

Vivekanand College, Kolhapur
(An Empowered Autonomous Institute)
Department of Botany

Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Bhaurav Tukaram Dangat**

Programme: **B. Sc. I**

Semester: **I**

Subject: **Botany**

Course Title: **"Plant Morphology"**

Month: August			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit I: General organization of plant body:	Root system – Introduction, types and modification of Shoot system - Introduction and modification of stem
04	04	08		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit I: General organization of plant body:	Leaf – Introduction, Types- Simple and Complex, Phyllotaxy, Leaf venation, Modification
04	04	08		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit II: Study of Inflorescence	Definition and characters, types of inflorescences and significance of inflorescence.
05	04	09		

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Department of Botany

Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Bhaurav Tukaram Dangat**

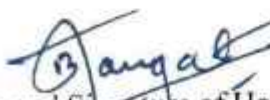
Programme: **B. Sc. II**

Semester: **III**

Subject: **Botany (Major)**

Course Title: **"DSC03BOT32: "Diversity of Phanerogams"**

Month: July			Module/Unit:	Sub-units Planned
Lectures	Practical's	Total	Unit- 3: Angiosperms	Introduction, Habit and Habitat diversity, Methods of reproduction
04	04	08		
Month: August			Module/Unit:	Sub-units Planned
Lectures	Practical's	Total	Unit- 3: Angiosperms	Evolutionary history, Taxonomic hierarchy, Bentham and Hooker System of Classification (Merit and Demerit),
04	04	08		
Month: September			Module/Unit:	Sub-units Planned
Lectures	Practical's	Total	Unit- 3: Angiosperms	Difference between Dicot and Monocot plant,
04	04	08		
Month: October			Module/Unit:	Sub-units Planned
Lectures	Practical's	Total	Unit- 3: Angiosperms	Study of Sunflower and Maize root and stem.
02	04	06		


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Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Bhaurav Tukaram Dangat**

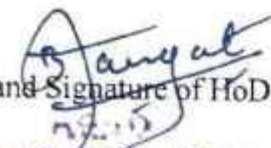
Programme: **3. Sc. III**

Semester: **V**

Subject: **Botany**

Course Title: "Plant Anatomy"

Month: July			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Section II: Unit II: Primary and secondary structures of plant body	Primary structure of monocotyledon and dicotyledon root, stem and leaf Normal secondary growth in dicotyledon root and stem Anomalous secondary growth in <i>Bignonia</i> (Dicot) and <i>Dracaena</i> (Monocot) stem
04	04	08		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit II: Primary and secondary structures of plant body.	Periderm and Lenticel, Epidermal tissue system, Secretary tissue system, Mechanical tissue system
04	04	08		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit IV: Primary and secondary structures of plant body.	Plant Adaptations Hydrophytes Xeric adaptations
04	04	08		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit IV: Plant Adaptations	Carnivorous plant Epiphytic and Parasitic plant Mangrove Biology
04	--	04		

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Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Bhaurav Tukaram Dangat**

Programme: **B. Sc. II**

Semester: **III**

Subject: **Botany (Minor)**

Course Title: **"MIN03BOT32: "Plant Taxonomy"**

Month: July			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit-2: Botanical Nomenclature	Principles and rules (ICN), Salient features of International Code of Botanical Nomenclature (ICBN),
04	04	08		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit-2: Botanical Nomenclature	Rules and regulations of Binomial nomenclature System, Systems of Classification-Natural, Artificial and Phylogenetic
04	04	08		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit-2: Botanical Nomenclature	Bentham and Hooter's system of Classification (Up to series).
04	04	08		

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Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Bhaurav Tukaram Dangat**

Programme: **B. Sc. I**

Semester: **II**

Subject: **Botany**

Course Title: **DSC-III: 2DSC03BOT21: "Reproductive Botany"**

Month: December			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit III: Pollination and Fertilization	Introduction and definition, Types of pollination (self, cross and its subtypes), Agents of pollination, Double fertilization: Definition and mechanism.
04	04	08		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit III: Pollination and Fertilization	Agents of pollination, Double fertilization: Definition and mechanism.
04	04	08		
Month: February			Module/Unit:	Sub-units planned
04	04	08	Unit IV: Endosperm and Embryo	Introduction, Development of endosperm, Types of endosperm, Embryogeny
Month: March			Module/Unit:	Sub-units planned
04	04	08	Unit IV: Endosperm and Embryo	Structure of dicot and monocot embryo, Seed formation, Polyembryony.

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Dr. B.T. Dangat



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Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Bhaurav Tukaram Dangat**

Programme: **B. Sc. II**

Semester: **IV**

Subject: **Botany (Major)**

Course Title: **DSC-VIII: 2DSC03BOT42: "Industrial Botany"**

Month: January			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit- 3: Sources of natural dyes	Sources of natural dyes in India and their extraction methods, merits and limitations of plant-based dyes.
04	04	08		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Practical's	Practical's
--	04	04		
Month: March			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Practical's	Practical's
--	04	04		

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Dr. B. T. Dangat



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Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Bhaurav Tukaram Dangat**

Programme: **B. Sc. III**

Semester: **VI**

Subject: **Botany**

Course Title: **DSC-XII: DSC03BOT61: "Fundamentals of Plant Taxonomy"**

DSE-II: DSE03BOT61: "Research Technique in Botany"

Month: December			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit-II: Plant Nomenclature	Common name, Scientific name, Binomial Nomenclature (Generic name, Specific epithet), Rules and Regulations,
04	04	08		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit-II: Plant Nomenclature	International Code of Botanical Nomenclature (ICBN), Systems of classification (up to series), APG III and IV.
04	04	08		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit-IV: Techniques	Plant micro techniques- Fixatives and staining (Single and Double), Extraction techniques (Soxhlet extraction), Photomicrography,
04	04	08		
Month: March			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit-IV: Techniques	Ethical and legal issues of research – Authentication of specimens, Legal permissions for collection of biological material from local biodiversity committees, Forest department, State biodiversity board, National Biodiversity Authority.
04	04	08		

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Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: **Dr. Abhijeet Rajaram Kasarkar**

Programme: **B. Sc. I**

Semester: **I**

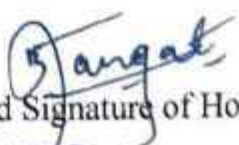
Subject: **Botany**

Course Code and Title: **2DSC03BOT12: "Plant Morphology"**

Month: July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III: Study of Flower	Definition and parts of a typical flower, Symmetry.
03	03	06		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III: Study of Flower	Insertion of floral whorls- Hypogynous, Perigynous and Epigynous, Calyx and Corolla.
04	04	08		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III: Study of Flower Unit IV: Study of Fruit	Perianth, Study of Androecium and Gynoecium. Introduction of Fruit
04	04	08		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit IV: Study of Fruit	Types of Fruit.
02	02	04		


 Name and Signature of Teacher
 (Dr. A. R. Kasarkar)




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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Abhijeet Rajaram Kasarkar**

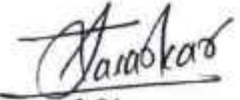
Programme: **B. Sc. II**

Semester: **III**

Subject: **Botany (Major)**

Course Code and Title: **2DSC03BOT32: "Diversity of Phanerogams"**

Month: July			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 4: Taxonomic Importance	Morphology, Anatomy
02	-	02		
Month: August			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 4: Taxonomic Importance	Chemotaxonomy, Palynology, Cytotaxonomy, Numerical Taxonomy,
04	03	07		
Month: September			Module/Unit:	Sub-units Planned
03	04	07	Unit 4: Taxonomic Importance	Molecular Taxonomy, DNA Barcoding of plants.
Month: October			Module/Unit:	Sub-units Planned
02	03	05	Unit 4: Taxonomic Importance	Herbaria, Herbarium Technique, Digital Herbaria


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Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Dr. Abhijeet Rajaram Kasarkar

Programme: B. Sc. II

Semester: III

Subject: Botany (Minor)

Course Code and Title: 2MIN03BOT32: "Plant Taxonomy"

Month: July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 1: Introductory Taxonomy	Introduction, Importance of Taxonomy
02	-	02		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 1: Introductory Taxonomy	Functions of Taxonomy, Nomenclature.
03	-	03		
Month: September			Module/Unit:	Sub-units planned
03	-	03	Unit 1: Introductory Taxonomy	Classification, Ranks, Categories and taxonomic groups.



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Academic Year: 2025-2026

Name of the teacher: **Dr. Abhijeet Rajaram Kasarkar**

Programme: **B. Sc. III**

Semester: **V**

Subject: **Botany**

Course Code and Title: **DSC03BOT53: "Plant Anatomy"**

Month: July			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 1: Organization of Higher Plant Body	Introduction to plant organs, Development of plant body.
04	--	04		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 1: Organization of Higher Plant Body	Internal Organization of plant body.
04	04	08		Study of Meristem
Month: September			Module/Unit:	Sub-units planned
03	03	06	Unit 2: Tissue and Tissue System	Theories of structural development. Study of Permanent tissue. Study of Complex tissue.
Month: October			Module/Unit:	Sub-units planned
02	02	04	Unit 2: Tissue and Tissue System	Types of Vascular Bundles.

