

Name of the Department : BOTANY

Programme : PG

S.No.	Course Code	Course Name	Course outcome
1.	17PBYC11	Taxonomy of Angiosperms	<ul style="list-style-type: none">• Understand the morphological features of vegetative, inflorescence, fruits and seed characters.• Provide knowledge on botanical nomenclature, classifications, merits and demerits of various systems of classifications.• Understand the systematics positions of the selected families of the flowering plants with their economic importance.• Provide the knowledge about the identification of plant species.• Students to be familiar with local flora and herbarium techniques.
2.	17PBYC12	Developmental Botany	<ul style="list-style-type: none">• Provide information about internal structure of stem, root and leaf.• Improve the knowledge about the general aspects of plant reproductive organs and embryo and its development.• Studied with a fundamental practices of plant embryology.• Provide the knowledge about the various aspects of morphogenesis.• Identifying the key aspects of embryology of Angiosperms.• Understand the process of formation of male and female sexual representatives.• Studied the mechanism of fertilization in angiosperms.• Improve the knowledge embryo development and endosperms.
3.	17PBYC13	Instrumentation and Bio-techniques	<ul style="list-style-type: none">• Learning to different types of microscopes and their uses of biological science laboratories.• Describe the pH measurement in soil and water samples

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			<ul style="list-style-type: none"> • Realise the need of centrifuges and their uses in research • Understand the principle, Applications and different methods of chromatography. • Realise the importance of UV-Visible. • Describe the principle of flame photometer and bomb calorimeter
4.	17PBYC1P	Practical I Lab in Taxonomy of Angiosperms, Developmental Botany, Instrumentation and Biotechniques	<ul style="list-style-type: none"> • Understand the floral and morphological characters of various families. • Helps to know the permanent herbarium preparation techniques. • Improve the knowledge about the plant identification. • Learn to the key preparations of families, Genus and species. • Improve the knowledge about the general aspects of plant reproductive organs and embryo and its development. • Learning to different types of microscopes and their uses of biological science laboratories. • Realize the need of centrifuges and their uses in research • Understand the principle and different methods of chromatography.
5.	17PBY011	Herbal Botany	<ul style="list-style-type: none"> • Provide the knowledge about the importance of medicinal plants. • Studied to be more familiar in medicinal plants cultivation and conservation. • Learn to the making and process of medicinal plants. • Understand the systematic position, diagnostic feature and medicinal uses of selected plants. • Improved knowledge about different systems of medicinal plants (Siddha, Ayurveda and Unani). • Studied that the conservation methods of

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			medicinal plants.
SEMESTER II			
1.	17PBYC21	Plant Diversity (Algae, Fungi and Lichens, Bryophytes, Pteridophytes and Gymnosperms)	<ul style="list-style-type: none"> Describe the essential features diversity of plant kingdom and their salient features. Provided a thorough knowledge about structure and life cycle pattern of algae and bryophytes. Study that the structure, reproduction, culture, classifications, life-cycle of fungi. Understand the salient features of Pteridophytes and Gymnosperms.
2.	17BYC22	Cell and Molecular Biology	<ul style="list-style-type: none"> Studied that about the structure and function of Cells. Provide the knowledge on advances in cell biology. Students to be studied about microscopy, cell organelles of Prokaryotic and Eukaryotic cells. Understand gene regulation and chloroplast and mitochondria genome organization. Helps to study the significance of mitosis and meiosis cell divisions. Understand about the cellular components. Gain knowledge about cell biology to selected examples of changes or losses in cell function.
3.	17PBYC23	Bioinformatics, Biostatics and Plant Biotechnology	<ul style="list-style-type: none"> Improve the knowledge of data collection and Biostatistics methods. Understand various media, sterilization, totipotency, cell induction, organogenesis. Able to apply the techniques to develop a standard protocol for Plant Tissue Culture. Have comprehensive knowledge on GM technology, bio-safety relations and germplasm storage.
4.	17PBYC2P	Practical –II –Lab in Plant Diversity Cell and Molecular	<ul style="list-style-type: none"> Describe the essential features diversity of plant kingdom and their salient features. Studied that about the structure and

