"Education for Knowledge, Science, and Culture"
- Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's

Vivekanand College, Kolhapur (Autonomous)

KOLHAPUR (AUTONOMOUS)

DEPARTMENT OF BOTANY

COURSE OUTCOMES

2022-23

B.Sc. I Semester: I	
BOTANY- DSC 1007 A – " Biodiversity in Cryptogams and Gymnosperms "	
(DSC 1007 A1) Sec. : I " Biodiversity in Microbes, Algae and Fungi "	
Course Outcomes	**After the completion of the course the student will be able to:**
CO1	Understand identify and classify bacteria, fungal, algal and lichen live and preserved specimen.
CO2	Understand classification of fungal, algal and lichen.
CO3	Identify diatoms.
CO4	Identify VAM fungi.
B.Sc. Part I Semester: I	
(DSC 1007 A2) – Sec. II "Bryophytes, Pteridophytes and Gymnosperms (Archegoniates)"	
Course Outcomes	**After the completion of the course the student will be able to:**
CO1	Understand identify and classify bryophytes, Pteridophytes and gymnosperms.
CO2	Understand classification of bryophytes, pteridophytes and gymnosperms.
CO3	Know the sustainable utilization of these plants to the society.
CO4	Know general characters of bryophytes pteridophytes and gymnosperm.
B.Sc. Part I Semester: II	
BOTANY- DSC 1007 B – " Plant Ecology and Angiosperm Taxonomy "	

VIVEKANAND COLLEGE ESTD. JUNE 1964 KOLHAPUR-416 003

(DSC 1007 B1) Sec. : I "Plant Ecology"	
Course Outcomes	**After the completion of the course the student will be able to:**
CO1	Understand the basic components of ecology.
CO2	Understand various species interactions.
CO3	Understand ecological succession.
CO4	Understand ecosystem and phytogeography.
B.Sc. Part I Semester: II	
(DSC 1007 B2) - Sec. II " Angiosperm Taxonomy "	
Course Outcomes	**After the completion of the course the student will be able to:**
CO1	Understand the morphology of flowering plant.
CO2	Understand the classification of flowering plant.
CO3	Understand the morphological, floral, distinguishing characters and economic importance of families.
CO4	Understand the classification system of flowering plant.
B.Sc. II Semester: III	
BOTANY- DSC 1007 C – " Taxonomy, Embryology and Plant Physiology "	
(DSC 1007 C1) Sec. : I "Taxonomy, Embryology"	
Course Outcomes	**After the completion of the course the student will be able to:**
CO1	Understand organization and different mechanism of flower.
CO2	Understand development and types of embryo.
CO3	Understand the morphological, floral, distinguishing characters and economic importance of families.
CO4	Understand different taxonomic literature.
B.Sc. II Semester: III	
(DSC 1007 C2) Sec. : II " Plant Physiology"	
Course Outcomes	**After the completion of the course the student will be able to:**
CO1	Know the plant water relationship.
CO2	Understand the concept of photosynthesis.

CO3	Understand the concept of respiration.
CO4	Know the role of minerals in plant growth.
B.Sc. II Semester: IV	
BOTANY- DSC 1007 D – " Plant Anatomy and Plant Metabolism "	
(DSC 1007 D1) Sec. : I " Plant Anatomy "	
Course Outcomes	**After the completion of the course the student will be able to:**
CO1	Understand the scope, importance and techniques of anatomy.
CO2	Know the various plant adaptations.
CO3	Know the organization of higher plant body.
CO4	Know tissue and tissue system.
B.Sc. II Semester: IV	
(DSC 1007 D2) Sec. : II " Plant Metabolism "	
Course Outcomes	**After the completion of the course the student will be able to:**
CO1	Know the mechanism of enzymes.
CO2	Understand the mechanism of nitrogen metabolism.
CO3	Know the mechanism of growth in plants.
CO4	Know the mechanism of seed dormancy and seed germination.
B.Sc. III Semester: V	
BOTANY- DSC 1007 E – "Cytology and Research Techniques in Life Sciences & Microbiology, Plant Pathology and Biofertiilizer"	
(DSC 1007 E1) Sec. : I "Cytology and Research Techniques in Life Sciences"	
Course Outcomes	**After the completion of the course the student will be able to:**
CO1	Know the details of microscopy-principles of light microscopy, Electron microscopy (TEM&SEM), fluorescence microscopy.
CO2	Perform chromatography technique.
CO3	Know the details of micrometry, microphotography and electrophoresis.
CO4	Know the radioactive isotopes and its importance.
B.Sc. III Semester: V	
(DSC 1007 E1) Sec. : II " Microbiology, Plant Pathology and Biofertiilizer"	

