

Anjuman Islam Janjira Degree College of Science, Murud Janjira
Academic Calender 2023-24

F.Y.BSc Botany I Sem I

Date	Topic
	Unit I Algae
07-03-2023	General character of chlorophyceae
07-04-2023	Asexual reproduction
07-05-2023	Sexual reproduction
07-10-2023	Systematic position of Nostoc
07-11-2023	Structure of thallus
07-12-2023	Asexual reproduction-Homogones
17/7/2023	Akinetes, Heterocysts
18/7/2023	Systematic position of <i>Spirogyra</i>
19/7/2023	Vegetative reproduction
24/7/2023	Sexual reproduction of <i>Spirogyra Scalariform</i>
25/7/2023	Lateral conjugation
26/7/2023	Zygospore
31/7/2023	Economical importance of algae
07-01-2023	Algae medicinal aspects
08-02-2023	Harmful Aspects
	Unit -I Fungi
08-07-2023	Structure <i>Rhizophus</i>
08-08-2023	Life cycle
08-09-2023	Systematic Position of <i>Rhizophus</i>
14/8/2023	Asexual Reproduction
16/8/2023	Sexual Reproduction
21/8/2023	Germination of Zygosporangium
22/8/2023	Introduction of <i>Aspergillus</i>
23/8/2023	Thallus structure of <i>Aspergillus</i>
28/8/2023	Systematic Position of <i>Aspergillus</i>
29/8/2023	Asexual Reproduction of <i>Aspergillus</i>
09-04-2023	sexual Reproduction of <i>Aspergillus</i>
09-05-2023	Life cycle of <i>Aspergillus</i>
09-11-2023	Economic Important of Fungi
09-12-2023	Mode of Nutrition in fungi
	Unit -III Bryophyta
13/9/2023	Introduction of Bryophyta, General character of Hepaticae
18/9/2023	Systematic Position of <i>Riccia</i>
25/9/2023	External Morphology of <i>Riccia</i>
26/9/2023	Vegetative reproduction of <i>riccia</i>
27/9/2023	Sexual reproduction of <i>Riccia</i>
10-03-2023	Dehiscence of sex organ
10-04-2023	Alternation of Generation
10-09-2023	Anthredium
10-10-2023	Archegonium
10-11-2023	Revision Algae
16/10/2023	Revision fugia
17/10/2023	Question discussion
18/10/2023	Questionn answering

F.Y. B. Sc. Botany-II Sem I

Date	Topic
20-07-2023	Recapturation of Botany
20-07-2023	Recapturation of Botany
22-07-2023	Syllabus discussion Botany paper II (Form and Function I)
27-07-2023	Unit 1: Cell biology-Introduction
27-07-2023	Plant cell structure
29-07-2023	Structure and chemical composition of cell wall
03-08-2023	Plasmodesmata
03-08-2023	Chloroplast
05-08-2023	Structure of cell wall membrane
10-08-2023	Robertson model of cell wall membrane
10-08-2023	Fluid mosaic model
12-08-2023	Endospermic reticulum structure
17-08-2023	Endospermic reticulum types
17-08-2023	Revision
19-08-2023	Unit 3: Genetics: Introduction
24-08-2023	Phenotype, Genotype
24-08-2023	Mendelian genetics
26-08-2023	Monohybrid cross
31-08-2023	Back cross, Test cross
31-08-2023	Multiple allelic inheritance
02-09-2023	Dihybrid Cross
07-09-2023	Law of dominance
07-09-2023	Law of segregation
09-09-2023	Recessive epistasis
14-09-2023	Duplicate recessive epistasis
14-09-2023	Dominant epistasis
16-09-2023	Duplicate dominant epistasis
28-09-2023	Revision
28-09-2023	Unit 2: Ecology -Introduction
30-09-2023	Ecosystem
05-10-2023	Energy Pyramid
05-10-2023	Energy flow in ecosystem
07-10-2023	Energy flow models
12-10-2023	Food Chain, Food web
12-10-2023	Ecological pyramid
14-10-2023	Types of ecosystem
19-10-2023	Aquatic ecosystem
19-10-2023	Esturine ecosystem
21-10-2023	Marine ecosystem
26-10-2023	Terrestrial ecosystem
26-10-2023	Grass land ecosystem
28-10-2023	Desert ecosystem

