Iyr B. Sc., Botany (Major)

COURSE OUT COMES (COs)

CO1. Identify problems and independently propose solutions using creative approaches, Acquired through interdisciplinary experiences, and a depth and breadth of knowledge/expertise in the field of Plant Identification

CO2. Students will be able to access the primary literature, identify relevant works for a particular topic, and evaluate the scientific content of these works.

CO3. Students will be able to apply fundamental mathematical tools (statistics, calculus) and physical principles (physics, chemistry) to the analysis of relevant biological situations.

CO4. Students will be able to identify the major groups of organisms with an emphasis on plants and be able to classify them within a phylogenetic framework. Students will be able to compare and contrast the characteristics of plants, algae, and fungi that differentiate them from each other and from other forms of life.

CO5. Students will be able to explain how Plants function at the level of the gene, genome, cell, tissue, Flower development. Drawing upon this knowledge, they will be able to give specific examples of the physiological adaptations, development, reproduction and mode of life cycle followed by different forms of plants.

PROGRAMME OUT COMES (PSOs)

On completion of the course, students are able to:

1). Understand the Biochemical nature of cell.

2). Understand the chemical nature of biomolecules and different types of interaction in Biomolecules.

3) Become aware of applications of different plants in various industries and equip the students with skills related to laboratory as well as industries based studies

4) They will learn about metabolism, catabolism and anabolism

5) Understand the concept, principle and types of sterilization methods.

6) Know the cultivation methods of bacteria, yeast, fungi and virus

7) Understand the fundamentals of Recombinant DNA Technology and Genetic Engineering.

8) Understand the principle and basic protocols for Plant Tissue Culture.

BOTANY (Major

Semester -1/ Course -1/Paper-2

(Introduction to Applied Biology)

COs-PSOs : Mapping

PSOs → / COs ↓		1	2	3	4	5	6	7	8
1	Students will be able to apply fundamental mathematical tools (statistics, calculus) and physical principles (physics, chemistry) to the analysis of relevant biological situations.	*	*	*				*	*
2	Students will be able to explain how Plants function at the level of the gene, genome, cell, tissue,			*	*				*
3	Students will be able to access the primary literature, identify relevant works for a particular topic, and evaluate the scientific content of these works.								*
4	Students will be able to identify the major groups of organisms and able to compare and contrast the characteristics of plants, algae, and fungi that differentiate them from each other			*			*		
5	Identify problems and independently propose solutions using creative approaches, acquired through interdisciplinary experiences, and a depth and breadth of knowledge/expertise in the field of Plant Identification.			*			*	*	*