

Unit- Algae

Date	Topic
13/07/2022	Syllabus Discussion
20/07/2022	Define Algae
27/07/2022	Morphological Structure of <i>Nostoc</i> (Colony)
08-03-2022	Life cycle of <i>Nostoc</i>
08-10-2022	systematic position of <i>Nostoc</i>
17/8/2022	Morphological Structure of <i>Spirogyra</i>
24/8/2022	Reproduction of <i>Spirogyra</i>
09-07-2022	Life cycle of <i>Spirogyra</i>
14/09/2022	Systematic position of <i>Spirogyra</i> .
21/09/2022	Economic importance of Algae
28/09/2022	Syllabus Revision

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

Date	Topic
14-07-2022	Recapturation of Botany
16-07-2022	Recapturation of Botany
21-07-2022	Syllabus discussion Botany paper II (Form and Function I)
23-07-2022	Unit 1: Cell biology-Introduction
28-07-2022	Plant cell structure
30-07-2022	Structure and chemical composition of cell wall
04-08-2022	Plasmodesmata
06-08-2022	Chloroplast
11-08-2022	Structure of cell wall membrane
13-08-2022	Robertson model of cell wall membrane
18-08-2022	Fluid mosaic model
20-08-2022	Endospermic reticulum structure
25-08-2022	Endospermic reticulum types
27-08-2022	Revision
08-09-2022	Unit 3: Genetics: Introduction
03-09-2022	Phenotype, Genotype
15-09-2022	Mendelian genetics
17-09-2022	Monohybrid cross
22-09-2022	Back cross, Test cross
24-09-2022	Multiple allelic inheritance
29-09-2022	Dihybrid Cross
01-10-2022	Law of dominance
06-10-2022	Law of segregation
08-10-2022	Recessive epistasis
13-10-2022	Duplicate recessive epistasis
15-10-2022	Dominant epistasis
20-10-2022	Duplicate dominant epistasis
22-10-2022	Revision

S.Y.B.Sc Botany Sem - III Paper - I Plant Diversity - II

Unit I : Thallophyta (Algae) & Bryophyta	
Date	Topic
15/06/2022	Syllabus Discussion
16/06/2022	General Characters of Division Phaeophyta
18/06/2022	Distribution, Cell structure, range of thallus, of Pheophyta
22/06/2022	Economic Importance of Pheophyta
23/06/2022	Structure, and systematic position of <i>Sargassum</i>
25/06/2022	life cycle of <i>Sargassum</i>
29/06/2022	General Account of Class Anthocerotae and Musci
30/06/2022	Structure, and systematic position of <i>Anthoceros</i>
07-06-2022	life cycle of <i>Anthoceros</i>
07-07-2022	Structure, and systematic position of <i>Funaria</i>
07-09-2022	life cycle of <i>Anthoceros Funaria</i>
Unit II: Angiosperms	
13-07-2022	Systematics: Objectives and Goals of Plant systematic
14-07-2022	Plant Nomenclature
16-07-2022	Taxonomy in relation to Anatomy
20/7/2022	Taxonomy in relation to Palynology
21/7/2022	Taxonomy in relation to Chemical constituents
28/7/2022	Taxonomy in relation to Embryology
30/7/2022	Taxonomy in relation to Cytology
08-03-2022	Taxonomy in relation to Ecology
08-04-2022	With the help of Bentham and Hooker's system of Classification for flowering plants
08-06-2022	Explain Key character, terminology, of flowering plants.
08-10-2022	study the vegetative, floral characters
08-11-2022	Classification of Leguminosae and examples Key characheter
13/8/2022	Economic importance of the leguminosae
17/8/2022	Classification of Asterace and examples Key characheter
18/8/2022	Economic importance of the Asterace
20/8/2022	Classification of Amaranthaceae and examples Key characheter
24/8/2022	Classification of Palmae and examples Key characheter
25/8/2022	Economic importance of the Palmae
Unit III :Modern Techniques to Study Plant Diversity	
27/8/2022	Preservation methods :Dry method
09-07-2022	Preservation methods: Wet method
09-08-2022	Microscopy – Principle and working
09-10-2022	Light Microscopy
14/09/2022	electron microscope.
15/09/2022	Chromatography- Principles and techniques in paper and
17/09/2022	Principles and techniques in thin layer chromatography.
21/09/2022	Expain electrophoresis
22/09/2022	Principles and techniques ofHorizontal
24/09/2022	Principles and techniques of Vertical electrophoresis
28/09/2022	Quation practices
29/09/2022	Syllabus rivision