S.Y.B.Sc. Boatny-I Sem III

Date	Unit I : Thallophyta (Algae) & Bryophyta
13-06-2023	Syllabus Discussion
15-06-2023	General Characters of Division Phaeophyta
19-06-2023	Distribution, Cell structure, range of thallus, of Pheophyta
20-06-2023	Economic Importance of Pheophyta
22-06-2023	Structure, and systematic position of <i>Sargassum</i>
26-06-2023	life cycle of <i>Sargassum</i>
27-06-2023	General Account of Class Anthocerotae and Musci
07-03-2023	Structure, and systematic position of <i>Anthoceros</i>
07-04-2023	life cycle of <i>Anthoceros</i>
07-06-2023	Structure, and systematic position of <i>Funaria</i>
07-10-2023	life cycle of <i>Anthoceros Funaria</i>
	Unit II: Angiosperms
07-11-2023	Systematics: Objectives and Goals of Plant systematic
13-07-2023	Plant Nomenclature
17-07-2023	Taxonomy in relation to Anatomy
18-07-2023	Taxonomy in relation to Palynology
20-07-2023	Taxonomy in relation to Chemical constituents
24-07-2023	Taxonomy in relation to Embryology
20-07-2023	Taxonomy in relation to Cytology
27-07-2023	Taxonomy in relation to Ecology
31-07-2023	With the help of Bentham and Hooker's system of Classification for flowering plants
08-01-2023	Explain Key character, terminology, of flowering plants.
08-03-2023	study the vegetative, floral characters
08-07-2023	Classification of Leguminosae and examples Key characheter
08-08-2023	Economic importance of the leguminosae
08-10-2023	Classification of Asterace and examples Key characheter
14/8/2023	Economic importance of the Asterace
17/8/2023	Classification of Amaranthaceae and examples Key characheter
21/8/2023	Classification of Palmae and examples Key characheter
22/8/2023	Economic importance of the Palmae
	Unit III :Modern Techniques to Study Plant Diversity
24/8/2023	Preservation methods :Dry method
28/08/2023	Preservation methods: Wet method
29/08/2023	Microscopy – Principle and working
31/08/2023	Light Microscopy
09-04-2023	electron microscope.
09-05-2023	Chromatography- Principles and techniques in paper and
09-07-2023	Principles and techniques in thin layer chromatography.
09-11-2023	Expain electrophoresis
09-12-2023	Principles of electrophoresis
14/09/2023	Horizontal electrophoresis Techniques
18/09/2023	Principles and techniques of Horizontal
25/09/2023	Principles and techniques of Vertical electrophoresis
29/09/2023	Quation Paper practices
10-03-2023	Quation practices
10-05-2023	Syllabus rivision
10-09-2023	Syllabus rivision

S.Y.B.Sc. Botany Paper II Sem III

Date	Topic
17-06-2023	Syllabus discussion: Botany paper II (Form and Function II)
19-06-2023	Revised the Cell biology
21-06-2023	Unit 2 Cell Biology- Introduction
24-06-2023	Ultrastructure and Function of Cell Organelles-Mitochondria
26-06-2023	Ultrastructure and Function of Cell Organelles-Peroxisomes
03-07-2023	Ultrastructure and Function of Cell Organelles-Glyoxisomes
08-07-2023	Ultrastructure and Function of Cell Organelles-Ribosomes
10-07-2023	Cell Cycle
12-07-2023	Cell Division, types of Cell division, Mitosis
15-07-2023	Mitosis
17-07-2023	Meiosis
19-07-2023	Difference between Mitosis and Meiosis,
22-07-2023	Structure, Function and Types of DNA
24-07-2023	Structure, Function and Types of RNA
26-07-2023	Revision of Cell Biology unit
29-07-2023	Unit 2: Cytogenetics: Introduction
31-07-2023	Variation in chromosome structure: deletion
02-08-2023	Duplication
05-08-2023	Inversions
07-08-2023	Translocation
09-08-2023	Sex determination- heterogametic male and females
12-08-2023	Sex determination in monoecious and dioecious plant.
14-08-2023	Genic balance theory of sex determination in Drosophila
19-08-2023	Lyon's hypothesis of X chromosome inactivation
21-08-2023	Eye colour in Drosophila
23-08-2023	Haemophilia
26-08-2023	Colourblindness
28-08-2023	Baldness in man
30-08-2023	Extranuclear genetics-plastid transmission in plants.
02-09-2023	Streptomycin resistance in Chlamydomonas
04-09-2023	Male sterility in Maize.
09-09-2023	Unit 3: Molecular biology: Introduction
11-09-2023	DNA replication
13-09-2023	Messelson and stahl experiment
16-09-2023	DNA replication in prokaryotes
18-09-2023	DNA replication in eukaryotes
25-09-2023	Enzymes involved in DNA replication
27-09-2023	Transcription in eukaryotes
30-09-2023	Transcription in prokaryotes
04-10-2023	Central dogma of protein synthesis
07-10-2023	Enzymes for transcription in prokaryotes
09-10-2023	Enzymes for transcription in prokaryotes
11-10-2023	RNA processing
14-10-2023	Revision

