**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** |
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| * 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 |