


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

Shri Swami Vivekanand Shikshan Sanstha's
Vivekanand College, Kolhapur
(Empowered Autonomous)



Department of Botany

Syllabus Completion Report

2023-2024

Syllabus Completion Report (2023-2024)

Department of Botany





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

Shri Swami Vivekanand Shikshan Sanstha's
Vivekanand College, Kolhapur
(Empowered Autonomous)



Department of Botany
Syllabus Completion Report
(2023-2024)

INDEX

Sr. No.	Name of Faculty	Page No.
1.	Dr. B. T. Dangat	01-02
2.	Dr. A. R. Kasarkar	03-04
3.	Dr. J. M. Gorule	05-06
4.	Dr. A.R. Alvikar	07-08
5.	Dr. P. D. Patil	09-10
6.	Dr. L. A. Kagale	11-12
7.	Dr. M. N. Desai	13-14
8.	Dr. S.B. Koparde	15-16
9.	Dr. P.P. Jadhav	17-18
10.	Dr. S. S. Wadkar	19-20
11.	Ms. P. B. Shelar	21-22
12.	Dr. U.A. Desai	23

Dangat
Head
Department of Botany

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

P. Desai
Principal
PRINCIPAL
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

Syllabus Completion Report (2023-2024)

Department of Botany



VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2022-2023

Term: Ist

Name of the Teacher: Dr. Bhaurav Tukaram Dangat

Department: Botany

Class	Subject	Syllabus Assigned	Syllabus Covered	Remarks
B.Sc. I	Botany	Unit-1: General organization of plant body Unit-2: Study of Inflorescence:	Root system – Introduction, types and modification of root with one example. Shoot system - Introduction and modification of stem with one example. Leaf – Introduction, Types- Simple and Complex, Phyllotaxy, Leaf venation, Modification with one example. Definition and characters, types of inflorescence and significance of inflorescence. Practicals	Completed
B.Sc. II	Botany	Unit: I Organization of flower :	1a: Concept of flower as a modified shoot, structure of typical flower. 1b. Structure of typical stamen, microsporogenesis, pollen germination and development of male gametophyte. 1c. Structure of typical gynoecium, structure of a typical ovule,	Completed



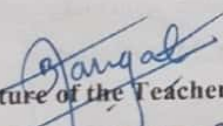
			types of ovules.	
			1d. Megasporogenesis, structure of embryo sac: Monosporic (Polygonum) ,Bisporic (Allium) and Tetrasporic (Pepromia) development of female gametophyte.	
		Unit: II Pollination and Fertilization:	2a.Definition, Types and mechanism in Anemophily (Zea mays), Entomophily (Calotropis) and Hydrophily (Vallisneria), Mimicry (Orchid).	
			2b. Fertilization: Entry of pollen tube,double fertilization and triple fusion.Significance of double fertilization.	
			2c: Structure and development of embryo in Monocotyledons.	
			2d: Structure and development of embryo in Dicotyledons.	
			2e: Development of endosperm, Types of endosperm- Nuclear, Helobial and Cellular.	
			2f: Apomixes	
			Plant Families:	
			Morphological,floral, distinguishing character and economic importance of following families.	
			i.Annonaceae ii. Meliaceae	
			Apocynaceae	
		Unit: 4	Practicals	

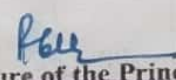


B.Sc. II	PP	<p align="center">Unit I. Crop Diseases</p>	<p>1a: Introduction and importance of Plant Pathology.</p> <p>1b: Definition and concept of disease, Terminologies used in Plant Pathology: Host, Pathogen, Inoculum, Virulence, Pathogenecity, Pathogenesis, Prediposition, Symptoms, Infection, Incubation period, Etiology, Disease cycle, Resistance, Susceptibility, Immunity, Hypersensitivity, Cross protection, Phytoalexins, Siderophores, Inoculum potential, Dissemination Virus, Mycoplasma, Viroid.</p> <p>1c: Classification of plant diseases – Based on a) Pathogens, b) Symptoms, c) Severity, spread and occurrence of disease d) transmission of pathogens through e) Host f) Cause (Biotic, Abiotic and Mesobiotic) g) epidemiology</p> <p>1d. Symptoms and signs of plant diseases (Chlorosis, Necrosis, Mildew, Rust and Smuts)</p> <p>1e: Methods of studying plant pathogens and Koch's Postulates a) Isolation of Fungi and Bacteria b) Methods of purification of Fungi</p>	Completed
----------	----	---------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------



			and Bacteria c) Koch's Postulates Practicals	
B.Sc. III	Botany	Unit : 2 System of Classification	2a: Phylogeny of Angiosperms, The general account of origin of Angiosperms (with reference to Gnetalean theory) 2b: Classificationsy stem of Takhtajan, Brief reference of Angiosperm Phylogeny Group (APG-III) classification(2009). 2c: Ranks of IUCN and methods of Conservation. Practicals	Completed

(Signature of the Teacher)

HEAD 11.23
 DEPARTMENT OF BOTANY
 VIVEKANAND COLLEGE, KOLHAPUR
 (EMPOWERED AUTONOMOUS)

(Signature of the Principal)

PRINCIPAL
 VIVEKANAND COLLEGE, KOLHAPUR
 (EMPOWERED AUTONOMOUS)



VIVEKANAND COLLEGE, KOLHAPUR. (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year : 2023-24

Term – Ist

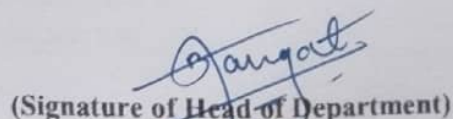
Name of the teacher: Dr. Abhijeet Rajaram Kasarkar

