

MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Odd Semester)
Session–(2019-20)

Name of the Teacher/s: Dr. Purnima Bhandari and Dr. Aditi Shreeya Bali

Department: Botany

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

Subject: Paper A (PLANT PHYSIOLOGY-I)

Sections: A and B

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
July	15.07.2019	31.07.2019	Plant Water Relations: Importance of water to plant life; physical properties of water; imbibition, diffusion, osmosis, plasmolysis and deplasmolysis, concept of osmotic potential, water potential and pressure potential	Lecture Method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
August	01.08.2019	31.08.2019	Absorption of water, active and passive mechanism of water absorption; transport of water, mechanism and theories to explain ascent of sap; transpiration types, mechanism of opening and closing of stomata, mechanism of transpiration, factors affecting transpiration, antitranspirants	Lecture Method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
September	02.09.2019	30.09.2019	Mineral nutrition: Hydroponics and its importance; essential macro-and micro elements, essentiality	

			criteria, deficiency symptoms and their role; mineral uptake; mechanism of mineral uptake (active, passive absorption and modern concepts).	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
October	01.10.2019	09.10.2019	Nitrogen Metabolism: Biological nitrogen fixation; importance of nitrate reductase and its regulation; ammonia assimilation.	Lecture Method, PPT
	10.10.2019	17.10.2019	Mid Semester Examination	
	18.10.2019	31.10.2019	Lipid Metabolism: Structure and function of lipids; β – oxidation; saturated and unsaturated fatty acids.	Lecture Method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
November	1.11.2019	30.11.2019	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.	Lecture Method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
December	2.12.2019	24.12.2019	Tentative P.U. Semester Examination	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				

*Any of these – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc.
Other Methods adopted by the teacher – Please write the specific teaching method

MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Even Semester)
Session–(2019-20)

Name of the Teacher/s: Dr. Purnima Bhandari and Dr. Aditi Shreeya Bali

Department: Botany

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

Subject: Paper A (PLANT PHYSIOLOGY-II)

Sections: A and B

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
January	09.01.2020	31.01.2020	Photosynthesis: Significance, historical aspect; photosynthetic pigments; action spectra and enhancement effects; concept of two photosystems, cyclic and non- cyclic photophosphorylation	Lecture Method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
February	01.02.2020	29.02.2020	Calvin cycle; C4 pathway; CAM plants; photorespiration; factors affecting photosynthesis; transport of organic substances: Mechanism of phloem transport, source-sink relationship, factors affecting translocation. Respiration: ATP – The biological energy currency; aerobic and anaerobic respiration;	Lecture Method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
March	02.3.2020	30.3.2020	Krebs cycle; electron transport mechanism (Chemiosmotic theory); redox	Lecture Method, PPT

			potential; oxidative phosphorylation; pentose phosphate pathway; respiratory quotient, Growth and development: Definitions; phases of growth and development; kinetics of growth, factors affecting growth	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
April	01.04.2020	19.04.2020	Plant movements; the concept of photoperiodism, physiology of flowering; florigen concept; roles of plant hormones– auxins, gibberellins, cytokinins, abscisic acid and ethylene, history of their discovery. Biotechnology: Functional definition; basic aspects of plant tissue culture, its applications and somatic hybridization.	Lecture Method, PPT
	20.4.2020	27.4.2020	Tentative PU Practical Examination	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
May	03.5.2020	30.5.2020	Tentative PU Semester Examination	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				

*Any of these – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc. Other Methods adopted by the teacher – Please write the specific teaching method

MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Odd Semester)
Session–(2019-20)

Name of the Teacher/s: Dr. Gunjan Sud and Dr. Ruby Singh

Department: Botany

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

Subject: Paper B (PLANT ECOLOGY)

Sections: A and B

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
July	15.07.2019	31.07.2019	Definition, scope, relationship with other sciences	Lecture Method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
August	01.08.2019	31.08.2019	Plant Environment: Climatic, edaphic, topographic and biotic factors affecting growth and distribution of plants.	Lecture Method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
September	02.09.2019	30.09.2019	Ecosystem : Concept, structure; abiotic and biotic components; trophic levels, food chain, food web, ecological pyramids, energy flow, biogeochemical cycles of carbon, nitrogen and water.	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
October	01.10.2019	09.10.2019	Community Ecology: Community characteristics, frequency, density cover, life forms	Lecture Method, PPT
	10.10.2019	17.10.2019	Mid Semester Examination	
	18.10.2019	31.10.2019	biological spectrum; ecological succession – Hydrosere	Lecture Method, PPT

			and Xerosere.	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
November	1.11.2019	30.11.2019	Applied Ecology : a) Air, water and soil pollution and their control. b) Conservation and management of natural resources. (renewable and non-renewable)	Lecture Method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
December	2.12.2019	24.12.2019	Tentative P.U. Semester Examination	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				

***Any of these** – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc.
Other Methods adopted by the teacher – Please write the specific teaching method

MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Even Semester)
Session–(2019-20)

Name of the Teacher/s: Dr. Gunjan Sud and Dr. Ruby Singh

Department: Botany

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

Subject: Paper B (ECONOMIC BOTANY)

Sections: A and B

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
January	09.01.2020	31.01.2020	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 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
February	01.02.2020	29.02.2020	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) : i) Wheat, Maize, Rice, Moong, Gram (Food).	Lecture Method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				

March	02.3.2020	30.3.2020	<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 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
April	01.04.2020	19.04.2020	<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 seasoning and its preservation.</p>	Lecture Method, PPT
	20.4.2020	27.4.2020	Tentative PU Practical Examination	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
May	03.5.2020	30.5.2020	Tentative PU Semester	

			Examination	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				

***Any of these** – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc. Other Methods adopted by the teacher – Please write the specific teaching method.