Course Outcomes	After the completion of the course the student will be able to:
CO1	Know the microorganisms in biological world.
CO2	Become aware of applications of different microbes in various industries.
CO3	Know the potential of these studies to become and entrepreneur.
CO4	Equip themselves with skills related to laboratory as well as industries based studies.
B.Sc. III Semester: V	
BOTANY- DSC 1007 E2 – "Biochemistry and Stress Physiology & Plants Systematics and Paleobotany"	
(DSC 1007 E2) Sec. : I "Biochemistry and Stress Physiology"	
Course Outcomes	**After the completion of the course the student will be able to:**
CO1	Understand the properties and classification of carbohydrates and proteins..
CO2	Understand the Beta oxidation, Gluconeogenesis and its role immobilization of fatty acids during germination.
CO3	Understand the different types of plant stresses.
CO4	Know the mechanism of senescence and aging in plants.
B.Sc. III Semester: V	
(DSC 1007 E2) Sec. : II "Plants Systematics and Paleobotany"	
Course Outcomes	**After the completion of the course the student will be able to:**
CO1	Know the concept of systematics.
CO2	Know the phylogeny of angiosperms, a general account of origin of Angiosperms.
CO3	Trace the history of development of systems of classification, emphasizing angiospermic taxa.
CO4	Know the wide verities of angiosperm and trades in classification.
B.Sc. III Semester: VI	
BOTANY- DSC 1007 F –"Genetics and Plant Breeding & Biostatistics, Economic Botany and Ethno botany"	
(DSC 1007 F1) Sec. : I "Genetics and Plant Breeding"	
Course Outcomes	**After the completion of the course the student will be able to:**

CO1	Know the Mendelian genetics and basic laws of inheritance.
CO2	Know the phenomenon of dominance, laws of segregation, and independent assortments of genes.
CO3	Understand the phenomenon of linkage and crossing over.
CO4	Know the genomic organization in plants.
B.Sc. III Semester: VI	
(DSC 1007 F1) Sec. : II "Biostatistics, Economic Botany and Ethno botany"	
Course Outcomes	**After the completion of the course the student will be able to:**
CO1	Know the biostatistics and statistical terms.
CO2	Know the method of sampling and representation of data.
CO3	The role of plants in human welfare.
CO4	Gain the knowledge about various plants of economic use and importance of plant and plant products.
B.Sc. III Semester: VI	
BOTANY- DSC 1007 F2 – "Molecular Biology and Biotechnology & Horticulture, Forestry and Herbal Technology"	
(DSC 1007 F2) Sec. : I "Molecular Biology and Biotechnology"	
Course Outcomes	**After the completion of the course the student will be able to:**
CO1	Know the scope and importance of molecular biology.
CO2	Gain knowledge about the mechanism and essential component required for the DNA replication.
CO3	Know the fundamentals of Recombinant DNA technology.
CO4	Gain the knowledge of genetic engineering.
B.Sc. III Semester: VI	
(DSC 1007 F2) Sec. : II "Horticulture, Forestry and Herbal Technology"	
Course Outcomes	**After the completion of the course the student will be able to:**
CO1	Know the science of horticulture and methods of propagation of horticultural plants.
CO2	Know how to manage a good nursery.
CO3	Gain the basic knowledge of forestry and its products.

CO4	Know different methods of herbal technology.
B.Sc. – Part – III – Botany Semester – V	
Paper : SEC3 (E) Title : "Technique of Life Science"	
Course Outcomes:	**After the completion of the course the student will be able to:**
CO1	Familiar with various instrument & techniques used in labs.
CO2	Familiar with different plant diseases & their management.
CO3	Get to Know plant products used in agriculture & organic farming.
CO4	Learn plant biochemistry.
Botany Semester – VI	
Paper : SEC 4 (F) Title : " Techniques in Plant Diversity and Crop Improvement"	
Course Outcomes:	**After the completion of the course the student will be able to:**
CO1	Familiar with identification, classification & nomenclature of plants.
CO2	Familiar with conservation of useful & endangered plants.
CO3	Learn breeding technique for improvement of crop diseases.
CO4	Get employment opportunities by studying different horticultural techniques.

Head of the Department

Head
Department of Botany
Vivekanand College
Kolhapur

VIVEKANAND COLLEGE * KOLHAPUR-416003 * ESTD. JUNE 1964