MONTHLY TEACHING PLAN (2026-27)

MEHR CHAND MAHAJAN DAV COLLEGE FOR WOMEN
SECTOR 36-A, CHANDIGARH

Monthly Teaching Plans – ODD Semester (Semester V)
Session 2026-27

Name of the Teacher: Dr. Gunjan Sud

Department: Botany

Class: B.Sc. (Med.) III Year

Subject: Course Title: Economic Botany

Course Code: BOT-DST-10 (Maj-502)

Month	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
July	20.7.2026	31.7.2026	Crop production: Area of cultivation, soil requirement, cultivation practices, and high yielding varieties of: i) Cereals (Rice and Maize) ii) Fibres (Cotton) iii) Vegetables (Potato)	Lecture Method; PPT; Charts; Notes; Assignments
Departmental Meeting held on 29.07.26 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
August	1.8.2026	31.8.2026	Crop production: Area of cultivation, soil requirement, cultivation practices and high yielding varieties of : i) Fruits (Mango, Grapes, Lemon) ii) Sugar-yielding plants (Sugarcane) iii) Oil-yielding plants (Groundnut, Mustard)	Lecture Method; PPT; Charts; Notes; Assignments
Departmental Meeting held on 26.08.26 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans **Discussion on the Mid Semester Tests to be held in September**				

MONTHLY TEACHING PLAN (2026-27)

Month	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
September	01.09.2026	30.09.2026	Elementary knowledge of the following plants (Botanical names, families, parts used and economic importance) : i) Wheat, Maize, Rice (Food). ii) Teak, Shisham, Deodar, Sal (Timbers). iii) Cotton, Jute, Coir, Flax (Fibres). iv) Fennel, Coriander, Turmeric, Ginger, Mint, Clove (Spices and Condiments).	Lecture Method; PPT; Charts; Notes; Assignments
Departmental Meeting held on 30.09.26 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
October	01.10.2026	31.10.2026	Elementary knowledge of the following plants (Botanical names, families, parts used and economic importance): i) Bamboo, Eucalyptus (Pulp plants). ii) Tea and Coffee (Beverages).	Lecture Method; PPT; Charts; Notes; Assignments
Departmental Meeting held on 28.10.2026 to review the progress of syllabus as per lesson plans				
November	01.11.2026	17.11.2026	Elementary knowledge of the following plants (Botanical names, families, parts used and economic importance): iii) Bajra, Jowar, Ragi (Millets) **Revision Classes**	Lecture Method; PPT; Charts; Notes; Assignments
Departmental Meeting held on 16.11.26 to Coordinate and Review the monthly completion of syllabus as per lesson plans and preparation for the Final exams				
November-December	18.11.26	31.12.26	**PU semester examinations**	

MONTHLY TEACHING PLAN (2026-27)

MEHR CHAND MAHAJAN DAV College for Women,
Sector – 36-A, Chandigarh
Monthly Teaching Plans [SIXTH (Even) Semester]
Session: 2026-27

Name of the Teacher/s: Dr. Gunjan Sud
Department: Botany
Class: B.Sc. (Med.) IIIrd Year
Subject: Course Title: Anatomy of angiosperms
Course Code: BOT-DSC-15 (Maj-602)

Month	**Date (Monthly)**		**Topics to be Covered**	**Academic Activity Undertaken***
	From	**To**		
January	15.01.2027	31.01.2027	**Tissue systems:** Meristematic tissue, Classification of meristems, Permanent tissues (Simple and Complex), Secretory (special) tissues, Apical meristems: Shoot apex and organization of shoot apex (Apical cell theory, Histogen theory, Tunica Corpus theory, cyto-histological zonation) , Root apex and Organization of root apex (Apical cell theory, Histogen theory, Korper-Kappe theory); Quiescentcentre; Root cap.	Lecture Method; PPT; Charts; Notes; Assignments
Departmental Meeting will be held on 27.01.27 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
February	01.02.2027	28.02.2027	**Root:** Internal structure of primary dicot root (*Helianthus*), Internal structure of primary monocot root (*Zea mays*), Secondary growth in dicot root (*Helianthus*), differences between dicot and monocot root, Anatomy of modified storage and reproductive root (*Ipomeabatatas*), Anatomy of respiratory root or pneumatophores.	Lecture Method; PPT; Charts; Notes; Assignments

Departmental Meeting will be held on 24.02.27 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans Discussion on Mid Semester Test to be held in March

MONTHLY TEACHING PLAN (2026-27)

March	01.03.2027	31.03.2027	**Mid Semester Examinations (MST) – March 2026.** **Stem:** Internal structure of primary dicot stem (*Helianthus*), Internal structure of primary monocot stem (*Zea mays*), Secondary growth in dicot stem (*Helianthus*), differences between dicot and monocot stem, Anomalous stem structure in *Boerhaavia*, *Nyctanthes*, *Mirabilis*, *Dracaena*.	Lecture Method; PPT; Charts; Notes; Assignments
Departmental Meeting will held on 31.03.27 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
April	01.04.2027	26.04.2027	**Leaf:** Internal structure of dicot leaf (*Mangifera indica*), Internal structure of monocot leaf (*Zea mays*), Differences between monocot and dicot leaf, Kranz anatomy. **Revision/doubt clearing Sessions**	Lecture Method; PPT; Charts; Notes; Assignments
Departmental Meeting will be held on 21.04.27 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans and preparation for the Final examination.				