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Academic Year: **2025-2026**

Name of the teacher: **Dr. Abhijeet Rajaram Kasarkar**

Programme: **B. Sc. I**

Semester: **II**

Subject: **Botany**

Course Code and Title: **2DSC03BOT21: "Reproductive Botany"**

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 1: Study of Microsporogenesis	Study of microsporangium, Study of Anther.
03	03	06		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 1: Study of Microsporogenesis	Study of microsporogenesis, Study of pollen grain, Study of male gametophyte development.
05	05	10		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 2: Study of Megasporogenesis	Study of types of ovule, Study of megasporogenesis, Study of typical embryo sac.
04	04	08		
Month: March			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 2: Study of Megasporogenesis	Study of types of embryo sac – Monosporic, Bisporic, Tetrasporic.
02	-	02		


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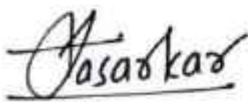
Programme: B. Sc. II

Semester: IV

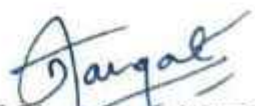
Subject: Botany (Major)

Course Code and Title: 2DSC03BOT42: "Industrial Botany"

Month: December			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 2: Extraction of sugar from sugarcane	Flow diagram of the process of sugar production.
02	02	04		
Month: January			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 2: Extraction of sugar from sugarcane	Problems faced by sugar industry in India. By products of sugar industry.
04	04	08		
Month: February			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 2: Extraction of sugar from sugarcane	Distillation of alcohol and other products with special reference to distilleries in Maharashtra.
03	03	06		


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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
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Academic Year: 2025-2026

Name of the teacher: **Dr. Abhijeet Rajaram Kasarkar**

Programme: **B. Sc. II**

Semester: **IV**

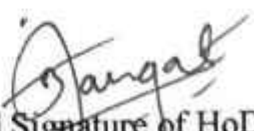
Subject: **Botany (Minor)**

Course Code and Title: **2MIN03BOT42: "Commercial Botany"**

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 1: Algae	Introduction, Potential Algae.
02	-	02		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 1: Algae	Products, Processing and application of Algae. Future prospectus- <i>Sargassum</i> , <i>Nostoc</i> .
04	-	04		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 1: Algae	<i>Spirulina</i> , <i>Chlorella</i> , <i>Prophyra</i> .
03	-	03		


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Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Abhijeet Rajaram Kasarkar**

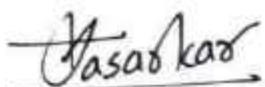
Programme: **B. Sc. III**

Semester: **VI**

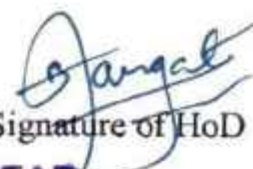
Subject: **Botany**

Course Code and Title: **DSC03BOT61: "Fundamentals of Plant Taxonomy"**

Month: November			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 1: Introductory Taxonomy	Need, Importance of Taxonomy, Different aspects of taxonomy.
03	02	05		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 1: Introductory Taxonomy	Systematics, Molecular Systematics, Phases of Taxonomy.
04	04	08		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 4: Taxonomic Literature and Plant Families	Flora, Manuals, Monographs, eFlora, Revisions, Journals, Periodicals, Reference books. Study of Plant families.
04	04	08		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 4: Taxonomic Literature and Plant Families	Study of Plant families- Fabaceae, Solanaceae, Euphorbiaceae, Poaceae.
03	03	06		


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Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Annapurna Ram Alvikar**

Programme : **B. Sc. III Minor**

Semester: **V**

Subject: **Botany**

Course Title: **"Plant Pharmaceutical Industry"**

(MIN-IX: MIN03BOT51)

Month : 1 st July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III – Study of indigenous traditional drugs	Introduction, Drugs used to cure the following ailments: Cold and cough, Gastrointestinal disorders, Urinary bladders, Liver diseases, Anti arthritic agents, Sedative, Cardiac drugs and other disorders.
04	--	04		
Month : August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III – Study of indigenous traditional drugs	<i>Hedychium sp., Ficus religiosa, Boerhavia diffusa, Adhatoda vasaka, Piper longum,</i>
04	--	04		
Month : September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III – Study of indigenous traditional drugs	<i>Terminalia arjuna, Andrographis paniculata, Terminalia belerica,</i>
03	--	03		
Month : October			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III – Study of indigenous traditional drugs	<i>Asparagus racemosus, Centella asiatica, Azadirachta indica</i>
02	--	02		

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Academic Year: 2025-2026

Name of the teacher: **Dr. Annapurna Ram Alvikar**

Programme : **B. Sc. III Major**

Semester: **V**

Subject: **Botany**

Course Title: **"Plant Physiology and Metabolism"**

(DSE-I: DSE03BOT51)

Month : 1 st July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit I – Plant Water Relationship	Introduction, Physiological importance of water, Permeability, Diffusion and Osmosis. Absorption of water (Active and Passive)
04	--	04		
Month : August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit I – Plant Water Relationship	Factors affecting absorption of water. The ascent of sap (Mechanism and different theory), Transpiration- Introduction, types and mechanism.
05	--	05		
Month : September			Module/Unit:	Sub-units planned
04	--	04	Unit I – Plant Water Relationship	Guttation and Wilting- Introduction and mechanism.
			Unit II- Mineral Nutrition	Role of mineral elements in plants, Macro and micro elements, specific role and deficiency symptoms of elements,
Month : October			Module/Unit:	Sub-units planned
03	--	03	Unit II- Mineral Nutrition	Sites for absorption of mineral ions:

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Academic Year: 2025-2026

Name of the teacher: **Dr. Annapurna Ram Alvikar**

Programme : **B. Sc. I (Major)**

Semester: **III**

Subject: **Botany**

Course Title: **"Diversity of Cryptogams"**

(DSC-V: 2DSC03BOT31)

Month : 1 st July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III – Bryophyta	Introduction, Distribution in India, Range of Thallus organization, Methods of reproduction,
04	--	04		
Month : August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III – Bryophyta	Outline of classification according to Parihar(1965), Study of example with reference to occurrence, plant body and life cycle of <i>Riccia</i>
04	--	04		
Month : September			Module/Unit:	Sub-units planned
04	--	04	Unit III – Bryophyta	Study of example with reference to occurrence, plant body and life cycle of <i>Anthoceros</i> .

Name and Signature of Teacher
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DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur
(An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Annapurna Ram Alvikar**

Programme : **B. Sc. II (Minor)**

Semester: **III**

Subject: **Botany**

Course Title: **"Plant Taxonomy"**

(MIN-II : 2MIN03BOT32)

Month : 1 st July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III – Tools for Taxonomic Studies	Herbarium- Introduction, Roles and significance, Botanical gardens- Introduction,
04	--	04		
Month : August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III – Tools for Taxonomic Studies	Role and Significance, , Sir. J. C. Bose Botanical Garden, Calcutta.,
04	03	07		
Month : September			Module/Unit:	Sub-units planned
04	04	08	Unit III – Tools for Taxonomic Studies	Kew Botanical Garden, Kew. Lead Botanical Garden, Shivaji University, Kolhapur.

Name and Signature of Teacher
(Dr. Annapurna. R. Alvikar)



Name and Signature of HoD
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VIVEKANAND COLLEGE, KOLHAPUR
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Vivekanand College, Kolhapur (Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Annapurna Ram Alvikar**

Programme : **B. Sc. I**

Semester: **I**

Subject: **Botany**

Course Title: **"Practicals"**

Month : August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total		
--	03	03	----	----
Month : September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total		
--	04	04	----	----
Month : October			Module/Unit:	Sub-units planned
04	04	04	----	----

Name and Signature of Teacher
(Dr. Annapurna. R. Alvikar)



Name and Signature of HoD

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Vivekanand College, Kolhapur
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Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Annapurna Ram Alvikar**

Programme: **B.Sc. III Minor** Semester: **VI**

Subject: **Botany** Course Title: **"General Agriculture" (MIN-X: MIN03BOT61)**

Month : November			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit I – Introduction and study of major crops	Introduction, And Importance of agriculture, Study of following crops of Maharashtra with reference to botanical name, geographical distribution, origin, gross morphology soil and climate, seed and sowing, varieties, manures and fertilizers, harvesting and yield and economic importance of Cereal – Jowar,
03	03	06		
Month : December			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit I – Introduction and study of major crops	Cereal –Rice., Oil seed crops- Cotton, Soybean.,
04	04	08		
Month : January			Module/Unit:	Sub-units planned
04	03	07	Unit I – Introduction and study of major crops	Pulse crop – Tur, Gram., Cash crop- Sugarcane, Spice- Turmeric,
Month : February			Module/Unit:	Sub-units planned
02	02	04	Unit I – Introduction and study of major crops	Spice-Ginger, Fruit crop- Mango, Pomegranate.

Name and Signature of Teacher
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Vivekanand College, Kolhapur
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 Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Annapurna Ram Alvikar**

Programme: **B.Sc. III Major** Semester: **VI**

Subject: **Botany** Course Title: **"Fundamentals of Plant Taxonomy**

(DSCXII: DSC03BOT61)

Month : November			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit III – Tools for Taxonomic Studies	Herbarium- Introduction, Roles and significance, Botanical gardens- Introduction,
04	--	04		
Month : December			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit III – Tools for Taxonomic Studies	Important Herbaria of the worlds, Methods of Preparing herbarium. Special types of garden Arboretum,
04	--	04		
Month : January			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit III – Tools for Taxonomic Studies	Special types of garden Arboretum, Pinetum, Orchidarium, Bambusetum. Study of Royal botanical garden, Kew Botanical Garden.
04	--	04		
Month : February			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit III – Tools for Taxonomic Studies	some major botanical gardens in India.
02	--	02		

Name and Signature of Teacher
 (Dr. Annapurna. R. Alvikar)



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Vivekanand College, Kolhapur
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Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Annapurna Ram Alvikar**

