ANDHRA CHRISTIAN COLLEGE: GUNTUR
DEPARTMENT OF BOTANY

B.Sc. - BOTANY

COs and PSOs

PROGRAMME SPECIFIC OUTCOMES (PSOs)

At the end of the Programme the student will be able to

PSO 1	Interpret principles, classifications, concepts, theories and mechanisms.
PSO 2	Analyse hypothesis, procedures, properties, experimental facts and draw conclusions.
PSO 3	Apply techniques in solving problems, sample analysis and production.
PSO 4	Develop communicative competence, creative and critical thinking, practical, technical and employability skills, social sensibility and responsibility

COURSE OUTCOMES (COs)

Course Code: BOT1SK

Course Name: Fundamentals of Microbes and Non-vascular Plants.

Upon completion of this course, the student will be able to:	
CO 1	Illustrate diversity among the viruses and prokaryotic organisms and categorize them.
CO 2	Classify fungi, lichens, algae and bryophytes based on the structure reproduction and life cycles.
CO 3	Analyze and ascertain the plant disease symptoms due to viruses and Bacteria.
CO 4	Evaluate the ecological and economic value of microbes, thallophytes and bryophytes.

Course Code: BOT2SK

Course Name: Basics of Vascular plants and Phytogeography.

Upon completion of this course, the student will be able to:	
CO 1	Classify and compare Pteridophytes and Gymnosperms based on their morphology, Anatomy reproduction and life cycles.
CO 2	Explain the process of fossilization and compare the characteristics of extinct and extant plants.
CO 3	Analyze the morphological of the most common angiosperm plants of their localities and recognize their families.
CO 4	Locate different Phytogeographical regions of the world and India and can analyze their floristic wealth.

Course Code: BOT3SK

Course Name: Anatomy and Embryology of Angiosperms, Plant Ecology and Biodiversity.

Upon completion of this course, the student will be able to:	
CO 1	Understand on the organization of tissues and tissue systems in plants.
CO 2	Illustrate and interpret various aspects of embryology.
CO 3	Appraise various qualitative and quantitative parameters to study the population and community ecology.
CO 4	Correlate the importance of biodiversity and consequences due to its loss.

Course Code: BOT4SK

Course Name: Plant Physiology and Metabolism.

Upon completion of this course, the student will be able to:	
CO 1	Comprehend the importance of water in plant life and mechanisms for transport of water and solutes in plants.
CO 2	Evaluate the role of minerals in plant nutrition and their deficiency symptoms
CO 3	Critically understand the light reactions and carbon assimilation process responsible for synthesis of food in plants.
CO 4	Evaluate the physiological factors that regulate growth and development inplants.
CO 5	Examine the role of light on flowering and explain physiology of plants understress conditions.

Course Code: BOT5SK

Course Name: Cell Biology, Genetics and Plant Breeding.

Upon completion of this course, the student will be able to:	
CO 1	Distinguish prokaryotic and eukaryotic cells and design the model of a cell.
CO 2	Discuss the basics of Mendelian genetics its variations and interpret inheritance of traits in living beings.
CO 3	Understand the application of principles and modern techniques in plant breeding.
CO 4	Explain the organization of a eukaryotic chromosome, and structure of genetic material.
CO 5	Explain the procedures of selection and hybridization for improvement of crops.

Semester V
Course Code: BOT 6C
Course Name: 6 C Plant Tissue Culture

	By the completion of course the graduate should able to
CO1	Comprehend the basic knowledge and application of tissue culture
CO2	Identify various facilities required to set up a plant tissue cultural laboratory
CO3	Acquire a critical knowledge on sterilization techniques related to plant tissue cultural
CO4	Understand the bio transformation technique for production of secondary metabolities

Semester V
Course Code: BOT 7C
Course Name: 7 C Mushroom cultivation

	By the completion of course the graduate should able to
CO1	Understand the structure and life of a mushroom and discriminate edible and poisonous mushrooms
CO2	Identify the basic infrastructure establish a mushroom culture unit
CO3	Demonstrate skills preparation of compost and spawn
CO4	Explain the methods of storage preparation of value – added products and marketing