

# 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 – II

**Subject: Botany**

**Name of Teacher: TILSHWER PRASAD CHANDRA**

**Paper - I: Plant Taxonomy, Economic Botany, Plant Anatomy and Embryology**

**Paper - II: Ecology and Plant Physiology**

Week	Day	Date	Paper	Unit	Topic
	Friday	01-07-2022			Admission Process
	Saturday	02-07-2022			Admission Process
	<b>Sunday</b>	03-07-2022	<b>Holiday</b>		
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
	<b>Sunday</b>	10-07-2022	<b>Holiday</b>		
Week 2	Monday	11-07-2022	Paper - I	Unit - I	Introduction of Plant Taxonomy
	Tuesday	12-07-2022	Paper - I	Unit - I	Bentham and Hooker System of Classification
	Wednesday	13-07-2022	Paper - I	Unit - I	Bentham and Hooker System: Merits and Demerits
	Thursday	14-07-2022	Paper - II	Unit - I	Introduction of Plant Ecology
	Friday	15-07-2022	Paper - II	Unit - I	Scope of Plant Ecology
	Saturday	16-07-2022	Paper - II	Unit - I	Environmental Factors
	<b>Sunday</b>	17-07-2022	<b>Holiday</b>		
Week 3	Monday	18-07-2022	Paper - I	Unit - I	Binomial Nomenclature
	Tuesday	19-07-2022	Paper - I	Unit - I	IUCN: General Introduction
	Wednesday	20-07-2022	Paper - I	Unit - I	IUCN for Algae, Fungi and Plants
	Thursday	21-07-2022	Paper - II	Unit - I	Ecological Factors
	Friday	22-07-2022	Paper - II	Unit - I	Soil Formation and Soil Profile
	Saturday	23-07-2022	Paper - II	Unit - I	Liebig's Law of Minimum (PPT Presentation)
	<b>Sunday</b>	24-07-2022	<b>Holiday</b>		
Week 4	Monday	25-07-2022	Paper - I	Unit - I	Typification
	Tuesday	26-07-2022	Paper - I	Unit - I	Numerical Taxonomy
	Wednesday	27-07-2022	Paper - I	Unit - I	Chemotaxonomy
	Thursday	28-07-2022	<b>Holiday</b>		Hareli Festival
	Friday	29-07-2022	Paper - II	Unit - I	Shelford's law of Tolerance
	Saturday	30-07-2022	Paper - II	Unit - I	Hydrophytes: Morphological & Anatomical Adaptation
	<b>Sunday</b>	31-07-2022	<b>Holiday</b>		
Week 5	Monday	01-08-2022	Paper - I	Unit - I	Preservation of Plant Material
	Tuesday	02-08-2022	Paper - I	Unit - I	Herbarium Techniques
	Wednesday	03-08-2022	Paper - I	Unit - I	Important Botanical Gardens and Herbaria of India
	Thursday	04-08-2022	Paper - II	Unit - I	Xerophytes: Morphological & Anatomical Adaptation
	Friday	05-08-2022	Paper - II	Unit - I	Epiphytes: Morphological & Anatomical Adaptation
	Saturday	06-08-2022	Paper - II	Unit - I	Unit Test - I / Quiz -I
	<b>Sunday</b>	07-08-2022	<b>Holiday</b>		
Week 6	Monday	08-08-2022	Paper - I	Unit - I	Kew Botanical Garden, England
	Tuesday	09-08-2022	<b>Holiday</b>		World Tribal Day / Moharram
	Wednesday	10-08-2022	Paper - I	Unit - I	<b>Invited Expert Lecture on Plant Taxonomy</b>
	Thursday	11-08-2022	<b>Holiday</b>		Raksha Bandhan
	Friday	12-08-2022	Paper - II	Unit - II	Population Characteristics
	Saturday	13-08-2022	Paper - II	Unit - II	Community Characteristics
	<b>Sunday</b>	14-08-2022	<b>Holiday</b>		
Week 7	Monday	15-08-2022	<b>Holiday</b>		Independence Day
	Tuesday	16-08-2022	Paper - I	Unit - I	Unit Test - I / Quiz -I
	Wednesday	17-08-2022	Paper - I	Unit - II	Terminology for Family Description
	Thursday	18-08-2022	Paper - II	Unit - II	Raunkiar's Life Forms
	Friday	19-08-2022	<b>Holiday</b>		Krishna Janmashtami
	Saturday	20-08-2022	Paper - II	Unit - II	Population Interaction
	<b>Sunday</b>	21-08-2022	<b>Holiday</b>		
Week 8	Monday	22-08-2022	Paper - I	Unit - II	Family: Ranunculaceae (PPT Presentation)
	Tuesday	23-08-2022	Paper - I	Unit - II	Family: Magnoliaceae (PPT Presentation)
	Wednesday	24-08-2022	Paper - I	Unit - II	Family: Brassicaceae (PPT Presentation)
	Thursday	25-08-2022	Paper - II	Unit - II	Plant Succession - Xerosere

