

DEPARTMENT OF BOTANY

Govt. Pt. Madhav Rao Sapre College, Pendra Road, Dist.- Gaurella- Pendra- Marwahi (C.G.)

Lesson Plan (Session 2022-23)

B. Sc. Part – III

Subject: Botany

Name of Teacher: TILSHWER PRASAD CHANDRA

**Paper - I: Analytical Technology, Plant Pathology, Experimental Embryology,
Elementary Biostatistics, Environmental Pollution and Conservation**

Paper - II: Genetics, Molecular Biology, Biotechnology and Biochemistry

Week	Day	Date	Paper	Unit	Topic
	Friday	01-07-2022			Admission Process
	Saturday	02-07-2022			Admission Process
	Sunday	03-07-2022	Holiday		
Week 1	Monday	04-07-2022			General Introduction
	Tuesday	05-07-2022			General Discussion on scope of Botany
	Wednesday	06-07-2022			How to write a perfect Answer?
	Thursday	07-07-2022			How to prepare notes?
	Friday	08-07-2022			Summarization of Paper 1
	Saturday	09-07-2022			Summarization of Paper 2
	Sunday	10-07-2022	Holiday		
Week 2	Monday	11-07-2022	Paper - I	Unit - I	Introduction of Analytical Instrumentation
	Tuesday	12-07-2022	Paper - I	Unit - I	Introduction of Analytical Instrumentation (PPT Presentation)
	Wednesday	13-07-2022	Paper - I	Unit - I	Chromatography: Structure and Types
	Thursday	14-07-2022	Paper - II	Unit - I	Introduction of Plant Cell Biology
	Friday	15-07-2022	Paper - II	Unit - I	The Cell: Structure of Plant Cell
	Saturday	16-07-2022	Paper - II	Unit - I	The Cell: Cell Wall
	Sunday	17-07-2022	Holiday		
Week 3	Monday	18-07-2022	Paper - I	Unit - I	Chromatography: Principle and Application
	Tuesday	19-07-2022	Paper - I	Unit - I	Oven: Structure, Principle and Application
	Wednesday	20-07-2022	Paper - I	Unit - I	Incubator: Structure, Principle and Application
	Thursday	21-07-2022	Paper - II	Unit - I	The Cell: Cell Organelles – Mitochondria
	Friday	22-07-2022	Paper - II	Unit - I	The Cell: Cell Organelles – Chloroplast
	Saturday	23-07-2022	Paper - II	Unit - I	The Cell: Cell Organelles – Ribosome
	Sunday	24-07-2022	Holiday		
Week 4	Monday	25-07-2022	Paper - I	Unit - I	Autoclave: Structure, Principle and Application
	Tuesday	26-07-2022	Paper - I	Unit - I	Centrifuge: Structure, Principle and Application
	Wednesday	27-07-2022	Paper - I	Unit - I	Spectrophotometer: Structure, Principle and Application
	Thursday	28-07-2022	Holiday		Hareli Festival
	Friday	29-07-2022	Paper - II	Unit - I	The Cell: Cell Organelles – Nucleus and Nucleolus
	Saturday	30-07-2022	Paper - II	Unit - I	The Cell: Cell Organelles – E. R. and Golgi Body
	Sunday	31-07-2022	Holiday		
Week 5	Monday	01-08-2022	Paper - I	Unit - I	Revision Class/ Problem discussion
	Tuesday	02-08-2022	Paper - I	Unit - I	Invited Expert Lecture on Analytical Instrumentation
	Wednesday	03-08-2022	Paper - I	Unit - I	Unit Test – I/Quiz - I
	Thursday	04-08-2022	Paper - II	Unit - I	The Cell: Cell Organelles – Lysosomes and microtubules
	Friday	05-08-2022	Paper - II	Unit - I	The Chromosome: Structure and Organization
	Saturday	06-08-2022	Paper - II	Unit - I	The Chromosome: Organization Theories
	Sunday	07-08-2022	Holiday		
Week 6	Monday	08-08-2022	Paper - I	Unit - II	Introduction of Plant Tissue Culture Techniques
	Tuesday	09-08-2022	Holiday		World Tribal Day / Moharram
	Wednesday	10-08-2022	Paper - I	Unit - II	PTC: Growth Media
	Thursday	11-08-2022	Holiday		Raksha Bandhan
	Friday	12-08-2022	Paper - II	Unit - I	The Chromosome: Giant Chromosome
	Saturday	13-08-2022	Paper - II	Unit - I	Cell Division: Cell Cycle
	Sunday	14-08-2022	Holiday		
Week 7	Monday	15-08-2022	Holiday		Independence Day
	Tuesday	16-08-2022	Paper - I	Unit - II	Totipotency
	Wednesday	17-08-2022	Paper - I	Unit - II	Protoplast Culture (PPT Presentation)
	Thursday	18-08-2022	Paper - II	Unit - I	Cell Division: Mitosis
	Friday	19-08-2022	Holiday		Krishna Janmashtami
	Saturday	20-08-2022	Paper - II	Unit - I	Cell Division: Meiosis
	Sunday	21-08-2022	Holiday		
Week 8	Monday	22-08-2022	Paper - I	Unit - II	Somatic Hybrids and Cybrids
	Tuesday	23-08-2022	Paper - I	Unit - II	Micropropagation

