**PG.GOVT COLLEGE FOR GIRLS, SECTOR-42, CHANDIGARH**

**Teaching Plan Session Odd Semester**

**(2018-19)**

**Class:** B.Sc. III, M.Sc. II **Name of the Teacher:** Dr.Manvi Malwal

**Subject:** Plant Physiology, **Period:** 1 **Room No:** 218

\*Moleculer Biology 4,5,6 :211

\*\*Cytogenetics 1,2,5 :213,224,211

**Paper:** Plant Physiology- Paper A **Room No:** 218

Moleculer Biology- 211

Cytogenetics - 213, 224,211

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| **S. No** | **Date From** | | **Date Upto** | **Topics to be covered** |
| Week 1 | **(For ongoing classes)** | | | Admissions |
| July 24, 2018 | | July 28, 2018 | Admissions |
| Week 2 | July 30, 2018 | August 4, 2018 | | **B.Sc. III:** Water and plant cell. |
| **M.Sc. II: \*:-** cell cycle and apoptosis, mechanism of programmed cell death.  **\*:-** Mutation |
| Week 3 | August 6, 2018 | August 11, 2018 | | **B.Sc. III:** Plasmolysis& deplasmolysis,water potential, osmosis, diffusion |
| **M.Sc. II: \*:-** Nucleic Acid*A-, B- , Z-DNA,* RNA  **\*\*:-** Transposons |
| Week 4 | August 13, 2018 | August 18, 2018 | | **B.Sc. III:** Structure of root,Absorption of water, active& passive pathway |
| **M.Sc. II: \*:-** Biosynthesis of Nucleotides and Biological importance of the  nucleotides.  **\*\*:-** DNA damage &repair |
| Week 5 | August 20, 2018 | August 25, 2018 | | **B.Sc. III:** Transpiration |
| **M.Sc. II: \*:-**Replication of DNA  **\*\*:-** structure changes in chromosomes |
| Week 6 | August 27, 2018 | September 1, 2018 | | **B.Sc. III:** Hydroponis, Macro& Microelements |
| **M.Sc. II: \*:-** different DNA enzymes  **\*\*:-** structure changes in chromosomes |
| Week 7 | September 3, 2018 | September 8, 2018 | | **B.Sc. III:** mechanism of mineral uptake |
| **M.Sc. II: \*:-** RNA  **\*\*:-** numerical changes in chromosomes |
| Week 8 | September 10, 2018 | September 15, 2018 | | **B.Sc. III:** mechanism of mineral uptake ( modern view) |
| **M.Sc. II: \*:-**Biosynthesis of different type of RNA  **\*\*:-** numerical changes in chromosomes |
| Week 9 | September 17, 2018 | September 22, 2018 | | **B.Sc. III:** Revision |
| **M.Sc. II: \*:-** RNA Processing  **\*\*:-** numerical changes in chromosomes |
| Week 10 | September 24, 2018 | September 29, 2018 | | **B.Sc. III:** Class Test |
| **M.Sc. II: \*:-** RNA transport  **\*:-**Immune Responses, antigens, immunoglobins, MHC, application of immunological principles.  **\*\*:-** |
| Week 11 | October 1, 2018 | October 8, 2018 | | **B.Sc. III:** Nitrogen Fixation |
| **M.Sc. II: \*:-** RNA transport  **\*\*:-** numerical changes in chromosomes |
| **MID SEMESTER EXAMINATION (October 11, 2018 to October 17, 2018)** | | | | |
| Week 12 | October 20, 2018 | October 27, 2018 | | **B.Sc. III:** Biological Nitrogen Fixation, importance of nitrate reductase and its regulation, ammonia assimilation |
| **M.Sc. II: \*:-** Translation  **\*\*:-** Restriction Maps and Molecular Genetic Maps |
| Week 13 | October 29, 2018 | November 3, 2018 | | **B.Sc. III:** structure & functions of lipids |
| **M.Sc. II: \*:-** post translation processing of polypeptides  **\*\*:-** FISH, GISH; chromosome jumping; Random amplified polymorphic DNA and  AFLP techniques. |
| Week 14 | November 5, 2018 | November 10, 2018 | | **B.Sc. III:** saturated & unsaturated fatty acids. |
| **M.Sc. II: \*:-** control & function of genes  **\*\*:-** Nuclear DNA contents; C-value paradox, cot curve and its  significance; Southern Northern and Western Blotting Techniques, Polymerase Chain Reaction. |
| Week 15 | November 12, 2018 | November 17, 2018 | | **B.Sc. III:** classification, role & structure of proteins |
| **M.Sc. II: \*:-** Regulation of gene expression in eukaryotes, model of control, translation enzymatic & hormonal control  **\*\*:-** Alien Gene Transfer through Chromosome Manipulations; characterization and utility of alien addition and substitution lines. |
| Week 16 | November 19, 2018 | November 22, 2018 | | **B.Sc. III:** enzymes: discovery nomenclature, classification, properties and factors |
| **M.Sc. II: \*:-** cancer biochemistry& mol bio , cell cycle, threauptic interventions of uncontrolled cell growth  **\*\*:-** Transfer of whole genome, transfer of individual chromosomes and chromosome segments; methods for detecting alien chromatin, |
| Week 17 | November 26, 2018 | December 1, 2018 | | **B.Sc. III:** Revision |
| **M.Sc. II:** Revision |