Programme: **B.Sc. II (Minor)** Semester: **IV**

Subject: **Botany** Course Title: **"Commercial Botany" (MIN-IV: 2MIN03BOT42)**

Month : December			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit III – Bryophytes and Pteridophytes	Introduction, Potential member, products, processing and applications of organisms (Future prospectus) Bryophytes- <i>Moss, Marchantia, Riccia</i> . Pteridophytes – <i>Adiantum, Nephrolepis, Dryopteris, Polypodium, Lycopodium</i> .
04	04	08		
Month : January			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit III – Bryophytes and Pteridophytes	Pteridophytes – <i>Nephrolepis, Dryopteris, Polypodium, Lycopodium</i> .
04	03	07		
Month : February			Module/Unit:	Sub-units planned
04	04	08	Unit IV – Higher Plants	Introduction, Potential member, Products, Processing and applications of organisms (Future prospectus). Gymnosperm- <i>Cycas, Pinus, Ginkgo, Taxus</i> Angiosperm- <i>Aswaghanda, Ashoka, Atropa, Plumbago, Costus</i> .
Month : March			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit IV – Higher Plants	Angiosperm- <i>Aswaghanda, Ashoka, Atropa, Plumbago, Costus</i> .
04	04	08		

Name and Signature of Teacher
(Dr. Annapurna. R. Alvikar)



Name and Signature of HoD
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Vivekanand College, Kolhapur
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Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Annapurna Ram Alvikar**

Programme: **B.Sc. I**

Semester: **I**

Subject: **Botany**

Course Title: **Practical's**

Month : November			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	----	----
--	02	02		
Month : December			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	----	----
--	04	04		
Month : January			Module/Unit:	Sub-units planned
--	03	03	----	----
Month : February			Module/Unit:	Sub-units planned
--	02	02	----	----
Month : March			Module/Unit:	Sub-units planned
--	02	02	----	----

Name and Signature of Teacher
(Dr. Annapurna R. Alvikar)



Name and Signature of HoD
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VIVEKANAND COLLEGE, KOLHAPUR

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Priya Digambar Patil**

Programme: **B. Sc. III**

Semester: **V**

Subject: **Botany**

Course Code and Title: **DSC03BOT51: "Mycology and Plant pathology"**

Month: July			Module/Unit:	Sub-units planned
Lectures	Practical (Paper I: Plant Pathology)	Total	Unit 3: Plant Pathology	Introduction, Classification of plant diseases based on Pathogens, Crops and Symptoms, Study of mechanism of infection in disease development (Biochemical changes),
04	—	06		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 3: Plant Pathology	Prevention and control of plant diseases, Role of Quarantine, Significance of Plant Pathology
04	04	08		
Month: September			Module/Unit:	Sub-units planned
05	04	09	Unit 4: Study of Diseases	A) Study of Fungal Diseases: 1. Phycomycetes: White rust of Crucifers 2. Ascomycetes: Powdery mildew of Cucurbits 3. Basidiomycetes: Corn Smut



Month: October			Module/Unit:	Sub-units planned
04	02	06	Unit 4: Study of Diseases	4. Deuteromycetes: Leaf spot (Tikka) disease of Groundnut B) Study of Bacterial Disease: Citrus Canker C) Study of Viral Disease: Yellow vein mosaic of Bhendi

P. D. Patil
 (Dr. P. D. Patil)
 Name and Signature of Teacher



P. Jangal
 Name and Signature of HoD
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Dr. Priya Digambar Patil

Programme: B. Sc. II

Semester: III

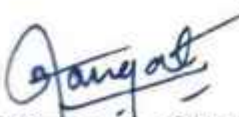
Subject: Botany (Major)

Course Code and Title: 2DSC03BOT31: "Diversity of Cryptogams"

Month: July			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 4: Pteridophyta	Pteridophytes: Introduction Distribution in India Methods of reproduction
02	-	02		
Month: August			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 4: Pteridophyta	Outline of classification according to Smith (1955) Heterospory Study of example with reference to occurrence, plant body and life cycle of <i>Selaginella</i>
04	-	04		
Month: September			Module/Unit:	Sub-units Planned
03	-	03	Unit 4: Pteridophyta	Study of example with reference to occurrence, plant body and life cycle of <i>Azolla</i>


 (Dr. P. D. Patil)
 Name and Signature of Teacher




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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Priya Digambar Patil**

Programme: **B. Sc. II**

Semester: **III**

Subject: **Botany (Minor)**

Course Code and Title: **2MIN03BOT32: "Plant Taxonomy"**

Month: July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Section II:	Flora, Manuals, Monographs e-flora, Revisions, Journals, Periodicals
02	-	02	Unit 4: Taxonomic Literature	
Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 4: Taxonomic Literature	Reference Books, Research Paper, Websites and Catalogues
04	-	04		Plant Families: Morphological, floral, distinguishing characters and economic importance of Family: Malvaceae
Month: September			Module/Unit:	Sub-units planned
03	-	03	Unit 4: Taxonomic Literature	Morphological, floral, distinguishing characters and economic importance of Family: Amaryllidaceae

Priya D. Patil
(Dr. P. D. Patil)
 Name and Signature of Teacher



[Signature]
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EMPOWERED AUTONOMOUS

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Dr. Priya Digambar Patil

Programme: B. Sc. I

Semester: I

Subject: Botany

Course Code and Title: 2DSC03BOT11: "Basic in Botany"

Month: July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 4: Organization of higher plant body	Plant organs (Root, stem and Leaf) * * Development of plant body (Seedling development)
03	01	04		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 4: Organization of higher plant body	Internal organization (Root, stem & leaf) Study of tissue systems: Meristematic tissue, Simple and complex tissue Study of Algae: <i>Nostoc</i>
05	04	09		
Month: September			Module/Unit:	Sub-units planned
05	04	09	Unit 3: Study of following examples with reference to occurrence, plant body and life cycle	Study of Fungi: <i>Mucor</i> Study of Bryophyte: Moss <i>Funaria</i>



Month: October			Module/Unit:	Sub-units planned
04	04	08	Unit 3: Study of following examples with reference to occurrence, plant body and life cycle	Study of Pteridophyte: <i>Pteris</i> Study of Gymnosperm: <i>Cycas</i>

P. D. Patil
(Dr. P. D. Patil)
Name and Signature of Teacher



A. Gangadhar
Name and Signature of HoD

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DEPARTMENT OF BOTANY
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Priya Digambar Patil**

Programme: **B. Sc. II**

Semester: **III**

Subject: **Botany**

Course Code and Title: **2OEC03LFS31: "Advanced Entrepreneurship in Botany-I"**

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	--
--	02	02		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total		
--	04	04		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practicals	Total		
--	02	02		


 Name and Signature of Teacher
 (Dr. P. D. Patil)




 Name and Signature of HoD
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Priya Digambar Patil**

Programme: **B. Sc. III**

Semester: **VI**

Subject: **Botany**

Course Code and Title: **DSC03BOT562: "Cytology and Genetics"**

Month: November			Module/Unit:	Sub-units planned
Lectures	Practical (Paper III: Molecular Biology & Biotechnology)	Total	Unit 1: Cell as a unit of life	Introduction, The cell theory
02	01	03		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 1: Cell as a unit of life	Cell size and shape Models of membrane structure The functions of membrane
05	03	08		
Month: January			Module/Unit:	Sub-units planned
05	04	09	Unit 1: Cell as a unit of life Unit 2: Cell Organelles	Cell cycle Apoptosis Introduction Cell organelles- Plastids Endoplasmic reticulum Ribosomes Golgi complex Mitochondria



Month: February			Module/Unit:	Sub-units planned
04	02	05	Unit 2: Cell Organelles	Cell organelles- Lysosomes Centrosome Cilia and flagella Microbodies (Glyoxysomes & Peroxisomes) Vacuoles Nucleus Chromosomes

Priya D. Patil

Name and Signature of Teacher

(Dr. Priya D. Patil)



Name and Signature of HoD

[Signature]
HEAD 17.11.22
 DEPARTMENT OF BOTANY
 VIVEKANAND COLLEGE, KOLHAPUR
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

Department of Botany

Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Priya Digambar Patil**

Programme: **B. Sc. II**

Semester: **IV**

Subject: **Botany (Major)**

Course Code and Title: **2DSC03BOT41: "Resource Botany"**

Month: December			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 1: Forest as Potential Resource	Introduction and Scope
04	-	04		Major forest produce
Month: January			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 1: Forest as Potential Resource	Uses: Gum, Resin, Tannin and Pigments
04	-	04		
			Unit 2: Plant resources used in cosmetics, aromatics and pharmaceuticals	Introduction and Scope
				Herbal preparations
Month: February			Module/Unit:	Sub-units Planned
03	-	03	Unit 2: Plant resources used in cosmetics, aromatics and pharmaceuticals	Methods of extraction-
				Maceration Digestion Decoction Aromatic waste Extracts and tinctures
Month: March			Module/Unit:	Sub-units Planned
04	-	04	Unit 2: Plant resources used in cosmetics, aromatics and pharmaceuticals	Study of Aloe, Heena, Lemon grass, Rose, Jasmine, Turmeric, Ginger, Neem, Holy basil, Amla

Priya D. Patil
Name and Signature of Teacher
(**Dr. Priya D. Patil**)



G. Jangal
Name and Signature of HoD
17.11.24
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DEPARTMENT OF BOTANY
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

Department of Botany

Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Priya Digambar Patil**

Programme: **B. Sc. I**

Semester: **II**

Subject: **Botany**

Course Code and Title: **2DSC03BOT22: "Diversity and conservation of Plants"**

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III: Plant Diversity	Introduction and Definition
04	03	07		Types of diversity
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III: Plant Diversity	Importance of diversity
04	04	08		Threats of diversity Magnitude of diversity
Month: February			Module/Unit:	Sub-units planned
03	04	07	Unit IV: Conservation of Plant Diversity	Introduction and definition Types of conservation (In situ and Ex situ)
Month: March			Module/Unit:	Sub-units planned
02	03	05	Unit IV: Conservation of Plant Diversity	Necessity of conservation

Name and Signature of Teacher
(Dr. Priya D. Patil)



Name and Signature of HoD

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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Priya Digambar Patil**