	Wednesday	24-08-2022	Paper - I	Unit - II	Somaclonal Variation
	Thursday	25-08-2022	Paper - II	Unit - I	Mendel's Law (PPT Presentation)
	Friday	26-08-2022	Paper - II	Unit - I	Gene Interaction (PPT Presentation)
	Saturday	27-08-2022	Paper - II	Unit - I	Linkage
	Sunday	28-08-2022	Holiday		
Week 9	Monday	29-08-2022	Paper - I	Unit - II	Haploid Culture
	Tuesday	30-08-2022	Holiday		Hartalika Teej
	Wednesday	31-08-2022	Paper - I	Unit - II	Microscopy: Light Microscope (Live Demonstration)
	Thursday	01-09-2022	Paper - II	Unit - I	Crossin Over
	Friday	02-09-2022	Paper - II	Unit - I	Chromosomal Aberration
	Saturday	03-09-2022	Paper - II	Unit - I	Polyploidy
	Sunday	04-09-2022	Holiday		
Week 10	Monday	05-09-2022	Paper - I	Unit - II	Electron Microscope (PPT Presentation)
	Tuesday	06-09-2022	Paper - I	Unit - II	Invited Expert Lecture on Plant Tissue Culture Techniques
	Wednesday	07-09-2022	Paper - I	Unit - II	Unit Test – II/ Quiz - II
	Thursday	08-09-2022	Paper - II	Unit - I	Sex Linked Inheritance
	Friday	09-09-2022	Paper - II	Unit - I	Sex Determination
	Saturday	10-09-2022	Paper - II	Unit - I	Cytoplasmic Inheritance
	Sunday	11-09-2022	Holiday		
Week 11	Monday	12-09-2022	Paper - I	Unit - III	General Principal of Plant Pathology
	Tuesday	13-09-2022	Paper - I	Unit - III	General Symptoms of Fungal Diseases (PPT Presentation)
	Wednesday	14-09-2022	Paper - I	Unit - III	General Symptoms of Bacterial Diseases (PPT Presentation)
	Thursday	15-09-2022	Paper - II	Unit - I	Gene Concept: Cistron, Muton and Recon
	Friday	16-09-2022	Paper - II	Unit - I	Problem Discussion / Invited Expert Lecture on Genetics
	Saturday	17-09-2022	Paper - II	Unit - I	Unit Test – I/ Quiz – I
	Sunday	18-09-2022	Holiday		
Week 12	Monday	19-09-2022	Paper - I	Unit - III	General Symptoms of Viral Diseases (PPT Presentation)
	Tuesday	20-09-2022	Paper - I	Unit - III	Mode of Infection
	Wednesday	21-09-2022	Paper - I	Unit - III	Diseases Resistance and Control Measures
	Thursday	22-09-2022	Paper - II	Unit - II	Structure and Forms of DNA (PPT Presentation)
	Friday	23-09-2022	Paper - II	Unit - II	Structure and Forms of RNA (PPT Presentation)
	Saturday	24-09-2022	Paper - II	Unit - II	DNA/ RNA as Genetic Material
	Sunday	25-09-2022	Holiday		
Week 13	Monday	26-09-2022	Paper - I	Unit - III	Plant Quarantine
