**P.G. GOVT COLLEGE FOR GIRLS, SECTOR-42, CHANDIGARH**

**Teaching Plan Even Semester**

**Session (2018-19)**

**Class:** M.Sc. I (Sem. 2nd)  **Name:** Dr. Radha Chauhan

**Subject:** Gymnosperms **Period:** 2nd , 3rd, 5th (3,5,6)

**Paper:** VII  **Room No:** 211

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| **S. No** | **Dates** | **Topics to be covered** |
| Week 1 | 14 /01/2019 – 19/01/2019 | General characteristics, Distribution, Detailed study of Aneurophytales, Archaeopteridales, Protopityales, |
| Week 2 | 21/01/2019 –  25/01/2019 | Lyginopteridaceae, Glossopteridaceae |
| Week 3 | 28/01/2019 –  2/02/2019 | Medullosaceae, Caytoniaceae, Bennettitaceae |
| Week 4 | 4/02/2019 –  9/02/2019 | Cycadales, Williamsoniaceae, |
| Week 5 | 11/02/2019 –  16/02/2019 | Wiellandiellaceae, Coniferales: General account |
| Week 6 | 18/02/2019 –  23/02/2019 | Pinaceae, Taxodiaceae |
| Week 7 | 25/02/2019 –  02/03/2019 | Podocarpaceae, Cephalotaxaceae |
| Mid Semester Exam | | |
| Week 8 | 11/03/2019 –  16/03/2019 | Ginkgoales, Taxales |
| Week 9 | 18 /03/2019 –  22/03/2019 | Gnetales, Araucariaceae, |
| Week 10 | 25/03/2019 –  30/03/2019 | Sciadopityaceae, Cordaitales, |
| Week 11 | 1/04/2019 –  6/04/2019 | Pentoxylales, Classification of Gymnosperms |
| Week 12 | 8/04/2019 –  12/04/2019 | Classification of Gymnosperms, Male gametophytes, |
| Week 13 | 15/04/2019 –  20/04/2019 | Structure and Evolution of Archegonium in Gymnosperms |
| Week 14 | 22/04/2019 –  27/04/2019 | Cytology of Gymnosperms |
| Week 15 | 29 /04/2019 –  3/05/2019 | Economic importance of Gymnosperms |

**P.G. GOVT COLLEGE FOR GIRLS, SECTOR-42, CHANDIGARH**

**Teaching Plan Even Semester**

**Session (2018-19)**

**Class:** M.Sc. I (Sem. 2nd)  **Name:** Dr. Radha Chauhan

**Subject:** Reproductive Biology of Angiosperms **Period:** 1st, 3rd (1,2,4,6)

**Paper:** IX **Room No:** 211

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| **S. No.** | **Date From** | **Topics to be covered** |
| Week 1 | 14 /01/2019 – 19/01/2019 | Structure of anthers, Microsporogenesis, Role of tapetum, Pollen development, |
| Week 2 | 21/01/2019 –  25/01/2019 | Sperm dimorphism, Pollen wall structure, Male sterility, Pollination mechanisms and vectors, |
| Week 3 | 28/01/2019 –  2/02/2019 | Apomixis: Types and evolutionary significance |
| Week 4 | 4/02/2019 –  9/02/2019 | Hybrid seed production, Pollen  viability and storage |
| Week 5 | 11/02/2019 –  16/02/2019 | Ovule development, Megasporogenesis |
| Week 6 | 18/02/2019 –  23/02/2019 | Organization of Embryo sac, structure of embryo sac cells |
| Week 7 | 25/02/2019 –  02/03/2019 | Floral characteristics, breeding systems |
| Mid Semester Exam | | |
| Week 8 | 11/03/2019 –  16/03/2019 | Structure of the pistil, Pollen-stigma interactions and pollen tube growth and guidance. |
| Week 9 | 18 /03/2019 –  22/03/2019 | Sporophytic self – incompatibility |
| Week 10 | 25/03/2019 –  30/03/2019 | Gametophytic self – incompatibility |
| Week 11 | 1/04/2019 –  6/04/2019 | Double fertilization, *in vitro* fertilization |
| Week 12 | 8/04/2019 –  12/04/2019 | Endosperm: Development and types |
| Week 13 | 15/04/2019 –  20/04/2019 | Development of embryo in Monocots |
| Week 14 | 22/04/2019 –  27/04/2019 | Development of embryo in Dicots |
| Week 15 | 29 /04/2019 –  3/05/2019 | Seed: Structure and formation |

**P.G. GOVT COLLEGE FOR GIRLS, SECTOR-42, CHANDIGARH**

**Teaching Plan Even Semester**

**Session (2018-19)**

**Class:** M.Sc. 1st (Sem. 2nd)  **Name:** Dr. Radha Chauhan

**Subject:** Angiosperm, Morphology, Taxonomy **Period:** 2nd (1-4)

and Phylogeny

**Paper:** VIII **Room No:** 211

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| **S. No.** | **Date From** | **Topics to be covered** |
| Week 1 | 14 /01/2019 – 19/01/2019 | System of classification-Benthem& Hooker, Phylogenetic system-detailed, |
| Week 2 | 21/01/2019 –  25/01/2019 | Botanical nomenclature and ICBN, BSI, Diagnostic keys, Principles of systematics, |
| Week 3 | 28/01/2019 –  2/02/2019 | Botanical Gardens, Taxonomic literature, , Malvaceae, Phylogeny of Angiosperms, |
| Week 4 | 4/02/2019 –  9/02/2019 | Biosystematics, Caryophyllaceae, Species concept, Cruciferae |
| Week 5 | 11/02/2019 –  16/02/2019 | Fumariaceae, Asteraceae, Nyctaginaceae |
| Week 6 | 18/02/2019 –  23/02/2019 | Ranunculaceae, Euphorbiaceae |
| Week 7 | 25/02/2019 –  02/03/2019 | Apocynacaeae, Cyperaceae, Rhamnaceae, Araceae |
| Mid Semester Exam | | |
| Week 8 | 11/03/2019 –  16/03/2019 | Phytogeography, Papaveraceae, Lythraceae, Cucurbitaceae. |
| Week 9 | 18 /03/2019 –  22/03/2019 | Evolution of Stamen & Carpel, Combretaceae, Liliaceae, Graminae |
| Week 10 | 25/03/2019 –  30/03/2019 | Scrophulariaceae, Cactaceae, Rosaceae |
| Week 11 | 1/04/2019 –  6/04/2019 | Myrtaceae, Solanaceae, Asclepediaceae |
| Week 12 | 8/04/2019 –  12/04/2019 | Primulaceae, Rutaceae, Meliaceae, Anacardiaceae |
| Week 13 | 15/04/2019 –  20/04/2019 | Umbelliferae, Boraginaceae, Leguminosae, Oleaceae |
| Week 14 | 22/04/2019 –  27/04/2019 | Polygonaceae, Amaranthaceae, Cannabinaceae |
| Week 15 | 29 /04/2019 –  3/05/2019 | Cannaceae, Orchidaceae, Amaryllidaceae, Palmae |