MONTHLY TEACHING PLAN (2026-27)

MEHR CHAND MAHAJAN DAV COLLEGE FOR WOMEN SECTOR 36-A, CHANDIGARH

Monthly Teaching Plans – ODD Semester (Semester V)
Session 2026-27

Name of the Teacher/s: Dr. Purnima Bhandari
Department: Botany
Class: B.Sc. III (under NEP)
Subject: PLANT METABOLISM
Course Code: BOT-DSC-9 Maj/Min – 501
Sections: Single

Month	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
July	20.07.2026	31.07.2026	**Carbon Oxidation:** Respiration – Glycolysis, fate of pyruvate, oxidative pentose phosphate pathway. Tri Carboxylic Acid cycle, mitochondrial electron transport, oxidative phosphorylation.	PowerPoint presentations, group discussion, Assignments.
Departmental Meeting held on 29.07.2026 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
August	01.08.2026	31.08.2026	**Carbon Oxidation:** ATP-Synthesis: Mechanism of ATP synthesis, substrate level phosphorylation, oxidative and photo-phosphorylation, chemiosmotic hypothesis. **Carbon Assimilation:** Photosynthesis- Photosynthetic pigments, role of photosynthetic pigments (chlorophylls and accessory pigments), action and absorption spectra, concept of two photosystems, antenna molecules and reaction centres,	PowerPoint presentations, group discussion, Assignments.

MONTHLY TEACHING PLAN (2026-27)

Month	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
			photochemical reactions, cyclic and non-cyclic photophosphorylation, photosynthetic electron transport, PSI, PSII, Carbon assimilation pathways (Calvin Cycle (C3), Hatch and Slack cycle (C4), Crassulacean Acid Metabolism – CAM), Photorespiration.	
Departmental Meeting held on 26.08.2026 to review the progress of syllabus as per lesson plans				
September	01.09.2026	30.9.2026	**Nitrogen Metabolism:** Biological nitrogen fixation, Reduction of nitrogen to ammonia, *Nif* genes, nitrate assimilation, importance of nitrate reductase and its regulation, regulation of nitrogenase, ammonia assimilation. **Mid Semester Examinations (MST)**	PowerPoint presentations, group discussion, Assignments.
Departmental Meeting held on 30.09.2026 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
October	01.10.2026	31.10.2026	**Lipid Metabolism:** Structure and importance of lipids, saturated and unsaturated fatty acids, β (beta) oxidation of fatty acids, glyoxylate cycle, gluconeogenesis and its role in active of lipids during seed germination.	Power point presentation, group discussion, assignments, Flipped classroom method.
Departmental Meeting held on 28.10.2026 to review the progress of syllabus as per lesson plans				
November	01.11.2026	17.11.2026	**Revision, Test and Assessments.**	
Departmental Meeting held on 16.11.2026 to review the progress of syllabus as per lesson plans; End Semester Examinations from 18.11.2026 – 31.12.2026 Semester Vacation – Winter Break – 01.01.2027 – 14.01.2027				

MONTHLY TEACHING PLAN (2026-27)

MEHR CHAND MAHAJAN DAV COLLEGE FOR WOMEN SECTOR 36-A, CHANDIGARH

Monthly Teaching Plans – EVEN Semester (Semester VI) Session 2026-27

Name of the Teacher: Dr. Purnima Bhandari
Department: Botany
Class: B.Sc. III year (Under NEP)
Subject: PLANT PHYSIOLOGY
Course Code: BOT-DSC-14 Maj/Min-601
Sections: A (Single Section)

Month	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
January	15.01.2027	31.01.2027	**Plant Water Relations:** Importance of water to plants, active, diffusion, osmosis, plasmolysis and deplasmolysis, water potential and its components, absorption of water, active and passive mechanism of water absorption	Power point presentation, group discussion, assignments, Flipped classroom method
Departmental Meeting will be held on 27.01.2027 to review the Monthly completion of Syllabus as per lesson plans				
February	01.02.2027	28.02.2027	**Plant Water Relations (contd):** Pathway of water movement (apoplast, symplast, transmembrane), ascent of sap and theories to explain ascent of sap; transpiration and mechanism of stomatal movement, mechanism of transpiration, antitranspirants. **Mineral nutrition:** Hydroponics and its importance; essential macro-and micro elements,	Power point presentation, group discussion, assignments.
Departmental Meeting will be held on 24.02.2027 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				

MONTHLY TEACHING PLAN (2026-27)

Month	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
March	01.03.2027	31.03.2027	**Mid Semester Examinations (MST) – March 2027.** **Mineral nutrition:** Essentiality criteria, deficiency symptoms and their role; mineral uptake; mechanism of mineral uptake (passive absorption, active absorption, modern concepts). Translocation in the phloem: Pressure–Flow hypothesis, Phloem loading and unloading; Source– sink relationship. **Proteins:** Classification, role and structure (primary, secondary and tertiary) of proteins. Basics of enzymology: Discovery and nomenclature; classification, structure, properties, factors affecting enzyme activity, mechanism of enzyme action.	Power point presentation, group discussion, assignments.
Departmental Meeting will be held on 31.03.2027 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
April	01.04.2026	26.04.2027	**Growth and development:** Definitions; phases of growth and development; plant movements; the concept of photoperiodism, florigen concept, vernalization, seed dormancy, physiological role of plant hormones– auxins, gibberellins, cytokinins, abscisic acid and ethylene, general account of Brassinosteroids and Jasmonic acid. **Revision & Test**	Power point presentation, group discussion, assignments.

MONTHLY TEACHING PLAN (2026-27)

Month	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
Departmental Meeting will on 21.04.2027 to Review the Monthly completion of Syllabus as per lesson plans. **End Semester Examinations from 27.04.2027– 05.06.2027;** **Semester Vacation – Summer Break – 06.06.2027 – 11.07.2027**				