	Tuesday	27-09-2022	Paper - I	Unit - III	Epidemiology and Etiology of Rust Disease of Wheat
	Wednesday	28-09-2022	Paper - I	Unit - III	Epidemiology and Etiology of Tikka Disease of Ground nut
	Thursday	29-09-2022	Paper - II	Unit - II	Replication of DNA (PPT Presentation)
	Friday	30-09-2022	Paper - II	Unit - II	Biochemical and Molecular Basis of Mutation (PPT Presentation)
	Saturday	01-10-2022	Paper - II	Unit - II	Genetic Code and its Properties (PPT Presentation)
	Sunday	02-10-2022	Holiday		
Week 14	Monday	03-10-2022	Holiday		Dusshera
	Tuesday	04-10-2022	Holiday		Dusshera
	Wednesday	05-10-2022	Holiday		Dusshera
	Thursday	06-10-2022	Paper - II	Unit - II	Transcription in Prokaryotes (PPT Presentation)
	Friday	07-10-2022	Paper - II	Unit - II	Translation in Prokaryotes (PPT Presentation)
	Saturday	08-10-2022	Paper - II	Unit - II	Regulation of Gene Expression
	Sunday	09-10-2022	Holiday		
Week 15	Monday	10-10-2022	Paper - I	Unit - III	Epidemiology and Etiology of Red rot of Sugarcane
	Tuesday	11-10-2022	Paper - I	Unit - III	Epidemiology and Etiology of Bacterial Blight of Rice
	Wednesday	12-10-2022	Paper - I	Unit - III	Epidemiology and Etiology of Yellow Vein Mosaic of Bhindi
	Thursday	13-10-2022	Paper - II	Unit - II	Operon Model (PPT Presentation)
	Friday	14-10-2022	Paper - II	Unit - II	Invited Expert Lecture on Mutation
	Saturday	15-10-2022	Paper - II	Unit - II	Unit Test – II / Quiz - II
	Sunday	16-10-2022	Holiday		
Week 16	Monday	17-10-2022	Paper - I	Unit - III	Epidemiology and Etiology of Little Leaf of Brinjal
	Tuesday	18-10-2022	Paper - I	Unit - III	Unit Test – III / Quiz-III
	Wednesday	19-10-2022	Paper - I	Unit - III	Revision Class/ Problem Discussion
	Thursday	20-10-2022	Paper - II	Unit - III	Recombinant DNA Technology (PPT Presentation)
	Friday	21-10-2022	Paper - II	Unit - III	Recombinant DNA and Enzymes
	Saturday	22-10-2022	Paper - II	Unit - III	Cloning Vector -Plasmid and Bacteriophages (PPT Presentation)
	Sunday	23-10-2022	Holiday		
Week 17	Monday	24-10-2022	Holiday		Diwali
	Tuesday	25-10-2022	Holiday		Diwali
	Wednesday	26-10-2022	Holiday		Diwali
	Thursday	27-10-2022	Paper - II	Unit - III	Cloning Vector – Cosmids and Phagemids (PPT Presentation)
	Friday	28-10-2022	Paper - II	Unit - III	Gene Cloning

