

**MEHR CHAND MAHAJAN DAV College for Women,
Sector – 36-A, Chandigarh
Monthly Teaching Plans [FIFTH (Odd) Semester]
Session: 2021-22**

Name of the Teacher/s: Dr. Purnima Bhandari

Department: Botany

Class: B.Sc. (Med.) THIRD year

Subject: Paper A (PLANT PHYSIOLOGY-I; Subject Code: 0454)

Sections: A

Month	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
August	18.8.2021	31.8.2021	Plant Water Relations: Importance of water to plant life; physical properties of water; imbibition, diffusion, osmosis	ONLINE Lecture Method – PPT/Notes – Google meet, Google Classroom
Departmental Meeting was held on 20.8.2021 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
September	01.09.2021	30.09.2021	Plasmolysis and Deplasmolysis, concept of osmotic potential, water potential and pressure potential Absorption of water, active and passive mechanism of water absorption; transport of water, mechanism and theories to explain ascent of sap; transpiration types	ONLINE Lecture Method – PPT/Notes – Google meet, Google Classroom, Videos from YouTube
Review Meeting was held on 30.9.2021 to discuss about the Monthly completion of Syllabus as per lesson plans				
October	04.10.2021	28.10.2021	Mechanism of opening and closing of stomata, mechanism of transpiration, factors affecting transpiration, anti-transpirants; Mineral nutrition: Hydroponics and its importance; essential macro and micro elements, essentiality	ONLINE Lecture Method – PPT/Notes – Google meet, Google Classroom, Videos from YouTube

			criteria, deficiency symptoms and their role;	
Departmental Meeting was held on 23.10.2021 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans and preparation of modules.				
November	02.11.2021	30.11.2021	Mineral uptake; mechanism of mineral uptake (active, passive absorption and modern concepts); Nitrogen Metabolism: Biological nitrogen fixation; Importance of nitrate reductase and its regulation; ammonia assimilation. Lipid Metabolism: Structure and function of lipids; β – oxidation; saturated and unsaturated fatty acids.	ONLINE Lecture Method – PPT/Notes – Google meet, Google Classroom, Assignments
Mid semester Examinations - 17.11.2021 to 25.11.2021				
December	01.12.2021	16.12.2021	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. Classification, structure, properties, factors affecting enzyme activity, mechanism of enzyme action. REVISION TESTS P.U. Semester Examination	Lecture Method – PPT/Notes – Assignments
PU Semester examinations from 17.12.2021 – 27.01.2022				

**MEHR CHAND MAHAJAN DAV College for Women,
Sector – 36-A, Chandigarh
Monthly Teaching Plans [SIXTH (Even) Semester]
Session: 2021-22**

Name of the Teacher/s: Dr. Purnima Bhandari

Department: Botany

Class: B.Sc. (Med.) THIRD year

Subject: Paper A (PLANT PHYSIOLOGY-II; Subject Code: 0550)

Sections: A

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
Departmental Meeting shall be held on 03.02.2022 to discuss the various activities to be undertaken in this semester and Review the Monthly plan of the semester				
February	07.02.2022	28.02.2022	Photosynthesis: Significance, historical aspect; photosynthetic pigments; action spectra and enhancement effects; concept of two photosystems, cyclic and non-cyclic photophosphorylation. Calvin cycle; C4 pathway; CAM plants; photorespiration; factors affecting photosynthesis; transport of organic substances: Mechanism of phloem transport, source-sink relationship, factors affecting translocation.	Lecture Method; PPT;
Departmental Meeting shall be held on 01.03.2022 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
March	01.03.2022	30.03.2022	Respiration: ATP – The biological energy currency; aerobic and anaerobic respiration; Krebs cycle; electron transport mechanism (Chemiosmotic theory); redox	Lecture Method; PPT

			potential; oxidative phosphorylation; pentose phosphate pathway; respiratory quotient,	
Departmental Meeting shall be held on 30.03.2022 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
Mid semester Test 17.3.2022-25.3.2022				
April	04.04.2022	27.04.2022	Growth and development: Definitions; phases of growth and development; kinetics of growth, factors affecting growth; Biotechnology: Functional definition; basic aspects of plant tissue culture, its applications and somatic hybridization.	Lecture Method -PPT
Departmental Meeting shall be held on 27.04.2022 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
May	02.05.2022	25.05.2022	Plant movements; the concept of photoperiodism, physiology of flowering; florigen concept; roles of plant hormones– auxins, gibberellins, cytokinin's, abscisic acid and ethylene, history of their discovery. Revision/doubt clearing SESSIONS	Lecture Method – Notes/PPT/ Assignments
	26.05.2022	05.07.2022	PU Semester Examinations	