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		Biology, Bioinformatics, Biostatistics and Plant Biotechnology	function of Cells <ul style="list-style-type: none"> • Understand various media, sterilization, totipotency, cell induction, organogenesis.
5.	17PBYN21	Mushroom Cultivation	<ul style="list-style-type: none"> • Understand the cultivation process of mushrooms. • Provide the knowledge about spawn preparation technique. • Understand the various types mushroom diseases and control. • Provide the Knowledge about processing of mushrooms. • To become a entrepreneur through the knowledge of mushroom cultivation.
SEMESTER III			
1.	17PBYC31	Microbiology and Plant Pathology	<ul style="list-style-type: none"> • Understand the basics knowledge of microbiology includes types of microbes, classification and characterization. • Studied the history of microbiology and its applications. • Describe the classification of bacteria. • Explain the different types of viruses and plant diseases. • Provide the sufficient knowledge about the types of symptoms and their causative agents of diseases. • Understand the diversity of microbes and importance of classification of microorganisms.
2.	17PBYC32	Genetics and Evolution	<ul style="list-style-type: none"> • Study the principles and concept of Mendelian law. • Gain knowledge about mutation and population genetics. • Understand basic structure and function of DNA and chromosomes. • Provide sufficient knowledge of hybridization and concepts of genetics. • Understand the concept of genetic

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			<p>recombination's at molecular level.</p> <ul style="list-style-type: none"> • Studied the origins of the human species.
3.	17PBYC33	Biochemistry	<ul style="list-style-type: none"> • Discuss different metabolic pathways. • Relate the characteristics and role of enzymes. • Comprehend the lipid metabolism. • Understand Hormones, Vitamins and Alkaloids
4.	17PBYC3P	Practical- III: Lab in Microbiology, Plant Pathology, Genetics, Evolution and Biochemistry	<ul style="list-style-type: none"> • Understand the basics knowledge of microbiology includes types of microbes, classification and characterization. • Provide the sufficient knowledge about the types of symptoms and their causative agents of diseases. • Study the principles and concept of Mendelian law. • Understand basic structure and function of DNA and chromosomes. • Comprehend the lipid metabolism.
5.	17PBY031	Biodiversity and Conservation	<ul style="list-style-type: none"> • Understand vegetation and their relationship with the ecosystem. • Provide a thorough knowledge about environmental biology and ecosystem. • Acquire knowledge on ecosystem organization, biogeochemical cycle and ecosystem stability. • Comprehend the information on biodiversity, threats and conservations.
6.	17UBYO32	Palynology and Pollination Biology	<ul style="list-style-type: none"> • Learning about Palynology. • Provide the knowledge on Pollination in plants. • Understand the sexual incompatibility in plants. • Students to be familiar with embryonic processes. • Understand the various pollinations periods. • Explain the seeds dispersal mode of plants.

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SEMESTER IV			
1.	17PBYC41	Plant Physiology	<ul style="list-style-type: none"> • Describe the physiological phenomena of plants in terms of mechanisms. • Will know the overview of biorhythms; stress physiology of plants. • Understand photoperiodism and physiology of flowering.
2.	17PBYC42	Plant Ecology	<ul style="list-style-type: none"> • Understand vegetation and their relationship with the ecosystem. • Provide a thorough knowledge about environmental biology and ecosystem. • Acquire knowledge on ecosystem organization, biogeochemical cycle and ecosystem stability. • Comprehend the information on biodiversity, threats and conservations.
3.	17PBYC4P	Practical IV- Lab in Plant Physiology and Plant Ecology	<ul style="list-style-type: none"> • Understand vegetation and their relationship with the ecosystem. • Provide a thorough knowledge about environmental biology and ecosystem. • Acquire knowledge on physiological response of plants to various factors. • Understand the photosynthetic mechanism and related events of plants.