Department: Botany

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus not be covered	Remarks
B.Sc. -I	Botany (Major and Minor)	Paper II Unit. 3 – Study of Flower Unit. 4 – Study of Fruit	Paper II Unit. 3 – Study of Flower Unit. 4 – Study of Fruit	—	Completed
	Botany (Open Elective)	Paper I Unit. 4 – Biopesticides Paper II Unit.3 – Agri Inputs Unit. 4 – Study of Agrotourism	Paper I Unit. 4 – Biopesticides Paper II Unit.3 – Agri Inputs Unit. 4 – Study of Agrotourism	—	Completed
B.Sc. II	Botany	Paper – III Section – I Unit. 3- Taxonomic Literature Unit. 4 – Plant Families	Paper – III Section – I Unit. 3- Taxonomic Literature Unit. 4 – Plant Families	—	Completed
B.Sc. II	Plant Protection	Paper – I Section – I Unit. 4 – Methods of Plant Protection Part II	Paper – I Section – I Unit. 4 – Methods of Plant Protection Part II	—	Completed
	Practical - I	Study of Rice, Soybean, Gram, Sugarcane, Brinjal, Rose	Study of Rice, Soybean, Gram, Sugarcane, Brinjal, Rose	—	Completed
B.Sc. III	Botany	Paper – VIII Unit. 3- Plant Families	Paper – VIII Unit. 3- Plant Families	—	Completed
	Practical - II	Study of plant families	Study of plant families	—	Completed



(Signature of Teacher)



(Signature of Head of Department)

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

470

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: Ist

Name of the Teacher: **Dr. Jyoti Mahadev Gorule**

Department: **Plant Protection**

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. I	Open elective	Practical I	As per Curriculum	--	Completed
B.Sc. II	Botany	Practical I	As per Curriculum	--	Completed
B.Sc. II	Plant Protection	Paper – I: DSC1011C2 Section : I Unit I: Introduction of agriculture and study of major crops Section : II Unit IV: Phytopathological skills	1a. Introduction and importance of agriculture. 1b. Study of following crops of Maharashtra A. Cereal – Rice B. Oil seed crop – Soybean C. Pulse crop – Gram D. Cash crop - Sugarcane 4a. Principles of plant disease management 4b. Classification of fungicides based on chemical nature and Mode of action.	--	Completed
B.Sc. III	Botany	Paper –DSE7E1 Section : II Unit II: Plant Pathology	2a: Classification of plant diseases based on Pathogens, Crops and Symptoms. 2b: Study of Mechanism of Infection in Disease development (Biochemical changes), prevention and	--	Completed



		<p>Paper –DSE7E1 Section : I Unit III: Stress physiology</p>	<p>control of Plant Diseases. Role of Quarantine, Significance Of Plant Pathology.</p> <p>3a:Defining Plant stress. 3b:Types of stress:-Water stress-Salinity strees, light stress, Temperature stress. 3c: Stress sensing mechanisms in plants, Calcium Signaling, Phospholipid signaling</p> <p>Practical</p>		
--	--	--------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--

J. M. S.

Signature of Teacher



S. J. S.
Signature of Head
HEAD. 23

DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: Ist / IInd

Name of the Teacher: **Dr. Annapurna Ram Alvikar** Department: **Botany**

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. III (Sem. V)	Botany Paper – DSE 1007E1 Section-II “Microbiology, Plant Pathology and Biofertilizers”	Section-II: Unit 1: ‘Microbiology’ Introduction, Methods in Microbiology, Micro-organisms in Biological world, Scope of Microbes in Industry and Environment	All syllabus covered	Nil	--
	Botany Paper – DSE 1007E2 Section-I “Plant Biochemistry and Stress Physiology”	Section-I: Unit 4: ‘Senescence and Aging’ Introduction, Patterns of Senescence, Physical changes during senescence, Control of Senescence.	All syllabus covered	Nil	--
	Practicals IV	As per curriculum	Covered	Nil	-

(Signature of Teacher)

(Dr. A.R. Alvikar)



(Signature of Head of Dept)

HEAD 7.11.23
DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: Ist / IInd

Name of the Teacher: Dr. Annapurna Ram Alvikar

Department: Botany

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. II (Sem. III)	Botany	Practicals	All Practicals covered	Nil	--

(Signature of Teacher)

(Dr. A. R. Alvikar)



(Signature of Head of Dept)

HEAD 07.11.23
DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

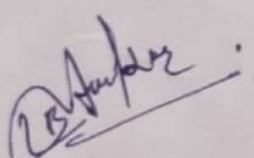
STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

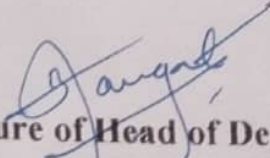
Term: Ist / IInd

Name of the Teacher: Dr. Annapurna Ram Alvikar Department: Botany

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. I (Sem. I)	Botany	OE Practicals	All syllabus covered	Nil	--


(Signature of Teacher)
(Dr. A.R. Alvikar)




(Signature of Head of Dept)
HEAD
DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: Ist / IInd

Name of the Teacher: Dr. Priya Digambar Patil

Department: Botany

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. III	Botany	Section I: Unit 2: Cell Organelles	Introduction, Eukaryotic cell components- Nucleus, Endoplasmic reticulum, Golgi complex, Specialized cell organelle- Ribosome	All syllabus covered	
B.Sc. II	Plant Protection	Section II: Unit III: Study of crop diseases with reference to pathogen, symptoms, disease cycle and their management	Diseases caused by phytoplasma- Little leaf of Brinjal Diseases caused by viruses- Tobacco mosaic virus Diseases caused by Bacteria- Oily spot of Pomegranate Diseases caused by Fungi- Rust of Soybean, White rust of crucifers, Grain smut of Jowar, Tikka Disease of Groundnut	All syllabus covered	



B.Sc. I	Botany	Unit II: General outline of plant kingdom	Study of characters of plant kingdom, Study of classification of plant kingdom, Study of five divisions with respect to characters and economic importance	All syllabus covered	
B.Sc. I	Botany	Unit IV: Organization of higher plant body	Plant organs (Root, Stem and Leaf) Development of plant body Internal organization Study of tissue systems- Meristematic tissue, simple and complex tissue	All syllabus covered	
B.Sc. I	Botany Practical-I	As per curriculum		covered	
B.Sc.II	Botany Practical-I	As per curriculum		covered	
B.Sc.II	Botany Practical- II	As per curriculum		covered	

Priyanka D. Patil
(Signature of Teacher)

[Signature]
(Signature of Head of Dept.)