	Friday	26-08-2022	Paper - II	Unit - II	Plant Succession - Hydrosere
	Saturday	27-08-2022	Paper - II	Unit - II	Plant Succession - Lithosere
	<b>Sunday</b>	28-08-2022	<b>Holiday</b>		
Week 9	Monday	29-08-2022	Paper - I	Unit - II	Family: Rosaceae (PPT Presentation)
	Tuesday	30-08-2022	<b>Holiday</b>		Hartalika Teej
	Wednesday	31-08-2022	Paper - I	Unit - II	Family: Papavaraceae (PPT Presentation)
	Thursday	01-09-2022	Paper - II	Unit - II	Ecotone and Edge effect
	Friday	02-09-2022	Paper - II	Unit - II	Ecological Niches
	Saturday	03-09-2022	Paper - II	Unit - II	Ecotypes and Ecads
	<b>Sunday</b>	04-09-2022	<b>Holiday</b>		
Week 10	Monday	05-09-2022	Paper - I	Unit - II	Family: Caryophyllaceae (PPT Presentation)
	Tuesday	06-09-2022	Paper - I	Unit - II	Family: Rutaceae (PPT Presentation)
	Wednesday	07-09-2022	Paper - I	Unit - II	Family: Cucurbitaceae (PPT Presentation)
	Thursday	08-09-2022	Paper - II	Unit - II	Keystone Species
	Friday	09-09-2022	Paper - II	Unit - II	Concept of Ecosystem (PPT Presentation)
	Saturday	10-09-2022	Paper - II	Unit - II	Trophic Levels
	<b>Sunday</b>	11-09-2022	<b>Holiday</b>		
Week 11	Monday	12-09-2022	Paper - I	Unit - II	Family: Apiaceae (PPT Presentation)
	Tuesday	13-09-2022	Paper - I	Unit - II	Family: Rubiaceae (PPT Presentation)
	Wednesday	14-09-2022	Paper - I	Unit - II	Family: Apocynaceae (PPT Presentation)
	Thursday	15-09-2022	Paper - II	Unit - II	Flow of Energy in Ecosystem (PPT Presentation)
	Friday	16-09-2022	Paper - II	Unit - II	Food Chains (PPT Presentation)
	Saturday	17-09-2022	Paper - II	Unit - II	Food Web (PPT Presentation)
	<b>Sunday</b>	18-09-2022	<b>Holiday</b>		
Week 12	Monday	19-09-2022	Paper - I	Unit - II	Family: Asclepiadaceae (PPT Presentation)
	Tuesday	20-09-2022	Paper - I	Unit - II	Family: Solanaceae (PPT Presentation)
	Wednesday	21-09-2022	Paper - I	Unit - II	Family: Malvaceae (PPT Presentation)
	Thursday	22-09-2022	Paper - II	Unit - II	Concept of Ecological Pyramids
	Friday	23-09-2022	Paper - II	Unit - II	Biogeochemical Cycle: Carbon Cycle
	Saturday	24-09-2022	Paper - II	Unit - II	Biogeochemical Cycle: Nitrogen Cycle
	<b>Sunday</b>	25-09-2022	<b>Holiday</b>		
Week 13	Monday	26-09-2022	Paper - I	Unit - II	Family: Convolvulaceae (PPT Presentation)
	Tuesday	27-09-2022	Paper - I	Unit - II	Family: Orchidaceae (PPT Presentation)
	Wednesday	28-09-2022	Paper - I	Unit - II	Family: Acanthaceae (PPT Presentation)
	Thursday	29-09-2022	Paper - II	Unit - II	Biogeochemical Cycle: Phosphorus Cycle
	Friday	30-09-2022	Paper - II	Unit - II	Unit Test- II/ Quiz- II
	Saturday	01-10-2022	Paper - II	Unit - II	<b>Invited Expert Lecture on Ecosystem</b>
	<b>Sunday</b>	02-10-2022	<b>Holiday</b>		
Week 14	Monday	03-10-2022	<b>Holiday</b>		Dussehra
	Tuesday	04-10-2022	<b>Holiday</b>		Dussehra
	Wednesday	05-10-2022	<b>Holiday</b>		Dussehra
	Thursday	06-10-2022	Paper - II	Unit - III	Plant Water Relation: Diffusion and Permeability
	Friday	07-10-2022	Paper - II	Unit - III	Plant Water Relation: Osmosis and Imbibition
	Saturday	08-10-2022	Paper - II	Unit - III	Plant Water Relation: Plasmolysis
	<b>Sunday</b>	09-10-2022	<b>Holiday</b>		
Week 15	Monday	10-10-2022	Paper - I	Unit - II	Family: Verbenaceae (PPT Presentation)
	Tuesday	11-10-2022	Paper - I	Unit - II	Family: Lamiaceae (PPT Presentation)
	Wednesday	12-10-2022	Paper - I	Unit - II	Family: Asteraceae (PPT Presentation)
	Thursday	13-10-2022	Paper - II	Unit - III	Plant Water Relation: Osmotic Potential and Water Potential
	Friday	14-10-2022	Paper - II	Unit - III	Plant Water Relation: Types of Soil Water
	Saturday	15-10-2022	Paper - II	Unit - III	Plant Water Relation: Water Holding Capacity and Wilting
	<b>Sunday</b>	16-10-2022	<b>Holiday</b>		
Week 16	Monday	17-10-2022	Paper - I	Unit - II	Family: Fabaceae (PPT Presentation)
	Tuesday	18-10-2022	Paper - I	Unit - II	Family: Euphorbiaceae (PPT Presentation)
	Wednesday	19-10-2022	Paper - I	Unit - II	Family: Poaceae (PPT Presentation)
	Thursday	20-10-2022	Paper - II	Unit - III	Absorption of Water
	Friday	21-10-2022	Paper - II	Unit - III	Theories of Ascent of Sap
	Saturday	22-10-2022	Paper - II	Unit - III	Mineral Nutrition and Deficiency Symptoms (PPT Presentation)
	<b>Sunday</b>	23-10-2022	<b>Holiday</b>		
Week 17	Monday	24-10-2022	<b>Holiday</b>		Diwali
	Tuesday	25-10-2022	<b>Holiday</b>		Diwali
	Wednesday	26-10-2022	<b>Holiday</b>		Diwali
	Thursday	27-10-2022	Paper - II	Unit - III	Transpiration
	Friday	28-10-2022	Paper - II	Unit - III	Stomatal Movement
	Saturday	29-10-2022	Paper - II	Unit - III	Significance of Transpiration
	<b>Sunday</b>	30-10-2022	<b>Holiday</b>		

