DEPARTMENT OF BOTANY				*CLASS: II B.Sc. Botany*				
Sem	**Course Type**	**Course Code**	**Course Title**	**Credits**	**Contact Hours/week**	**CIA**	**Ext**	**Total**
III	Major Core Practical	20U3BMP3	**Major Practical III**	2	3	40	60	100

Nature of Course				
Knowledge and skill	✓		Employability oriented	✓
Skill oriented	✓		Entrepreneurship oriented	

Course Objectives: This course will enable the students

1. To train students for identifying plants based on morphological observations.
2. To dissect the various members of angiosperm families by examining their vegetative and reproductive characters.
3. To enrich the knowledge on the use of economically important plants in our daily life.

Practicals:

1. Morphological observation of various plant parts and their modifications.
2. Dissection offloral parts of plants belonging to the dicotyledonous families Nymphaeaceae, Brassicaceae, Malvaceae, Rutaceae, Meliaceae, Myrtaceae, Cucurbitaceae, Rubiaceae, Asteraceae, Sapotaceae, Acanthaceae, Lamiaceae, Amaranthaceae, Aristolochiaceae and Euphorbiaceae.
3. Dissection of floral parts of plants belonging to the monocotyledonous familiesOrchidaceae, Commelinaceae and Poaceae
4. Field trips (minimum 2 days) to places within or outside the state under the guidance of teachers to study plants in their natural habitats.
5. Preparation and submission of minimum 10 herbarium sheets.
6. Identification of economically important plants and their uses.
7. Submission of record note book and field report note.

Rationale for Nature of the Course

The students acquire profound practical skills in the laboratory with scientific observations in the field of morphology and plant taxonomy thereby enriching a thorough understanding on the field aspects of identifying plants.

Activities having direct bearing on Skill development / Employability / Entrepreneurship

The course will help the students to develop their skills on the nuances of morphological aspects of angiosperms and the importance of economically important plants in our day today life which enables them to get a position in pharmaceutical industries.

Pedagogy

Chalk and Talk, Power Point, Group Discussion, Seminar, Interaction, Problem Solving, Quiz, Virtual Labs, You Tube Videos& Learning Management System (CANVAS).

Course Designer: Dr. N. Janakiraman, Assistant Professor

Lecture Schedule

S. No.	Description	Hours	Mode
1	Morphological observation of plant parts and their modifications	3	Plant specimens
2	Study the vegetative characters and dissect the floral parts of Nymphaeaceae, Brassicaceae and Malvaceae	6	Dissection
3	Study the vegetative characters and dissect the floral parts of Rutaceae, Meliaceae and Myrtaceae	6	Dissection
4	Study the vegetative characters and dissect the floral parts of Cucurbitaceae, Rubiaceae and Asteraceae	6	Dissection
5	Study the vegetative characters and dissect the floral parts of Sapotaceae, Acanthaceae, Lamiaceae	6	Dissection
6	Study the vegetative characters and dissect the floral parts of Amaranthaceae, Aristolochiaceae, Euphorbiaceae	6	Dissection
7	Study the vegetative characters and dissect the floral parts of Orchidaceae, Commelinaceae and Poaceae	6	Dissection
8	Preparation of herbarium	3	Preparation
9	Identification of economically important plants and their uses	3	Plants specimens and their products
Total		**45**	

Course Learning Outcomes

On successful completion of the course, the students will be able to know, understand, apply and analyse

CLOs	CLO Statement	Knowledge Level
CLO 1	The morphological aspects of various plant parts	**Up to K4**
CLO 2	The dissection of the floral parts of dicotyledonous families and study their reproductive structures	**Up to K4**
CLO 3	The dissection of the floral parts of monocotyledonous families and study their reproductive structures	**Up to K4**
CLO 4	The utilization of economically important plants in daily life	**Up to K4**
CLO 5	The preparation and maintenance of herbarium sheets	**Up to K4**

Mapping Programme Specific Outcomes with Course Learning Outcomes

#	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9
CLO1	3	2	1	3	3	2	2	2	3
CLO 2	3	3	2	2	2	3	3	3	3
CLO 3	3	3	2	2	1	3	3	3	3
CLO 4	3	2	1	2	1	2	2	3	3
CLO 5	3	2	-	-	-	3	3	3	3

3 - Advance Application; 2 - Intermediate Level; 1 - Basic Level

Mapping Programme Outcomes with Course Learning Outcomes

#	PO 1	PO 2	PO3	PO4	PO5
CLO1	3	2	2	2	1
CLO2	3	3	3	3	3
CLO 3	3	3	3	3	3
CLO4	2	2	2	2	2
CLO 5	1	2	1	1	3

3 - Advance Application; 2 - Intermediate Level; 1 - Basic Level