S.Y.B.Sc. Botany Paper III Sem III

Date	Topic
	Unit 1: Pharmacognosy and phytochemistry
13-06-2023	Introduction to pharmacopoeia
14-06-2023	Indian pharmacopoeia,
17-06-2023	Indian Herbal Pharmacopoeia
20-06-2023	Ayurvedic Pharmacopoeia
21-06-2023	Secondary Metabolites:
24-06-2023	Secondary Metabolites: Sources,
27-06-2023	properties, Secondary Metabolites:
28-06-2023	uses Secondary Metabolites:
01-07-2023	Types Secondary Metabolites:
04-07-2023	adulterants,
05-07-2023	regional and seasonal variations
08-07-2023	Adulterants: Saraca asoca
11-07-2023	Terminalia arjuna, Terminalia tomentosa
12-07-2023	Bacopa monnieri, Centella asiatica
15-07-2023	Abrus, Glycyrrhiza
18-07-2023	Phyllanthus amarus (Bhuiamla)
	Unit 2: Forestry and Economic Botany
19-07-2023	Forestry:
21-07-2023	Outline of types of forest in India
25-07-2023	Forestry: Agro-forestry
26-07-2023	Urban forestry
29-07-2023	organic farming
01-08-2023	Introduction to Organic Farming
02-08-2023	Applications and use
05-08-2023	Silviculture
08-08-2023	Economic Botany
13-08-2023	Types of fibers Jute and cotton
15-08-2023	Current trends in Fiber industries
16-08-2023	Spices and condiments
19-08-2023	Saffron and cardamom
22-08-2023	Commercial market of spices
23-08-2023	Test and Assessment
	Unit 3: Industry based on plant products
26-08-2023	Introduction
29-08-2023	Application
30-08-2023	Aromatherapy- Introduction
02-09-2023	Uses with few examples. Jojoba, lemon, jasmin
05-09-2023	Botanical and nutraceuticals -
06-09-2023	Spirulina
07-09-2023	Vanillin,
12-09-2023	Garcinia indica
13-09-2023	Garcinia cambogia
16-09-2023	Chlorella, and Kale.
26-09-2023	Enzymes industry
27-09-2023	Cellulases, Biofuels
30-09-2023	Papain, Bromelain
03-10-2023	Revision 1
04-10-2023	Test and Assessment
07-10-2023	Exam Preparation and Revisions