Week 18	Monday	31-10-2022	Paper - I	Unit - II	Family: Liliaceae
	Tuesday	01-11-2022	Paper - I	Unit - II	Quiz - II/ Unit Test - II
	Wednesday	02-11-2022	Paper - I	Unit - III	Economic Botany: Fiber Yielding Plants
	Thursday	03-11-2022	Paper - II	Unit - III	Factor affecting Transpiration
	Friday	04-11-2022	Paper - II	Unit - III	Guttation
	Saturday	05-11-2022	Paper - II	Unit - III	Unit Test - III / Quiz- III
	<b>Sunday</b>	06-11-2022	<b>Holiday</b>		
Week 19	Monday	07-11-2022	Paper - I	Unit - III	Economic Botany: Timber Yielding Plants
	Tuesday	08-11-2022	Paper - I	Unit - III	Economic Botany: Medicinal Plants
	Wednesday	09-11-2022	Paper - I	Unit - III	Economic Botany: Medicinal Plants
	Thursday	10-11-2022	Paper - II	Unit - IV	Photosynthesis: Introduction
	Friday	11-11-2022	Paper - II	Unit - IV	Photosynthesis: Photosynthetic Apparatus
	Saturday	12-11-2022	Paper - II	Unit - IV	Photosynthesis: Photosynthetic Pigments
	<b>Sunday</b>	13-11-2022	<b>Holiday</b>		
Week 20	Monday	14-11-2022	Paper - I	Unit - III	Economic Botany: Medicinal Plants of C.G.
	Tuesday	15-11-2022	Paper - I	Unit - III	Economic Botany: Food Plants
	Wednesday	16-11-2022	Paper - I	Unit - III	Economic Botany: Food Plants
	Thursday	17-11-2022	Paper - II	Unit - IV	Photosynthesis: Light Reaction Mechanism of ATP Synthesis
	Friday	18-11-2022	Paper - II	Unit - IV	Photosynthesis: Dark Reaction- C3 Pathway
	Saturday	19-11-2022	Paper - II	Unit - IV	Photosynthesis: Dark Reaction- C4 Pathway
	<b>Sunday</b>	20-11-2022	<b>Holiday</b>		
Week 21	Monday	21-11-2022	Paper - I	Unit - III	Economic Botany: Fruit Plants
	Tuesday	22-11-2022	Paper - I	Unit - III	Economic Botany: Spices Plants
	Wednesday	23-11-2022	Paper - I	Unit - III	Economic Botany: Spices Plants
	Thursday	24-11-2022	Paper - II	Unit - IV	Photosynthesis: Dark Reaction- CAM Pathway
	Friday	25-11-2022	Paper - II	Unit - IV	Photosynthesis: Photorespiration
	Saturday	26-11-2022	Paper - II	Unit - IV	Photosynthesis: Factor affecting Photosynthesis
	<b>Sunday</b>	27-11-2022	<b>Holiday</b>		
Week 22	Monday	28-11-2022	Paper - I	Unit - III	Economic Botany: Beverages Plants
	Tuesday	29-11-2022	Paper - I	Unit - III	Economic Botany: Beverages Plants
	Wednesday	30-11-2022	Paper - I	Unit - III	Economic Botany: Cultivation of Flower Plants
	Thursday	01-12-2022	Paper - II	Unit - IV	Respiration: Introduction
	Friday	02-12-2022	Paper - II	Unit - IV	Respiration: Aerobic and Anaerobic Respiration
