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

**Teaching Plan**

**Class: M.Sc. II & B.Sc. III Paper: XV & A**

**Subject: Advances In Entomology & Session: 2015-16**

**Development biology and Genetics**

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| **S. No** | **Date From** | **Date Up to** | **Topics to be covered** |
| Week 1 | 22nd Jul | 25th Jul | **M.Sc.II:** Salient features with suitable examples of the various insect orders |
| Week 2 | 27th Jul | 1st Aug | **B.Sc. III:** Gametogenesis with particular reference to differentiation of spermatozoa, vitellogenesis |
| Week 3 | 3rd Aug | 8th Aug | **M.Sc.II:** Digestive System, Respiratory System, Nervous System |
| Week 4 | 10th Aug | 14th Aug | **B.Sc. III:** Hormonal control of gametogenesis,  Egg maturation; egg membranes ; polarity of egg |
| Week 5 | 17th Aug | 22nd Aug | **M.Sc.II:** Reproductive System, Post embryonic development and types of metamorphosis in insects. |
| Week 6 | 24th Aug | 29th Aug | **B.Sc. III:** Extranuclear inheritance : Kappa particles in Paramecium |
| Week 7 | 31st Aug | 5th Sept | **M.Sc.II:** Structural modifications in the larvae & pupae, Parthenogenesis in insects. |
| Week 8 | 7th Sept | 12th Sept | **B.Sc. III:** Linkage, crossing over and recombination |
| Week 9 | 14th Sept | 19th Sept | **M.Sc.II:** Effect of temperature and photopteriod on the lives of insects, details of onset,  termination and significance of diapause. |
| Week 10  (including mid term) | 21st Sept | 3rd Oct | **B.Sc. III:** Regulation of gene expression in prokaryotes (Operon model) and in eukaryotes, Population genetics |
| Week 11 | 5th Oct | 10th Oct | **M.Sc.II:** Plant host-insect interaction, Sericulture, Apiculture |
| Week 12 | 12th Oct | 21st Oct | **B.Sc. III:** Modification of Mendelian ratios |