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

477

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)
STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: Ist

Name of the Teacher: Dr. Lubdha Abhijeet Kagale

Department: Botany

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. I	Botany Open Elective	"Agri Based Microenterprises-I" Unit III: Food Spoilage and Preservation Techniques	3a. Causes of food spoilage 3b. Study of Preservation techniques- Asepsis, Removal of microorganisms, anaerobic conditions 3c. Study of special methods like Drying, heat treatment, low temperature storage, by food additives		Completed
B.Sc. I	Botany Open Elective	"Agri Based Microenterprises-II" Unit I: Fundamentals of Plant Pathology Unit: III Agribusiness and Agrieconomics	1c. Introduction and definition of integrated disease management(IDM) 1e. Basic principles of IDM with reference to cultural and biological disease management 1f. Study of IDM in different crops 3a. Definition and scope of Agribusiness 3b. Study of various business models in agri business 3c. Agrieconomics		Completed



			meaning, definition and scope 3d. Basic concepts- goods, service and utility		
B.Sc. II	Plant Protection	Paper I General Agriculture Unit: III Methods of Plant protection I	3a. Cultural Methods: Tillage, crop rotation, trap crops, fertilizers application, land fallowing, timely sowing and proper soil selection 3b. Mechanical methods: Field sanitation, hand picking, Destruction of infected plants, egg masses, light traps, use of sticky bands, bagging for the pest and pheromone traps 3c. Physical Methods: Heat and soil solarization		Completed
B.Sc. II	Plant Protection	Section II Plant Pathology Unit II: Mechanism of Plant Infection	2a. Mechanism of infection (Fungi, Bacteria and viruses) 2b. Factors affecting infection		Completed
B.Sc. III	Botany	Paper: DSE7E1 Section -I Cytology and research techniques in life sciences Unit III: Analytical techniques in Plant Sciences	3a. Principles of Microscopy- Light microscopy, Fluorescence microscopy, Electron microscopy (TEM and SEM) 3b: Chromatography- Principles, paper chromatography, TLC, HPLC 3c. Micrometry, Microphotography, Electrophoresis		Completed



B.Sc. III	Botany	Paper: DSE7E2 Section -II Unit-I Introduction of Plant Systematics	1a. Introduction of Systematics, Evidences from Palenology, Cytology, Phytochemistry and Molecular data 1b. Field inventory, Functions of Herbarium, Important Herbaria and Botanical Gardens of the World and India		Completed
B.Sc. II	Botany	Practical I and II	As per Curriculum		Completed
B.Sc. III	Botany	Practical III	As per Curriculum		Completed

A. Lubelha

Name and Signature of Teacher

Dr. Lubelha A. Kargale

B.T. Dargat

Name and Signature of HoD

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



STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: Ist

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

Department: **Botany**

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. I	Botany Open Elective	“Agri Based Microenterprises -I” Unit III: Horticulture and Nursery Management	Study of types of soil with its components. Study of potting mixture. Study of common Garden tools and implements, Study of methods of plant propagation- sexual (seed) and asexual (cutting, grafting, budding and layering). Use of Growth Regulators for rooting. Study of types of Garden.		Completed
		“Agri Based Microenterprises -II” Unit I: Fundamentals of Plant Pathology	Introduction and definition of Plant Pathology. Terminologies used in Plant Pathology. Concepts and tools of disease management.		Completed



B.Sc. II	Botany	Unit I: Plant Water Relationship	Introduction, Physiological importance of water Water transport process: Mechanism of water absorption: Active and passive absorption theories Water transport through xylem and tracheids Transpiration: Definition, Types, Mechanism of stomatal movement, Starch sugar hypothesis Factors affecting transpiration, Significance of transpiration Anti transpirants	Completed
B.Sc. II	Plant Protection	Unit II: Study of crops with reference gross morphology, economic importance, soil, field preparation, cultivars, seed sowing, interculture operations, fertilizers, irrigation, intercropping, yield, major diseases and pests. Section II Plant Pathology Unit IV: Phytopathologic al Skills	Fruit Crop: Mango Vegetable crop: Brinjal Spice: Turmeric Floriculture: Rose Principles of plant disease management Classification of fungicides based on chemical nature and Mode of actions	Completed



B.Sc. III	Botany	Section II: Unit III: Study of Plant Diseases	Introduction, Cereals: Rust of Wheat Cash crop: Red Rot of Sugarcane Legume: Wilt of Gram Spices: Leaf spot of Black Pepper Vegetables: Onion Smut Fruit: Apple Scab		Completed
B.Sc. II	Botany	Practical I	As per Curriculum		Completed
B.Sc. III	Botany	Practical III	As per Curriculum		Completed

Name and Signature of Teacher
(Dr. Mounalini N. Desai)

Name and Signature of HoD

(Dr. B. T. Dangat)

HEAD

DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: Ist

Name of the Teacher: Dr. Shital B. Koparde

Department: Botany

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to covered	Remarks
B. Sc I	Botany	Plant physiology	Unit III Photosynthesis Introduction, Ultra structure of photosynthetic apparatus, Photosynthetic pigments, Adaptive pathway of photosynthesis C4 pathway and CAN pathway.	Nil	Completed
B. Sc III	Botany	Plant biochemistry and Stress Physiology and Plant systematic and Paleobotany	Unit II Lipid metabolism and Fatty acid metabolism Introduction, classification of lipids. Properties of fatty acids. Gluconeogenesis and role in mobilization of fatty acids.	Nil	Completed
B.Sc.I	Botany	Practical	As per Curriculum		Completed
B.Sc.II	Botany	Practical	As per Curriculum I		Completed
B.Sc.III	Botany	Practical	As per Curriculum II		Completed