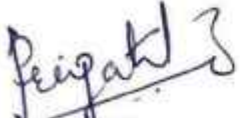
Programme: **B. Sc. II**

Semester: **IV**

Subject: **Botany**

Course Code and Title: **2OEC03LFS41: "Advanced Entrepreneurship in Botany-II"**

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	--
--	02	02		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	--
--	04	04		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	--
--	03	02		
Month: March			Module/Unit:	Sub-units planned
--	02	02	--	--


 Name and Signature of Teacher
 (Dr. Priya D. Patil)




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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Dr. Mrunalini Nilesh Desai

Programme: B. Sc. I Semester: I

Subject: Botany

Course Title: IKS03GEC11: Indian Knowledge System and

2DSC03BOT19DSC Botany lab-1

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit-1: Introduction to Ayurveda.	1a. Ayurvedic medicinal system 1b. Principles of Ayurveda (Vata, Pitta, Kapha) 1c. Ayurvedic therapies
04	04	08		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	1d. Unani system of medicine 1e. Siddha system of medicine
02	04	06		
Month: October			Module/Unit:	Sub-units planned
04	04	08	Practical - II	1d. Unani system of medicine 1e. Siddha system of medicine 1f. Future of herbal drugs 1g. Study of medicinal plants- Punarnava, Vasaka, Shatavar, Brahmi and Arjuna

Name and Signature of Teacher

(Dr. M.N. Desai)



Name and Signature of HOD

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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Mrunalini Nilesh Desai**

Programme: **B. Sc. II (Major)**

Semester: **V**

Subject: **Botany**

Course Title: **2DSC03BOT32: Diversity of Phanerogams**

Practical:- **MIN-PR-I: 2MIN03BOT39: MIN-Botany Lab-3**

Month: July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Gymnosperms: Outline of classification system According to Sporne (1965),	Introduction, Distribution of Gymnosperms in India, Methods of Reproduction,
02	02	04		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total		Outline of classification system According to Sporne (1965), Study of example with reference to occurrence, plant body and life cycle of <i>Pinus</i>
04	04	08		
Month: September			Module/Unit:	Sub-units planned
04	04	08		Study of example with reference to occurrence, plant body and life cycle of <i>Gnetum</i>

Name and Signature of Teacher

(Dr. M. N. Desai)



Name and Signature of HOD

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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

Department of Botany

Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Mrunalini Nilesh Desai**

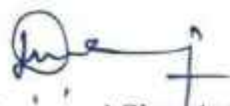
Programme: **B. Sc. III**

Semester: **V**

Subject: **Botany**

Course Title: **DSC03BOT52: Plant Ecology"**

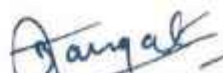
Month: July			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 1 Introduction to Ecology	Introduction and definition of Ecology Ecological Factors: Edaphic Factors – Soil origin and formation, Composition of soil water, soil air, soil temperature, soil organic matter and soil microbes. Climatic factors – Light, Temperature, Precipitation, Atmospheric humidity and Rainfall.
04	--	04		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total		Ecological Adaptations – Hydrophytes, Xerophytes, Epiphytes and Parasites. Soil Pollution – Preventive and Curative methods.
04	02	06		
Month: September			Module/Unit:	Sub-units planned
03	02	05	Unit II: Ecological Succession and Interaction	Introduction, Process of succession, Types of succession- Hydrosere, Xerosere. Introduction of ecological interaction. Intra-specific interaction – Co- operation, Communication,
Month: October			Module/Unit:	Sub-units planned
04	02	06		Competition. Inter-specific interaction – Symbiosis, Commensalism, Parasitism and Predation.



Name and Signature of Teacher

(Dr. M. N. Desai)




Name and Signature of HOD

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EMPOWERED AUTONOMOUS

Vivekanand College, Kolhapur
(An Empowered Autonomous Institute)
 Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Mrunalini Nilesh Desai**

Programme: **B. Sc. III**

Semester: **VI**

Subject: **Botany**

Course Title: DSE03BOT61: "Herbal Technology"

Month: November			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit I: Herbal Medicine	1a. Definition of herbal medicine 1b. History and scope
02	--	02		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit I: Herbal Medicine	1c. Role of medicinal plants in Ayurveda 1d. Importance of herbal medicine 1e. Herbal drug industries
04	--	04		
Month: January			Module/Unit:	Sub-units planned
04	--	04	Unit II: Pharmacognosy	1a. History and definition 1b. Importance of Pharmacognosy
Month: February			Module/Unit:	Sub-units planned
04	--	04	Unit II: Pharmacognosy	1c. Study of techniques of Pharmacognosy 1d. Role of Pharmacognosy in medicines

Name and Signature of Teacher

Dr. Mrunalini N. Desai



Name and Signature of HOD

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 DEPARTMENT OF BOTANY
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Vivekanand College, Kolhapur
(An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: **2024-2025**

Name of the teacher: **Dr. Mrunalini Nilesh Desai**

Programme: **B. Sc. II**

Semester: **IV**

Subject: **Botany**

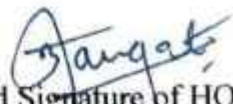
Course Title: **DSC-VIII: DSC03BOT42 "Industrial Botany"**

Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	"Industrial Botany" Unit IV: Importance of Seed Industry	Seed production
02	--	02		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	"Industrial Botany" Unit IV: Importance of Seed Industry	Seed processing and Marketing
02	--	02		
Month: March			Module/Unit:	Sub-units planned
01	--	01	"Industrial Botany" Unit IV: Importance of Seed Industry	Major seed industries and corporation of India



Name and Signature of Teacher

Dr. Mrunalini N. Desai

Name and Signature of HOD

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DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
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Vivekanand College, Kolhapur
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Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

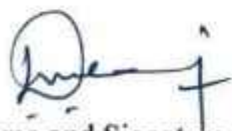
Name of the teacher: **Dr. Mrunalini Nilesh Desai**

Programme: **B. Sc. I** Semester: **II**

Subject: **Botany**

Course Title: **DSC BOT- PR-II: DSC03BOT19: DSC BOTANY LAB- 2**

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	--
--	02	02		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	--
--	05	05		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	--
--	04	04		
Month: March			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	--
--	02	02		



Name and Signature of Teacher

(Dr. Mrunalini N. Desai)




Name and Signature of HOD

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Vivekanand College, Kolhapur
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Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Mrunalini Nilesh Desai**

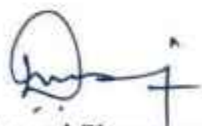
Programme: **B. Sc. II**

Semester: **IV**

Subject: **Botany**

Course Title: **MIN03BOT41 and MIN03BOT42**

Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	--
--	04	04		
Month: February			Module/Unit:	Sub-units planned
--	03	03	--	--
Month: March			Module/Unit:	Sub-units planned
--	04	04	--	--



Name and Signature of Teacher

(Dr. Mrunalini N. Desai)




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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

Department of Botany
Academic Year: 2024-2026
Annual Teaching Plan

Name of the teacher: Dr. Snehal Sanjay Wadkar

Programme - B. Sc. I

Semester- I

Subject: Botany

Course Title: DSC-I: 2DSC03BOT11: Basic in Botany

Month – July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit -1: Importance of Plant	Role of plants in human welfare (Direct and indirect) Role of plants in ecological services.
03	04	05		
Month – August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit -1: Importance of Plant	Role of plants in ecological services. Evolutionary history of plants.
03	04	07		
			Unit -2: General outline of Plant Kingdom	Introduction
Month- September			Module/Unit:	Sub-units planned
03	04	07	Unit -2: General outline of Plant Kingdom	Study of classification of plant kingdom



Month- October			Modules/Unit	Sub-units planned
Lectures	Practicals	Total	Unit -2: General outline of Plant Kingdom	Study of five divisions with respect to characters and economic importance
05	04	09		


(Dr. Snehal S. Wadkar)
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Academic Year: 2024-2026
Annual Teaching Plan

Name of the teacher: Dr. Snehal Sanjay Wadkar

Programme - B. Sc. II (Major)

Semester- III

Subject: Botany

Course Title: DSC-VI: 2DSC03BOT32: Diversity of Phanerogams

Month - July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit -1 Phanerogams	Introduction
02	00	03		
Month - August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit -1 Phanerogams	Characters of Gymnosperms
03	00	03		Characters of Angiosperms
Month -September			Module/Unit:	Sub-units planned
02	00	02	Unit -1 Phanerogams	Distinguishing characters of Gymnosperms and Angiosperms.


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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

Department of Botany
Academic Year: 2024-2026
Annual Teaching Plan

Name of the teacher: Dr. Snehal Sanjay Wadkar

Programme - B. Sc. II (Minor)

Semester- III

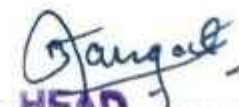
Subject: Botany

Course Title: Practical - I (Based on Paper 2MIN03BOT31 and Paper2MIN03BOT32)

Month – July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - I	Based on Paper 2MIN03BOT31 and Paper2MIN03BOT32
-	02	02		
Month – August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - I	Based on Paper 2MIN03BOT31 and Paper2MIN03BOT32
-	04	04		
Month- September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - I	Based on Paper 2MIN03BOT31 and Paper2MIN03BOT32
-	03	03		


(Dr. S. S. Wadkar)
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

Department of Botany

Academic Year: 2024-2026

Annual Teaching Plan

Name of the teacher: Dr. Snehal Sanjay Wadkar

Programme - B. Sc. III (Major)

Semester- V

Subject: Botany

Course Title- DSE-I: DSE03BOT51: Plant Physiology and Metabolism & Practical - II Study of Plant Ecology

Month - July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit- 3 Photosynthesis	Introduction, site of photosynthesis.
04	-	04		
Month – August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit- 3 Photosynthesis & Practical - II	Photosynthetic pigments, Mechanism of photosynthesis,
04	04	08		
Month-September			Module/Unit:	Sub-units planned
03	04	07	Unit- 3 Photosynthesis & Practical - II	Light reaction, Dark reaction (C3, C4, CAM pathway of carbon fixation).
Month- October			Module/Unit:	Sub-units planned
01	03	04	Unit- 3	CAM pathway, Significance.



