

## PROGRAMME OUTCOME

Programme Name: T.Y.B.Sc. BOTANY

Paper No.	Name of the Paper	Outcomes
<b>I</b>	<b>Plant Diversity III</b>	<ul style="list-style-type: none"> <li>• The syllabus is designed to train the students in all areas of the plant sciences with some applied areas of the subject.</li> <li>• The students will learn about the diversity, identification, classification and economic importance of lower organisms and plants like viruses, bacteria, algae, bryophytes, fungi and gymnosperms.</li> <li>• The students will also develop understanding in different diseases caused by viruses, bacteria and fungi.</li> <li>• Students will acquire knowledge about the tools and techniques of microbiology.</li> <li>• Students will understand the role of microbes in fermentation industry.</li> </ul>
<b>II</b>	<b>Plant Diversity IV</b>	<ul style="list-style-type: none"> <li>• The students will also acquire knowledge about palaeobotany and various plants fossils.</li> <li>• The students will understand the growth, development and reproduction in plants</li> <li>• Students will also become familiar with various taxonomic aspects like how to identify the plants on the basis of morphological characters and will also become familiar with various plant families with study of economic important plants.</li> <li>• Students will also develop understanding in plant anatomy.</li> <li>• Students will also learn how biodiversity is important, what threats are there to biodiversity and how to conserve biodiversity.</li> </ul>
<b>III</b>	<b>Form and Function III</b>	<ul style="list-style-type: none"> <li>• The students will acquire knowledge about few cell organelles and their function under broad topic of cytology.</li> <li>• They will be understand some important physiological processes like osmosis, imbibition etc.</li> <li>• Students will also get exposed to various hands on practical of various tissue culture techniques and biotechnology based techniques.</li> <li>• The students would be able learn the technique of mushroom cultivation and explore the possibility of entrepreneurship in the same.</li> <li>• Students will able to understand how nitrogen cycle occurs in nature and why nitrogen is</li> </ul>

		<p>so important for plants and how it is assimilated in nature.</p> <ul style="list-style-type: none"> <li>• The students will be able to draw genetic chromosome maps on the basis of three point test cross and will also learn about mutations, its sources.</li> <li>• Students will be able to solve biostatistics based problems based on students t test, regression analysis and ANOVA.</li> </ul>
<b>IV</b>	<b>Current Trends in Plant Sciences II</b>	<ul style="list-style-type: none"> <li>• Students will gain knowledge on post harvesting techniques which will explore the possibility of entrepreneurship in this field.</li> <li>• The students will also gain knowledge about the latest molecular biology techniques for isolation and characterization of genes.</li> <li>• Students will learn about important bioinformatics based practical's.</li> </ul>
<b>Applied Component</b>	<b>Horticulture &amp; Gardening</b>	<ul style="list-style-type: none"> <li>• Students acquire knowledge about Basic horticultural science terminology</li> <li>• Students will gain knowledge on post harvesting techniques which will explore the possibility of entrepreneurship in this field.</li> <li>• Focus of the Horticulture program is the development of a well-rounded Horticulturist.</li> <li>• Demonstrate knowledge and understanding in Current applications of horticultural principles and practices: propagation, pest management, production, maintenance, and business practices</li> </ul>

Programme Name: S.Y.B.Sc. BOTANY

Paper No.	Name of the Paper	Outcomes
I	Plant Diversity II	<ul style="list-style-type: none"> <li>• The syllabus is designed to train the students in all areas of the plant sciences with some applied areas of the subject.</li> <li>• The students will learn about the diversity, identification, classification and economic importance of lower plants like algae, fungi, bryophytes and gymnosperm.</li> <li>• Students will also become familiar with various taxonomic aspects like how to identify the plants on the basis of morphological characters and will also become familiar with various plant families with study of economic important plants.</li> <li>• The students will learn about some important instrumentation techniques.</li> <li>• The students will also acquire knowledge about palaeobotany and various plants fossils.</li> </ul>
II	Form and Function II	<ul style="list-style-type: none"> <li>• The students will acquire knowledge about some important cell organelles and their function under broad topic of cytology.</li> <li>• Students will also learn about basic concepts of cytogenetics like how sex is determined in different organisms, variation in chromosome number and concept of extra nuclear genetics.</li> <li>• Student will able to learn about central dogma of life basis of molecular biology.</li> <li>• Students will go through basic plant physiological processes like respiration, Photoperiodism, photorespiration and its importance.</li> <li>• Students will acquire knowledge about various biogeochemical cycles of nature and how soil formation occurs.</li> </ul>
III	Current Trends in Plant Sciences I	<ul style="list-style-type: none"> <li>• Students will also get exposed to various hands on practical of various tissue culture techniques and biotechnology based techniques and horticulture based practices like bonsai, dish garden, terrarium making.</li> <li>• The students will also gain knowledge about the latest molecular biology techniques for isolation and characterization of genes.</li> <li>• Students will learn about important bioinformatics based practical's.</li> </ul>

Programme Name: F.Y.B.Sc. BOTANY

Paper No.	Name of the Paper	Outcomes
I	Plant Diversity I	<ul style="list-style-type: none"><li>• The students will learn about the diversity, identification, classification and economic importance of some specific algae, fungi, bryophytes and gymnosperm.</li><li>• Students will also become familiar with various taxonomic aspects like how to identify the plants on the basis of morphological characters like root, stem, leaves and flowers.</li><li>• Students will also become familiar with specific plant families with study of economic important plants.</li><li>• .</li></ul>
II	Form and Function I	<ul style="list-style-type: none"><li>• The students will acquire knowledge about some important cell organelles like chloroplast and endoplasmic reticulum and their function under broad topic of cell biology.</li><li>• Students will also learn about basic concepts of ecology like energy pyramids, how energy flows in an ecosystem and various types of biotic and abiotic factors in different ecosystems.</li><li>• Students will also learn about basic concepts of Mendelism and how genes interact under topic genetics.</li><li>• Students will also solve basic biostatics problems based on mean mode and median, standard deviation and frequency distribution.</li><li>• Students will go through basic plant physiological processes like photosynthesis and its importance.</li><li>• Students will learn about grandmas pouch containing various medicinally important plants and their uses.</li></ul>

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Dr. P.V. Phate