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

Date	Topic
13-06-2022	Syllabus discussion: Botany paper II (Form and Function II)
20-06-2022	Revised the Cell biology
27-06-2022	Unit 2 Cell Biology- Introduction
04-07-2022	Ultrastructure and Function of Cell Organelles-Mitochondria
11-07-2022	Ultrastructure and Function of Cell Organelles-Peroxisomes
18-07-2022	Ultrastructure and Function of Cell Organelles-Glyoxisomes
25-07-2022	Ultrastructure and Function of Cell Organelles-Ribosomes
01-08-2022	Cell Cycle
08-08-2022	Cell Division, types of Cell division, Mitosis
22-08-2022	Meiosis
29-08-2022	Difference between Mitosis and Meiosis,
12-09-2022	Structure, Function and Types of DNA
19-09-2022	Structure, Function and Types of RNA
26-09-2022	Revision of Cell Biology unit

S.Y.B.Sc Botany Sem - III Paper - III Current Trends In Plant Science-I

Date	Topic
13-06-2022	Recapturation:
13-06-2022	Recapturation:
17-06-2022	Syllabus discussion
18-06-2022	Unit I: Pharmacognosy and photochemistry - Introduction to Pharmacopoeia
20-06-2022	Indian Pharmacopoeia
21-06-2022	Indian herbal pharmacopoeia and Ayurvedic pharmacopoeia.
24-06-2022	Study of Monograph from Ayurvedic pharmacopoeia
25-06-2022	Study of Monograph of Allopathic drug and Indian herbal pharmacopoeia.
27-06-2022	Secondary metabolites: Sources and properties and uses.
28-06-2022	Secondary metabolites: Adulterants and regional and seasonal variations.
01-07-2022	Adulterants: Saraca asoca and Polyalthia longifolia
04-07-2022	Adulterants: Terminalia arjuna and Terminalia tomentosa
05-07-2022	Adulterants: Bacopa monnieri and Cintella asiatica
09-07-2022	Adulterants: Abrus, Glycyrrhiza and Phyllanthus amarus (Bhuiamla)
11-07-2022	Unit II: Forestry and Economic Botany - Forestry: Outline of types of forest in India.
12-07-2022	Forestry: Agro-forestry
16-07-2022	Forestry: Urban forestry
18-07-2022	Forestry: organic farming
19-07-2022	Silviculture
23-07-2022	Economic Botany: Types of fibers- Jute and cotton
25-07-2022	Current trends in Fiber industries
26-07-2022	Spices and Condiments: Saffron
30-07-2022	Spices and Condiments: Cardamom
01-08-2022	Commercial market of spices.
09-08-2022	Unit III: Industry based on plant products: Aromatherapy- Introduction and uses
06-08-2022	Uses of Jojoba in Aromatherapy
08-08-2022	Application of Lemon in Aromatherapy

13-08-2022	Role of Jasmin in Aromatherapy
20-08-2022	Botanicals and nutraceuticals: Vanillin
22-08-2022	Botanicals and nutraceuticals: Garcinia indica/ Garcinia cambogia
23-08-2022	Botanicals and nutraceuticals: Chlorella
27-08-2022	Botanicals and nutraceuticals: Kale
29-08-2022	Botanicals and nutraceuticals: Spirulina
30-08-2022	Biotuels: Types of Biofuels
06-09-2022	Enzymes industry: Papain
10-09-2022	Enzymes industry: Cellulases
12-09-2022	Enzymes industry: Bromelain
13-09-2022	Revision: Pharmacopoeia
17-09-2022	Revision: Secondary metabolites and Adulterants
19-09-2022	Revision: Forestry
20-09-2022	Revision: Agro-forestry
24-09-2022	Revision: Organic farming