			Photosynthesis & Practical - II	
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 (Dr. S. S. Wadkar)
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Department of Botany
Academic Year: 2024-2026
Annual Teaching Plan

Name of the teacher: Dr. Snehal Sanjay Wadkar

Programme - B. Sc. III(Minor)

Semester- V

Subject: Botany

Course Title- MIN-IX: MIN03BOT51: Plant Pharmaceutical Industry

Month - July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 1 Classification of Crude drugs	Morphological characters- Organized – Flowering plants, leaves, barks, root, rhizome, wood, hair: fibres, fruits, seed. Unorganized – Dried latex, juice, gums, resins, fats, wax, volatile oil
04	-	04		
Month – August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 1 Classification of Crude drugs	Chemical classification- Carbohydrates, glycosides, tannins, volatile oils, lipids, resins, alkaloids, proteins, vitamins.
02	-	02		
Month-September			Module/Unit:	Sub-units planned
03	-	03	Unit 1 Classification of Crude drugs	Based on pharmacological action- Anticancer, anti-inflammatory, antiamoebic, anthelmintic, antispasmodic, astringent, bitter tonic,



				purgatives, flavours, expectorant, CNS and Cardiotonic.
Month- October			Module/Unit:	Sub-units planned
01	-	01	Unit 1 Classification of Crude drugs	Revision


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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Snehal Sanjay Wadkar**

Programme: **B. Sc. I**

Semester: **II**

Subject: **Botany**

Course Code and Title: **DSC-IV: 2DSC03BOT22: "Diversity and Conservation of Plants"**

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 1: Study of classification systems	Introduction and definition, Ranks of classification. Study of five kingdom classification system (R. H. Whittaker). Study of general characters of each kingdom
03	03	06		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 1: Study of classification systems	Study of five kingdom classification system (R. H. Whittaker),
05	05	10		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 1: Study of classification systems Unit 2: Domains of Life	Study of general characters of each kingdom Study of three domains of life – Archaea
04	04	08		
Month: March			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 2: Domains of Life	Study of three domains of life – Bacteria and Eukarya. (Study of general character of each)
02	-	02		


 Name and Signature of Teacher
(Dr. snehal s. Wadkar)




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VIVEKANAND COLLEGE, KOLHAPUR
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Snehal Sanjay Wadkar**

Programme: **B. Sc. II**

Semester: **IV**

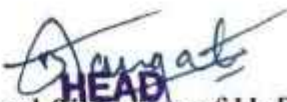
Subject: **Botany (Major)**

Course Code and Title: **DSC-VII: 2DSC03BOT41: "Resource Botany"**

Month: December			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 3: Floricultural Industry	Introduction to floriculture, Cultivation practices, Harvesting and marketing of Rose
02	02	04		
Month: January			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 3: Floricultural Industry Unit 4: Bio- fuel Technology	Cultivation practices, Harvesting and marketing of Gerbera.
04	04	08		Introduction and advantages, Concept of Bio-fuel and its need
Month: February			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 4: Bio-fuel Technology:	Plants used for Bio-fuel production, Biodiesel production from Castor
03	03	06		


 Name and Signature of Teacher
 (Dr. Snehal S. Wadkar)




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DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE KOLHAPUR
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Snehal Sanjay Wadkar**

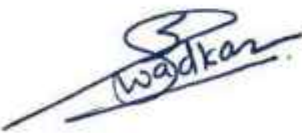
Programme: **B. Sc. II**

Semester: **IV**

Subject: **Botany (Minor)**

Course Code and Title: **MIN-PR-II:2MIN03BOT49: MIN- Botany**

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical – II	Practical – II
-	02	02		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical – II	Practical – II
-	04	04		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical – II	Practical – II
-	04	03		


 Name and Signature of Teacher
(Dr. Snehal S. Wadkar)




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DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
EMPOWERED AUTONOMOUS

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Snehal Sanjay Wadkar**

Programme: **B. Sc. III**

Semester: **VI**

Subject: **Botany (Major)**

Course Code and Title: **DSE-II: DSE03BOT61: "Herbal Technology"**

Month: November			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 3: Phytochemistry	History and definition, Importance of phytochemicals
03	02	05		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 3: Phytochemistry	Study of different types of phytochemicals, Study of different methods of testing of active chemicals.
04	04	08		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 4: Analytical Pharmacognosy	Study of secondary metabolites, Drug adulteration.
04	04	08		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 4: Analytical Pharmacognosy	Types of drug adulteration, Methods of drug evaluation.
03	03	06		


 Name and Signature of Teacher
(Dr. Snehal S. Wadkar)




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DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Snehal Sanjay Wadkar**

Programme: **B. Sc. III (Minor)**

Semester: **VI**

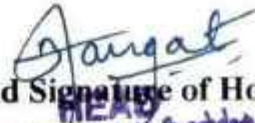
Subject: **Botany**

Course Code and Title: **MIN-X: MIN03BOT61: "General Agriculture"**

Month: November			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 4: Modern approaches in agriculture	Green house technology, Hydroponics technology,
02	-	02		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 4:	Transgenic crops, Integrated Pest Management,
03	-	03		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 4: Modern approaches in agriculture	Forecasting and Bio pesticide Revision
04	04	08		


Name and Signature of Teacher
(Dr. Snehal S. Wadkar)




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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Dr. Priyanka Pravin Jadhav

Programme: B. Sc. I. (Minor) Semester: III Subject: Botany

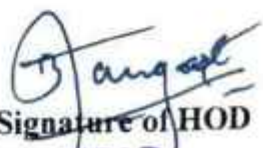
Course Title: MIN- I:2MIN03BOT31: Plant Biotechnology and Molecular Biology.

Practical:- MIN-PR-I: 2MIN03BOT39: MIN-Botany Lab-3

Month: July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 1 Genetic Material	Introduction Nucleic acids (DNA and RNA)
02	02	04		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total		Griffith's and Avery's transformation experiment, Harshey – Chase bacteriophage experiment,
04	04	08		
Month: September			Module/Unit:	Sub-units planned
04	04	08		DNA structure and Types of DNA, DNA replication, RNA structure and types of RNA.


Name and Signature of Teacher
Dr. Priyanka Pravin Jadhav




Name and Signature of HOD
Dr. B.T. Danga

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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

**Department of Botany
Annual Teaching Plan**

Academic Year: 2025-2026

Name of the teacher: Dr. Priyanka Pravin Jadhav

Programme: B. Sc. III (Major)

Semester: V

Subject: Botany

Course Title: DSE03BOT51: Plant Physiology and Metabolism

Practical - IV Plant Physiology and Metabolism

Month: July			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 4 'Respiration'	Introduction, site of respiration, types of respiration, fermentation, mechanism of respiration
04	--	04		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total		Glycolysis, link reaction, Krebs cycle, ETS in mitochondria, Significance and Respiratory ratio.
04	02	06		
Month: September			Module/Unit:	Sub-units planned
03	02	05	Plant Metabolism:	Carbohydrate, Fat (Lipid) metabolism with reference to properties, classification and importance
Month: October			Module/Unit:	Sub-units planned
04	02	06		Protein metabolism with reference to properties, classification and importance

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Name and Signature of Teacher
Dr. Priyanka Pravin Jadhav



B.T. Dangat
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Dr. B.T. Dangat
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VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Priyanka Pravin Jadhav**

Programme: **B. Sc. III (Minor)**

Semester: **V**

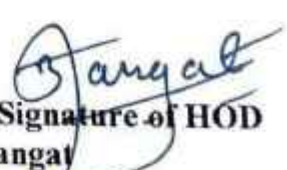
Subject: **Botany**

Course Title: **MIN03BOT51: Plant Pharmaceutical Industry**

Month: July			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 2 Drug Constituents,	Carbohydrates, glycosides,
02	--	02		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total		Saponins, anthraquinone derivatives, lipids, fats and waxes
04	--	04		
Month: September			Module/Unit:	Sub-units planned
03	--	04		Volatile oils, resins, tannins, alkaloids,
Month: October			Module/Unit:	Sub-units planned
04	--	04		Enzymes, microorganisms, marine products, vitamins, antibiotics and miscellaneous.


Name and Signature of Teacher
Dr. Priyanka Pravin Jadhav




Name and Signature of HOD
Dr. B.T. Dangal

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'EMPOWERED AUTONOMOUS'

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Priyanka Pravin Jadhav**

Programme: **B. Sc. I** Semester: **I**

Subject: **Botany**

Course Title: **2DSC03BOT19DSC Botany lab-I**

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	-----	-----
-	04	04		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	-----	-----
-	04	04		
Month: October			Module/Unit:	Sub-units planned
-	04	04	-----	-----


Name and Signature of Teacher
Dr. Priyanka Pravin Jadhav




Name and Signature of HOD
Dr. B.T. Dangat

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DEPARTMENT OF BOTANY
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Dr. Priyanka Pravin Jadhav**

Programme: **B. Sc. II (Major)**

Semester: **IV**

Subject: **Botany**

Course Title: **DSC-VIII: 2DSC03BOT42: Industrial Botany**

Month: November			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit no. 1 Physical characteristics of Indian Woods:	Methods of seasoning and chemical treatment of specialized use, Fire proofing of the wood, Industrial manufacturing of packing material and plywood, the Classification of plywoods according to their use.
02		02		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total		Some important commercial woods - <i>Dalbergia sp.</i> , <i>Shorea robusta</i> <i>Tectona grandis</i> , <i>Cedrus deodara</i> , Bamboo - the "Green Gold of India."
04		04		
Month: January			Module/Unit:	Sub-units planned
04		04		Manufacturing of paper and board from raw plant material Manufacturing of crude and high quality paper, recycled paper.
Month: February			Module/Unit:	Sub-units planned
04		04	Unit 3 Sources of natural dyes	Sources of natural dyes in India and their extraction methods, merits and limitations of plant based dyes

