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

M.Sc., BOTANY (2017 – 2018)

Semester	Category	Paper Code	Title of the Paper	Outcome
I	Core	17P1BOC1	Plant Diversity I (Algae, Fungi, Lichen and Bryophytes)	• To understand the classification, range of thallus structure, reproduction methods and life cycle patterns of lower plants. • To understand the phylogeny and inter relationships of various classes of algae and fungi. • To learn various culture techniques for growing fresh water and marine algae in laboratory condition. • To know the classification range of structural variations in gametophytes, sporophytes, evolution, ecology and economic importance of Bryophytes.
	Core	17P1BOC2	Environmental Biotechnology	• To enable the students acquire knowledge about their environment. • To enable the students identify the environmental problems and issues. • To enable the students find out remedial solutions to the environmental problem. • To enable the students to acquire knowledge in environment management.
	Core	17P1BOC3	Cytology, Genetics and Plant Breeding	• To enable the students to understand the ultra structure of cell and its components. • To get a broad knowledge in the field of genetics. • To understand the importance of plant breeding techniques.
	Core PL	17P1BOCP1	Practical – I	• To study the vegetative and reproductive structures of important algae, fungi, lichens and bryophytes. • To know the equipment used in Microbiology. • To study the water pollution, microbes in polluted

				environment, Microbes in soil fertility, Biocontrol, vermicompost.
	Major Elective-I	17P1BOEL1A 17P1BOEL1B	Biofertilizer Technology Biofuel Technology	• To understand the important of biofertilizers in agriculture. • To know the various types of microbial inoculants used as biofertilizers. • To know the methodology of isolation, characterization, identification, mass multiplication and method of applications of biofertilizers. (or) • To have a basic knowledge on Biofuels-origin, structure, occurrence-fossil fuels-advantages and disadvantages of Bio-fuels.
	Core	17P2BOC4	Plant Diversity – II (Pteridophytes, Gymnosperms and Paleobotany)	• To know classification, salient features of gametophyte and sporophyte, morphology of the major groups, phylogeny, evolutionary status and economic importance of Pteridophytes. • To have a comprehensive knowledge on the classification, distribution, general structure, evolutionary significance and economic importance of Gymnosperms.
	Core	17P2BOC5	Angiosperms, Anatomy, Embryology and Microtechniques	• To study tissues, their classification and functions. • To study meristems, their classification and distribution. • To study the various aspects of roots and stems of dicots and monocots. • To study the microsprogenesis and megasporogenesis • To study the structure and development of endosperm and embryo • To learn various methods of microtechniques
	Core	17P2BOC6	Molecular Biology and Genetic Engineering	• To know the structure of nucleic acid. • To understand the mechanism of DNA replication • To understand the molecular mechanism of protein synthesis and gene expression

				• To understand the application of Recombinant DNA Technology
II	Core	17P2BOC7	Herbal Science and Phytotheraphy	• To enable the students to identify local medicinal plants. • To enable the students to learn the uses of medicinal plants as natural medicines alternative to the existing allopathic medicine. • To impart the students knowledge on botany and phytochemistry of medicinal plants. • To make the students to cure common human aliments with medicinal plants.
	Core PL	17P2BOCP2	Practical – II	• To study the vegetative and reproductive structures of Pteridophytes and Gymnosperms. • To study the structure of meristems, xylem, phloem, cambium and Nodal anatomy and stomata • To study the different methods employed in molecular biology and genetic engineering
	Major Elective-II	17P2BOEL2A 17P2BOEL2B	Horticulture Food Processing and Preservation	• To understand the main principles and importance of horticulture • To develop skill in horticultural techniques • To know the various methods of plant propagation • To develop potential for self employment. (or) • To understand the various processes involved in food preservation and processing. • To develop skill in preparing preserved foods.
	Core	17P3BOC8	Plant Taxonomy and Economic Botany	• To enable the students to get a fair knowledge of taxonomy of angiosperms. • To enable the students to know the modern trends in taxonomy of angiosperms. • To enable the students to develop skill in identifying the angiosperms upto species level.
	Core	17P3BOC9	Microbiology and Plant Pathology	• To understand classification of microbes, structure and reproduction. • To gain some basic knowledge in soil and Industrial Microbiology

III				• To gain knowledge on mycoses and Antibiotics • To know the basis of plant pathology, crop disease and their control
	Core	17P3BOC10	Plant Biotechnology	• To know the principles and applications in various fields of biotechnology. • To enable the student to understand the different technologies involved in tissue culture. • To apply the knowledge of tissue culture in the commercial and industrial field of agriculture.
	Core	17P3BOC11	Bionanotechnology	• To understand the biological systems that operate in nano level are taught along with instrumentation to facilitate such studies . • To understand the importance of future global with perspective of this technology in the next waves of industries is informed • To understand this field for the students to explore the naturally occurring nanotechnology and to use biotechnology to harness and modify these nonomechines • To understand of this technology in exemplified in molecular medicine and diversity systems.
	Core PL	17P3BOCP3	Practical - III	• To identify the families of plants in the theory syllabus. • To prepare dichotomous keys. • To identify economically important plants and products • To know about the various techniques involved in microbiology and biotechnology • To gain knowledge on the diseases of crop plants
	EDC	17P3BOEDC	Medical Botany and Pharmacognosy	• Understand the various Indian system of medicine • Learn about the vital role of herbal medicines for human ailments • Outline and classify the crud drugs • Trained about drugs adulteration and direction
	Core	17P4BOC12	Research Methodology	• To make the students to learn the physiological techniques.

IV				• To train the students to understand the main principles in biostatistics • To make the students apply statistical principles to biological studies • To enable the students to understand computer hardware, software and various programming languages • To make the students know the scientific application of packages • To make the students understand the problem selection and project design • To lay a strong foundation for the students to understand the basics of research and report preparation
	Core	17P4BOC13	Plant Physiology, Biochemistry and Biophysics	• To understand the metabolic activities of plants. • To understand the role of enzymes in various metabolic activities of plants. • To understand the energy relationships in various metabolic activities. • To understand the molecular physiology and development of plant growth
	Core PL	17P4BOCP4	Practical - IV	• To know the various aspects pertaining to research • To identify the instruments, their parts and applications • To prepare buffers, standard graphs etc • To estimate various physiological parameters in plants • To know about the enzymes and their role in plant physiology • To gain practical knowledge on the application of computer in research
	Major Elective-III	17P4BOEL3A 17P4BOEL3B	Applied Phycology Mushroom Technology	• To understand the applied aspects of algae and their mass cultivation
	CN	17P4BOCN	Comprehension	• To better for the preparations of Competitive Exams in advance.