knowledge on genetics and plant breeding in crop improvement.
7		Knowledge on development of transgenic plants for agricultural or industrial use.
8		Knowledge generation on herbal medicinal plants of Assam and formulate new concepts for a green world, sustainable development, betterment of human health specifically from medicinal plants to meet specific need and eco-friendly environment.
9		Giving opportunities to students to conduct experiments practically both in field and laboratory. Hands on practical helps the students to gain proficiency and skills in different topics of modules offered to them.
1	Program specific outcome	Critical evaluation of ideas and arguments by collecting relevant information about the plants so as to recognize their position in the classification systems and at phylogenetic level.
2		Students able to understand the basic microbiological interventions in modern day human welfare.
3		Students able to explain how plant function at gene, genome, cellular and tissue level.
4		Knowledge generation on indigenous herbal medicinal plants.
5		Students able to know the role of bio-fertilizer for sustainable agriculture.

Course Outcome (CO)

Sl. No	Corse	Outcome
1	B.Sc. Botany Honours (HC)	Knowledge on microbial world & their economic importance.
2		knowledge on structure, properties and functions of cell and its components
3		Brief idea on Mycology and Phytopathology
4		Knowledge on archegonia producing plants with their ecological significance and economic importance.
5		Knowledge on morphology of angiosperms and developmental biology of plant body
6		Knowledge on economic importance of crop plants

7		Knowledge on genetics, heredity and evolution in living organisms.
8		Detailed coverage on basic molecular biology, genome organization and central dogma of life
9		Knowledge on ecology of plants and phytogeography.
10		Knowledge on plant systematics, phylogenetic and evolutionary relationships of angiosperms
11		Knowledge on detailed morphological and anatomical study of reproductive structures of angiospermic plants
12		Knowledge on plant-water relationships, mineral nutrition and physiological processes associated with plant growth
13		Knowledge on sustainable utilization of natural resources
14		Basic knowledge on horticulture and its practices on ornamental and crop plants
1	B.Sc. Botany Regular (RC)- Generic HG)	Knowledge on structure and diversity of microbes, algae and fungi.
2		Basic knowledge on Plant Ecology, biogeochemical cycles of Carbon, Nitrogen and Phosphorus, Knowledge on plant taxonomy, its identification, Classification and Nomenclature, phytogeography and principle of bio-geographical zones of India
3		Knowledge on plant-water relationships, mineral nutrition and physiological processes associated with plant growth
4		Knowledge on different anatomical structures of plant, basic knowledge on embryology of plants.
5		Knowledge on economic importance of crop plants and application of biotechnology in plant animal & human welfare.
6		Basic principle, function and working of microscopy used in research, basic principle, structure, composition and function of different cell organelles of prokaryotes & eukaryotes, basics on molecular biology techniques.
7		Practical knowledge on addressing relevant scientific questions through experimentation
8		Knowledge on bio-fertilizer, basic knowledge on the microbes used as bio-fertilizer.
9		Brief on Gardening and Nursery and their maintenance.
10		Knowledge on medicinal plants and indigenous medicinal sciences/systems of India, knowledge on ethno-botany.