Sector – 36-A, Chandigarh
Monthly Teaching Plans [FIFTH (Odd) Semester]
Session: 2021-22

Name of the Teacher/s: Dr. Ruby Singh

Department: Botany

Class: B.Sc. (Med.) 3rd year

Subject: Paper B (PLANT ECOLOGY; Subject Code: 0455)

Sections: A +B

Month	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
August	18.8.2021	31.8.2021	Definition, scope, relationship with other sciences	ONLINE Lecture Method – PPT/Notes – Google meet, Google Classroom
Departmental Meeting was held on 20.8.2021 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
September	01.09.2021	30.09.2021	Plant Environment: Climatic, edaphic, topographic and biotic factors affecting growth and distribution of plants	ONLINE Lecture Method – PPT/Notes – Google meet, Google Classroom, Videos from YouTube
Review Meeting was held on 30.9.2021 to discuss about the Monthly completion of Syllabus as per lesson plans				
October	04.10.2021	28.10.2021	Ecosystem : Concept, structure; abiotic and biotic components; trophic levels, food chain, food web, ecological pyramids, energy flow, biogeochemical cycles of carbon, nitrogen and water.	ONLINE Lecture Method – PPT/Notes – Google meet, Google Classroom, Videos from YouTube
Departmental Meeting was held on 23.10.2021 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans and preparation of modules.				
November	02.11.2021	30.11.2021	Community Ecology: Community characteristics, frequency, density cover, life forms, biological spectrum; Applied Ecology : a) Air, water, soil pollution and their control. b) Conservation and management of natural	ONLINE Lecture Method – PPT/Notes – Google meet, Google Classroom, Assignments

			resources. (renewable and non-renewable)	
Mid semester Examinations - 17.11.2021 to 25.11.2021				
December	01.12.2021	16.12.2021	ecological succession – Hydrosere and Xerosere , Revision Classes	Lecture Method – PPT/Notes – Assignments
PU Semester examinations from 17.12.2021 – 27.01.2022				

Sector – 36-A, Chandigarh
Monthly Teaching Plans [SIXTH (Even) Semester]
Session: 2021-22

Name of the Teacher/s: Dr. Ruby Singh

Department: Botany

Class: B.Sc. (Med.) 3rd year

Subject: Paper B (ECONOMIC BOTANY; Subject Code: 0551)

Sections: A+ B

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
Departmental Meeting shall be held on 03.02.2022 to discuss the various activities to be undertaken in this semester and Review the Monthly plan of the semester				
February	07.02.2022	28.02.2022	Crop production: Area of cultivation, soil requirement, cultivation practices and high yielding varieties of: i) Cereals (Wheat, Rice and Maize) ii) Fibres (Cotton) iii) Vegetables (Potato)	Lecture Method; PPT;
Departmental Meeting shall be held on 01.03.2022 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
March	01.03.2022	30.03.2022	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) Elementary knowledge of the following plants (Botanical names, families, parts used and economic importance) :	Lecture Method; PPT

			i) Wheat, Maize, Rice, Moong, Gram (Food).	
Departmental Meeting shall be held on 30.03.2022 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
Mid semester Test 17.3.2022-25.3.2022				
April	04.04.2022	27.04.2022	<p>Botanical names, families, parts used and economic importance): Teak, Shisham, Deodar, Sal (Timbers). Elementary knowledge of the following plants (Botanical names, families, parts used and economic importance):</p> <p>iii) Cotton, Jute, Coir, Flax (Fibres). Elementary knowledge of the following plants (Botanical names, families, parts used and economic importance) :</p> <p>Fennel, Coriander, Turmeric, Ginger, Mint, Clove (Spices and Condiments).</p>	Lecture Method -PPT
Departmental Meeting shall be held on 27.04.2022 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
May	02.05.2022	25.05.2022	<p>Elementary knowledge of the following plants (Botanical names, families, parts used and economic importance) :</p> <p>i) Bamboo, Eucalyptus (Pulp plants). ii) Liquorice, Belladonna, Aconite, Ashwagandha, Arjun, Poppy, Amla (Medicinal plants). iii) Tea and Coffee (Beverages). Forestry: Forest conservation, wood</p>	Lecture Method – Notes/PPT/ Assignments

			seasoning and its preservation. Revision/doubt clearing SESSIONS	
	26.05.2022	05.07.2022	PU Semester Examinations	