## A.V.V.M. SRI PUSHPAM COLLEGE (AUTONOMOUS), POONDI-613 503, THANJAVUR



1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific outcomes (PSOs) and Course Outcomes (COs) of the Programmes offered by the Institution

## **COURSE OUTCOMES**

## **B.Sc., BOTANY (2017 - 2018)**

Semester	Category	Paper Code	Title of the Paper	Outcome
	Part-I	17U1BOT1/H1	Tamil-I/ Hindi-I	To know and get the awareness of resent tamil literature
	Part - II	17U1B0E1	English-I	• To initiate the Students to understand English through Prose, Poetry and Basic Communicative Grammar.
I	Core I	17U1B0C1	Algae, Fungi and	To study the classification of various types of Algae
			Bryophytes	• To Study the form, occurrence, cell structure and reproduction of various types of algae.
				• To study the general characteristics of main classes of fungi.
				• To study in detail about classification of bryophytes and their economic importance
	Core PL	17U1BOCP1	Practical - I	• To know the vegetative and reproductive structures of various types of algae, fungi and bryophytes.
	Allied	17U1B0Z0A1	Allied Zoology - I	<ul> <li>To acquire a basic knowledge of animal diversity and organization.</li> <li>To study the general aspects of Invertebrates and Parasites.</li> </ul>
				• To study the general aspects of Chordata animals and their anatomy
				To learn the general principles.
	Allied (NS)	17U2BOZOAPL	Allied Zoology	To know the Digestive system, Nervous system of Earthworm and Cockroach.
			Practical (NS)	To dissect and study the circulatory of Calotes.
	ES	17U1BOES	Environmental	To get better awareness of Environmental Condition
			Studies	
	Part-I	17U2BOT2/H2	Tamil-II/Hindi-II	To know and get the knowledge of Literature of the middle ages.
	Part - II	17U2B0E2	English-II	To impart language and communicative skills through

				short stories, one act plays and communicative grammar
II	Core I	17U2BOC2	Fundamentals of Industrial Microbiology	<ul> <li>To understand the various concepts of Industrial Microbiology.</li> <li>To study the classification, characteristics and structure of industrially important microbes used in industries.</li> <li>To study the isolation, identification and production of microbes used in industries.</li> <li>To study the various methods of culture preservation and an mutant selection</li> </ul>
	Core PL	17U2BOCP2	Practical – II	<ul> <li>To know the various aspects like preparation of media.</li> <li>To know the methods of autoclaving and sterilization of glassware.</li> <li>To know the isolation and maintenance of different microbial groups</li> </ul>
	Allied	17U2B0Z0A2	Allied Zoology - II	<ul> <li>To acquire basic knowledge about the beneficial role of animals.</li> <li>To study the various types cultures.</li> </ul>
	Allied PL	17U2BOZOAPL	Allied Zoology Practical (NS)	<ul> <li>To know the Digestive system, Nervous system of Earthworm and Cockroach.</li> <li>To dissect and study the circulatory of Calotes.</li> </ul>
	SBE	17U1B0S1	Culture of Microorganisms	<ul> <li>They are studied very clear in types of microbial culture medium</li> <li>Obtain more idea about the methods of sterilization</li> <li>To learned the methods of isolating pure culture</li> </ul>
	VBE	17U2BOVBE	Value based Education	To enhance the understanding of Human physical and mental health and the ability to maintain it well to the life and beyond.
	Part-I	17U3BOT3/H3	Tamil-III/ Hindi-III	To understand the differences and importance of Epics ,Essays, History of Tamil literature
	Part - II	17U3B0E3	English-III	• To introduce the language of the world renowned dramatist and novelist to enhance the vocabulary and communicative skills of the learners.

III	Core I	17U3BOC3	Anatomy and Embryology	<ul> <li>To study the tissues, their classification and functions.</li> <li>To study the meristems, their classification and distribution</li> <li>To study the various aspects in roots and stems of dicots and monocot embryo</li> <li>To study the structure of anther and ovule</li> </ul>
	Core PL	17U3BOCP3	Practical - III	<ul> <li>To study the mechanism of endosperm formation &amp; their development in dicots &amp; monocots.</li> <li>To understand the structure of meristems, stem and root.</li> <li>To understand the process of secondary thickening</li> <li>To study the different stages of anthers, ovules endosperms and embryos</li> </ul>
	GS	17U3B0GS	Gender Studies	To know the differences Understanding Gender to treat other genders with goodness
	Part-I	17U4B0T4/H4	Tamil-IV/ Hindi-IV	To know and get the knowledge of Classical, Sangam, Moral Literatures of Tamil language.
IV	Part - II	17U4B0E4	English-IV	• To prepare the learners for competitive examinations and to know the fundamentals of practical communication.
	Core I	17U4BOC4	Pteridophytes and Gymnosperms	<ul> <li>To study the classification of Pteridophytes (Reimer, 1954).</li> <li>To study the morphology, anatomy and reproduction of sporophytes and gametophytes of various Pteridophytes.</li> <li>To study the classification, morphology and reproductive structures of various types of Gymnosperms</li> <li>To study the reproductive structures of male and female gametophytes of different types of Gymnospersms.</li> </ul>
	Core PL	17U4B0CP4	Practical - IV	• To study the morphology, anatomy and reproductive structures of different types of Pteridophytes and Gymnosperms.
	Allied	17U4BOCHA2	Allied Chemistry -	• Students should understand the possible chemical