Shital B. Koparde

Signature of the Teacher

(Dr. Shital B. Koparde)



Dr. Angel

Signature of the Head

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

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: Ist

Name of the Teacher: Dr. Priyanka Pravin Jadhav

Department: Botany

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. III	Botany	"Plant Biochemistry and Stress Physiology" DSE1007E2 Section I: Unit 1: Carbohydrate Metabolism	1. Introduction, and Classification of Carbohydrates 2. Properties of Monosaccharides, Oligosaccharides, Polysaccharides, 3. Significance of Carbohydrates		Completed
B.Sc. III	Botany	Protein metabolism	1. Introduction properties and Characters of aminoacids. 2. Protein structure and classification 3. Protein synthesis		completed
B.Sc. I	Botany	Practical I Batch B14	As per Curriculum		Completed



B.Sc. I	Botany	Practical I Batch 018	As per Curriculum		Completed
B.Sc. I	Botany	OE	As per Curriculum		Completed
B.Sc. II	Botany	Practical I	As per Curriculum		Completed

P. P. Tadha

Name and Signature of Teacher

(Dr. Priyanka P. Tadha)

P. P. Tadha

Name and Signature of HoD

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



VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: Ist

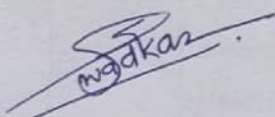
Name of the Teacher: Dr. Snehal Sanjay Wadkar

Department: Botany

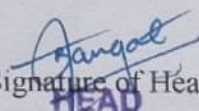
Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. I	Open elective	Practical I	As per Curriculum	--	Completed
B.Sc. II	Botany	Paper DSC7C Section- II Unit 4.Respiration	4a. Introduction 4b. Types of respiration 4c. Glycolysis 4d. Formation of Acetyl Co A 4e. TCA cycle 4f. ETS in mitochondria 4g. Significance of respiration 4h. Factors affecting respiration	--	Completed
B.Sc. III	Botany	Paper DSE7E1 Section- II Unit 4.Biofertilizer	4a: Microbes in Agriculture - Biological Nitrogen Fixation, Mycorrhizae. 4b:Organic Farming- Introduction, Concept and scope of Organic farming, Green		Completed



			Manuring, Biocompost Making Methods.		
		Paper DSE7E2 Section- II Unit 4. Paleobotany	4a: General account types of fossils, Geological time scale. 4b: Study of following form genera with reference to systematic position, external morphology and affinities - <i>Lyginopteris</i> and <i>Enigmocarpon</i> 4c: Applications of Paleobotany-Role of microfossils in oil and coal		Completed
		Practical II	As per Curriculum		


Signature of Teacher




Signature of Head
HEAD
DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

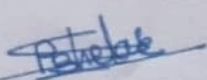
Year: 2023-2024

Term: Ist

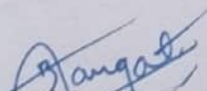
Name of the Teacher: Miss. Pradnya B. Shelar

Department: Botany

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to covered	Remarks
B. Sc I	Botany	Paper I Unit- 1 Importance of Plant	1a: Role of plants in human welfare. (Direct and indirect) 1b. Role of plants in ecological services. 1c. Evolutionary history of plants.	Nil	Completed
		Unit- 3 Study of following example with reference to occurrence, plant body and life cycle.	3a: Study of Algae <i>Nostoc</i> . 3b: Study of Fungi : <i>Mucor</i> . 3c: Study of Bryophyte Moss. 3d: Study of Pteridophyte <i>Pteris</i> . 3e: Study of Gymnosperm: <i>Cycas</i>	Nil	Completed
B. Sc III	Botany	Paper I Section I Unit- 1 Cell as a unit of Life	1a: The cell theory, Prokaryotic and Eukaryotic cells, Cell size and shape. 1b: Cell Membrane and cell wall 1c: Models of membrane structure. 1d: The functions of membranes. 1e. Cell cycle 1d. Apoptosis	Nil	Completed


Signature of the Teacher




Signature of the Head
HEAD
DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

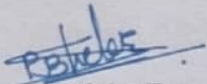
Year: 2022-2023

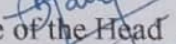
Term: Ist

Name of the Teacher: Miss. Pradnya B. Shelar

Department: Botany

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to covered	Remarks
B. Sc I	Botany	Practicals	Alloted practicals are completed	Nil	Completed
B. Sc II	Botany	Practicals	Alloted practicals are completed	Nil	Completed
B. Sc III	Botany	Practicals	Alloted practicals are completed	Nil	Completed


Signature of the Teacher


Signature of the Head
HEAD
DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: Ist

Name of the Teacher: Dr. Udaysingh A Desai

Department: Botany

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. II	Botany DSC 1007 C: "Taxonomy, Embryology and Plant Physiology"	Section: I DSC 1007C2: "Plant Physiology" Unit. II. Mineral Nutrition	2a. Introduction, Criteria of essentiality 2b. Macro and Micronutrients 2c. Mineral nutrient uptake- Passive uptake (Diffusion), Active uptake (Carrier Concept - Protein Lecithian Theory). 2d. Role and Deficiency Disorders of Macronutrients (P, K, Ca, Mg) and Micronutrients (Fe, Mn, Zn, Br) in plants and its recovery. 2e. Effect of excess minerals on plant growth.	Nil	Completed
B.Sc. III	Botany DSE7E1 "Cytology and Research Techniques in Life Sciences"	Section II: Paper: DSE7E1 Section- I: "Cytology and Research Techniques in Life Sciences" Unit. IV Radiation Biology	4a: Radioactive isotopes 4b: Effect of Radiations on Biological Systems. 4c: Beneficial Effect of Radioations. 4d: Autoradiography Technique 4e: Geiger-Muller Experiment / Liquid Scintillation Counter 4f: Precautionary measures	Nil	Completed
B.Sc. I		Botany Practical - I	As per curriculum	Nil	All Practicals covered
B.Sc. II		Botany Practical - I	As per curriculum	Nil	All Practicals covered

Dr. Desai U.A.

