

**MEHR CHAND MAHAJAN DAV College for Women,
Sector – 36 -A, Chandigarh
Monthly Teaching Plans (Odd Semester- Semester I)
Session: 2023-24**

Name of the Teacher/s: Dr. Gunjan Sud

Department: Botany

Class: B.Sc. (Med.) 1styear

Subject: Paper A (Plant Diversity-I; Subject code: 0052)

(MONTH)	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
July- August	27.07.2023	31.08.2023	Bacteria: Salient features, types and cell structure; Algae: General Characters; systematic position, Structure and life history of <i>Oscillatoria</i> (Cyanophyceae) <i>Volvox</i> (Chlorophyceae. Cladophora (Chlorophyceae)	Lecture Method; Charts,PPTs
September	1.09.23	30.09.2023	<i>Vaucheria</i> (Xanthophyceae); Systematic position, structure and life history of <i>Dictyota</i> (Phaeophyceae); <i>Batrachospermum</i> (Rhodophyceae) and economic importance of algae.	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
October	01.10.2023	31.10.2023	Fungi: General characters; systematic position,	Lecture Method; Charts,PPTs

			structure and life history of Albugo (White rust of crucifers: <i>Albugo candida</i>), Rhizopus and Saccharomyces Systematic position, structure and life history of Agaricus, Ustilago (Loose smut of wheat: <i>Ustilago tritici</i>)	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
Mid semester Examinations				
November	01.11.2023	30.11.2023	Systematic position, structure and life history of <i>Puccinia</i> (Black rust of wheat: <i>Puccinia graminis tritici</i>), <i>Colletotrichum</i> (Red rot of sugarcane: <i>Colletotrichum falcatum</i>); general account of Lichens and their economic importance. Revision Classes	Lecture Method; Charts,PPTs
PU Semester examinations from December, 2023				

**MEHR CHAND MAHAJAN DAV College for Women, Sector – 36A,
Chandigarh
Monthly Teaching Plans - SECOND (Even Semester)
Session: 2023-24**

Name of the Teacher/s: Dr. Gunjan Sud

Department: Botany

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

Subject: Paper A (Plant Diversity-II; Subject code: 0152)

Month	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
January	09.01.2024	31.01.2024	Bryophyta: General characters; systematic position, structure, reproduction and life cycle of <i>Marchantia</i> and <i>Riccia</i> (Hepaticopsida) excluding developmental stages	Lecture Method; Charts,PPTs
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
February	01.02.2024	28.02.2024	Systematic position, structure, reproduction and life cycle of <i>Anthoceros</i> (Anthocerotopsida) and <i>Funaria</i> (Bryopsida) excluding developmental stages.	Lecture Method; Charts,PPTs
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans Mid Semester Test				
March	01.03.2024	31.03.2024	Pteridophyta: General characters, systematic position, structure,	Lecture Method; Charts,PPTs

			reproduction and life cycle of <i>Rhynia</i> (Psilophytopsida) and <i>Selaginella</i> (Lycopsida) excluding developmental stage; Systematic position,	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
April	01.04.2024	22.04.2024	Structure, reproduction and life cycle of <i>Equisetum</i> (Sphenopsida) and <i>Pteris</i> (Pteropsida) excluding developmental stages. Revision Classes.	Lecture Method; Charts,PPTs,Notes
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
May			PU Semester Examination	

**MEHR CHAND MAHAJAN DAV College for Women,
Sector – 36 -A, Chandigarh
Monthly Teaching Plans (Odd Semester- Semester I)
Session: 2022-23**

Name of the Teacher/s: Dr. Purnima Bhandari

Department: Botany

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

Subject: Paper B (Cell Biology; Subject code: 0053)

(MONTH)	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
July- August	24.07.2023	31.08.2023	Ultrastructure and functions of a typical plant cell and its organelles: Nucleus, Mitochondrion, Plastids, Ribosome, Endoplasmic reticulum, Ultrastructure and functions of a typical plant cell and its organelles- Golgi apparatus, Lysosomes; Structure and functions of cell wall. Plasma membrane: fluid mosaic model only.	Lecture Method; Charts,PPTs,Notes
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
September	1.09.2023	30.09.2023	Cell divisions: Mitosis; Meiosis in plants and its significance. Synaptonemal complex; DNA: Structure (Watson and Crick model)Nucleosome, types of DNA and role of	Lecture Method; Charts,PPTs,Notes

			DNA, Replication of DNA.	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans Mid semester Examinations				
October	01.10.2023	31.10.2023	Structure and concept of gene: One gene-one enzyme hypothesis; Genetic Code: Characteristics, exceptions, Wobble hypothesis; RNA: Structure and types; Transcription and translation; Regulation of gene expression in prokaryotes (Lac operon and Tryptophan operon) and in eukaryotes (a brief account).	Lecture Method; Charts,PPTs,Notes
November	1.11.2023	30.11.2023	Physical structure of chromosome; Giant chromosomes: Polytene and Lampbrush chromosomes; Chromosomal alterations (deletion, duplication, inversion, translocation) and their importance; Variations in chromosome number, (aneuploidy and polyploidy) introduction and their importance.	
December			PU Semester examinations	

**MEHR CHAND MAHAJAN DAV College for Women, Sector – 36A,
Chandigarh
Monthly Teaching Plans - SECOND (Even Semester)
Session: 2023-24**

Name of the Teacher/s: Dr. Purnima Bhandari

Department: Botany

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

Subject: Paper B (Genetics; Subject Code: 0155)

Month	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
January	09.01.2024	31.01.2024	Mendelism: Mendel's experiments and results, Mendel's Laws of Dominance, Segregation and Independent assortment; Linkage: complete and incomplete linkage, linkage groups, linkage maps, importance of linkage, cytological interpretation of Mendelism.	Lecture Method; Charts,PPTs,Notes
February	03.02.2024	28.02.2024	Non-allelic Gene Interactions: Dominant and recessive epistasis, supplementary genes, Complementary genes, quantitative or polygenic inheritance, duplicate genes. Allelic gene interactions: Incomplete	Lecture Method; Charts,PPTs,Notes

			dominance, codominance, multiple alleles, pleiotropic genes.	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans Mid Semester Test				
March	01.03.2024	31.03.2024	Genetic variations: Continuous and Discontinuous; Mutations: characteristics, types, importance, factors affecting mutations; Mutagens: Physical and chemical, mechanism of gene mutations; DNA damage and repair: Types of damage (Single base change and structural Distortion), types of repair system in prokaryotes and eukaryotes. Chromosome theory of heredity, parallelism between chromosome and Mendelian factors;	Lecture Method; Charts,PPTs,Notes
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
April	01.04.2024	22.04.2024	Sex linked inheritance; Characteristics and examples (Haemophilia, colour-blindness);Cytoplasmic or extranuclear inheritance: mitochondrial and plastid DNA; plastid inheritance in Mirabilis, mitochondrial inheritance in Yeast. Revision Classes	Lecture Method; Charts,PPTs,Notes
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
May			PU Semester Examination	