

**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. Gunjan Sud and Ms. Parool Kaushik

**Department:** Botany

**Class:** B.Sc. (Med.) 1<sup>st</sup> year

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

**Sections:** A and B

(MONTH)	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
September	05.09.2022	30.09.2022	Bacteria: Salient features, types and cell structure; Algae: General Characters; systematic position, structure and life history of Oscillatoria (Cyanophyceae) Volvox(Chlorophyceae.	Lecture Method; Charts,PPTs
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
October	01.10.2022	30.10.2022	Cladophora (Chlorophyceae); Vaucheria (Xanthophyceae);Systematic position, structure and life history of Dictyota (Phaeophyceae); Batrachospermum (Rhodophyceae) and economic importance of algae.	Lecture Method; Charts,PPTs
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
<b>Mid semester Examinations</b>				
November	01.11.2022	25.11.2022	Fungi: General characters; systematic position,	Lecture Method; Charts,PPTs

			<p>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: Ustilago  tritici; Systematic position,  structure and life history of  Puccinia (Black rust of  wheat: Puccinia graminis  tritici), Colletotrichum (Red  rot of sugarcane:  Colletotrichum falcatum);  general account of Lichens  and their economic  importance.  <b>Revision Classes</b></p>	
<b>PU Semester examinations from 26.11.2022</b>				

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

**Name of the Teacher/s:** Dr. Gunjan Sud and Ms. Parool Kaushik

**Department:** Botany

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

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

**Sections:** A and B

Month	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
January	16.01.2023	31.01.2023	Bryophyta: General characters; systematic position, structure, reproduction and life cycle of Marchantia and Riccia (Hepaticopsida) excluding developmental stages	Lecture Method; Charts,PPTs
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
February	01.02.2023	28.02.2023	Bryophyta: General characters; systematic position, structure, reproduction and life cycle of Marchantia and Riccia (Hepaticopsida) excluding developmental stages	Lecture Method; Charts,PPTs
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans Mid Semester Test</b>				
March	01.03.2023	31.03.2023	Systematic position, structure, reproduction and life cycle of Anthoceros (Anthocerotopsida) and Funaria (Bryopsida) excluding developmental	Lecture Method; Charts,PPTs

			stages.	
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
April	01.04.2022	29.04.2023	Pteridophyta: General characters, systematic position, structure, reproduction and life cycle of Rhynia (Psilophytopsida) and Selaginella (Lycopsida) excluding developmental stage; Systematic position, structure, reproduction and life cycle of Equisetum (Sphenopsida) and Pteris (Pteropsida) excluding developmental stages. <b>Revision Classes.</b>	Lecture Method; Charts,PPTs,Notes
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
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 and Dr. Ruby Singh

**Department:** Botany

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

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

**Sections:** A and B

(MONTH)	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
September	05.09.2022	30.09.2022	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
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
October	01.10.2022	31.10.2022	Cell divisions: Mitosis; Meiosis in plants and its significance. Synaptonemal complex; DNA: Structure (Watson and Crick model)Nucleosome,	Lecture Method; Charts,PPTs,Notes

			types of DNA and role of DNA, Replication of DNA.	
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans Mid semester Examinations</b>				
November	01.11.2022	25.11.2022	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). 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.	Lecture Method; Charts,PPTs,Notes
December			<b>PU Semester examinations</b>	

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

**Name of the Teacher/s:** Dr. Purnima Bhandari and Dr. Ruby Singh

**Department:** Botany

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

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

**Sections:** A and B

Month	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
January	16.01.2023	31.01.2023	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	03.02.2022	28.02.2022	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.	
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans Mid Semester Test</b>				
March	01.03.2023	31.03.2023	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.	Lecture Method; Charts,PPTs,Notes
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
April	01.04.2023	29.04.2023	Chromosome theory of heredity, parallelism between chromosome and Mendelian factors; 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. <b>Revision Classes</b>	Lecture Method; Charts,PPTs,Notes
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
May			PU Semester Examination	