T.Y.B.Sc. Boatny Sem - V Paper - I Plant Diversity - III

Unit I: Microbiology	
Date	Topic
13/06/2022	Syllabus Discussion
15/06/2022	Types of Microbes
18/06/2022	Culturing: media preparation
20/06/2022	Methods of Sterilization
22/06/2022	Types of Strilization
25/06/2022	staining, colony characters
25/06/2022	Pure cultures
27/06/2022	Role of microbes in fermentation
29/06/2022	Fermentation process :Alcohol production and Antibiotics
Unit II : Algae	
07-02-2022	Explain Division Rhodophyta
07-02-2022	Classification and General Characters of Rhodophyta
07-04-2022	Distribution, Cell structure of Rhodophyta
07-09-2022	pigments, reserve food, of Rhodophyta
07-09-2022	range of thallus, Asexual reproduction of Rhodophyta
07-11-2022	sexual reproduction of rhodophyta ,and Alternation of Generations
13-07-2022	Economic Importance of rhodophyta
16-07-2022	Structure, life cycle and systematic position of <i>Polysiphonia</i>
18-07-2022	Structure, life cycle and systematic position of <i>Batrachospermum</i>
20-07-2022	Classification and General Characters of Xanthophyta
23-07-2022	Distribution, Cell structure, pigments, reserve food
25-07-2022	range of thallus
27-07-2022	Reproduction: asexual and sexual, of <i>Polysiphonia</i>
30-07-2022	Reproduction: asexual and sexual, of <i>Batrachospermum</i>
30-07-2022	Alternation of Generations and Economic Importance
08-06-2022	Structure, life cycle and systematic position of <i>Vaucheria</i>
08-06-2022	Classification and General Characters of Bacillariophyta
08-08-2022	Distribution, Cell structure, pigments, reserve food
08-10-2022	range of thallus, Reproduction: asexual and sexual
13-08-2022	Alternation of Generations, Economic Importance.
13-08-2022	Structure, life cycle and systematic position of <i>Pinnularia</i>

Unit III : Fungi	
17-08-2022	Basidiomycetes: Classification and General characters
20-08-2022	Classification and General characters and Life cycle of <i>Agaricus</i>
20-08-2022	Classification and General characters and life cycle of <i>Puccinia</i>
22-08-2022	Deuteromycetae: Classification and General Characters
24-08-2022	Life cycle of <i>Alternaria</i>
Unit IV : Plant Pathology	
27-08-2022	Study of plant diseases
27-08-2022	Causative organism, symptoms, of white Rust - <i>Albugo</i> Sp.
09-05-2022	predisposing factors, disease cycle and control measures of <i>Albugo</i> Sp.
09-07-2022	Causative organism, symptoms, of Tikka disease of ground nut: <i>Cercospora</i>
09-10-2022	predisposing factors, disease cycle and control measures of <i>Cercospora</i>
09-10-2022	Causative organism, symptoms, of Damping off disease: <i>Pythium</i>
09-12-2022	predisposing factors, disease cycle and control measures of <i>Pythium</i>
14-09-2022	Causative organism, symptoms, of Citrus canker – <i>Xanthomonas</i> sp.
17-09-2022	predisposing factors, disease cycle and control measures of <i>Xanthomonas</i> sp.
17-09-2022	Causative organism, symptoms, of Citrus canker – leaf curl virus
19-09-2022	predisposing factors, disease cycle and control measures of leaf curl virus
21-09-2022	Study of Physical control methods of plant diseases.
24-09-2022	Chemical control methods of plant diseases.
24-09-2022	Biological control methods of plant diseases.
26-09-2022	Examples of control methods of plant diseases.
28-09-2022	Syllabus revision

T.Y. B.Sc. Botany Sem - V Paper - II Plant Diversity - IV

Date	Topic
13-06-2022	Recapturation of Plant Diversity
14-06-2022	Syllabus discussion: Botany Paper II (Plant Diversity IV)
17-06-2022	Unit 1: Paleobotany- Introduction
18-06-2022	Lepidodendron- Salient feature-All form genera <i>Stigmaria</i> (Root), <i>Lepidophyllum</i> (Leaf)
20-06-2022	Lepidodendron- <i>Lepidostrobus</i> (Cone) and <i>Lepidocarpon</i> (Seed)
21-06-2022	Lyginopteris- Salient feature, Classification
24-06-2022	Lyginopteris- All form genera- <i>Lyginopteris oldhamia</i> (Stem), <i>Sphenopteris hoeninghausi</i> (Leaves)
25-06-2022	Lyginopteris- All form genera- <i>Kaloxylon hookeri</i> (Root), <i>Lagenostoma lamaxii</i> (Seed), <i>Crosotheca kidstonii</i> (Pollen bearing organ)
27-06-2022	Pentoxylon- Salient features, Classification
28-06-2022	Pentoxylon- <i>Pentoxylon sahnii</i> (Stem), <i>Nipaniophyllum</i> (Leaves)
01-07-2022	Pentoxylon- <i>Cornoconites</i> (Seed bearing organ), <i>Sahnia nipaniensis</i> (Male reproductive organ)
02-07-2022	Birbal Sahni- Contribution in paleobotany
04-07-2022	Birbal Sahni institute of paleobotany
05-07-2022	Revision Paleobotany
08-07-2022	Recapturation of Angiosperm
09-07-2022	Unit 2: Angiosperm- Introduction
11-07-2022	Bentham and Hookers classification system-outline
12-07-2022	Bentham and Hookers classification system-Merits and Demerits
15-07-2022	Morphology of flower
16-07-2022	Accessory whorls- calyx, Corolla
18-07-2022	Essential whorls-Androecium, Gynoecium
19-07-2022	Family- <i>Capparidaceae</i>