T.Y. B.Sc. Botany Paper I Sem V

Date	Topic
14/6/2023	Unit I: Microbiology: Introduction
17/6/2023	Types of Microbes: Viruses
17/6/2023	Bacteria
19/6/2023	Algae
21/6/2023	Fungi,
24/6/2023	Protozoa,
24/6/2023	Mycoplasma and Actinomycetes
26/6/2023	Culturing: Sterilization,
28/6/2023	media,
07-01-2023	staining,
07-01-2023	colony characters
07-03-2023	Pure cultures
	Unit II: Algae
07-05-2023	Division Rhodophyta: Classification and General Characters:
07-08-2023	Distribution ,cell structure,pigment, reserve food ,range of thallus
07-08-2023	reproduction: asexual and sexual
07-10-2023	Alternation of Generations,
07-12-2023	Economic Importance.
15/7/2023	Structure, life cycle and systematic position of Polysiphonia
15/7/2023	Batrachospermum.
17/7/2023	Classification and General Characters of Xanthophyta:
19/7/2023	Distribution, Cell structure, pigments, reserve food, range of thallus,
22/7/2023	Reproduction: asexual and sexual,
22/7/2023	Alternation of Generations,
24/7/2023	Economic Importance
26/7/2023	Structure, life cycle and systematic position of Vaucheria.
08-02-2023	Classification and General Characters of Bacillariophyta:
08-05-2023	Distribution, Cell structure, pigments, reserve food, range of thallus,
08-05-2023	Reproduction: asexual and sexual
08-07-2023	Alternation of Generations,
08-09-2023	Economic Importance.
08-12-2023	Structure, life cycle and systematic position of Pinnularia.
	Unit III: Fungi
08-12-2023	Basidiomycetes: Classification
14/8/2023	General characters
19/8/2023	Life cycle of Agaricus
19/8/2023	Life cycle of Puccinia
21/8/2023	Deuteromycetae: introduction
23/8/2023	: Classification
26/8/2023	General Characters
26/8/2023	Life cycle of Alternaria
	Unit IV: Plant Pathology
28/8/2023	Study of plant diseases: Causative organism, symptoms, predisposing factors, disease cycle and control measures
30/8/2023	White Rust –Albugo candida
09-02-2023	White Rust –Albugo candida disease cycle and control measures
09-02-2023	Tikka disease of ground nut: Cercospora
09-04-2023	Tikka disease of ground nut: Cercospora disease cycle and control measures

09-06-2023	Damping off disease: Pythium
09-09-2023	Damping off disease: Pythium disease cycle and control measures
09-09-2023	Citrus canker –Xanthomonas axonopodis pv. Citri
09-11-2023	Citrus canker –Xanthomonas axonopodis pv. Citri disease cycle and control measures
13/9/2023	Leaf curl – leaf curl virus in Papaya
16/9/2023	Leaf curl – leaf curl virus in Papaya disease cycle and control measures
16/9/2023	Study of Physical, chemical and biological control methods of plant diseases.
18/9/2023	Repeate Cercospora
25/9/2023	Revision damping disease
27/9/2023	Repetition of citrus canker
30/9/2023	Question answering
30/9/2023	Overall discussion

T.Y. B.Sc. Botany Paper II Sem V

Date	Topic
16-06-2023	Recapturation of Plant Diversity
16-06-2023	Syllabus discussion: Botany Paper II (Plant Diversity IV)
19-06-2023	Unit 1: Paleobotany- Introduction
21-06-2023	Lepidodendron- Salient feature-All form genera Stigmaria (Root), Lepidophyllum (Leaf)
23-06-2023	Lepidodendron- Lepidostrobulus (Cone) and Lepidocarpon (Seed)
23-06-2023	Lyginopteris- Salient feature, Classification
26-06-2023	Lyginopteris- All form genera-Lyginopteris oldhamia (Stem), Sphenopteris hoeninghausi (Leaves)
28-06-2023	Lyginopteris- All form genera-Kaloxylon hookeri (Root), Lagenostoma lamaxii (Seed), Crosotheca kidstonii (Pollen bearing organ)
03-07-2023	Pentoxylon- Salient features, Classification
05-07-2023	Pentoxylon- Pentoxylon sahnii (Stem), Nipaniophyllum (Leaves)
07-07-2023	Pentoxylon- Cornocoonites (Seed bearing organ), Sahnia nipaniensis (Male reproductive organ)
07-07-2023	Birbal Sahni- Contribution in paleobotany
10-07-2023	Birbal Sahni institute of paleobotany
12-07-2023	Revision Paleobotany
14-07-2023	Recapturation of Angiosperm
14-07-2023	Unit 2: Angiosperm- Introduction
17-07-2023	Benthum and Hookers classification system-outline
19-07-2023	Benthum and Hookers classification system-Merits and Demerits
21-07-2023	Morphology of flower
24-07-2023	Accesory whorls- calyx, Corolla
26-07-2023	Essential whorls-Androecium, Gynoecium
28-07-2023	Family- Capparidaceae
28-07-2023	Family- Umbellifere
31-07-2023	Family- Cucurbitaceae
02-08-2023	Family-Rubiaceae
04-08-2023	Family-Solanaceae
04-08-2023	Family- Commelinaceae
07-08-2023	Family- Graminae
09-08-2023	Revision of Unit 2