Name and Signature of Teacher



Name and Signature of HoD

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



"Education for Knowledge, Science, and Culture"

- Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's

Vivekanand College, Kolhapur
(Empowered Autonomous)



Department of Botany

Syllabus Completion Report

2023-2024

Syllabus Completion Report (2023-2024)

Department of Botany





"Education for Knowledge, Science, and Culture"

- Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's


Vivekanand College, Kolhapur
(Empowered Autonomous)




Department of Botany
Syllabus Completion Report
(2023-2024)

INDEX

Sr. No.	Name of Faculty	Page No.
1.	Dr. B. T. Dangat	01-02
2.	Dr. A. R. Kasarkar	03-04
3.	Dr. J. M. Gorule	05-06
4.	Dr. A.R. Alvikar	07-08
5.	Dr. P. D. Patil	09-10
6.	Dr. L. A. Kagale	11-12
7.	Dr. M. N. Desai	13-14
8.	Dr. P.P. Jadhav	17-18
9.	Dr. S. S. Wadkar	19-20
10.	Ms. P. B. Shelar	21-22
11.	Dr. U.A. Desai	23-24


Head
Department of Botany
HEAD
DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)


Principal
PRINCIPAL
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

Syllabus Completion Report (2023-2024)

Department of Botany



VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: IInd

Name of the Teacher: Dr. Bhaurav Tukaram Dangat

Department: Botany

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. I	Botany	Unit-3: Plant Diversity	1. Introduction and definition, Types of diversity, Importance of diversity. Threats of diversity, Magnitude of diversity. 2. Introduction and definition, Types of conservation. (In situ / Ex situ). Necessity of conservation. Practical's		Completed
B.Sc. I	O.E.	Unit-2: Medicinal plants and Phytochemistry	Introduction and definition, History, present and future status. Cultivation, processing, storage, marketing and utilization of medicinal plants. Precautions during the use of herbal medicinal products. History and definition, Importance of phytochemicals Study of different types of phytochemicals. Study of different methods of testing of active chemicals Practical's		Completed



Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. II	PP	Unit I: Introduction of weeds	1a: Weeds – Definition, Harmful and beneficial effect of weed 1b: Characteristic of weeds: 1c: Classification of weeds: 1d: Weed Biology and Ecology: 1e: Study of parasitic, aquatic, poisonous and noxious weeds: With reference to a) Gross morphology , b) Reproduction , c) Ecology d) Dispersal e) Management 1. <i>Argemone Mexicana</i> , 2. <i>Portulaca oleracea</i> , 3. <i>Parthenium hysterophorus</i> , 4. <i>Eupatorium species</i> , 5. <i>Alternanthera sessilis</i> , 6. <i>Amaranthus spinosus</i> , 7. <i>Cassia tora</i> , 8. <i>Cyperus rotundus</i> and 9. <i>Cynodon dactylon</i>		Completed
B.Sc. III	Botany	Section I: Unit: 1 Molecular Biology and Biotechnology	Recombinant DNA Technology: 2a: Introduction and Principle 2b: Enzymes involved in recombinant DNA technology 2c: Cloning Vectors (Plasmid, Bacteriophage and Cosmids) 2d: Gene Amplification: PCR techniques Practicals		Completed

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



(Signature of the Principal)

PRINCIPAL
 VIVEKANAND COLLEGE, KOLHAPUR
 (EMPOWERED AUTONOMOUS)

VIVEKANAND COLLEGE, KOLHAPUR. (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-24


Term – IInd


Name of the teacher: Dr. Abhijeet Rajaram Kasarkar

Department: Botany

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus not be covered	Remarks
B.Sc. -I	Botany (Major and Minor)	Paper IV Unit. I – Study of classification systems. Unit. II – Domains of Life	Paper IV Unit. 1 – Study of classification systems. Unit. 2 – Domains of Life		Completed
	Botany (Open Elective)	Paper I Unit. IV – Study of Medicinal plants –II Paper II Unit. IV – Conservation of herbal plants.	Paper I Unit. IV – Study of Medicinal plants –II Paper II Unit. IV – Conservation of herbal plants.		Completed
B.Sc. II	Botany	Paper – IV Section – I Unit. I – Organization of higher plant body. Paper – IV Section – II Unit. IV – Seed Dormancy and Germination	Paper – IV Section – I Unit. I – Organization of higher plant body. Paper – IV Section – II Unit. IV – Seed Dormancy and Germination		Completed
B.Sc. II	Plant Protection	Paper – II Section – I Unit. III – Methods of weed management	Paper – II Section – I Unit. III – Methods of weed management		Completed
	Practical - I	1. Study of Dicot and Monocot weeds. 2. Study of weed population by quadrat method. 3. Study of herbicidal action on seed germination. 4. Study of mode of	1. Study of Dicot and Monocot weeds. 2. Study of weed population by quadrat method. 3. Study of herbicidal action on seed germination. 4. Study of mode of		Completed