22-07-2022	Family- Umbellifere
23-07-2022	Family- Cucurbitaceae
25-07-2022	Family-Rubiaceae
26-07-2022	Family-Solanaceae
29-07-2022	Family- Commelinaceae
30-07-2022	Family- Graminae
01-08-2022	Revision of Unit 2
02-08-2022	Unit 3: Anatomy: Introduction
05-08-2022	Anomalous secondary growth in stem of Bignonia
06-08-2022	Anomalous secondary growth in Achyranthus
08-08-2022	Anomalous secondary growth in Aristolochia
09-08-2022	Anomalous secondary growth in Dracaena
12-08-2022	Anomalous secondary growth in Salvadora
13-08-2022	Anomalous secondary growth in storage root in radish
16-08-2022	Anomalous secondary growth in storage root in beet
19-08-2022	Root stem transition, Types A
20-08-2022	Root stem transition, Types B
22-08-2022	Root stem transition, Types C
23-08-2022	Root stem transition, Types D
26-08-2022	Stomata- Structure and function
27-08-2022	Types of stomata- Anomocytic, Anisocytic, Diacytic.
29-08-2022	Types of stomata- Paracytic and Gramineous
30-08-2022	Revision of Unit 3
06-09-2022	Unit 4: Palynology-Introduction
09-09-2022	Pollen morphology
10-09-2022	Pollen viability- storage
12-09-2022	Germination of pollen
13-09-2022	Growth of pollen, Factors affecting pollen tube growth
16-09-2022	Uses of palynology in taxonomy
17-09-2022	Application of palynology in honey industry
19-09-2022	Application of palynology in Coal and oil exploration
20-09-2022	Application of palynology in aerobiology
23-09-2022	Application of palynology in pollen allergies
24-09-2022	Application of palynology in forensic science
26-09-2022	Revision of Unit 4
27-09-2022	Revision
30-09-2022	Revision

T.Y.B.Sc. Botany Sem - V Paper - III Form & Function - III

Date	Topic
06-07-2021	Unit 1: Cytology and Molecular biology-Structure and function of Nucleus
07-07-2021	Nuclear envelop
08-07-2021	Nuclear pore
10-07-2021	Nucleoplasm
13-07-2021	Nucleolus
14-07-2021	Chromatin network, cytochemistry of nucleus
15-07-2021	Structure and function of Vacuole
17-07-2021	Structure and function of Giant chromosomes- Polytene chromosome, Lambrush chromosome
20-07-2021	Characteristics of the Genetic code
27-07-2021	Transcription, Translation in eukaryotes
28-07-2021	Unit 2: Physiology- Water relations: Water potential

29-07-2021	Osmosis
31-07-2021	Transpiration
03-08-2021	Imbibition
04-08-2021	Solute transport-Transport of ions across cell membranes
05-08-2021	Active and passive transport
07-08-2021	Carriers, channels and pumps
10-08-2021	Translocation of solutes: Composition of phloem sap
11-08-2021	Girdling experiment
12-08-2021	Pressure flow model
14-08-2021	Phloem loading and unloading
17-08-2021	Anatomy of sieve tube translocation
18-08-2021	Mechanisms of sieve tube translocation
19-08-2021	Munchs hypothesis
24-08-2021	Unit 3: Environmental botany- Bioremediation- Principles
25-08-2021	Factors responsible and microbial population in bioremediation
26-08-2021	Phytoremediation- Metals
28-08-2021	Phytoremediation-Organic pollutants
31-08-2021	Plant succession: Hydrosere
01-09-2021	Plant succession: Xerosere
02-09-2021	Formation of barren space
04-09-2021	Succession on the citing different seres leading upto the climax
07-09-2021	Succession in water
08-09-2021	Ecesis
09-09-2021	Poly and monoclimax theories
11-09-2021	Unit 4: Plant tissue culture- Micropropogation
14-09-2021	Aspects of micropropogation with reference to floriculture: Detailed study of orchid cultivation
15-09-2021	Plant cell suspension cultures for the production of secondary metabolites: with special referance to shikonin production
16-09-2021	Somatic embryogenesis
18-09-2021	Artificial seeds
21-09-2021	Protoplast fusion and somatic hybridization: Concept, definition and various methods of protoplast fusion
22-09-2021	Somatic hybridization
23-09-2021	Applications of somatic hybridization in agriculture
25-09-2021	Revision Unit 1
28-09-2021	Revision Unit 2
29-09-2021	Revision Unit 3
30-09-2021	Revision Unit 4