	Saturday	03-12-2022	Paper - II	Unit - IV	Respiration: Glycolysis
	<b>Sunday</b>	04-12-2022	<b>Holiday</b>		
Week 23	Monday	05-12-2022	Paper - I	Unit - III	Economic Botany: Biodiesel Plants
	Tuesday	06-12-2022	Paper - I	Unit - III	Ethnobotany in Context of Chhattisgarh
	Wednesday	07-12-2022	Paper - I	Unit - III	<b>Invited Expert Lecture on Economic Botany</b>
	Thursday	08-12-2022	Paper - II	Unit - IV	Respiration: Kreb's Cycle
	Friday	09-12-2022	Paper - II	Unit - IV	Respiration: Factor Affecting Respiration
	Saturday	10-12-2022	Paper - II	Unit - IV	Respiration: R. Q. Analysis
	<b>Sunday</b>	11-12-2022	<b>Holiday</b>		
Week 24	Monday	12-12-2022	Paper - I	Unit - III	Quiz -III / Unit Test - III
	Tuesday	13-12-2022	Paper - I	Unit - IV	Plant Anatomy: Shoot Apex Meristem (PPT Presentation)
	Wednesday	14-12-2022	Paper - I	Unit - IV	Plant Anatomy: Root Apex Meristem (PPT Presentation)
	Thursday	15-12-2022	Paper - II	Unit - IV	Quiz -IV / Unit Test - IV
	Friday	16-12-2022	Paper - II	Unit - V	Plant Growth Hormones: Auxin
	Saturday	17-12-2022	Paper - II	Unit - V	Plant Growth Hormones: Gibberellin
	<b>Sunday</b>	18-12-2022	<b>Holiday</b>		
Week 25	Monday	19-12-2022	Paper - I	Unit - IV	Plant Anatomy: Theories of Shoot Apex Organization
	Tuesday	20-12-2022	Paper - I	Unit - IV	Plant Anatomy: Theories of Root Apex Organization
	Wednesday	21-12-2022	Paper - I	Unit - IV	Plant Anatomy: Permanent Tissues
	Thursday	22-12-2022	Paper - II	Unit - V	Plant Growth Hormones: Cytokinin
	Friday	23-12-2022	Paper - II	Unit - V	Plant Growth Hormones: Ethylene
	Saturday	24-12-2022	<b>Holiday</b>		Winter Vacation
	<b>Sunday</b>	25-12-2022	<b>Holiday</b>		Winter Vacation
Week 26	Monday	26-12-2022	<b>Holiday</b>		Winter Vacation
	Tuesday	27-12-2022	Paper - I	Unit - IV	Plant Anatomy: Anatomy of Dicot Root
	Wednesday	28-12-2022	Paper - I	Unit - IV	Plant Anatomy: Anatomy of Dicot Stem
	Thursday	29-12-2022	Paper - II	Unit - V	Plant Growth Hormones: Absciscic Acid
	Friday	30-12-2022	Paper - II	Unit - V	Plant Growth Hormones: Physiology of Flowering
	Saturday	31-12-2022	Paper - II	Unit - V	Plant Growth Hormones: Florigen concept
	<b>Sunday</b>	01-01-2023	<b>Holiday</b>		
Week 27	Monday	02-01-2023	Paper - I	Unit - IV	Plant Anatomy: Anatomy of Dicot Leaf
	Tuesday	03-01-2023	Paper - I	Unit - IV	Plant Anatomy: Anatomy of Monocot Root and Stem
	Wednesday	04-01-2023	Paper - I	Unit - IV	Plant Anatomy: Anatomy of Monocot Leaf