	Saturday	29-10-2022	Paper - II	Unit - III	PCR (PPT Presentation)
	Sunday	30-10-2022	Holiday		
Week 18	Monday	31-10-2022	Paper - I	Unit - IV	Introduction to Pollution
	Tuesday	01-11-2022	Paper - I	Unit - IV	Green House Gases
	Wednesday	02-11-2022	Paper - I	Unit - IV	Ozone Depletion
	Thursday	03-11-2022	Paper - II	Unit - III	Application of Biotechnology
	Friday	04-11-2022	Paper - II	Unit - III	G. M. Plants
	Saturday	05-11-2022	Paper - II	Unit - III	Monoclonal Antibodies
	Sunday	06-11-2022	Holiday		
Week 19	Monday	07-11-2022	Paper - I	Unit - IV	Dissolve Oxygen
	Tuesday	08-11-2022	Paper - I	Unit - IV	Biochemical Oxygen Demand
	Wednesday	09-11-2022	Paper - I	Unit - IV	Chemical Oxygen Demand
	Thursday	10-11-2022	Paper - II	Unit - III	DNA Fingerprinting (PPT Presentation)
	Friday	11-11-2022	Paper - II	Unit - III	Invited Expert lecture on Recombinant DNA Technology
	Saturday	12-11-2022	Paper - II	Unit - III	Unit Test – III / Quiz - III
	Sunday	13-11-2022	Holiday		
Week 20	Monday	14-11-2022	Paper - I	Unit - IV	Biomagnification
	Tuesday	15-11-2022	Paper - I	Unit - IV	Eutrophication
	Wednesday	16-11-2022	Paper - I	Unit - IV	Acid Precipitation
	Thursday	17-11-2022	Paper - II	Unit - III	Problem Discussion
	Friday	18-11-2022	Paper - II	Unit - IV	Introduction of Biochemistry
	Saturday	19-11-2022	Paper - II	Unit - IV	Protein: Chemical Composition (PPT Presentation)
	Sunday	20-11-2022	Holiday		
Week 21	Monday	21-11-2022	Paper - I	Unit - IV	Phytoremediation
	Tuesday	22-11-2022	Paper - I	Unit - IV	Plant Indicators
	Wednesday	23-11-2022	Paper - I	Unit - IV	Biogeographical Zone of India
	Thursday	24-11-2022	Paper - II	Unit - IV	Protein: Primary, Secondary and Tertiary Structure
	Friday	25-11-2022	Paper - II	Unit - IV	Carbohydrate: Chemical Composition
	Saturday	26-11-2022	Paper - II	Unit - IV	Carbohydrate: General Account of Monosaccharides
	Sunday	27-11-2022	Holiday		
Week 22	Monday	28-11-2022	Paper - I	Unit - IV	Concept of Biodiversity
	Tuesday	29-11-2022	Paper - I	Unit - IV	Conservation of Biodiversity – <i>In situ</i>
	Wednesday	30-11-2022	Paper - I	Unit - IV	Conservation of Biodiversity – <i>Ex situ</i>
	Thursday	01-12-2022	Paper - II	Unit - IV	Carbohydrate: General Account of Disaccharides
	Friday	02-12-2022	Paper - II	Unit - IV	Carbohydrate: General Account of Polysaccharides
	Saturday	03-12-2022	Paper - II	Unit - IV	Fat: Structure and Properties
	Sunday	04-12-2022	Holiday		
Week 23	Monday	05-12-2022	Paper - I	Unit - IV	Biodiversity – MAB (Man and Biosphere Program)
	Tuesday	06-12-2022	Paper - I	Unit - IV	National Parks
	Wednesday	07-12-2022	Paper - I	Unit - IV	Biodiversity Hot Spots
	Thursday	08-12-2022	Paper - II	Unit - IV	Fatty Acids: Structure and Properties
	Friday	09-12-2022	Paper - II	Unit - IV	Fatty Acids: Synthesis
	Saturday	10-12-2022	Paper - II	Unit - IV	Fatty Acids: Breakdown
	Sunday	11-12-2022	Holiday		
Week 24	Monday	12-12-2022	Paper - I	Unit - IV	Conservation Strategies
	Tuesday	13-12-2022	Paper - I	Unit - IV	Red Data Book
	Wednesday	14-12-2022	Paper - I	Unit - IV	IUCN threat Categories
	Thursday	15-12-2022	Paper - II	Unit - IV	Invited Expert Lecture on Fundamentals of Biochemistry
	Friday	16-12-2022	Paper - II	Unit - IV	Quiz -IV / Unit Test - IV
	Saturday	17-12-2022	Paper - II	Unit - V	Problem Discussion
	Sunday	18-12-2022	Holiday		
Week 25	Monday	19-12-2022	Paper - I	Unit - IV	Invasive Species
	Tuesday	20-12-2022	Paper - I	Unit - IV	Endemic Species
	Wednesday	21-12-2022	Paper - I	Unit - IV	Concept of Sustainable Development
	Thursday	22-12-2022	Paper - II	Unit - V	Enzyme: General Account
	Friday	23-12-2022	Paper - II	Unit - V	Enzyme: Nomenclature
	Saturday	24-12-2022	Holiday		Winter Vacation
	Sunday	25-12-2022	Holiday		Winter Vacation
Week 26	Monday	26-12-2022	Holiday		Winter Vacation
	Tuesday	27-12-2022	Paper - I	Unit - IV	Invited Expert Lecture on Biodiversity
	Wednesday	28-12-2022	Paper - I	Unit - IV	Unit Test – IV / Quiz - IV
	Thursday	29-12-2022	Paper - II	Unit - V	Enzyme: Classification
	Friday	30-12-2022	Paper - II	Unit - V	Enzyme: Components
	Saturday	31-12-2022	Paper - II	Unit - V	Enzyme action Theories
	Sunday	01-01-2023	Holiday		
Week 27	Monday	02-01-2023	Paper - I	Unit - V	Introduction and Application of Biostatics