			II	<ul> <li>modification of Aromatic compounds.</li> <li>Students should able to learn accepted models to describe the reactions between gaseous systems and become aware of their physical properties.</li> </ul>
	Allied PL	17U4BOCHAPL	Allied Chemistry Practical (NS)	Facilitate the learner to make solutions of various molar concentrations.
	SBE	17U4B0S2	Compost Preparation	<ul> <li>To know the techniques of compost</li> <li>To learn the methods of compost making</li> <li>To know the significance of Pachakavya and Dasakavya</li> </ul>
	Core I	17U5BOC5	Taxonomy and Economic Botany	<ul> <li>To study the different types of classification.</li> <li>To learn herbarium techniques</li> <li>To learn in detail about characters and economic importance of various families.</li> <li>To understand the concept of evolution and learn the various theories.</li> </ul>
V	Core II	17U5BOC6	Cytogenetics and Molecular Biology	<ul> <li>Understand the modern concept of cell structure, component and function.</li> <li>Know about latest concept of prokaryotic &amp; eukaryotic DNA structure &amp; expression.</li> <li>To study the basis of Mendelian Genetics.</li> <li>To study the various factors for various mechanisms of sex determination in plants.</li> <li>Apply the knowledge gained from plant molecular biology in agriculture.</li> <li>Make venture in plant genomic research</li> </ul>
	Core III	17U5B0C7	Fundamentals of Bioinformatics	<ul> <li>This subjects was initiated with an aim to have basic knowledge in computer operating. Nowadays it is necessary to go to the websites and internet for future research work.</li> </ul>
	Core PL	17U5BOCP5	Practical V	<ul> <li>To identify the families of locally available plants.</li> <li>To study the various cell organelles using slides and electron micrographs</li> <li>To study the floral biology of some important crops</li> </ul>

Major Electiv	re- I 17U5B0EL1A 17U5B0EL1B	Biofertilizer Biological control	<ul> <li>To know the various aspects of Mendelian genetics and molecular biology</li> <li>Mandatory - Botanical tour / Submission of Herbarium of 20 sheets and Tour report</li> <li>To study the Economic importance of plants and submission of charts</li> <li>To know the basic aspects of Biofertilizers</li> <li>To study the symbiotic association of various microbes</li> <li>To study in detail about various types of biofertilizers</li> <li>To know about production &amp; mass multiplication of various microbes used as fertilizers.</li> <li>(or)</li> <li>To understand the importance of biological control.</li> <li>To understand the role of microorganisms in various types of interaction.</li> <li>To enable the students to aquire knowledge on biocontrol agents.</li> </ul>
Major Electiv		Applied Microbiology Laboratory Techniques	<ul> <li>To understand the fundamental of fermentation process.</li> <li>To know the microbial based industries</li> <li>To gain knowledge about Industrial fermentations and products</li> <li>(or)</li> <li>To make the students to understand the various techniques and engage themselves in self-employment.</li> </ul>
NME	17U5BONME	Herbal Technology	<ul> <li>This study enriches the systematic botany which can be utilized for botanical gardens diagnosis of fragmentary crude drugs.</li> <li>This study will be useful in identifying medicinal taxa.</li> <li>This study also help in knowing the preliminary phytochemistry of plant organs.</li> </ul>
SSD	17U5BOSSD	Soft Skill Development	<ul> <li>Developing organizational behavior and employment skills to the employment organizations</li> </ul>

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	Core I	17U6BOC8	Plant Physiology	<ul> <li>To study in detail about diffusion, osmosis and water potential.</li> <li>To study the various aspects of enzymes</li> </ul>
				• To learn about the light and dark reactions of
				photosynthesis
VI				• To learn in detail about respiration and growth mechanisms.
	Core II	17U6B0C9	<b>Environmental</b>	To study the various aspects of Ecology.
			<b>Botany and</b>	To know about ecological pyramids, food chain and
			<b>Biostatistics</b>	food webs
				To know in detail about various types of vegetation
				To study the biodiversity and pollution
				To study the importance of statistics in biology
	Core III	17U6B0C10	Forest Botany &	To know the scope of studying forestry.
			<b>Wood Science</b>	To learn the significance of agroforestry and social
				forestry.
				To know the value of Silviculture.
				To know the importance of resources to environment.
	Core PL	17U6B0CP6	Practical - VI	• To conduct experiments in various aspects of Plant
				physiology.
				To study morphological and anatomical features of
				hydrophytes,
				xerophytes, epiphytes etc.
				To conduct study of vegetation by quadrat method.
				To work out problems in Biostatistics
				Demonstration of experimental aspects in Microbial
				Physiology
	Major	17U6B0EL3A	Biotechnology	To know the outlines of Biotechnology
	<b>Elective-III</b>	17U6B0EL3B	Environmental	To understand the application of genetic engineering
			Biotechnology	To understand the mechanism of biological nitrogen
				fixation
				To know the various aspects of fermentation
				To study the basic aspects of various biofuels
				(or)
				To give an insight into environmental pollution and
				microbial processes in the environment. The paper is

	Major Elective-IV	17U6B0EL4A 17U6B0EL4B	Plant Tissue Culture Preservation of Fruits and Vegetables	<ul> <li>also mainly focused to provide knowledge on the use of microbes for a safe of environment and to treat hazardous waste using biotechnological processes.</li> <li>To know the scope of plant tissue culture</li> <li>To learn the tissue and organ culture</li> <li>To learn the protoplast culture</li> <li>(or)</li> <li>To understand the fundamentals of food processing</li> <li>To know the fruits and vegetable products microbial based industries.</li> <li>To gain knowledge about preservation of fruits and vegetable.</li> </ul>
	GK	17U6B0GK	General Knowledge	To make awareness of GK in Competitive World.
	CN	17U6BOCN	Comprehensive Test	• To better for the preparations of Competitive Exams in advance.