	Thursday	05-01-2023	Paper - II	Unit - V	Photoperiodism
	Friday	06-01-2023	Paper - II	Unit - V	Vernalization
	Saturday	07-01-2023	Paper - II	Unit - V	Seed Dormancy
	<b>Sunday</b>	08-01-2023	<b>Holiday</b>		
Week 28	Monday	09-01-2023			<b>One Day Botanical Excursion Tour</b>
	Tuesday	10-01-2023	Paper - I	Unit - IV	Plant Anatomy: Secondary Growth in Root and Stem
	Wednesday	11-01-2023	Paper - I	Unit - IV	Anomalies in the Primary structure of Stem - <i>Nyctanthus</i>
	Thursday	12-01-2023	Paper - II	Unit - V	Seed Germination
	Friday	13-01-2023	Paper - II	Unit - V	Plant Movement
	Saturday	14-01-2023	Paper - II	Unit - V	Plant Movement
	<b>Sunday</b>	15-01-2023	<b>Holiday</b>		
Week 29	Monday	16-01-2023	Paper - I	Unit - IV	Anomalies in the Primary structure of Stem - <i>Boerhaavia</i>
	Tuesday	17-01-2023	Paper - I	Unit - IV	Anomalies in the Primary structure of Stem - <i>Casuarina</i>
	Wednesday	18-01-2023	Paper - I	Unit - IV	Anomalous Secondary Growth in <i>Dracaena</i> , <i>Bignonia</i> & <i>Lept.</i>
	Thursday	19-01-2023	Paper - II	Unit - V	Unit Test - V/ Quiz- V
	Friday	20-01-2023			Project Work/ Assignment
	Saturday	21-01-2023			Project Work/ Assignment
	<b>Sunday</b>	22-01-2023	<b>Holiday</b>		
Week 30	Monday	23-01-2023	Paper - I	Unit - IV	Unit Test - IV / Quiz -IV
	Tuesday	24-01-2023	Paper - I	Unit - V	Embryology: Flower as a Reproductive organ and Anther
	Wednesday	25-01-2023	Paper - I	Unit - V	Embryology: Microsporogenesis
	Thursday	26-01-2023	<b>Holiday</b>		Republic Day
	Friday	27-01-2023	Paper - I	Unit - V	Embryology: Development of male Gametophyte
	Saturday	28-01-2023	Paper - I	Unit - V	Embryology: Types of Ovules and Structure
	<b>Sunday</b>	29-01-2023	<b>Holiday</b>		
Week 31	Monday	30-01-2023	Paper - I	Unit - V	Embryology: Megasporogenesis
	Tuesday	31-01-2023	Paper - I	Unit - V	Embryology: Development of Female Gametophyte
	Wednesday	01-02-2023	Paper - I	Unit - V	Embryology: Pollination and their mechanism
	Thursday	02-02-2023	Paper - I	Unit - V	Embryology: Self Incompatibility
	Friday	03-02-2023	Paper - I	Unit - V	Embryology: Fertilization
	Saturday	04-02-2023	Paper - I	Unit - V	Embryology: Endosperm
	<b>Sunday</b>	05-02-2023	<b>Holiday</b>		
Week 32	Monday	06-02-2023	Paper - I	Unit - V	Embryology: Embryo
	Tuesday	07-02-2023	Paper - I	Unit - V	Embryology: Polyembryony
	Wednesday	08-02-2023	Paper - I	Unit - V	Embryology: Apomixes and Parthenocarpy
	Thursday	09-02-2023	Paper - I	Unit - V	Unit Test- V/ Quiz- V
	Friday	10-02-2023	Paper - II		Revision Class/ Problem Discussion
	Saturday	11-02-2023	Paper - II		Revision Class/ Problem Discussion
	<b>Sunday</b>	12-02-2023	<b>Holiday</b>		
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
	<b>Sunday</b>	19-02-2023	<b>Holiday</b>		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
	<b>Sunday</b>	26-02-2023	<b>Holiday</b>		Preparation Leave
Week 35	Monday	27-02-2023			Preparation Leave
	Tuesday	28-02-2023			National Science Day Celebration
	Wednesday	01-03-2023			<b>Annual Examination Start</b>

**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.**

(Tilshwer Prasad Chandra)  
Head,  
Department of Botany