		dispersal of weed. 5. Study of herbicides, Nematicides and rodenticides. 6. Preparation of weed herbarium. 7. Determination of Sucrose percentage. 8. Determination of pH and EC of soil samples. 9. Study of herbicide label information. 10. Determination of soil moisture from crop fields.	dispersal of weed. 5. Study of herbicides, Nematicides and rodenticides. 6. Preparation of weed herbarium. 7. Determination of Sucrose percentage. 8. Determination of pH and EC of soil samples. 9. Study of herbicide label information. 10. Determination of soil moisture from crop fields.		
B.Sc. III	Botany	Paper – XII Unit. 1- Horticulture	Paper – XII Unit. 1- Horticulture		Completed
	Practical - II	1. Study of qualitative test for sugar, starch and cellulose. 2. Study of qualitative test for proteins and lipids. 3. Determination of fatty acid value of soil sample. 4. Estimation of amino acid by circular paper chromatography. 5. Comparative phytochemical studies in healthy and stressed plants. 6. Identification of genus and species with the help of Cooks flora. 7. Study of pollen viability and pollen germination. 8. Study of herbarium technique.	1. Study of qualitative test for sugar, starch and cellulose. 2. Study of qualitative test for proteins and lipids. 3. Determination of fatty acid value of soil sample. 4. Estimation of amino acid by circular paper chromatography. 5. Comparative phytochemical studies in healthy and stressed plants. 6. Identification of genus and species with the help of Cooks flora. 7. Study of pollen viability and pollen germination. 8. Study of herbarium technique.		Completed


 (Signature of Teacher)


 (Signature of Head of Department)
HEAD
 DEPARTMENT OF BOTANY
 VIVEKANAND COLLEGE, KOLHAPUR
 (EMPOWERED AUTONOMOUS)

VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: II

Name of the Teacher: **Dr. Jyoti Mahadev Gorule**

Department: **Botany**

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. I	Botany	Practical (OE)	Practical	--	Completed
B.Sc. II	Plant Protection	Paper II- DSC 1011D2 : “Weed Science and Insect Pest” Section : II “Insect Pest ”	2a: Study of following insect pests of different crops with reference to – a)Scientific name b) Marks of identification c) Life cycle d) Nature of damage e) Management practices of Maize - Fall army worm of Maize Sugarcane – White grub Gram – Pod borer Mango – Hoppers Brinjal – Top shoot borer Rose – Bud borer 2b: Stored grain pests and their management. i) Rice weevil ii) Pulse beetle	--	Completed
B.Sc. II	Botany	Practical	Practical II	--	Completed



B.Sc. III		Paper VI Section : II (DSE 1007F1): Biostatistics, Economic Botany and Ethno botany Unit 2- Economic Botany-I Practical	2a: Study of following economical important plant with reference to origin, morphology, parts used and uses. 2b:Cereals- Barley and Oats 2c:Legumes- Soybean and Vigna 2d:Vegetables- Spinach 2e:Spices-Clove and blackpepper Practical IV	—	Completed
--------------	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---	-----------



(Signature of the Teacher)



(Signature of the Ho D)

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



VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: Ist / IInd

Name of the Teacher: Dr. Annapurna Ram Alvikar **Department: Botany**

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. I (Sem. I)	Botany	OE Practicals	All syllabus covered	Nil	--



(Signature of Teacher)



(Signature of Head of Dept.)

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

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: Ist / IInd

Name of the Teacher: Dr. Annapurna Ram Alvikar

Department: Botany

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. II (Sem. IV)	Botany Paper – DSC 1007D Section-II “Plant Metabolism”	2a: Introduction- Role of N ₂ 2b: Biological Nitrogen Fixation- Asymbiotic and Symbiotic 2c: General structure and role of Nitrogenase 2d: Mechanism of Reduction of Nitrate into Ammonia 2e: Mechanism of Ammonia assimilation in plants.	All syllabus covered	Nil	
	Botany	Practicals	All Practicals covered	Nil	--

(Signature of Teacher)



(Signature of Head of Dept.)

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

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

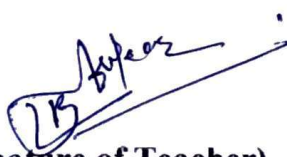
STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: Ist / IInd

Name of the Teacher: Dr. Annapurna Ram Alvikar **Department: Botany**

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. III (Sem. VI)	Botany Paper – DSE 1007F1 Section-I “Genetics and, Plant Breeding”	3a: Introduction and Organization of genome 3b: Plastid Inheritance 3c: Mitochondrial Inheritance	All syllabus covered	Nil	--
	Botany Paper – DSE 1007F2 Section-I “Molecular Biology and Biotechnology”	1a: Introduction, Nucleic Acids (DNA, RNA) 1b: Griffith's and Avery's transformation experiment, Hershey-Chase bacteriophage experiment. 1c: DNA structure and Types of DNA 1d: DNA replication 1e: Types of RNA	All syllabus covered	Nil	--


(Signature of Teacher)




(Signature of Head of Dept.)

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

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: Ist / IInd

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

Department: **Botany**

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. III	Botany	DSE-1007F3 Section I: Unit 3: Genetic Engineering	Introduction, Methods of gene transfer, Direct gene transfer techniques, Agrobacterium mediated gene transfer, Transgenic plants (Bt cotton & Golden Rice) Applications of genetic transformation, Blotting techniques- Northern, Southern and DNA fingerprinting	All syllabus covered	
B.Sc. II	Plant Protection	"Weed Science and Insect Pest" DSC 1011D2 Section II: Unit 1: Introduction to insect pests	Definition and losses caused by insect pests, Causes for insects to assume pest status. Classification of insect pest based on- a) Occurrence of pest b) Intensity of pest c) Level of infestation d) Food requirement	All syllabus covered	



		Unit 4: Recent trends in pest management	Introduction a) Attractants b) Repellents c) Antifeedants d) Pheromones e) Chemosterilents f) Precautionary measures used during use of pesticides	All syllabus covered	
B.Sc. I	Botany	DSC03BOT21 MIN03BOT21 “Reproductive Botany” Unit I: Study of Microsporogenesis	Study of microsporangium, Study of anther (Structure and dehiscence), Study of microsporogenesis, Study of pollengrain, Study of development of male gametophyte	All syllabus covered	
B.Sc. I	Botany	Unit IV: Endosperm and Embryo	Structure of dicot and monocot embryo, Seed formation, Polyembryony	All syllabus covered	
B. Sc. I	Botany Practicals	As per curriculum		All Practicals covered	
B. Sc. II	Botany Practical-I	As per curriculum		All Practicals covered	
B. Sc. II	Botany Practical-II	As per curriculum		All Practicals covered	

