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.		ate nthly)	Topics to be Covered	Academic Activity Undertaken*
	From	То		
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	Lecture Method, PPT
			potential and	
			pressure potential	
Departmo	ental Meeting to C	oordinate and Rev	iew the Monthly completion of Sy	llabus 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
			iew the Monthly completion of Sy	llabus 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).	
			iew the Monthly completion of Sy	
October	01.10.2019	09.10.2019	Nitrogen Metabolism:	Lecture Method, PPT
			Biological nitrogen	
			fixation; importance of	
			nitrate reductase and its	
			regulation;	
			ammonia assimilation.	
	10.10.2019	17.10.2019	Mid Semester	
			Examination	
	18.10.2019	31.10.2019	Lipid Metabolism:	Lecture Method, PPT
	10.10.2017		_	
	10.10.2017		Structure and function of	
	10.10.2017			
	10.10.2017		Structure and function of lipids; β – oxidation; saturated and unsaturated	
			lipids; β – oxidation; saturated and unsaturated fatty acids.	
Departme		oordinate and Rev	lipids; β – oxidation; saturated and unsaturated	llabus as per lesson plans
	ental Meeting to C		lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy	
Departme November		oordinate and Rev 30.11.2019	lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy Proteins: Classification,	
	ental Meeting to C		lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy Proteins: Classification, role and structure	
	ental Meeting to C		lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy Proteins: Classification, role and structure (primary, secondary and	
	ental Meeting to C		 lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy Proteins: Classification, role and structure (primary, secondary and tertiary) of proteins. 	
	ental Meeting to C		lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy Proteins: Classification, role and structure (primary, secondary and tertiary) of proteins. Basics of enzymology:	llabus as per lesson plans Lecture Method, PPT
	ental Meeting to C		lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy Proteins: Classification, role and structure (primary, secondary and tertiary) of proteins. Basics of enzymology: Discovery and	
	ental Meeting to C		lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy Proteins: Classification, role and structure (primary, secondary and tertiary) of proteins. Basics of enzymology: Discovery and nomenclature;	
	ental Meeting to C		lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy Proteins: Classification, role and structure (primary, secondary and tertiary) of proteins. Basics of enzymology: Discovery and nomenclature; classification, structure,	
	ental Meeting to C		lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy Proteins: Classification, role and structure (primary, secondary and tertiary) of proteins. Basics of enzymology: Discovery and nomenclature; classification, structure, properties, factors	
	ental Meeting to C		lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy Proteins: Classification, role and structure (primary, secondary and tertiary) of proteins. Basics of enzymology: Discovery and nomenclature; classification, structure, properties, factors affecting	
	ental Meeting to C		lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy Proteins: Classification, role and structure (primary, secondary and tertiary) of proteins. Basics of enzymology: Discovery and nomenclature; classification, structure, properties, factors affecting enzyme activity,	
	ental Meeting to C		lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy 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	
November	ntal Meeting to C	30.11.2019	lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy 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
November	ntal Meeting to C	30.11.2019	lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy 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	Lecture Method, PPT
November	ntal Meeting to C	30.11.2019	lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy 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. iew the Monthly completion of Sy Tentative P.U. Semester	Lecture Method, PPT
November Departme	Image: Second control of the second	30.11.2019 oordinate and Rev 24.12.2019	lipids; β – oxidation; saturated and unsaturated fatty acids. iew the Monthly completion of Sy 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. iew the Monthly completion of Sy	Lecture Method, PPT

Other Methods adopted by the teacher – Please write the specific teaching method

MCM DAV College for Women, Sector – 36A, Chandigarh MonthlyTeaching 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.		ate nthly)	Topics to be Covered	Academic Activity Undertaken*
	From	То		
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	Lecture Method, PPT
Donoutm	antal Maating to C	andinate and Dev	photophosphorylation iew the Monthly completion of Sy	llabus og nor losson plans
Departmo	ental Meeting to Co	oordinate and Kev	rew the Monthly completion of Sy	liadus 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
Departmo	ental Meeting to C	oordinate and Rev	iew the Monthly completion of Sy	llabus as per lesson plans
March	02.3.2020	30.3.2020	Krebs cycle; electron transport mechanism (Chemi- osmotic 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	
Departn	nental Meeting to C	oordinate and Rev	view the Monthly completion of Syl	labus as per lesson plans
April	01.04.2020	19.04.2020	Plant movements; the	Lecture Method, PP
			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.	
	20.4.2020	27.4.2020	Tentative PU Practical	
			Examination	
Departn	nental Meeting to C	oordinate and Rev	view the Monthly completion of Syl	labus as per lesson plans
May	03.5.2020	30.5.2020	Tentative PU Semester	
-			Examination	
Denartn	nental Meeting to C	oordinate and Rev	view the Monthly completion of Syl	lahus as ner lesson nlans

*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	То		
July	15.07.2019	31.07.2019	Definition, scope, relationship with other sciences	Lecture Method, PPT
Departm	ental Meeting to C	oordinate and Rev	iew the Monthly completion of Sy	llabus 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
			iew the Monthly completion of Sy	llabus 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.	
-			iew the Monthly completion of Sy	
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

Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plant November 1.11.2019 30.11.2019 Applied Ecology : a) Air, water and soil pollution and their control. Lecture Method November 1.11.2019 30.11.2019 Applied Ecology : a) Air, water and soil pollution and their control. Lecture Method November 0.11.2019 0.11.2019 Booservation and management of natural resources. (renewable and non-renewable) November Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plant Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plant Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plant Examination				and Xerosere.	
Image: Provide and Solution and Solution and their control. water and soil pollution and their control. b) Conservation and management of natural resources. (renewable and non-renewable) management of Syllabus as per lesson plate December 2.12.2019 24.12.2019 Tentative P.U. Semester Examination	Departme	ental Meeting to C	oordinate and Rev	iew the Monthly completion of Syl	llabus as per lesson plans
Image: Provide and Solution and Solution and their control. water and soil pollution and their control. b) Conservation and management of natural resources. (renewable and non-renewable) management of Syllabus as per lesson plate December 2.12.2019 24.12.2019 Tentative P.U. Semester Examination					
and their control. and their control. b) Conservation and b) Conservation and management of natural resources. (renewable and non-renewable) non-renewable) December 2.12.2019 24.12.2019 Tentative P.U. Semester Examination	November	1.11.2019	30.11.2019	Applied Ecology : a) Air,	Lecture Method, PPT
b) Conservation and management of natural resources. (renewable and non-renewable) Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson play December 2.12.2019 24.12.2019 Tentative P.U. Semester Examination				water and soil pollution	
management of natural resources. (renewable and non-renewable) Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plate December 2.12.2019 24.12.2019 Tentative P.U. Semester Examination				and their control.	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson planet December 2.12.2019 24.12.2019 Tentative P.U. Semester Examination				b) Conservation and	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson planet December 2.12.2019 24.12.2019 Tentative P.U. Semester Examination				management of natural	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson planet December 2.12.2019 24.12.2019 Tentative P.U. Semester Examination Examination				resources. (renewable and	
December 2.12.2019 24.12.2019 Tentative P.U. Semester Examination				non-renewable)	
Examination	Departme	ental Meeting to C	oordinate and Rev	iew the Monthly completion of Sy	llabus as per lesson plans
Examination		1			
	December	2.12.2019	24.12.2019	Tentative P.U. Semester	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson pla				Examination	
	Departme	ental Meeting to C	oordinate and Rev	iew the Monthly completion of Syl	llabus 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 MonthlyTeaching 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	То		
January	09.01.2020	31.01.2020	Crop production: Area of	Lecture Method, PPT
			cultivation, soil	
			requirement, cultivation	
			practices and high yielding	
			varieties of:	
			i) Cereals (Wheat, Rice	
			and Maize)	
			ii) Fibres (Cotton)	
			iii) Vegetables (Potato)	
Departm	ental Meeting to C	oordinate and Rev	view the Monthly completion of Syl	llabus as per lesson plans
February	01.02.2020	29.02.2020	Crop production: Area of	Lecture Method, PPT
			cultivation, soil	
			requirement, cultivation	
			practices and high yielding	
			varieties of:	
			varieties of: i) Fruits (Mango, Grapes,	
			i) Fruits (Mango, Grapes,	
			i) Fruits (Mango, Grapes, Lemon)	
			i) Fruits (Mango, Grapes, Lemon)ii) Sugar-yielding plants	
			 i) Fruits (Mango, Grapes, Lemon) ii) Sugar-yielding plants (Sugarcane) 	
			 i) Fruits (Mango, Grapes, Lemon) ii) Sugar-yielding plants (Sugarcane) iii) Oil-yielding plants (Groundnut, Mustard) Elementary knowledge of 	
			 i) Fruits (Mango, Grapes, Lemon) ii) Sugar-yielding plants (Sugarcane) iii) Oil-yielding plants (Groundnut, Mustard) 	
			 i) Fruits (Mango, Grapes, Lemon) ii) Sugar-yielding plants (Sugarcane) iii) Oil-yielding plants (Groundnut, Mustard) Elementary knowledge of the following plants (Botanical names, 	
			 i) Fruits (Mango, Grapes, Lemon) ii) Sugar-yielding plants (Sugarcane) iii) Oil-yielding plants (Groundnut, Mustard) Elementary knowledge of the following plants 	
			 i) Fruits (Mango, Grapes, Lemon) ii) Sugar-yielding plants (Sugarcane) iii) Oil-yielding plants (Groundnut, Mustard) Elementary knowledge of the following plants (Botanical names, 	
			 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 	
			 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 	

March	02.3.2020	30.3.2020	Botanical names, families,	Lecture Method, PPT
			parts used and economic	
			importance):	
			Teak, Shisham, Deodar,	
			Sal (Timbers). Elementary	
			knowledge of the	
			following plants	
			(Botanical names,	
			families, parts used and	
			economic	
			importance):	
			iii) Cotton, Jute, Coir, Flax	
			(Fibres).	
			Elementary knowledge of	
			the following plants	
			(Botanical names,	
			families, parts used and economic	
			importance) :	
			Fennel, Coriander,	
			Turmeric, Ginger, Mint,	
			Clove (Spices and	
			Condiments).	
Departme	ental Meeting to C	oordinate and Rev	iew the Monthly completion of Sy	llabus as per lesson plans
April	01.04.2020	19.04.2020	Elementary knowledge of	Lecture Method, PPT
			the following plants	
			(Botanical names,	
			families, parts used and	
			economic importance) :	
			i) Bamboo, Eucalyptus	
			(Pulp plants).	
			ii) Liquorice, Belladona,	
			Aconite, Ashwagandha,	
			Arjun, Poppy, Amla	
			(Medicinal plants).	
			iii) Tea and Coffee	
			(Beverages).	
			Forestry: Forest	
			conservation, wood	
			seasoning and its	
			preservation.	
	20.4.2020	27.4.2020	Tentative PU Practical	
			Examination	
Departme	ental Meeting to C	oordinate and Rev	iew the Monthly completion of Sy	llabus as per lesson plans
	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.