B.Sc.: Botany

Programme Specific Outcomes

At the time of graduation, the students will be able to-
PSO1: Understand the basic concepts of taxonomy and ecology
PSO2: Acquire knowledge about economics and medicinal plants in agriculture and medicine
PSO3: Analyse the relationship between plants and microbes
PSO4: Understand the biology of diversity of seed plants or phanerogams
PSO5: Understand behaviours of fossils and gymnosperm plants
PSO6: Understand plant diseases, chemical properties and evolutionary relationship among taxonomic groups

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Course Outcomes

B. Sc. First Year

Paper I- Diversity of Cryptogams-I

Upon completion of the course, the students will be able to-
CO1: Identify various types of plants in kingdom Plantae
CO2: Identify Cryptogams
CO3: Identify various types of Algae
CO4: Describe various types of bacteria
CO5: Describe various types of fungi
CO6: Identify various types of viruses

Paper II- Morphology of Angiosperms

Upon completion of the course, the students will be able to-
CO1: Describe various types of habitat habit and morphological characters
CO2: Identify various types of root, stem and leaves
CO3: Identify various types of inflorescence and flowers
CO4: Identify various types of fruits
CO5: Describe modifications of roots stems and leaves

Paper V- Diversity of Cryptogams-II

Upon completion of the course, the students will be able to-
CO1: Describe Cryptogams
CO2: Describe characteristic feature of Bryophytes
CO3: Describe Characteristic feature of Pteridophytes
CO4: Identify various types of Bryophytes
CO5: Identify various types of Pteridophytes

Paper VI- Histology, Anatomy and Embryology

Upon completion of the course, the students will be able to-
CO1: Describe various types of tissues
CO2: Describe anatomical characters of monocot and dicot plants
CO3: Describe various types of ovules
CO4: Describe vascular elements in tissues

B. Sc. Second Year

Paper IX- Taxonomy of Angiosperms

Upon completion of the course, the students will be able to-
CO1: Describe various Classification Systems of plants
CO2: Describe characteristics of various angiosperm families
CO3: Describe various taxonomic terminologies
CO4: Describe importance of plant studies
CO5: Describe various tools used in taxonomy

Paper X- Plant Ecology

Upon completion of the course, the students will be able to-
CO1: Describe importance of plant studies
CO2: Describe various terminologies used in ecology
CO3: Describe soil structure and soil types
CO4: Describe various methods of conservation
CO5: Describe ecological adaptations in plants

Paper XIII- Gymnosperms and Utilization of plants

Upon completion of the course, the students will be able to-
CO1: Differentiate angiosperm and gymnosperm
CO2: Describe the characteristic feature of gymnosperm plants
CO3: Describe economic importance of cereals pulses
CO4: Describe importance of timber plants
CO5: Describe medicinal values of plants
CO6: Describe uses of plants and their parts in various industries

Paper XIV- Plant Physiology

Upon completion of the course, the students will be able to-
CO1: Describe various physiological processes of plants
CO2: Describe photosynthesis
CO3: Describe transpiration
CO4: Describe respiration
CO5: Describe stomata and functions of stomata
CO6: Describe osmosis

B. Sc. Third Year

Paper XVII- Cell & Molecular Biology

Upon completion of the course, the students will be able to-
CO1: Describe Cell and cell structure
CO2: Describe molecular basis of cell
CO3: Describe various types of cells
CO4: Describe mitosis and meiosis
CO5: Identify various cell organelles
CO6: Describe various stages of cell division

Paper XVIII (A) - Diversity of Angiosperms-I

Upon completion of the course, the students will be able to-
CO1: Describe various Classification Systems of plants
CO2: Describe variations among angiosperm families
CO3: Describe various types of keys used for plant identification
CO4: Describe various floral characters of angiosperm families
CO5: Describe importance of plant studies and uses of plants

Paper XXI- Genetics & Biotechnology

Upon completion of the course, the students will be able to-
CO1: Describe genetics
CO2: Describe the basic information about gene, hybridisation and genetic material
CO3: Describe various genetic abnormalities
CO4: Describe mutation and chromosomal aberrations
CO5: Describe uses and applications of r-DNA technology

Paper XXII (A)- Diversity of Angiosperms – II

Upon completion of the course, the students will be able to-
CO1: Describe characteristic feature of various families of angiosperm plants
CO2: Describe the importance of plants of various families
CO3: Describe various tools used in taxonomy
CO4: Describe botanical gardens, bio-reservoirs and conserved forests
CO5: Describe herbariums and gene banks