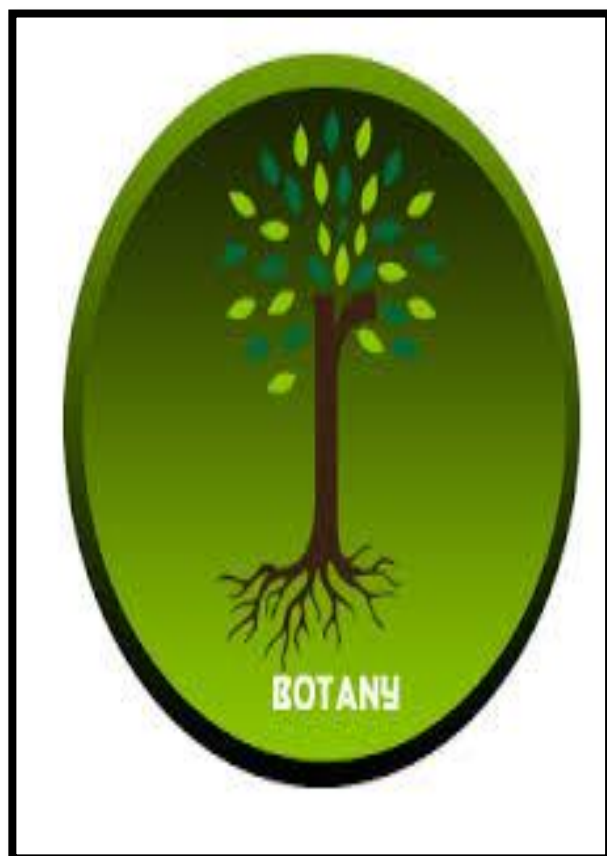


KSN GOVERNMENT DEGREE COLLEGE FOR WOMEN, ANANTHAPURAMU
DEPARTMENT OF BOTANY
ATTAINMENT OF COURSE OUTCOMES



B.Sc., BOTANY

COs, PSO and POs Mapping

PROGRAMME OUTCOMES (POs)

PO 1	Relevance of the Principles: To understand the basic laws of nature, fundamental principles, and the scientific theories related to various phenomena and their relevance in the day-to-day life.
PO 2	Critical Thinking, Problem Solving Skills: Acquire the skills in handling scientific instruments, planning and performing in laboratory experiments. The skills of observations and drawing logical inferences from the scientific experiments.
PO 3	Interdisciplinary learning: Realizing that knowledge of subjects in other branches such as humanities, performing arts, social sciences etc. can have greater influence and inspiration in evolving new scientific theories and inventions, and understanding the importance of interdisciplinary study in every walk of life.
PO 4	Moral and Ethical Values: To imbibe ethical, moral and social values in personal and social life leading to highly cultured, civilized and responsible personality development.
PO 5	Scientific Temper: Analyzing the given scientific data critically and systematically and the ability to draw the objective conclusions. Acquire the knowledge with facts and figures related to various subjects in pure sciences such as Botany, Chemistry, Computer Science, Electronics, Mathematics, Physics, and Zoology etc.
PO 6	Technical and Intellectual proficiency: To give a glimpse of designing solutions for communication problems with specific needs with appropriate technology thus developing healthy competition and setting parameters for excellence.
PO 7	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern instruments and equipments for Biochemical estimation, Molecular Biology, Biotechnology, Plant Tissue culture experiments, cellular and physiological activities of plants with an understanding of the application and limitations
PO 8	PO4. Transferable skills: 1. Use of IT (word-processing, use of internet, statistical packages and databases). 2. Communication of scientific ideas in writing and orally. 3. Ability to work as part of a team. 4. Ability to use library resources. 5. Time management. 6. Career planning.
PO 9	Scientific Knowledge: Apply the knowledge of basic science, life sciences and fundamental process of plants to study and analyze any plant form.
PO 10	PO11. Environment and sustainability: Understand the impact of the plant diversity in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

The Department of Botany, KSN Government Degree College for Women, Anantapur, offers Three Year (comprising 6 semesters) Undergraduate Programme in Botany with objective of empowering students to acquire all-inclusive understanding of Botany as an academic discipline. Upon completion of B. Sc. Botany Degree Programme successfully, the students shall acquire the following skills and competencies.