Name and Signature of Teacher
Dr. P. P. Jadhav



Name and Signature of HOD
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 (EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
 Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Priyanka Pravin Jadhav**

Programme: **B. Sc. III (Major)**

Semester: **VI**

Subject: **Botany**

Course Title: **DSE-II: DSE03BOT61: Research Technique in Botany**

Practical: - **Practical: IV Research Technique in Botany**

Month: November			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 1 Introduction to research	Introduction to research Meaning of research, its importance, aims and objectives, Criteria of selecting a research problem, Literature collection,
04	04	08		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practical	Total		Methodology (Experimental design/ Field data collection), Scientific paper writing- Manuscript preparation and presentation, Research journals, Impact factor and paper citationindex.
04	04	08		
Month: January			Module/Unit:	Sub-units planned
04	04	08	Unit2 Research institutes	Major research institutes related to botany in India, A brief idea about government research
Month: February			Module/Unit:	Sub-units planned
03	03	06		Funding agencies as DST, DBT, ICAR, ICMR, CSIR, UGC, CST , BSI etc., IPR and Patenting

Name and Signature of Teacher
Dr. P. P. Jadhav



Name and Signature of HOD
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Priyanka Pravin Jadhav**

Programme: **B. Sc. III (Minor)**

Semester: **VI**

Subject: **Botany**

Course Title: **B.Sc. III MIN03BOT61: General Agriculture**

Month: November			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 2 Study of weeds	Study of weeds Definition, characters of weed,
04	--	04		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practical	Total		Harmful and beneficial effect of weed, Classification of weed,
04	--	04		
Month: January			Module/Unit:	Sub-units planned
04	--	04	Plant Metabolism:	Study of parasitic, aquatic, poisonous and noxious weed with any two suitable example,
Month: February			Module/Unit:	Sub-units planned
04	--	04		Method of weed management (Mechanical, Biological, Chemical)

PPJadh

Name and Signature of Teacher
Dr. P. P. Jadhav



B. T. Dangat
Name and Signature of HOD
Dr. B.T. Dangat 17.11.24
HEAD
DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
 Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Priyanka Pravin Jadhav**

Programme: **B. Sc. II (Minor)** Semester: **IV**

Subject: **Botany**

Course Title: **MIN03BOT49 MIN-Botany Lab- 4**

Month: November			Module/Unit:	Sub-units planned
Lectures	Practical	Total		
	04	04		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practical	Total		
	04	04		
Month: January			Module/Unit:	Sub-units planned
	04	04		
Month: February			Module/Unit:	Sub-units planned
	04	04		

P.P. Jadhav

Name and Signature of Teacher
Dr. P. P. Jadhav

B.T. Dangat
Name and Signature of HOD
Dr. B.T. Dangat

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 DEPARTMENT OF BOTANY
 VIVEKANAND COLLEGE, KOLHAPUR
 (EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Dr. Priyanka Pravin Jadhav**

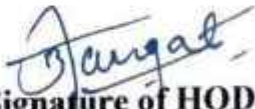
Programme: **B. Sc. I** Semester: **II**

Subject: **Botany**

Course Title: **2DSC03BOT19DSC Botany lab-II**

Month: November			Module/Unit:	Sub-units planned
Lectures	Practical	Total		
	04	04		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practical	Total		
	04	04		
Month: January			Module/Unit:	Sub-units planned
	04	04		
Month: February			Module/Unit:	Sub-units planned
	04	04		


Name and Signature of Teacher
Dr. P. P. Jadhav


Name and Signature of HOD
Dr. B.T. Dangat
HEAD
DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

Department of Botany

Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Ms. Aishwarya Anandarav Bogare**

Programme: **B. Sc. III**

Semester: **V**

Subject: **Botany**

Course Code and Title: **DSC03BOT52: "Plant Ecology"**

Month: July			Module/Unit:	Sub-units planned
Lectures		Total	Unit 3: Ecosystem	Introduction and structure, Composition-Biotic and Abiotic Energy flow trophic organization.
04	02	06		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 3: Ecosystem	Food chain and food webs. Ecological pyramids, Production and productivity.Types of Ecosystem.
04	02	06		
Month: September			Module/Unit:	Sub-units planned
04	01	05	Unit 4: Biogeochemical cycles and Phytogeography	Biogeochemical cycles- Introduction, Phosphorus and Nitrogen cycle.
Month: October			Module/Unit:	Sub-units planned
03	01	04	Unit 4: Study of Diseases	Phytogeography- Introduction, Phytogeographical regions(As per Chatteji)



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A. A. Boguee
 (Miss A. A. Boguee)
 Name and Signature of Teacher



A. A. Boguee
 Name and Signature of HoD
 HEAD
 DEPARTMENT OF BOTANY
 VIVEKANAND COLLEGE, KOLHAPUR
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Ms. Aishwarya Anandarav Bogare

Programme: B. Sc. II

Semester: III

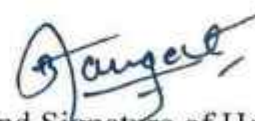
Subject: Botany (Major)

Course Code and Title: 2DSC03BOT31: "Diversity of Cryptogams"

Month: July			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 2: Fungi	Fungi-Introduction ,Habit(Types of Mycelium) Mode of nutrition. Methods of reproduction.
02	01	03		
Month: August			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 2: Fungi	Outline of classification according to Alexopoulos and Mims.
02	01	03		
Month: September			Module/Unit:	Sub-units Planned
03	01	04	Unit 2: Fungi	Study of example with reference to occurrence, plant body and life cycle of <i>Rhizopus</i> , <i>Puccinia</i>


 (Miss. A. A. Bogare)
 Name and Signature of Teacher




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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

Department of Botany

Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Ms. Aishwarya Anandarav Bogare

Programme: B. Sc. II

Semester: III

Subject: Botany (Minor)

Course Code and Title: 2MIN03BOT31: "Plant Biotechnology and Molecular Biology"

Month: July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Section II: Unit 4: Gene Amplification	An overview of the PCR technique, its principles
02	-	02		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 4: Gene Amplification	Mechanism of DNA amplification.
02	-	02		
Month: September			Module/Unit:	Sub-units planned
02	-	02	Unit 4: Gene Amplification	Types of PCR, Applications in healthcare, forensics, biotechnology.


(Miss. A. A. Bogare)
Name and Signature of Teacher




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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Ms. Aishwarya Anandarav Bogare**

Programme: **B. Sc. I**

Semester: **I**

Subject: **Botany**

Course Code and Title: **2OEC03LFS11: "Herbal Cosmetics-I"**

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	--
--	02	02		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	--
--	04	04		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	--
--	03	03		

Bogare
 (Miss. A. A. Bogare)
 Name and Signature of Teacher



Bogare
 Name and Signature of HoD
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DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Ms. Aishwarya Anandarav Bogare

Programme: B. Sc. I

Semester: I

Subject: Botany

Course Code and Title: DSC03BOT19

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	--
--	02	02		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	--
--	03	03		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	--
--	03	03		

Bogare.
(Miss. A. A. Bogare)
Name and Signature of Teacher



Bogare
Name and Signature of HoD
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DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
EMPOWERED AUTONOMOUS

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Miss. Aishwarya Anandarav Bogare

Programme: B. Sc. III

Semester: VI

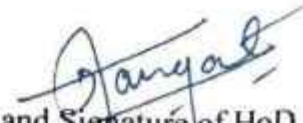
Subject: Botany

Course Code and Title: DSC03BOT62: "Cytology and Genetics"

Month: November			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 3: Genetics	Introduction and importance, Terminologies.
03	00	03		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 3: Genetics	Laws of Inheritance (Monohybrid and Dihybrid), Multiple allelism.
04	00	04		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 4: Linkage and Crossing over	Linkage-Concept, history and types of linkage, Crossing over- Concept and significance.
03	00	03		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 4: Linkage and Crossing over	Linkage maps, Extra chromosomal genome, Plastid inheritance and mitochondrial inheritance.
04	00	04		


 (Miss. A. A. Bogare)
 Name and Signature of Teacher




 Name and Signature of HoD
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Miss. Aishwarya Anandarav Bogare

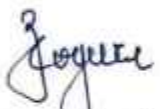
Programme: B. Sc. II

Semester: IV

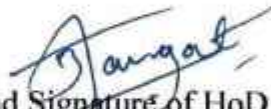
Subject: Botany (Major)

Course Code and Title: 2DSC03BOT42: "Industrial Botany"

Month: December			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Practical- II	-
00	02	02		
Month: January			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Practical- II	--
00	01	01		
Month: February			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Practical- II	--
00	01	01		


 (Miss. A. A. Bogare)
 Name and Signature of Teacher




 Name and Signature of HoD
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DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Miss. Aishwarya Anandarav Bogare

Programme: B. Sc. II

Semester: IV

Subject: Botany (Minor)

Course Code and Title: 2MIN03BOT42: "Commercial Botany"

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 2: Fungi	Introduction, Potential Fungi.
02	-	02		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 2: Fungi	Products, Processing and application of Fungi. Future prospectus- <i>Trichoderma</i> , <i>Metarhizium</i> , <i>Beauveria</i> .
04	-	04		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 2: Fungi	<i>Penicillium</i> , <i>Aspergillus</i> , <i>Yeast</i> , <i>Ganoderma</i> , <i>Agaricus</i> .
03	-	03		


 (Miss. A. A. Bogare)
 Name and Signature of Teacher




 Name and Signature of HoD
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 DEPARTMENT OF BOTANY
 VIVEKANAND COLLEGE, KOLHAPUR
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Miss. Aishwarya Anandarav Bogare**