	Tuesday	03-01-2023	Paper - I	Unit - V	Measure of Central Tendency – Mean
	Wednesday	04-01-2023	Paper - I	Unit - V	Measure of Central Tendency – Median
	Thursday	05-01-2023	Paper - II	Unit - V	Enzyme action Theories
	Friday	06-01-2023	Paper - II	Unit - V	Enzyme Kinetics
	Saturday	07-01-2023	Paper - II	Unit - V	Allosteric enzymes
	Sunday	08-01-2023	Holiday		
Week 28	Monday	09-01-2023			One Day Botanical Excursion Tour
	Tuesday	10-01-2023	Paper - I	Unit - V	Measure of Central Tendency – Mode
	Wednesday	11-01-2023	Paper - I	Unit - V	Measure of Dispersal – Standard Deviation
	Thursday	12-01-2023	Paper - II	Unit - V	Isozymes
	Friday	13-01-2023	Paper - II	Unit - V	Abzymes
	Saturday	14-01-2023	Paper - II	Unit - V	Ribozymes
	Sunday	15-01-2023	Holiday		
Week 29	Monday	16-01-2023	Paper - I	Unit - V	Measure of Dispersal – Standard Error
	Tuesday	17-01-2023	Paper - I	Unit - V	Invited Expert Lecture on Biostatistics
	Wednesday	18-01-2023	Paper - I	Unit - V	Unit Test – V / Quiz - V
	Thursday	19-01-2023	Paper - II	Unit - V	Factor affecting enzyme activity
	Friday	20-01-2023	Paper - II	Unit - V	Invited Expert Lecture on Enzyme
	Saturday	21-01-2023	Paper - II	Unit - V	Unit Test - V/ Quiz- V
	Sunday	22-01-2023	Holiday		
Week 30	Monday	23-01-2023	Paper - I		Assignment / Project Work
	Tuesday	24-01-2023	Paper - I		Assignment / Project Work
	Wednesday	25-01-2023	Paper - I		Assignment / Project Work
	Thursday	26-01-2023	Holiday		Republic Day
	Friday	27-01-2023	Paper - II		Assignment / Project Work
	Saturday	28-01-2023	Paper - II		Assignment / Project Work
	Sunday	29-01-2023	Holiday		
Week 31	Monday	30-01-2023	Paper - I		Revision Class/ Problem Discussion
	Tuesday	31-01-2023	Paper - I		Revision Class/ Problem Discussion
	Wednesday	01-02-2023	Paper - I		Revision Class/ Problem Discussion
	Thursday	02-02-2023	Paper - II		Revision Class/ Problem Discussion
	Friday	03-02-2023	Paper - II		Revision Class/ Problem Discussion
	Saturday	04-02-2023	Paper - II		Revision Class/ Problem Discussion
	Sunday	05-02-2023	Holiday		
Week 32	Monday	06-02-2023	Paper - I		Revision Class/ Problem Discussion
	Tuesday	07-02-2023	Paper - I		Revision Class/ Problem Discussion
	Wednesday	08-02-2023	Paper - I		Revision Class/ Problem Discussion
	Thursday	09-02-2023	Paper - II		Revision Class/ Problem Discussion
	Friday	10-02-2023	Paper - II		Revision Class/ Problem Discussion
	Saturday	11-02-2023	Paper - II		Revision Class/ Problem Discussion
	Sunday	12-02-2023	Holiday		
Week 33	Monday	13-02-2023	Paper - I		Revision Class/ Problem Discussion
	Tuesday	14-02-2023	Paper - I		Revision Class/ Problem Discussion
	Wednesday	15-02-2023	Paper - I		Revision Class/ Problem Discussion
	Thursday	16-02-2023	Paper - II		Revision Class/ Problem Discussion
	Friday	17-02-2023	Paper - II		Revision Class/ Problem Discussion
	Saturday	18-02-2023	Paper - II		Revision Class/ Problem Discussion
	Sunday	19-02-2023	Holiday		Preparation Leave
Week 34	Monday	20-02-2023			Preparation Leave
	Tuesday	21-02-2023			Preparation Leave
	Wednesday	22-02-2023			Preparation Leave
	Thursday	23-02-2023			Preparation Leave
	Friday	24-02-2023			Preparation Leave
	Saturday	25-02-2023			Preparation Leave
	Sunday	26-02-2023	Holiday		Preparation Leave
Week 35	Monday	27-02-2023			Preparation Leave
	Tuesday	28-02-2023			National Science Day Celebration
	Wednesday	01-03-2023			Annual Examination Start

Note: If classes are suspended for any type of activities for example College Annual Function, Internal Examination, Local Holidays declare by Local Administration etc. that classes will conduct in next successive days.

(Tilleshwer Prasad Chandra)
Head,
Department of Botany