**DEPARTMENT OF BOTANY**

**Teaching Plan 2020-21**

 **(Even Semester)**

**Dr. Divya Verma**

**GE Botany 1st Year, Sem I**

**Generic Elective-I Plant Anatomy and Embryology (Practical) Group 1**

| **Name of Paper & Code** | **Allocation of Lectures** | **Month wise schedule**  |
| --- | --- | --- |
| * Tissues and Study of meristems through permanent slides and photographs.
* Stem: Monocot: *Zea mays;* Dicot: *Helianthus*
* Root: Monocot: *Zea mays*; Dicot: *Helianthus*
* Leaf: Dicot and Monocot leaf.
* Secondary growth stem and root
 | 5 Practical | November -December |
| * Dissection of embryo/endosperm from developing seeds.
* Structure of anther (young and mature), tapetum (amoeboid and secretory)
* Types of ovules: anatropous, orthotropous, circinotropous, amphitropous, campylotropous.
 | 4 Practical | January |
| * Calculation of percentage of germinated pollen in a given medium.
* Female gametophyte: Polygonum (monosporic) type of Embryo sac Development.
* Ultrastructure of mature egg apparatus cells through electron micrographs.
* Pollination types and seed dispersal mechanisms (including appendages, aril, caruncle).
* Adaptive anatomy: Xerophyte (Nerium leaf); Hydrophyte (Hydrilla stem).
* Revision
 | 4 Practical | February |
| * Mock Exam
 | 1 Practical | March |