Prigati S
 (Dr. Priya D. Patil)
 (Signature of Teacher)



S. Jangale
 (Signature of Head of Dept.)
HEAD
 DEPARTMENT OF BOTANY
 VIVEKANAND COLLEGE, KOLHAPUR
 (EMPOWERED AUTONOMOUS)

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: IInd

Name of the Teacher: Dr. Lubdha Abhijeet Kagale

Department: Botany

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. I	Botany Open Elective	Paper –I Herbal Technology Unit - III Study of Medicinal Plant -I	3a. Study of different plant parts used in medicine, 3b. Study of plants used in hair care (Reetha and Shikakai) 3c. Study of plants used in skin care (Aloe Vera, Turmeric) 3d. Study of plants used as anti diabetic (Guduchi, Neem, Jamun)		Completed
	Botany Open Elective	Paper –I Unit – III Analytical Pharmacognosy	3a. Study of Secondary Metabolites 3b. Drug Adulteration 3c. Types of Drug Adulteration 3d. Methods of Drug Evaluation		Completed



B.Sc. II	Plant Protection	Paper – DSC 1011D2 Section – II Unit - III Management of Insect Pest	<p>3a. Principal of insect pest control</p> <p>3b. Classification based on</p> <p>1.mode of entry- Stomach, contact, systemic and Fumigants</p> <p>2. Mode of action- Respiratory, Nervous system</p> <p>3. Chemical Nature- Inorganic, Organic- Chlorinated Hydrocarbons, Organophosphates, Carbamate s, synthetic pyrethroids Plant origin insecticides,</p> <p>3d. Nature of formulations- Dust, Granules, Wettable powder, EC, Need of formulations, Adjuvant</p> <p>3c. Utilization of entomopathogenic nematodes in IPM</p>		Completed
B.Sc. III	Botany	Paper – DSE 1007 F2 Section – II Unit - IV Ethnobotany	<p>4a. Introduction and objectives,</p> <p>4b. Data collection, Herbarium, Field work,</p> <p>4c. Role of Ethnobotany in modern medicine, Ancient literature, Sacred groves Archaeological findings, Pharmacognosy, Phytochemicals</p>		Completed



B.Sc. III	Botany	Paper – DSE 1007 F2 Section – IV- Unit IV Plant Tissue Culture	4a. Principle and Totipotency, 4b. Components of tissue culture, Sterilization techniques 4c. Techniques in tissue culture, organogenesis, Embryogenesis 4d. Anther Culture, 4e. Applications of tissue culture		
B.Sc. II	Botany	Practical I and Practical II	As per Curriculum		Completed
B.Sc. III	Botany	Practical III	As per Curriculum		Completed

Lubdhak

Name and Signature of Teacher

Dr. Lubdha A. Kagale



Dangat

Name and Signature of HOD

Dr. B. T. Dangat

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

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: IInd

Name of the Teacher: Dr. Mrunalini Nilesh Desai

Department: Botany

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. I	Botany Open Elective	"Herbal Technology- I" Paper I: Unit I: Herbal medicine	1a. Definition of herbal medicine. 1b. History and Scope 1c. Role of medicinal plants in Ayurveda. 1d. Importance of herbal medicine. 1e. Herbal drug industries.		Completed
		"Herbal Technology-II" Paper I: Unit I: Pharmacognosy	1a. History and definition 1b. Importance of Pharmacognosy. 1c. Study of technique of Pharmacognosy. 1d. Role of Pharmacognosy in medicines.		Completed



B.Sc. II	Botany	"Plant Anatomy and Plant Metabolism" Unit : III. Primary and Secondary structure of plant body	3a. primary structure of Monocotyledon and Dicotyledon root, stem and leaf. 3b. Normal secondary growth in Dicotyledon root and stem. 3c. Anomalous secondary growth in Bignonia (Dicot) and Dracaena (Monocot) stem. 3d. Periderm and Lenticel		Completed
B.Sc. II	Plant Protection	Paper II "Weed Science and Insect Pest" Unit IV: Non Insect Pest and Household pest	4a. Nematodes 4b. Birds 4c. Rats 4d. Snails 4e. Household Pests: 1. Drosophila 2. House fly 3. Mosquitoes		Completed
B.Sc. III	Botany	"Biostatistics Economic Botany and Ethnobotany Section II" Unit : I Biostatistics Section II: "Horticulture, Forestry and Herbal Technology" Unit IV: Herbal Technology	1a. Introduction, Statistical terms 1b. Sampling Methods 1c. Collection and representation of data 1d. Measures of Central tendency 1e. Variances and standard deviation 1f. Test of Significance (T test), Chi Square test. 4a. Pharmacognosy: Definition and Techniques 4b. Phytochemicals 4c. Drug 4d. Scope		Completed

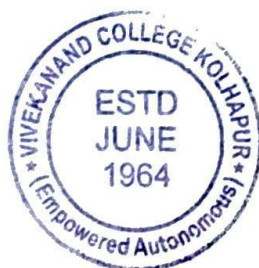


B.Sc. II	Botany	Botany Practical - I	As per curriculum		All Practicals covered
B.Sc. III	Botany	Botany Practical- III	As per curriculum		All Practicals covered



Name and Signature of Teacher

(Dr. Mrunalini N. Desai)