11-08-2023	Unit 3: Anatomy: Introduction
11-08-2023	Anomalous secondary growth in stem of Bignonia
12-08-2023	Anomalous secondary growth in Achyranthus
14-08-2023	Anomalous secondary growth in Aristolochia
18-08-2023	Anomalous secondary growth in Dracaena
18-08-2023	Anomalous secondary growth in Salvadora
21-08-2023	Anomalous secondary growth in storage root in radish
23-08-2023	Anomalous secondary growth in storage root in beet
25-08-2023	Root stem transition, Types A
25-08-2023	Root stem transition, Types B
28-08-2023	Root stem transition, Types C
30-08-2023	Root stem transition, Types D
01-09-2023	Stomata- Structure and function
01-09-2023	Types of stomata- Anomocytic, Anisocytic, Diacytic.
04-09-2023	Types of stomata- Paracytic and Graminaceous
08-09-2023	Revision of Unit 3
08-09-2023	Unit 4: Palynology-Introduction
11-09-2023	Pollen morphology
13-09-2023	Pollen viability- storage
15-09-2023	Germination of pollen
15-09-2023	Growth of pollen, Factors affecting pollen tube growth
18-09-2023	Uses of palynology in taxonomy
25-09-2023	Application of palynology in honey industry
27-09-2023	Application of palynology in Coal and oil exploration
29-09-2023	Application of palynology in aerobiology
29-09-2023	Application of palynology in pollen allergies
30-09-2023	Application of palynology in forensic science

T.Y.B.Sc. Botany Paper III Sem V

Date	UNIT.I Cytology and molecular biology
13/06/2023	Botany paper III: Syllabus discussion
15/06/2023	Structure of nucleus- Nuclear envelop, Nuclear pore, Nucleoplasm
15/06/2023	Structure of nucleus- Nucleolus, Chromatin network.
17/06/2023	Cytochemistry of nucleus, Function of nucleus.
20/06/2023	Structure of vacuole and function of vacuole
22/06/2023	Structure and function of giant chromosomes- Polytene chromosome,
22/06/2023	Structure and function of giant chromosomes - Lambrush chromosome
24/06/2023	The genetic code: Characteristics of the genetic code
27/06/2023	Translation in Prokaryotes and Eukaryotes.
	Unit II: Physiology- Water potential
07-04-2023	Osmosis, Transpiration, Imbibition
07-06-2023	Transport of ions across cell membranes,
07-06-2023	Active and passive transport
07-08-2023	Carriers, channels and pumps.
07-11-2023	Composition of phloem sap
13/7/2023	Girdling experiment
13/7/2023	Pressure flow model
15/7/2023	Phloem loading and unloading
18/7/2023	Anatomy of sieve tube elements,
20/7/2023	Mechanisms of sieve tube translocation,
22/7/2023	Mineral Nutrition: Role of Macro and Micro nutrients.
25/7/2023	Physiological functions and deficiency symptoms.

	Unit III: Environmental botany-Bioremediation: Principles,
27/7/2023	Factors responsible and microbial population in bioremediation
27/7/2023	Phytoremediation: Metals,
08-01-2023	Phytoremediation: Organic pollutants
08-03-2023	Plant succession: Hydrosere
08-03-2023	Plant succession: Xerosere
08-05-2023	Formation of barren space
08-08-2023	Succession on the land citing different seres leading upto the Climax,
08-10-2023	Succession in water
08-10-2023	Ecesis
08-12-2023	Poly climaxtheories.
17/8/2023	Mono-climaxtheories.
	Unit IV: Plant tissue culture: Recapturation
17/08/2023	Aspects of micropropagation with reference to Floriculture: Detailed
19/8/2023	study of Orchid cultivation
22/8/2023	Plant cell suspension cultures for the production of secondary
24/8/2023	Metabolites: with special reference to Shikonin production.
24/8/2023	Somatic embryogenesis
26/8/2023	Artificial seeds Protoplast fusion- i) Concept, definition, and various methods of protoplast fusion
29/8/2023	Somatic hybridization: i) Concept, definition
31/8/2023	various methods of protoplast fusion Applications of somatic hybridization in agriculture
31/8/2023	Previous question paper discussion