PSO 1	Understand the importance of plants ,their diversity and its conservation
PSO 2	Achieve knowledge of pure and applied botany. Students acquire fundamental Botanical knowledge through theory and practical"s.
PSO 3	Understand contribution of botany in increase and improve our supply of medicines, food ,fibers and other plant products.
PSO 4	Understand health and environmental protectionand to solve the pollution problems.
PSO 5	Understand knowledge of botany is an essential pre-requisite for the pursuit of many applied sciences like Agriculture, Horticulture ,Sericulture, Forestry ,Pharmacology and Medicine.
PSO 6	Understand to care Nature
PSO 7	To create awareness about cultivation, conservation and sustainable utilization of biodiversity
PSO 8	Understand good laboratory practices and safety. Understand experiments in botany.
PSO 9	Students able to start nursery, mushroom cultivation, biofertilizer production, fruit preservation and horticultural practices.
PSO 10	To know advance techniques in plant sciences like tissue culture, Phytoremediation, plant disease management, formulation of new herbal drugs
PSO 11	To explain basis plant of life, reproduction and their survival in nature
PSO 12	To explain basis plant of life, reproduction and their survival in nature. Helped to understand role of living and fossil plants in our life.

PSO – PO MAPPING

	POs									
	1	2	3	4	5	6	7	8	9	10
PSOs	1	*	*	*		*	*		*	
	2	*	*			*	*	*	*	
	3						*		*	*
	4			*	*	*		*	*	*
	5	*	*			*	*	*	*	*
	6			*	*	*	*		*	*
	7	*	*	*	*		*	*	*	*
	8	*	*			*	*	*	*	*
	9		*			*	*	*	*	*
	10		*	*		*	*	*	*	*
	11	*	*			*	*		*	
	12	*	*			*	*		*	

COURSE OUTCOMES (COs)

Course Code: BOT 101

Course Name: MICROBIAL DIVERSITY, ALGAE & FUNGI

Upon completion of this course, the student will be able to:		PSO	PO
CO 1	To know about the origin and evolution of life, formation of earth in the universe and existence of life on earth.	1	1,2
CO 2	Interpret the concept of Lamarckism, Neo Lamarckism, Darwinism and also understand the concept of natural selection. familiarize with the various concepts of evolution	6	5,3
CO 3	To know about microbial diseases regarding to various micro organism in man, animals and plants.	2	5,9
CO 4	To gain knowledge on Algae for growing the populations with lot of Economic importance as food, fodder and feed etc.,	3	9

Course Code: BOT 116

Course Name: PLANT TAXONOMY AND EMBRYOLOGY

Upon completion of this course, the student will be able to:		PSO	PO
CO 1	To acquire knowledge to maintain botanical garden worldwide.	1	5,7
CO 2	To acquire the knowledge of classification of the plants and the comparison, origin and evolution of angiosperms which are the most important species in our daily life.	2	9,1
CO 3	To acquire the knowledge of the development of embryo and structure.	11	5,9
CO 4	To know the pollination and fertilization methods to develop with new genetically combinations leading to new varieties.	11	2,5

Course Code: BOT 120

Course Name: DIVERSITY OF ARCHEGONIATES AND ANATOMY

Upon completion of this course, the student will be able to:		PSO	PO
CO 1	To Know the structure of non-vascular plants.	2	1
CO 2	To Know the importance of mass plants.	11	9
CO 3	To know the structure of vascular plants.	8	9,5
CO 4	To know the importance plant anatomy	2	9,5,7