Programme: **B. Sc. I**

Semester: **II**

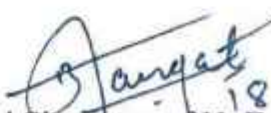
Subject: **Botany**

Course Code and Title: **2DSC03BOT29: DSC Botany LAB-2 Practical**

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	--
00	03	03		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	--
00	02	02		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	--
00	03	03		
Month: March			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	--
00	02	02		


 (Miss. A. A. Bogare)
 Name and Signature of Teacher




 Name and Signature of HoD
HEAD
DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Miss. Aishwarya Anandarav Bogare**

Programme: **B. Sc. I**

Semester: **II**

Subject: **Botany**

Course Code and Title: **2OEC3LFS21- 'Herbal Cosmetics- II' Practical**

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical -II	--
00	03	02		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical -II	--
00	03	03		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical -II	--
00	02	02		

Bogare.
 (Miss. A. A. Bogare)
 Name and Signature of Teacher

Jangal
 Name and Signature of HoD
 18.11.25
 DEPARTMENT OF BOTANY
 VIVEKANAND COLLEGE, KOLHAPUR
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Vivekanand College, Kolhapur (Empowered Autonomous)

Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Mrs. Priya Ashish Talekar**

Programme: **B. Sc II (Minor)**

Semester: **III**

Subject: **Botany**

Course Title: **Practical MIN-PR-I: 2MIN03BOT39**

Month : July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	---	
---	03	03		
Month : August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	---	
---	04	04		
Month : September			Module/Unit:	Sub-units planned
---	04	04	---	
Month : October			Module/Unit:	Sub-units planned
---	04	04	---	

Name and Signature of Teacher


(Mrs. Priya Ashish Talekar)



Name and Signature of HOD


Dr. B. T. Dangat
HEAD
DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

**Department of Botany
Annual Teaching Plan**

Academic Year: **2025-2026**

Name of the teacher: **Mrs. Priya Ashish Talekar**

Programme: **B. Sc II Major**

Semester: **III**

Subject: **Botany**

Course Title: **VSC PRACTICAL
(Bonsai and Terrarium)**

Month : July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	---	
--	04	04		
Month : August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	---	
--	04	04		
Month : September			Module/Unit:	Sub-units planned
--	04	04	---	
Month : October			Module/Unit:	Sub-units planned
--	03	03	---	

Name and Signature of Teacher


(Mrs. Priya Ashish Talekar)



Name and Signature of HOD


Dr. B. T. Dangat
HEAD
DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur (Empowered Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: **Mrs. Priya Ashish Talekar**

Programme: **B. Sc II Minor**

Semester: **III**

Subject: **Botany**

Course Title: **MIN- I:2MIN03BOT31**

Month : July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 3 Genetic Engineering	Genetic Engineering: Introduction.
02	---	02		
Month : August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 3 Genetic Engineering	Methods of gene transfer – Agrobacterium mediated
02	---	02		
Month : September			Module/Unit:	Sub-units planned
02	---	02	Unit 3 Genetic Engineering	Direct gene transfer by Electroporation, Microinjection, Microprojectile bombardment
Month : October			Module/Unit:	Sub-units planned
02	---	02	Unit 3 Genetic Engineering	Transgenic plants, Applications of plant biotechnology

Name and Signature of Teacher

Priya Talekar

(Mrs. Priya Ashish Talekar)



Name and Signature of HOD

Dr. B. T. Dangat

B. T. Dangat
HEAD

**DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)**

Vivekanand College, Kolhapur (Empowered Autonomous)

**Department of Botany
Annual Teaching Plan**

Academic Year: **2024-2025**

Name of the teacher: **Mrs. Priya Ashish Talekar**

Programme: **B. Sc III Minor**

Semester: **III**

Subject: **Botany**

Course Title: **MIN-IX: MIN03BOT51**

Plant Pharmaceutical Industry

Month : July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 4 Plant Anatomy	Dermal tissues: Epidermis, Stomata, trichomes, endodermis (Periderm)
02	---	02		
Month : August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 4 Plant Anatomy	Fundamental or ground tissues: Parenchyma, collenchyma, sclerenchyma
02	---	02		
Month : September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 4 Plant Anatomy	Vascular tissue: Phloem, xylem, cambium, secretory tissues
02	---	02		
Month : October			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 4 Plant Anatomy	Ergastic cell contents: Starch, proteins, fixed oils, fats and calcium oxalate
02	---	02		

Name and Signature of Teacher

Priya Talekar
(Mrs. Priya Ashish Talekar)



Name and Signature of HOD

Dr. B. T. Dangat

B. T. Dangat
DEPARTMENT OF BOTANY
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(EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2626

Name of the teacher: **Mrs. Priya Ashish Talekar**

Programme: **B. Sc III (Minor)**

Semester: **V**

Subject: **Botany**

Course Title: **PRACTICAL MIN03BOT59**

Month : July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	---	
--	03	03		
Month : August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	-	
--	02	02		
Month : September			Module/Unit:	Sub-units planned
--	02	02	---	
Month : Octomber			Module/Unit:	Sub-units planned
--	01	01	---	

Name and Signature of Teacher

(Mrs. Priya Ashish Talekar)



Name and Signature of HOD

Dr. B. T. Dangat

HEAD
DEPARTMENT OF BOTAN
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

Department of Botany

Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Mrs. Priya Ashish Talekar**

Programme: **B. Sc III (Major)**

Semester: **V**

Subject: **Botany**

Course Title: **PRACTICAL Study of Plant Ecology**

Month : July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	---	
--	02	02		
Month : August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	---	
--	02	02		
Month : September			Module/Unit:	Sub-units planned
--	02	02	---	
Month : October			Module/Unit:	Sub-units planned
--	02	02	---	

Name and Signature of Teacher

(Mrs. Priya Ashish Talekar)



Name and Signature of HOD

Dr. B. T. Dangat

Dr. B. T. Dangat
HEAD
DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur (Empowered Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Mrs. Priya Ashish Talekar**

Programme: **B. Sc III**

Semester: **V**

Subject: **Botany**

Course Title: **DSC- XI: DSC03BOT53: Plant Anatomy**

Month : July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	UNIT 4 Plant Adaptations	Plant Adaptations Hydrophytes
01	---	01		
Month : August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	UNIT 4 Plant Adaptations	Xeric adaptation
02	---	02		
Month : September			Module/Unit:	Sub-units planned
02	---	02	UNIT 4 Plant Adaptations	Carnivorous Plants Epiphytic and Parasitic plant
Month : October			Module/Unit:	Sub-units planned
02	---	02	UNIT 4 Plant Adaptations	Mangrove Biology

Name and Signature of Teacher

(Mrs. Priya Ashish Talekar)



Name and Signature of HOD

Dr. B. T. Dangat

Dangat
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DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Mrs. Priya Ashish Talekar

Programme: B. Sc. III (Minor)

Semester: VI

Subject: Botany

Course Code and Title: MIN-X: MIN03BOT61: General Agriculture

Month: November			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 3 : Study of Insect Pest	Defination and losses caused by insect pest, Causes of insect pest.
02	03	05		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 3 : Study of Insect Pest	Classification of insect pest based on (Occurrence of pest, intensity of pest, level of infection, food requirement).
02	02	04		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 3 : Study of Insect Pest	Study of insect pest – Sugarcane white grub, Gram pod borer, Ball worm of cotton, Mango hoppers
02	02	04		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 3 : Study of Insect Pest	Study of stored grain pest – Rice weevil, Pulse beetle Management of insect pest.
01	02	03		

P. Talekar

Name and Signature of Teacher
 Mrs. Priya. A. Talekar.



P. Jangot
 17.11.24
 HEAD

Name and Signature of HoD
 DEPARTMENT OF BOTANY
 VIVEKANAND COLLEGE, KOLHAPUR
 (EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Mrs. Priya Ashish Talekar

Programme: B. Sc. II (Major)

Semester: IV

Subject: Botany

Course Code and Title: VSC-PR-II : 2 VSC03BOT49 (Herbal Technology)

Month : December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	---	---
--	03	03		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	---	---
--	04	04		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	---	---
--	04	04		
Month : March			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	---	---
--	04	04		

P. Talekar
 Name and Signature of Teacher
 Mrs. Priya A. Talekar



A. Jangal
 Name and Signature of HoD
HEAD
 DEPARTMENT OF BOTANY
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 (EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

**Department of Botany
Annual Teaching Plan**

Academic Year: **2025-2026**

Name of the teacher: **Mrs. Priya Ashish Talekar**

Programme: **B. Sc. II (Minor)**

Semester: **IV**

Subject: **Botany (Minor)**

Course Code and Title: **MIN-III: 2MIN03BOT41 : Plant Tissue culture.**

Month: December			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 1: History of Plant tissue Culture	History of plant tissue culture and research, Basic principles & terminology of plant tissue.
03	02	05		
Month: January			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 1: History of Plant tissue Culture	Totipotency of cells, Cellular differentiation.
04	02	06		
Month: February			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 2: Methodology of Plant tissue culture	Methodology- Sterilization (Physical and chemical methods).
03	02	05		
Month: March			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 2: Methodology of Plant tissue culture	Plant cell culture methods, Culture media, MS and B5, Phytohormones, Medium for micro-propagation.
04	--	04		

Name and Signature of Teacher

Mrs. Priya A. Talekar.



