

BSc Botany		
Course code	Course Name	Course Outcome (CO)
CBCS (Honours)		
Semester I		
BOT-HC-1016	Phycology and Microbiology	<ul style="list-style-type: none"> The students gain knowledge at understanding of microbial world (Viruses and Bacteria) and the lower groups of plants-algae, their classification, structure, growth and their economic importance
BOT-HC-1026	Biomolecules and Cell Biology	<ul style="list-style-type: none"> The students will understand the basic of biomolecules and cell biology, detailed studies on structure and function of DNA and RNA, Cell cycle
Semester II		
BOT-HC-2016	Mycology and Phytopathology	<ul style="list-style-type: none"> Students will acquire knowledge of the microbes and its diversity, their occurrence types and their mode of nutrition Students will be aware of plant pathogens, the symptoms of plants diseases and their various control measures physiologically, biologically and chemically to protect plants or crops
BOT-HC-2026	Archegoniate	<ul style="list-style-type: none"> Student will gain a clear knowledge on general characteristics of bryophytes, pteridophytes and gymnosperm, their reproduction, evolution and also their economic importance of the group
Semester III		
BOT-HC-3016	Morphology, Anatomy of Angiosperm	<ul style="list-style-type: none"> Knowledge on morphology of inflorescence, all the whorl of flower, application of morphology, systematic, forensics and pharmacognosy in plant classification To understand the internal organisation of plant body in details and anatomical adaptations of xerophytes and hydrophytes
BOT-HC-3026	Economic Botany	<ul style="list-style-type: none"> Knowledge on origin and evolution of new crops / varieties of plants. The importance and uses of cereals, legumes, spices, dyes, beverages, fibre, timber and rubber yielding plants
BOT-HC-3036	Genetics	<ul style="list-style-type: none"> To gain knowledge on Mendelian genetics and its extensions, detail studies of chromosomes, gene mutations and classical vs molecular concepts of gene

BOT-SE-3014	Biofertilizer	<ul style="list-style-type: none"> • Imparts knowledge on biofertilizers in agriculture • To understand the actinorhizal symbiosis and Mycorrhizal association and its importance • To understand organic farming like green manuring and organic fertilizers, recycling of biodegradable, agricultural and industrial waste • To gain knowledge on vermicomposting
BOT-SE-3024	Herbal Technology	<ul style="list-style-type: none"> • Imparts knowledge on herbal medicine, role of medicinal plants in Siddha system of medicines, marketing and utilization of medicinal plants • To understand pharmacognosy and phytochemistry and analytical pharmacognosy • To gain knowledge on medicinal plant banks micropropagation of some medicinal plants
Semester IV		
BOT-HC-4016	Molecular Biology	<ul style="list-style-type: none"> • Gain knowledge on historical perspective of nucleic acid, detail studies on genetic material DNA, RNA, Transcription and translation • Processing and modification of DNA are also studied
BOT-HC-4026	Plant Ecology and Phytogeography	<ul style="list-style-type: none"> • Knowledge on basic concept of ecosystem, soil, water and biotic interaction. Plant communities, population ecology and the phytogeographical regions of India
BOT-HC-4036	Plant Systematics	<ul style="list-style-type: none"> • The course imparts knowledge on the significance of plant systematic, classification, nomenclatural type, phylogeny of angiosperms • Detailed studies of some economically important dicot and monocot families
BOT-SE-4014	Nursery and Gardening	<ul style="list-style-type: none"> • To understand the objectives and scope of nursery and different types of gardening • To understand vegetative propagation and its types like air-layering and cutting • To gain knowledge on hardening of plants like green house, mist chamber, shed root, shade house and glass house • To gain knowledge on sowing of seed and seedlings and cultivation of different vegetables

