**MEHR CHAND MAHAJAN DAV College for Women, Sector – 36A, Chandigarh**

**Monthly Teaching Plans (Odd Semester – Semester I)**

**Session–(2020-21)**

**Name of the Teacher/s: Dr. Gunjan Sud and Dr. Jasleen Kaur**

**Department:** Botany

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

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

**Sections:** A and B

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| **S.No.** | **Date**  **(Monthly)** | | **Topics to be Covered** | **Academic Activity Undertaken\*** |
| **From** | **To** |
| **Departmental Meeting was held on 11 .09.2020 to discuss the various activities and teaching plan of the semester** | | | | |
| September | 14.9.2020 | 30.9.2020 | Bacteria: Salient features, types and cell structure. | Online Lecture , PPT |
| **Departmental Meeting was held on 30.07.2016 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| October | 01.10.2020 | 31.10.2020 | Algae: General Characters; systematic position, structure and life history of Oscillatoria (Cyanophyceae)  Volvox(Chlorophyceae), | Online Lecture, PPT |
| **Departmental Meeting was held on 31.10.2020to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| November | 01.11.2020 | 30.11.2020 | Cladophora (Chlorophyceae); Vaucheria (Xanthophyceae);Systematic position, structure and life history of Dictyota (Phaeophyceae); | Lecture Method, PPT |
| **Departmental Meeting was held on 30.11.2020 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| December | 01.12.2020 | 31.12.2020 | Batrachospermum  (Rhodophyceae) and economic importance of algae. Fungi: General characters; systematic position, structure and life history of Albugo (White rust of  crucifers: *Albugo candida*),. | Online Lecture , PPT |
|  | 7.12.2020 | 14.12.2020 | MST |  |
| **Departmental Meeting was held on 4.12.2020 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| January | 1.1.2021 | 31.1.2021 | Rhizopus and Saccharomyces Systematic position, structure and life history of Agaricus, Ustilago (Loose smut of wheat: Ustilago  tritici | Online Lecture , PPT |
| February | 1.2.2021 | 26.2.2021 | 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. | Online Lecture , PPT |
| **Departmental Meeting was held on 26.2.2021 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| March | 8.3.2021 | 21.3.2021 | P.U. Semester Examination |  |

**\*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

**MEHR CHAND MAHAJAN DAV College for Women, Sector – 36 A, Chandigarh**

**Monthly Teaching Plans (Even Semester - Semester II)**

**Session–(2020-21)**

**Name of the Teacher/s: Dr. Gunjan Sud and Dr. Jasleen Kaur**

**Department:** Botany

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

**Subject:** Paper A (Plant Diversity-II; Subject code: 0154)

**Sections:** A and B

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| **S.No.** | **Date**  **(Monthly)** | | **Topics to be Covered** | **Academic Activity Undertaken\*** |
| **From** | **To** |
| **Departmental Meeting is proposed to be held on 25 .03.2021 to discuss the various activities and teaching plan of the semester** | | | | |
| April | 1.04.2021 | 30.04.2021 | Bryophyta: General characters; systematic position, structure, reproduction and life cycle of  Marchantia and Riccia (Hepaticopsida) excluding developmental stages. | Lecture Method, PPT |
| **Departmental Meeting proposed to be held on 31.05.2021 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| May | 01.05.2021 | 31.05.2021 | Systematic position, structure, reproduction and life cycle of Anthoceros (Anthocerotopsida) and  Funaria (Bryopsida) excluding developmental stages. | Lecture Method, PPT |
| **Departmental Meeting proposed to be held on 31.05.2021 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| June | 01.06.2021 | 30.06.2021 | Pteridophyta: General characters, systematic position, structure, reproduction and life cycle of  Rhynia (Psilophytopsida) and Selaginella (Lycopsida) excluding developmental stages. | Lecture Method, PPT |
|  |  |  | **Mid Semester Examination** |  |
| **Departmental Meeting proposed to be on 30.6.2021 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| July | 01.07.2021 | 22.04.2017 | Systematic position, structure, reproduction and life cycle of Equisetum (Sphenopsida) and  Pteris (Pteropsida) excluding developmental stages. | Lecture Method, PPT |
| **Departmental Meeting was held on 30.4.2017 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| August | 1.7.2021 | 31.7.2021 | 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

**MEHR CHAND MAHAJAN DAV College for Women, Sector – 36A, Chandigarh**

**Monthly Teaching Plans (Odd Semester- Semester I)**

**Session (2020-21)**

**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

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| **S.No. (MONTH)** | **Date**  **(Monthly)** | | **Topics to be Covered** | **Academic Activity Undertaken\*** |
| **From** | **To** |
| September | 14.09.2020 | 30.09.2020 | Ultrastructure and functions of a typical plant cell and its organelles: Nucleus, Mitochondrion, Plastids,  Ribosome, Endoplasmic reticulum, | **ONLINE** Lecture Method; Visual presentation through Google meet/Google Classroom |
| **Departmental Meeting was held on 1.10.2020 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| October | 071.10.2020 | 31.10.2020 | Ultrastructure and functions of a typical plant cell and its organelles:Golgi apparatus, Lysosomes; Structure and functions of cell wall. | **ONLINE** Lecture Method; Visual presentation |
| **Departmental Meeting was held on 31.10.2020 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| November | 01.11.2020 | 25.11.2020 | Plasma membrane: fluid mosaic model only. Cell divisions: Mitosis and Meiosis in plants and their significance | **ONLINE** Lecture Method |
| **Departmental Meeting was held on 30.9.2019 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| December | 01.12.2020 | 23.12.2020 | Synaptonemal complex, DNA:  Structure (Watson and Crick model) | Lecture Method |
|  | 7.12.2020 | 14.12.2020 | MST |  |
| **Departmental Meeting was held on 23.12.2020 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans; WINTER BREAK 25.12.2020-03.01.2021** | | | | |
| January | 4.01.2021 | 30.01.2021 | Nucleosome, types of DNA and role of DNA, Replication of DNA.;  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 |
| February | 01.02.2021 | 27.02.2021 | 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. |  |
| **Departmental Meeting was held on26.2.2021 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| March | 01.03.2021 | 7.03.2021 | Revision |  |
|  | 8.03.2021 | --- | PU Semester Examinations |  |
| **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

**MEHR CHAND MAHAJAN DAV College for Women, Sector – 36A, Chandigarh**

**Monthly Teaching Plans - SECOND (Even Semester)**

**Session–(2020-21)**

**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

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| **S.No.** | **Date**  **(Monthly)** | | **Topics to be Covered** | **Academic Activity Undertaken\*** |
| **From** | **To** |
| **Departmental Meeting shall be held on 01 .04.2021 to discuss the various activities and teaching plan of the semester** | | | | |
| April | 01.04.2021 | 30.04.2021 | 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 |
| **Departmental Meeting shall be held on 30.04.2021 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| May | 01.05.2021 | 31.05.2021 | Non-allelic Gene Interactions: Dominant and recessive epistasis, supplementary genes,  Complementary genes, quantitative or polygenic inheritance, duplicate genes. Allelic gene  interactions: Incomplete dominance, codominance, multiple alleles, pleiotropic genes. | Lecture Method |
| **Departmental Meeting shall be held on 31.05.2021 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| June | 01.06.2021 | 30.06.2021 | 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. | Lecture Method |
| **Departmental Meeting was held on 30.06.2021 to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| July | 02.06.2021 | 31.07.2021 | 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. Revision Classes | Lecture Method; PPT |
| \***Departmental meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans** | | | | |
| August | 1.08.2021 | --- | PU Semester Examination |  |

**\*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