



**SATPUDA SHIKSHAN VA GRAMIN VIKAS SANSTHA'S**  
**Bapumiya Sirajoddin Patel Arts, Commerce and**  
**Science College, Pimpalgaon Kale**  
**Minority Status Institution**

Affiliated to Sant Gadge Baba Amaravati University, Amaravati  
 Accredited with "B" Grade by NAAC

**DEPARTMENT OF BOTANY**

**Programme Outcome: B.Sc. Botany**

<b>DEPARTMENT OF BOTANY</b>	After Successful Completion of three year degree program in Botany a student is able to;
<b>PROGRAMME OUTCOME</b>	PO-1. Students know about different types of lower & higher plants their evolution in from algae to angiosperm & also their economic and Ecological importance.
	PO-2. They knows economic importance of various plant products.
	PO-3. Student can describe morphological & reproductive characters of plant and also identified different plant families and classification.
	PO-4. Cell biology gives knowledge about cell organelles & their functions. Genetics provides knowledge about laws of inheritance, various genetic interactions, chromosomal abberations & multiple alleles. Structural changes in chromosomes.
	PO-5. Students are able to understand the Physiological changes and metabolic reactions in the cell.
	PO-6. Molecular biology gives knowledge about chemical properties of nucleic acid and their role in living systems.
	PO-7. Students know about the Recombinant DNA technologies.
<b>PROGRAMME SPECIFIC OUTCOMES</b>	PSO-1. Students acquire fundamental Botanical knowledge through theory and practical's. PSO-2. To explain basis plant of life, reproduction and their survival in nature. PSO-3. Helped to understand role of living and fossil plants in our life. PSO-4. Understand good laboratory practices and safety. PSO-5 To create awareness about cultivation, conservation and sustainable utilization of biodiversity. PSO-6. To know advance techniques in plant sciences like tissue culture etc. PSO-7 Students able to start nursery for medicinal plants cultivation.
<b>COURSE</b>	<b>Course Outcomes B.Sc Botany</b>
	<b>Outcomes</b> After completion of these courses students should be able to;

<b>SEM I- DIVERSITY AND APPLICATION OF MICROBES AND CRYPTOGRAMS</b>	<p>CO-1. Study of cryptogams to understand their Diversity.  CO-2. Know the systematics, morphology and structure of algae, fungi, bryophytes, and Pteridophytes.  CO- 3. Know life cycle pattern of cryptogams.  CO-4. Know economic importance of cryptogams.  CO-5. Know evolution of algae, fungi, bryophytes and Pteridophytes.</p>
<b>SEM II- GYMNOSPERM, MORPHOLOGY OF ANGIOSPERM AND UTILIZATION OF PLANTS</b>	<p>CO-1. Systematic study of gymnosperms and angiosperms.  CO-2. Understand the morphological and reproductive character of spermatophytic plants.  CO-3. Understand economic importance of gymnosperms and angiosperms.  CO-4. Understand the diversity among spermatophyte.  CO-5. To bring investigation of palaeobotanical study in India.  CO-6. Know, scope and application of Palaeobotany.  CO-7. Know types of fossils, geological time scale.</p>
<b>SEM III- ANGIOSPERM SYSTEMATICS, ANATOMY AND EMBRYOLOGY</b>	<p>CO- 1. Know about systematic classification &amp; nomenclature.  CO-2. Knows about taxonomic aspects of angiosperms.  CO-3. Know about the taxonomic families (both Dicot and Monocot families)  CO-4. Understand the anatomical structure of plants and function of various cells and tissues.  CO-5. Understand the basic embryology and reproduction</p>
<b>SEM IV-CELL BIOLOGY AND GENETICS AND BIOCHEMISTRY</b>	<p>CO-1. Gain knowledge about cell and its function.  CO-2. Understand ultrastructure of cell wall, plasma membrane and cell organelles.  CO-3. Understand the biochemistry of cell.  CO-4. Understand the Mendelian genetics.  CO-5. Know about interaction of genes, multiple alleles and linkage and crossing over.  CO-6. Know about sex linked inheritance, chromosomal aberrations.</p>
<b>SEM V-PLANT PHYSIOLOGY AND ECOLOGY</b>	<p>CO-1. Know scope and importance of plant physiology.  CO-2 Understand the different biochemical reaction of biomolecules in plant cell.  CO-3. Understand process of photosynthesis, C3, C4, CAM pathways.  CO-4. Understand the process of respiration, growth and developmental process in plant.  CO-5. Know the biotic and abiotic components of ecosystem.</p>

	CO-6.Understand plant community & ecological adaptation in plants.
<b>SEM VI- MOLECULAR BIOLOGY AND BIOTECHNOLOGY</b>	CO-1.Learn the scope and importance of molecular biology. CO-2. Understand the biochemical nature of nucleic acid and their role in living systems. CO-3.Understand the fundamental of recombinant DNA technology. CO-4.Understand tissue culture techniques. CO-5.Understand the concept of bioinformatics, genomics & proteomics. CO-6.Understand technical germplasm & cryopreservation.

**HOD**

**Principal**