Name and Signature of HoD

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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Mrs. Priya Ashish Talekar

Programme: B. Sc. III (Major)

Semester: VI

Subject: Botany

Course Code and Title: VSC-PR-V: VSC03BOT69 : Plant Nursery

Month: November			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	---
--	02	02		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	---
--	02	02		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	---
--	02	02		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	---
--	02	02		

P. Talekar
 Name and Signature of Teacher
 Mrs. Priya A. Talekar



J. Jangal
 Name and Signature of HoD
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**Department of Botany
Annual Teaching Plan**

Academic Year: 2025-2026

Name of the teacher: Mrs. Priya Ashish Talekar

Programme: B. Sc. III (Major)

Semester: VI

Subject: Botany

Course Code and Title: DSC-XIV: DSC03BOT63: Molecular Biology and Biotechnology

Month: November			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 3 : Genetic Engineering	Introduction, Methods of gene transfer – Agrobacterium mediated, Direct gene transfer by Electroporation.
04	--	04		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 3 : Genetic Engineering	Microinjection, Microprojectil bombardment, Transgenic plants, Applications of plant biotechnology.
04	--	04		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 4 : Plant Tissue Culture	Principle, terminology and culture medium, Totipotency and cellular differentiation, Organogenesis and embryogenesis,
04	--	04		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit 4 : Plant Tissue Culture	Applications of plant tissue culture – Protoplast culture, Somatic hybridization and Micropropagation.
03	--	04		

Talekar
Name and Signature of Teacher
Mrs. Priya A. Talekar



J. J. Jangal
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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Ms. Shivani Vijay Khorate

Programme: B. Sc. III

Semester: V

Subject: Botany

Course Code and Title: DSC03BOT51: "Mycology and Plant Pathology"

Month: July			Module/Unit:	Sub-units planned
Lectures	Practical (Paper I: Plant Pathology)	Total	Unit 1: Introduction to Mycology	Intruction,Defination,History, Branches and Importance Classification of Fungi- Ainsworth (1973) Origin and Phylogeny of Fungi Fungal body and Cells, Fungal Physiology
04	--	04		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit 1: Introduction to Mycology	Nutrition and Growth Fungal Ecology Thallus Organisation in Fungi Cell wall Composition
04	--	04		
Month: September			Module/Unit:	Sub-units planned
04	--	04	Unit 2: Classification of Fungi	Study of Division Myxomycotina with reference to general characters upto classes with suitable examples Study of Division Eumycotina with reference to general characters upto classes with suitable examples
Month: October			Module/Unit:	Sub-units planned



Month: October			Module/Unit:	Sub-units planned
03	--	03	Unit 2: Classification of Fungi	Study of Virus and Viroid Study of Mycoplasma Study of Lichen (With reference to introduction, types and iconomic importance)


 Name and Signature of Teacher
 Ms. Shivani V. Khorate




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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Ms. Shivani Vijay Khorate**

Programme: **B. Sc. II**

Semester: **III**

Subject: **Botany (Major)**

Course Code and Title: **2DSC03BOT31: "Diversity of Cryptogams" and**

DSC-PR-III: DAC03BOT39: DSC- Botany Lab- 3

Month: July			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 1: Algae	Cryptogams: Introduction, General characters Algae: Introduction, General characters
02	01	03		
Month: August			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit 1: Algae	Thallus Organisation in Algae Methods of Reproduction Classification of Algae (G.M.Smith) Economic Importance of Algae
04	01	05		
Month: September			Module/Unit:	Sub-units Planned
03	01	04	Unit 1: Algae	Study of Example with reference to occurrence, plant body life cycle of Spirogyra and Sargassum


 Name and Signature of Teacher
Miss. Shivani V. Khorate




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Department of Botany
Annual Teaching Plan

Academic Year: **2024-2025**

Name of the teacher: **Ms. Shivani Vijay Khorate**

Programme: **B. Sc. I**

Semester: **I**

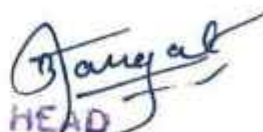
Subject: **Botany**

Course Code and Title: **2DSC03BOT29: DSC BOTANY LAB -1**

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	-	-
	04	04		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	-	-
	03	03		
Month: October			Module/Unit:	Sub-units planned
	01	01	-	-


Name and Signature of Teacher
Ms. Shivani. V. Khorate




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Vivekanand College, Kolhapur (An Empowered Autonomous Institute)
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Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: **Ms. Shivani Vijay Khorate**

Programme: **B. Sc. I**

Semester: **I**

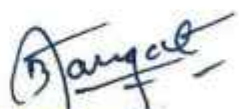
Subject: **Botany**

Course Code and Title: **2OEC03LFS11: "Herbal Cosmetics-I"**

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	--
--	02	02		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	-	-
--	04	04		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	-	-
--	03	03		


Name and Signature of Teacher
Ms. Shivani V. Khorate




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Department of Botany
Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Ms. Shivani Vijay Khorate

Programme: B. Sc. II

Semester: III

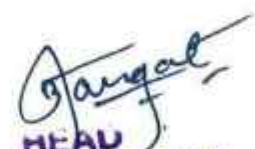
Subject: Botany

Course Code and Title: 2OEC03LFS31: "Advanced Entrepreneurship in Botany-I"

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	--
--	02	02		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total		
--	04	04		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practicals	Total		
--	02	02		


Name and Signature of Teacher
Ms Shivani. V. Khorate .




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Department of Botany

Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Miss Shivani Vijay Khorate**

Programme: **B. Sc. I** Semester: **II**

Subject: **Botany**

Course Title: **DSC BOT- PR-II: 2DSC03BOT29: DSC BOTANY LAB- 2**

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	--
--	05	05		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	--
--	04	04		
Month: February			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	--
--	04	04		
Month: March			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	--
--	02	02		


Name and Signature of Teacher
(Miss. S.V. Khorate)




Name and Signature of HOD
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Academic Year: 2025-2026

Name of the teacher: Miss Shivani Vijay Khorate

Programme: B. Sc. II

Semester: IV

Subject: Botany (OE)

Course Title: OEC-PR-IV: "2OEC03LFS41": Life Science-IV

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical II	--
	03	03		
Month: January				
Lectures	Practicals	Total	Practical II	--
	05	05		
Month: February				
	04	04	Practical II	--
Month: March				
	03	03		


Name and Signature of Teacher
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Annual Teaching Plan

Academic Year: 2025-2026

Name of the teacher: Miss Shivani Vijay Khorate

Programme: B. Sc. I Semester: II

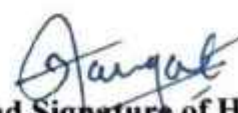
Subject: Botany

Course Title: "Open Elective" Practical – II ("2OEC3LFS21: Herbal Cosmetics-II")

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	Preparation of mehandi Study of extraction and application of natural dyes Study of preparation of organic soaps.
--	04	04		
Month: January			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical - II	Study of preparation of dhoop and agarbati. Study of preparation of beverages. Best from Waste Study of preparation of wheat grass juice
--	05	05		
Month: February			Module/Unit:	Sub-units planned
--	03	03	Practical - II	DIY Study of preparation of Ayurvedic juices


Name and Signature of Teacher
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Academic Year: 2025-2026

Name of the teacher: Miss Shivani Vijay Khorate

Programme: B. Sc. II

Semester: IV

Subject: Botany

Course Title: "2DSC-PR-IV: 2DSC03BOT42"

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical II	--
	02	02		
Month: January				
Lectures	Practicals	Total	Practical II	--
	04	04		
Month: February				
	02	02	Practical II	--


Name and Signature of Teacher
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Academic Year: **2025-2026**

Name of the teacher: **Miss Shivani Vijay Khorate**

Programme: **B. Sc. II**

Semester: **IV**

Subject: **Botany**

Course Title: **2MIN03BOT41- Plant Tissue Culture**

Month: December			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit. 3- Culture of organs	1a. Organogenesis
05	00	05		1.b Callus induction
				1.c Embryogenesis
				1.d Protoplast culture
				1.e Somatic hybridization
Month: January			Module/Unit:	Sub-units planned
04	00	04	Unit. 3- Culture of organs	1.f Micropropagation
				media requirements
				1.e Morphogenetic
				potential and its
				applications.
Month: February			Module/Unit:	Sub-units planned
04	00	04	Unit- Application of tissue	2.a Micropropagation
			culture	2.b Production of disease
				free plants, Tissue culture
				and crop improvement-
				Agrobacterium mediated
				gene transfer technology



				2.c Production of Artificial seeds.
Month: March			Module/Unit:	Sub-units planned
03	00	03	Unit-Application of tissue culture	2.b Production of disease free plants, Tissue culture and crop improvement- Agrobacterium mediated gene transfer technology 2.c Production of Artificial seeds,

S. V. Khosate
Name and Signature of Teacher
 Miss. S. V. Khosate



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Department of Botany
Annual Teaching Plan

Academic Year: **2025-2026**

Name of the teacher: **Miss Shivani Vijay Khorate**

Programme: **B. Sc. III**

Semester: **VI**

Subject: **Botany**

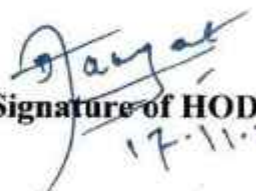
Course Title: DSC03BOT63: **"Molecular Biology and Biotechnology and**

Month: November			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Section I: Unit1- Genetic material	1a. Nucleic acids (DNA, RNA) 1.b Griffith's and Avery's transformation experiments 1.c Harshey- Chase bacteriophage experiment
03	00	03		
Month: December			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Section I: Unit1- Genetic material	1.d DNA structure and types of DNA 1e. DNA replication 1.f RNA its structure and types 1.g Transcription and translation process
04	00	04		
Month: January			Module/Unit:	Sub-units planned
05	00	05	Section I: Unit II: Recombinant DNA Technology	1a.Introduction 1b.Principle of Recombinant DNA Technology 1c. Enzymes involved in recombinant DNA technology. 1d. Introduction of cloning vectors

				1e. Plasmid, Bacteriophage
Month: February			Module/Unit:	Sub-units planned
04	00	04	Section I: Unit II: Recombinant DNA Technology	1f. Cosmid 1g. Blotting techniques- Northern, Southern and DNA fingerprinting 1.h Gene amplification- PCR technique


Name and Signature of Teacher
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