

## Programme and Course Outcome

### Programme: Botany

Programme Outcome	<p>The curriculum in the subject of Botany prepare students for various fields as:</p> <ul style="list-style-type: none"> <li>• Science Teacher</li> <li>• Horticulture and floriculture</li> <li>• Banking Sectors</li> <li>• Research Laboratories</li> <li>• Coaching Instructors</li> <li>• Environmental Science Field</li> <li>• Microbial Technology Labs</li> <li>• Biofertilizer Production Technology Labs</li> <li>• M.Sc. Life Sciences</li> </ul>
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### Course Outcome

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Biodiversity of microbes	On successful completion of this course the students will be able to understand about biodiversity specific in case of Microbes, Viruses, types and their replication with economic importance, Bacteria, its history & genetic recombination, Algae, different case studies and Fungi along with important plant disease, their control.
Biodiversity of Archegoniates	On successful completion of this course the students will be able to understand about Paleobotany, Archegoniates, alternation of generation, Pteridophytes, their economic importance and Gymnosperms specially Cycas & Pinus.
Plant Ecology	On successful completion of this course the students will be able to understand about Ecology and Environment, what are ecosystems, communities and their distribution of plants. Student's awarded about different types of Pollution, their causes and Environmental laws.
Plant Taxonomy	On successful completion of this course the students will be able to understand about Plant Taxonomy, their systematic, what are Herbariums and Botanical gardens, what are Modern trends in relation to Plant Taxonomy and different case study of Plant Families along with their specific feature, Floral characters and Economic importance
Plant Anatomy	On successful completion of this course the students will be able to understand about Internal structure of plants parts specially Root, Stem & Leaves. They learn about different aspects of Anatomical structure, Secondary growth and different types of Adaptive and Protective systems.
Plant Embryology	On successful completion of this course the students will be able to understand about Structural organization of Flower, Pollination, Fertilization, Seed structure, Embryo & Endosperm, types along with Apomixis and Polyembryony
Mushroom Culture technology	This course is a Skill Enhancement Course; on successful completion of this course the students will be able to understand about details steps

	of Mushroom Cultivation, Nutritional & Medicinal Value of Mushroom, Storage of Mushroom and Different types of Foods that can be prepared from Mushroom, its marketing export value.
Plant Physiology	On successful completion of this course the students will be able to understand about different aspects of physiology in relation to Plant-Water, Mineral Nutrition to plants, Translocation, Various types of Plant Growth Regulators and Photoperiodism.
Plant Metabolism	On successful completion of this course the students will be able to understand about details aspects of Photosynthesis, factors that affects photosynthesis, Respiration, Enzymology, Nitrogen and Lipid Metabolism, their degradation.
Cell Biology	On successful completion of this course the students will be able to understand about Cell, its related Theories, Mitosis & Meiosis, different Cell organelles & their function in details.
Molecular Biology	On successful completion of this course the students will be able to understand about Genetic Material (DNA & RNA) and its replication, various biological phenomena i.e. Transcription, Translation, Gene expression and Techniques of Molecular Biology (PCR, Microscopy).
Economic Botany	On successful completion of this course the students will be able to understand about origin of cultivated plants, their importance with reference to Vavilov's work, details description and economic importance of Legumes, Spices, Beverages, Oils, Fiber yielding plants.
Biotechnology	On successful completion of this course the students will be able to understand about Plant Tissue Culture Technology, different techniques of DNA recombination, various types & application of Molecular Markers & diagnostic techniques.