Name and Signature of HOD

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

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: -2023-2024

Term: IInd

Name of the Teacher:- **Dr. Priyanka Pravin Jadhav**

Department:- **Botany**

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. III	Botany	Paper – DSC 1007 F1 Section – I Unit:-1 Heredity	1a:Introduction, Terminologies, Terminologies, Laws of Inheritance (Monohybrid and Dihybrid) 1b:Multiple Allelism	Nil	Completed
B.Sc. III	Botany	Paper – DSC 1007 F1 Section – I Unit:-2 Linkage and Crossing over	2a. Linkage concept and History, types of Linkage, 2b. Crossing over: ConceptSignificance, Cytological proof of crossing over, 3c. Linkage Maps	Nil	Completed
B.Sc. II	Botany	Practical's from "Taxonomy, Embryology and Plant Pathology"	As per curriculum	Nil	Completed



B.Sc. I	Botany	Practical's from "Reproductive botany And Reproductive Botany and Diversity and conservation of Plants"	As per curriculum	Nil	Completed
B.Sc. I	Botany (OE)	Practical's from "Herbal Technology"	As per curriculum	Nil	Completed

(Name and Signature of Teacher)

(Dr. Priyanka P. Jadhav)

(Name and Signature of HOD)

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



VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year: 2023-2024

Term: II

Name of the Teacher: **Dr. Snehal S. Wadakar**

Department: **Botany**

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to covered	Remarks
B.Sc. I	Botany	Practical	Practical	--	Completed
B.Sc. I	Botany	Practical (OE)	Practical	--	Completed
B.Sc. II	Botany	DSC 1007 D: “ Plant Anatomy and Plant Metabolism ” Section : II (DSC 1007D2): “ Plant Metabolism ” Unit 1: Enzymes	1a.Introduction 1b. Chemical nature and properties of enzymes 1c. Classification and Nomenclature of enzyme 1d. Mechanism of enzyme action- Lock and Key hypothesis and Induced fit hypothesis. 1e. Factors affecting enzyme activity- temperature, pH and substrate. 1f. Allosteric modification and Feedback inhibition.	--	Completed
B.Sc. III	Botany	Paper VI Section: II (DSE 1007F1):	3a:Beverages-Tea and Coffee 3b:Fiber Yielding Plants-Cotton and <i>Hibiscus canabinis</i>	--	Completed



	Biostatistics, Economic Botany and Ethno botany Unit 3- Economic Botany-II Practical II	3c: Oil yielding <i>Pongamia</i> <i>pinnata</i> and Sunflower 3d: Dye : <i>Lawsonia</i> and <i>Indigofera</i> Practical II		
--	------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------	--	--



(Signature of the Teacher)



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



Vivekanand College, Kolhapur (Empowered Autonomous)

Department of Botany

Statement of Syllabus covered

Year: 2023-24

Term IInd

Name of the Teacher: Miss. Pradnya B. Shelar

Department: Botany

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to covered	Remarks
B. Sc I	Botany	Unit. II. Study of Megasporogenesis	2a. Study of types of ovule. 2b. Study of Megasporogenesis 2c. Study of typical embryosac. 2d. Study of types of embryosac: Monosporic (Polygonum type), Bisporic (Alliumsp.) and Tetrasporic (Peperomia type).	Nil	Completed
		Unit. III. Pollination and Fertilization	3a. Introduction and definition. 3b. Types of pollination.(self, cross and its sub types) 3c. Agents of pollination	Nil	Completed
B. Sc III	Botany	Unit III. Plant Breeding	4a: Introduction and objectives, Plant genetic resources, Centers of origin and Domestication of crop plants. 4b: Methods of crop improvements. Methods of Breeding, Selection methods for self-pollinated, cross pollinated and vegetatively	Nil	Completed

			propagated plants. Mutation breeding		
B.Sc I	Botany	Practical	As per curriculum	Nil	All Practical's completed
B.Sc II	Botany	Practical	As per curriculum	Nil	All Practical's completed

Name and Signature of Teacher

(Miss. Pradnya B. Shelar)



Name and Signature of
HoD

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

Vivekanand College, Kolhapur (Empowered Autonomous)

Department of Botany

Statement of Syllabus covered

Year: 2023-24

Term IInd

Name of the Teacher: Dr. Udaysingh A Desai

Department: Botany

Classes	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to covered	Remarks
B. Sc II	Botany	Unit. IV Plant Adaptations	4a. Mangrove Biology 4b. Xeric adaptations 4c. Carnivorous Plant 4d. Epiphytic and Parasitic Plant		Completed
B. Sc II	Botany	Unit. III. Growth and Development	3a. Definition and Phases of growth. 3b. Plant growth regulators: Discovery, site of synthesis, Physiological (Practical applications) roles of growth regulators – Auxins, Cytokinin, Gibberellins and Absciscic acid 3c. Photoperiodism and Florigen Concept, Photoperiodic classification of plants- LDP, SDP, DNP. 3d. Vernalization: Concept, site of vernalization and its significance.		Completed
B. Sc III	Botany	Unit II. Gardening and Ornamental Plants	2a: Gardening- Definition, Objective, Types of Gardening, Importance and Landscape garden 2b: Ornamental		Completed

			Plants: Herbs, Shrubs, Trees, Indoor plants, Lawn and Climber		
B. Sc III	Botany	Unit III. Forestry	3a:Introduction, Forest types of India3b:Wild life and Biosphere reserves3c:Social and Agricultural Forestry3d:Forest research education and Training institutions3e:Forest Acts3f:Different Plant as a forest products.		Completed
B.Sc I	Botany	Botany Practical – I	As per curriculum		All Practical's completed
B.Sc I	Botany	Botany Practical – I	As per curriculum		All Practical's completed
B.Sc II	Botany	Botany Practical – I	As per curriculum		All Practical's completed
B.Sc II	Botany	Botany Practical – I	As per curriculum		All Practical's completed

Name and Signature of Teacher

Dr. Deva V. X.



Name and Signature of HoD

[Signature]
HEAD
 DEPARTMENT OF BOTANY
 VIVEKANAND COLLEGE, KOLHAPUR
 (EMPOWERED AUTONOMOUS)