Course Code: BOT 121

Course Name: PLANT PHYSIOLOGY AND METABOLISM

Upon completion of this course, the student will be able to:		PSO	PO
CO 1	To Know the Process of various metabolic activities in plant body	2	1,2
CO 2	To Know the process of photosynthesis and respiration	8	5,8
CO 3	to know the importance of phyto hormones	3	9,5
CO 4	To know the process of stress physiology	11	1,2

Course Code: BOT 105

Course Name: CELL BIOLOGY, GENETICS AND PLANT BREEDING

Upon completion of this course, the student will be able to:		PSO	PO
CO 1	To gain knowledge regarding the unit of life that is cell, types, functions of the various organelles of the cell.	1,2	1,5
CO 2	The know the DNA Structure which is very useful at molecular levels of genes in various aspects of life quality of genetical characters and forensic methods of the society etc.	10	7,8

CO 3	To Acquire the knowledge about Genetical Aspects	8	7,9
CO 4	Get the detail knowledge about modern strategies applied in Plant Breeding for crop improvement i.e. Mass selection, Pureline Selection and Clonal selection	10	6,1,2,9
CO 5	Know about exploitation of Heterosis, hybrid and variety development and their release through artificial hybridization. Historical account and objectives of evolution and Plant breeding- Vegetative propagation, hybridization, maintenance of germplasm, pollen bank and quarantine method	12	2,3,5

Course Code: BOT 106

Course Name: PLANT ECOLOGY AND PHYTOGEOGRAPHY

Upon completion of this course, the student will be able to:		PSO	PO
CO 1	To have the knowledge of elements of environment.	2	7,9
CO 2	To understand the importance of Climatic factors like light, temperature, in related to growth of plant.	4	5,7
CO 3	To Know how to conserve the threatened plants in environment.	7	9,10
CO 4	To Know the various methods in seed storage.	9	1,7

Course Code: BOT 107

Course Name: ORGANIC FARMING AND SUSTAINABLE AGRICULTURE

Upon completion of this course, the student will be able to:		PSO	PO
CO 1	To know about the Concept,Scope,Types,Advantages of Organic Farming	7	9
CO 2	To know about BioPesticides and Organic manures	4	5
CO 3	To Know about growing of various vegetables,	3	2
CO 4	To Know about Terrace Farming,	9	3

Course Code: BOT 108

Course Name: PLANT DIVERSITY AND HUMAN WELFARE

Upon completion of this course, the student will be able to:		PSO	PO
CO 1	Understand the role plants in human welfare	1	1,7
CO 2	The students will understand the use of the plant resources to produce valuable products.	3	8,10
CO 3	be able to develop the ability to think and create useful plant products	9	9,10
CO 4	be enlightened about the opportunities for income and employment generation.	12	5,8

Course Code: BOT 123

Course Name: ETHNO BOTANY AND MEDICINAL BOTANY

Upon completion of this course, the student will be able to:		PSO	PO
CO 1	To know the culture and ethonology of ethnic communities	1,3	1,5
CO 2	To know the uses of ethno medicinal plants	6,7	5,9
CO 3	To Know the history of Various Methods in ancient Medicines.	8	6,10
CO 4	To know the uses of surrounding medicinal plants.	10	8,9

Course Code: BOT 124

Course Name: PhHYTOCHEMISTRY AND PLANT PHARMOCOGNOSY

Upon completion of this course, the student will be able to:		PSO	PO
CO 1	Outcome Know about history and relevance of herbal drugs in Indian system of medicine. Learn the macroscopic and microscopic characters, chemical constituents, adulterants, therapeutical and pharmaceutical uses of medicinal plants	1	1,2
CO 2	Understand the techniques for drug evaluation (Chemical, Physical and Biological)	2	7,8
CO 3	Phytochemical investigations, standardization and quality control of herbal drugs Know the technique of medicinal gardening	10	3,6

	Cultivation practices, marketing and utilization of selected medicinal plants		
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