T.Y.B.Sc. Botany Paper IV Sem V

Date	Topic
UNIT I: ETHNOBOTANY AND MUSHROOM INDUSTRY	
13-06-2023	Ethnobotany - Definition, history
16-06-2023	sources of data and methods of study
17-06-2023	Applications of ethnobotany 1) Ethnomedicines
19-06-2023	2) Agriculture 3) Edible plants 4) Famine related plants
20-06-2023	5) Toxic plants and Antidotes.
23-06-2023	Traditional medicines as used by tribal in Maharashtra towards
24-06-2023	i) Skin ailments: Rubia cordifolia, Sandalwood
26-06-2023	ii) Liver ailments : Phyllanthus , Andrographis
27-06-2023	iii) Wound healing and ageing: Centella, Typha, Terminalia, Tridax
30-06-2023	iv) Fever : Vitex negundo, Tinospora cordifolia leaves
	v) Diabetis: Momordica charantia, Syzygium cuminii
03-07-2023	Mushroom industry: i)Detail general account of production of mushrooms
04-07-2023	methods of Composting, spawning, casing, harvesting of mushroom
07-07-2023	Cultivation of Pleurotus, Agaricus, Volvariella Mushroom to be studied in detail.
08-07-2023	ii)General account of mushrooms: Nutritional value, picking and packaging, economic importance

Unit II: BIOTECHNOLOGY I	
10-07-2023	Introductation Concept of Biotech
11-07-2023	Construction of genomic DNA libraries
14-07-2023	Chromosome libraries c- DNA libraries
15-07-2023	Identification of specific cloned sequences in cDNA libraries
17-07-2023	Identification of specific cloned sequences in Genomic libraries
18-07-2023	Analysis of genes gene transcripts
21-07-2023	Restriction enzyme
22-07-2023	analysis of cloned DNA sequences
24-07-2023	DNA sequences
25-07-2023	specific cloned sequences
29-07-2023	Hybridization
29-07-2023	Southern Hybridization
31-07-2023	Revision
UNIT : III INSTRUMENTATION	
01-08-2023	Colorimetry Spectrophotometry
04-08-2023	Visible, UV and IR
05-08-2023	Chromatography Introductation
07-08-2023	General account of Column chromatography
08-08-2023	Instrumentation,
11-08-2023	working, principle
12-08-2023	Application
14-08-2023	Principle and bedding material involved in adsorbtion
15-08-2023	General account of Column chromatography
18-08-2023	Principle and bedding material involved in adsorbtion
19-08-2023	bedding material involved in adsorbtion
21-08-2023	partition chromatography,
25-08-2023	ion exchange chromatography
26-08-2023	molecular sieve chromatography.
28-08-2023	Revision
29-08-2023	Revision
UNIT: IV PHARMACOGNOSY AND MEDICINAL BOTANY	
01-09-2023	Introductation
04-09-2023	Concept
05-09-2023	Monographs of drugs
08-09-2023	Drugs with reference to biological sources
09-09-2023	Geographical distribution of Drug
11-09-2023	Common varieties,
12-09-2023	macro and microscopic characters
15-09-2023	chemical constituents,
16-09-2023	therapeutic uses,
18-09-2023	Clove buds, Allium sativum, Acorus calamus
25-09-2023	Allium sativum, Acorus calamus
26-09-2023	Acorus calamus
29-09-2023	therapeutic uses, Clove buds, Allium sativum, Acorus calamus
30-09-2023	adulterants- Strychnos seeds, Senna leaves, Curcuma longa
03-10-2023	Revision 1
04-10-2023	Revision 2
06-10-2023	Exam Preparation and Revsions
08-10-2023	Exam Preparation and Revsions
10-10-2023	Exam Preparation and Revsions
11-10-2023	Exam
13-10-2023	Exam

