

# **COURSE- LABORATORY PRACTICAL (BSCBO-204)**

## **UNIT SCHEDULE**

### **BLOCK-1- DIVERSITY OF ANGIOSPERMS**

**Unit-1-** Identification of locality available plants belonging to the families mentioned in the syllabus, their description in semi technical language- Ranunculaceae, Caryophyllaceae, Rutaceae, Rosaceae, Fabaceae, Asclepiadaceae, Solanaceae, Acanthaceae, Lamiaceae, Orchidaceae, Liliaceae, and Poaceae

**Unit-2-** Collection of plant specimens-herbarium and /or live specimen

**Unit-3-** T.S. of anther

**Unit-4-** Study of various types of pollen grains, placentations, ovules development using temporary and permanent preparations

### **BLOCK-2- EMBRYOLOGY, ANATOMY AND MORPHOGENESIS**

**Unit-5-** Demonstration of usual techniques of plant anatomy, section cutting, T.S., L.S. of leaf, stem and root

**Unit-6-** Normal and abnormal secondary growth in *Bougainvillea*, *Nyctanthes*, *Dracaena*, *Tinospora* and Orchids,

**Unit-7-** Influence of growth regulators on root formations, senescence and pollen germination (hanging drop method).

**Unit-8-** Structure and organization of the shoot apex-*Hydrilla verticellata*, *Ranunculus scleretus* and *Euphorbia hirta*

### **BLOCK-3- PLANT ECOLOGY AND BIOSTATISTICS**

**Unit-9-** Determine the minimum size and number of quadrat by species area curve method for the vegetational analysis of the given area.

**Unit-10-** Determine frequency (comparison of frequency diagram with Ruankiaer's normal frequency diagram), density and abundance of each species in a community by quadrat method.

**Unit-11-** Determine the mean basal cover and total basal cover.

**Unit-12-** Statistical problems of central tendencies- mean, median, mode and Standard deviation and Chi-square test