BOT-SE-4024	Floriculture	<ul style="list-style-type: none"> • To learn about the importance, scopes and types of gardening and nursery managements • To understand the uses and importance of ornamental plant and indoor plants • To learn about commercial floriculture and bonsai • To gain knowledge on diseases and pest of ornamental plants
BOT-SE-4034	Intellectual Property Rights	<ul style="list-style-type: none"> • To learn about the concept and kinds of IPR, Patents, copyrights, trademarks, geographical indications, protection of traditional knowledge, industrial designs, protection of plant varieties, information technology and biotechnology related to IPR
Semester V		
BOT-HC-5016	Reproductive Biology of Angiosperms	<ul style="list-style-type: none"> • Gain knowledge on different reproductive parts of angiosperm plants in details, basic concepts of self-incompatibility, polyembryony and apomixes
BOT-HC-5026	Plant Physiology	<ul style="list-style-type: none"> • To understand the physiological aspects of plants such as plant-water relations, mineral nutrition, nutrient uptake, physiology of flowering, phytochrome, cytochrome and phototropins
BOT-HE-5016	Natural Resource Management	<ul style="list-style-type: none"> • The students will gain knowledge on natural resources, sustainable utilization of natural resources like land, water, water, biological resources, forest and energy • To evaluate the contemporary practices in resource management • To understand the national and international efforts in resource management and conservation
BOT-HE-5026	Horticulture Practices and Post-Harvest Technology	<ul style="list-style-type: none"> • To understand the scope, importance, techniques and branches of horticulture • The students will learn about ornamental plants and some fruits and vegetables having economically importance • To learn about landscaping and garden design, floricultures, post-harvest technology and disease control and management • Field visit to gardens standing crop site nurseries, vegetable gardens or horticultural fields
Semester VI		

BOT-HC-6016	Plant Metabolism	<ul style="list-style-type: none"> • Students will gain knowledge on Conceptual knowledge on metabolism, carbon assimilation and oxidation, ATP synthesis, lipid and nitrogen metabolism • To understand the mechanism of signal transduction
BOT-HC-6026	Plant Biotechnology	<ul style="list-style-type: none"> • The students will able to learn about plant tissue culture, recombinant DNA technology, gene cloning, methods of gene transfer and application of biotechnology in different field
BOT-HE-6016	Industrial and Environmental Ecology	<ul style="list-style-type: none"> • To understand the scope of microbes in industry and environment • The students will learn about Bioreactors or fermenters and fermentation processes and visit to educational institute • The students will understand the microbial production and pure culture techniques, uses and importance in industries, agriculture and environment
BOT-HE-6026	Analytical Techniques in Plant Sciences	<ul style="list-style-type: none"> • The students will understand Imaging and related techniques, Cell fractioning, Radioisotopes, Spectroscopy, Chromatography, Characteristics of proteins and nucleic acids, and Biostatistics
BOT-HE-6036	Project Work / Dissertation	<ul style="list-style-type: none"> • On completion of the project work or dissertation students will be in a position to take up practical on some specific topic related to Plant Sciences
CBCS (Honours Generic)		
Semester I		
BOT-HG-1016	Biodiversity (Microbes, Algae, Fungi and Archegoniate)	<ul style="list-style-type: none"> • Students acquire knowledge on micro-organisms and its diversity, their occurrence types and their mode of nutrition. • It helps student to gain a clear knowledge on general characteristics of bryophytes, pteridophytes and gymnosperm, their reproduction, evolution and also their economic importance of the group.
Semester II		

BOT-HG-2016	Plant Ecology and Taxonomy	<ul style="list-style-type: none"> • Knowledge on basic concept of ecosystem, soil, water and biotic interaction. • To understand endemism, plant communities, population ecology and the phytogeographical regions of India. • To gain knowledge on Herbarium and Botanical gardens. • To understand taxonomic hierarchy, plant classifications systems, biometrics, numerical taxonomy and cladistics.
Semester III		
BOT-HG-3016	Plant Physiology and Metabolism	<ul style="list-style-type: none"> • To understanding the physiological processes involved in the plant sciences like plant water relations, enzymatic activities, translocation and a detailed study on photosynthesis and respiration. • To clear the concept on Mineral nutrition, plant growth regulators, nitrogen metabolism and other related physiological aspects such as photoperiodism and vernalization.
Semester IV		
BOT-HG-4016	Plant Anatomy and Embryology	<ul style="list-style-type: none"> • To understand tissue systems in plants. • To understand the internal organisation of plant body in details and anatomical adaptations of xerophytes and hydrophytes • To gain knowledge on the structural organisation of flowers, pollination, fertilization, embryo formation and endosperm