

Department of Botany

SKILL DEVELOPMENT NEEDS

SEMESTER I & II

UBBTC20/ UABTC20- OPTIONAL ALLIED BOTANY PRACTICAL /ALLIED BOTANY PRACTICAL

Year/ Sem	Course Code	Title of the Course	Course Type	Course Category	H/W	Credits	Marks
I Year I and II Sem	UBBTC20	Optional Allied Botany Practical	Practical	Allied	2	2	40+60=100
II Year III and IV Sem	UABTC20	Allied Botany Practical	Practical	Allied	2	2	40+60=100

Course Outcomes (CO):

On completion of the course, the students will be able to,

1. Identify and describe the plants in technical terms belonging to the families prescribed in the theory syllabus.
2. Distinguish and analyse the microscopic and macroscopic study of Cryptogams.
3. Examine the internal features of Dicot and Monocot- root, stem and leaf.
4. Interpret the Physiology experiments.
5. Illustrate the horticultural practices- cutting, layering and grafting.

1.Taxonomy:

1.1 Describe the plants in technical terms belonging to the following families
Caesalpiniaceae, Rubiaceae, Asclepiadaceae, Amaranthaceae and Liliaceae

2.Anatomy:

- 2.1 Sectioning of Dicot and Monocot stem
- 2.2 Sectioning of Dicot and Monocot root
- 2.3 Sectioning of Dicot and Monocot leaf

3.Demonstration of Physiology experiments:

- 3.1 Potato osmoscope
- 3.2 Ganong's potometer
- 3.3 Ganong's light screen experiment

3.4 Test tube and funnel experiment

3.5 Ganong's respiroscope

4.Observation of microscopic and macroscopic materials/photomicrographs:

4.1 Algae, Fungi, Bryophyta, Pteridophyta and Gymnosperms

4.2 Embryology

4.3 Ecology

4.4 Cytology

4.5 Biotechnology

4.6 Horticulture.

Reference Books:

1. Gamble, J.S.- The Flora of Presidency of Madras. Vol. I, II and III. Bishen Singh and Mahendra Pal Singh, Dehra Dun. 1919-1925.
2. Dr. Ashok M. Bendra and Dr. Ashok Kumar – A text book of Practical Botany –I,II ,Rastogi Publications, New Delhi, 2009-2010.