15-10-2023	Exam
17-10-2023	Exam
18-10-2023	Exam
20-10-2023	Exam

T.Y.B.Sc. Botany Paper V Sem V

Date	UNIT.I INTRODUCTION TO HORTICULTURE
13/06/2023	Definition, importance
14/06/2023	objectives of Horticulture, branches of
15/06/2023	branches of horticulture
16/06/2023	Horticulture, Pomology, Olericulture
20/06/2023	Landscape Gardening,
21/06/2023	Nurseries and and development
22/06/2023	Allied branches – Apiculture – Bee box, honey bee life cycle role of
23/06/2023	apiculture in pollination, Sericulture – Silkworm life cycle, different types with host plant, Social Forestry
27/06/2023	Exhibition: aims and objectives.
28/06/2023	Important Horticulture Research Institutes and Government Schemes for
30/06/2023	strategy plantations, Konkan Krishi Vidyapeeth – Dapoli
07-04-2023	National Research Centre for grapes, Regional Fruit Research centre Pune
07-05-2023	Horticulture Training Centre (H.T.C.) – Talegaon., Central Potato Tuber Research Institute (CPTRI) – Shimla Horticulture Consultancy
07-06-2023	Strategy plantation – Lakhibaug Yojana
	Unit. II PROPAGATION PRACTICES
07-07-2023	Introduction Propagation Practices
07-11-2023	By Seeds Advantages and disadvantages
07-12-2023	Method of seed propagation
13/07/2023	Production of seeds, Handling, Collection and Storage
14/07/2023	Sowing, Transplanting of seedlings
18/07/2023	Hardening
19/07/2023	Seed treatment to control diseases
20/07/2023	Seedling diseases and their control.
21/07/2023	By specialized Vegetative structures Bulbs, Tubers, Corms,
25/07/2023	Rhizomes, Root stock, runners, Offsets and suckers.
26/07/2023	Artificial methods of plant propagation Cutting– Root cutting, Stem cuttings, and leaf cuttings. Use of PGR's for rooting. Layering – Definition, Types: Simple, compound, (Serpentine) Tip, Trench, Mound, Air Layering.
27/07/2023	Grafting-Definition, advantages and disadvantages. Types: Splice, Whip/ Tongue, side, veneer, cleft, bark, epicotyls, approach, repair grafting – enarching, bridge and bracing
28/07/2023	Budding – Definition, advantages and disadvantages. Types: T budding, shield, patch , ring budding Developing new varieties: Technique of Emasculation and bagging, role of polyploidy n production of seedless varieties in plants. Application of Tissue Culture in relation to Horticulture.
	UNIT-III MAURES, FERTILIZERS AND DISEASES
08-01-2023	Manures: Definition, importance, important manures FYM(compost),
08-02-2023	oil cakes, green manure, organic manures and vermicompost
08-03-2023	Fertilizers: Definition, Types – Straight, Compound and mixed. Nitrogenous (NH ₄) ₂ SO ₄ , Urea, Ca (NO ₃) ₂ , NH ₄ Cl, Phosphatic (Superphosphate, Bone meal), Potassic (Muriate of potash, K ₂ SO ₄

08-04-2023	Biofertilizers: Bacteria, Cyanobacteria, Mycorrhiza, Sea weeds.
.8/8/2023	Diseases: Horticultural plant diseases and their control.
08-09-2023	Fungal diseases- Rust, Smut, Powdery mildew
08-10-2023	Bacterial – Citrus canker, Bacterial wilt
08-11-2023	Viral – TMV, Leaf curl.
17/8/2023	Pests – common pests on horticultural crops – Aphids, beetle
18/8/2023	stem borer, caterpillars and rats
22/8/2023	Friends of farmers: Eartworm, snakes and predaceous fungi.
	UNIT. IV GARDEN OPERATIONS FOR HORTICULTURE
23/8/2023	Selection of site, Preparation of soils for garden
24/8/2023	Mulching, top- dressing, blanching, Sowing, transplanting,
25/8/2023	Tree transplanting, Irrigation, - Overhead, Surface, Underground
29/8/2023	Weeding and pruning, - Principles, objectives and general technique.
30/8/2023	Water management and conservation through horticulture, Dry land Horticulture, Organic Farming Definition, Scope,
31/8/2023	Indian scenario, Future scope Irrigation, - Overhead, Surface, Underground