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

**Teaching Plan Session (2016-17)**

**Class: B.Sc.- II & M.Sc.- I, II Name of the Teacher: Dr. Rashmi Kohli**

**Subject: Zoology**

**Paper : B.Sc II: Biodiversity (Chordates) and Evolution (Paper-A)**

**M.Sc I: Endocrinology and Neural Physiology (Paper -IX)**

**M.Sc II: Cytogenetics and Molecular Genetics (Paper -XX)**

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| **S. No.** | **Date From** | **Date Upto** | | **Topics to be covered** |
| Week 1 | Jan. 11, 2017 | Jan. 14, 2017 | | Paper Discussions |
| Week 2 | Jan. 16, 2017 | Jan. 21, 2017 | | **B.Sc II**: Aves: Introduction, General Characters, Digestive System. |
| Week 3 | Jan. 23, 2017 | Jan. 28, 2017 | | **M.Sc I:** Chemical nature of hormones, steroid hormones, amino acid derived hormones, catecholamines and peptide hormones.  **M.Sc II:** Law of DNA constancy and C value paradox, salivary and Lampbrush chromosomes. |
| Week 4 | Jan. 30, 2017 | Feb. 4, 2017 | | **B.Sc II:** Aves: Respiratory, Circulatory system. |
| Week 5 | Feb. 6, 2017 | Feb. 11, 2017 | | **M.Sc I:** Mechanism of hormone action, steroid hormone receptor interactions and signal transduction.  **M.Sc II:**Molecular basis of mutation, physical and chemical mutagens, radiation mutagenesis, site directed mutagenesis, target theory. |
| Week 6 | Feb. 13, 2017 | Feb. 18, 2017 | | **B.Sc II:** Aves: Excretory, flight adaptations. |
| Week 7 | Feb. 20, 2017 | Feb. 25, 2017 | | **M.Sc I:** Autocrine, paracrine and telocrine regulation of hormones, Hormonal imbalance.  **M.Sc II:** Regulation of gene function, operon hypothesis, pro and eukaryotic operons, induction and represion, complex gene clusters. |
| Week 8 | Feb. 27, 2017 | Feb. 28, 2017 | | **B.Sc II:** Aves: Feathers, Nervous system and sense organs. |
| **First Week March (Mid Semester Exam)** | | | | |
| Week 9 | Mar. 9, 2017 | | Mar. 11,2017 | **M.Sc I:** pineal-hypothalmo hypophyseal gonadal axis.  **M.Sc II:** Linkage and genetic maps, dosage compensation, properties of genetic code, mutations in genetic code, Wobble’s hypothesis. |
| Week 10 | Mar. 13, 2017 | | Mar. 18, 2017 | **B.Sc II:** Mammals: general characters, dentition. |
| Week 11 | Mar. 20, 2017 | | Mar. 25, 2017 | **M.Sc I:** Hormonal elaborations of Pancreas , adrenals.  **M.Sc II:** Fine structure of gene, eukaryotic genome organization, DNA damage and repair. |
| Week 12 | Mar. 27,2017 | | April 1, 2017 | **B.Sc II:** Mammals: Digestive, Respiratory system. |
| Week 13 | April 3, 2017 | | April 8, 2017 | **M.Sc I:** Hormonal elaborations of Thyroid and parathyroid.  **M.Sc II**: DNA replication, amplification , rearrangements, Transcription of Pro and Eukaryotes, RNA processing. |
| Week 14 | April 10, 2017 | | April 15, 2017 | **B.Sc II:** Mammals: Circulatory, Excretory system. |
| Week 15 | April 17, 2017 | | April 22, 2017 | **M.Sc I:** Hormonal elaborations of GI Tract, Prostaglandins.  **M.Sc II**: Ribonucleoproteins, structure of mRNA, Protein synthesis. |
| Week 16 | April 24, 2017 | | April 29, 2017 | **B.Sc II:** Mammals: Reproductive, Nervous system and Sense organs. |
| Week 17 | April 30, 2017 | | May 6, 2017 | **M.Sc I:** Endocrine control of spermatogenesis and oogenesis, folliculogenesis in mammals.  **M.Sc II**: Principles and methods of genetic engineering and its applications in health, industry and agriculture. |