



DEPARTMENT OF BOTANY

COURSE OUTCOMES

2023-2024

B. Sc. Part – I Semester -I

BOTANY DSC-I: DSC03BOT11: Basic in Botany

Course Outcomes	After the completion of the course the student will be able to:
CO1	Develop basic skills to study botany in details.
CO2	Understand unique and general features of algae, fungi, bryophytes, pteridophytes and gymnosperm.
CO3	Understand the diversity of plants with respect to algae, fungi, bryophytes, pteridophytes and gymnosperm.
CO4	Acquaint the knowledge regarding importance of plants.

B. Sc. Part – I Semester -I

BOTANY DSC-II: DSC03BOT12: Plant Morphology.

Course Outcomes:	After the completion of the course the student will be able to:
CO1	Understand general organization of plant body
CO2	Acquire basic knowledge required for Understanding plant functioning.
CO3	Get and insight into be the fruit and seed development
CO4	Understand the morphology and development of different plant parts

B. Sc. Part – I Semester -II

BOTANY DSC-III: DSC03BOT21: Reproductive Botany

Course Outcomes:	After the completion of the course the student will be able to:
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CO1	Understand reproduction of plants.
CO2	Impart basic Knowledge of pollination and fertilization in plants.
CO3	Understand the development of reproductive parts.
CO4	Get and insight into be the fruit and seed development.

B. Sc. Part – I Semester -II

BOTANY DSC-IV: DSC03BOT22: Diversity and Conservation of Plants

Course Outcomes: After the completion of the course the student will be able to:

CO1	Understand outline of different classification system.
CO2	Classify the groups and the different the taxonomic forms.
CO3	Generate interest among the students about plant conservation.
CO4	Make the student aware about the extent of the total biodiversity and the importance of their Conservation.

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 Biofertilizer”	
(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 Biofertilizer”	
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



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
(EMPOWERED AUTONOMOUS)

