# COURSE OUTCOME
## DEPARTMENT OF BOTANY

| SL. NO. | PAPER TITLE | PAPER CODE | COURSE OBJECTIVES | COURSE OUTCOMES |
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| 1 | MICROBIOLOGY AND PHYCOLOGY | CORE-I | The course objective is to introduce the students to the world of microbes and the range of diversity amongst the algae. | Students will be able to<br>• understand the diversity among bacteria, viruses and algae and<br>• understand their morphology and life cycle pattern. |
| 2 | BIOMOLECULES AND CELL BIOLOGY | CORE-II | The course objective is to introduce the students to the biomolecules and their specific attributes. | Students will be able to<br>• know about the types of biomolecules.<br>• Know about the structure of cell components. |
| 3 | MYCOLOGY AND PHYTOPATHOLOGY | CORE-III | The course objective is to introduce the students to the fungal diversity and various plant pathogens. | Students will be able to<br>• understand the biodiversity and importance of fungi<br>• get a basic idea on the scope and importance of plant pathology. |
| 4 | ARCHEGONIATE | CORE-IV | The course objective is to introduce the students to the world of archegoniates and their evolutionary significance. | Students will be able to know and understand the morphological diversity, economic importance and evolution of bryophytes, pteridophytes and gymnosperms. |
| 5 | ANATOMY OF ANGIOSPERMS | CORE-V | The course objective is to acquaint the students with various plant tissues and to introduce the concept of secondary growth of plants. | The students will be able to know about different tissue systems in angiosperms and how they function.<br>They will get a concept on different developmental theories of root and shoot development.<br>They will get a concept on different types of woods developed in plant body. |

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| 6 | **ECONOMIC BOTANY** | **CORE-VI** | The course objective is to enable the students to have an understanding on how cultivated plants originates and how they are introduces across the world. and the uses of plants in day to day life. | Students will be able to gain knowledge about the role of plants in human welfare and a brief idea on industrial application of different plant parts for economic purposes. |
| 7 | **GENETICS** | **CORE-VII** | The course objective is to acquaint the students about the basics of genetics and heredity and basic knowledge on mutations. | Students will be able to learn about Mendelian principles of inheritance and the deviations. They will understand about the cause of mutation. |
| 8 | **MOLECULAR BIOLOGY** | **CORE-VIII** | The course objective is to impart knowledge on different types of heredity material and replication, transcription and translation. | Students will be able to explore the molecular basis of plant life and learn about the synthesis and processing of DNA, RNA and proteins. |
| 9 | **PLANT ECOLOGY AND PHYTOGEOGRAPHY** | **CORE-IX** | The course objective is to acquaint the students with environment and plant interactions and the concept of biogeography. | Students will be able to understand plant communities and ecological adaptations in plants. |
| 10 | **PLANT SYSTEMATICS** | **CORE-X** | The course objective is to introduce the techniques of plant identification and provide a basic | Students will be able to understand the distinguishing features of angiosperm families and realize their origin with respect to time, place and probable ancestors. |

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| | | | concept on angiosperm evolution. | |
| 11 | **REPRODUCTIVE BIOLOGY OF ANGIOSPERMS** | **CORE-XI** | The course objective is to acquaint the students with development of flower and various stages of fertilization. | Students will be able to understand the importance of embryology. They will gain knowledge on fertilization, endosperm, and embryogeny. |
| 12 | **PLANT PHYSIOLOGY** | **CORE-XII** | The course objective is to acquaint the students with the various physiological processes inside the plant body. | Students will be able to understand the plant water relationship, nutrient uptake and flowering physiology. |
| 13 | **ANALYTICAL TECHNIQUES IN PLANT SCIENCES** | **DSE-I** | The course objective is to help the students understand the use of major laboratory instruments. | Students will be able to know about different techniques in plant sciences. |
| 14 | **NATURAL RESOURCE MANAGEMENT** | **DSE-II** | The course objective is to give students basic idea about the concept of different natural resources and their utilization. | The students will know about biological resource and its management. |
| 15 | **PLANT METABOLISM** | **CORE-XIII** | The course objective is to develop the basic concept of metabolic processes in the plant body. | Students gain knowledge on the process of photosynthesis, respiration and ATP synthesis. |
| 16 | **PLANT BIOTECHNOLOGY** | **CORE-XIV** | The course objective is to acquaint the students with various fields of | Students will be able to understand the basic principles of plant tissue culture and acquire knowledge on genetic transformation methods and metabolic engineering. |

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| | | | biotechnology and their applications. | |
| 17 | **HORTICULTURE PRACTICES AND POST HARVEST TECHNOLOGY** | **DSE-III** | The course objective is to enable the students to get knowledge about different cultivation practices and disease management. | The students will know about important practices in horticulture and its techniques. |
| 18 | **BIODIVERSITY (MICROBES, ALGAE, FUNGI & ARCHEGONIATE)** | **GE-I** | The objective is to make students familiar with special groups of bacteria, viruses, fungi, algae and plants reproduction.to introduce students with various fungal groups and lichens. | The students will be to<br>• understand the world of fungi and pathogens of plants<br>• appreciate the characteristics of fungi<br>• understand the ecological and economic significance of lichen.<br>• Understand the economic and pathological importance of fungi, bacteria and viruses.<br>• Identify common plant diseases and their control measures |
| 19 | **PLANT PHYSIOLOGY & METABOLISM** | **GE-II** | The course aims at making students realize how plants function, importance of water, minerals, hormones and light in plant growth and development. | The students are able to<br>• Correlate morphology, anatomy, cell structure and biochemistry with plant functioning. |

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