Core Course Outcome - Botany

NAME OF PAPER	COURSE OUTCOME
Angiosperm Anatomy	• Demonstrate ability to differentiate plant organs by observing anatomical features • Understand non-living inclusions of plants their significance • Differentiate tissues and their functions • Primary and secondary growth of plant organs
Methodology and perspective of Plant Science	• Develop scientific temper and problem solving skills • Develop scientific temper • Summarize, organize and display qualitative data & derive conclusion
Research Methodology and Micro techniques	• Develop scientific temper and problem solving skills • Develop scientific temper • Summarize, organize and display qualitative data & derive conclusion • Prepare permanent slides, applying the histo chemical techniques
Micro technique and Horticulture	• Prepare permanent slides, applying the histo chemical techniques • Apply various horticultural practices in the field. • Experiment on the subject and try to become entrepreneurs.
Microbiology, Mycology, Lichenology & Plant pathology	• Basics of microbial life and their economic importance • Analyze ecological role played by bacteria, fungi, lichen. • Identify plant disease and find out control measures in our locality • Realize the significance of study of plant disease in terms of crop production

General Informatics and Bioinformatics	• Analyze the role of biotechnology in daily life. • Understand the basic aspects of bioinformatics. • Introduction to general IT
Phycology, Bryology, Pteridology	• Appreciate the diversity and evolutionary significance of lower plant groups. • Classify algae, bryophytes and pteridophytes. • Understand the economic and ecological importance of lower plant groups.
Microbiology, Mycology, Phycology Lichenology & Plant pathology	• Basics of microbial life and their economic importance • Analyze ecological role played by bacteria, fungi, lichen. • Identify plant disease and find out control measures in our locality • Realize the significance of study of plant disease in terms of crop production • Classify algae and study their economic importances
Gymnosperms, Palaeobotany, Phytogeography and Evolution.	• Understand the role of gymnosperms as a connecting link between pteridophytes and angiosperms • Appreciate the process of organic evolution. • Realize the importance of fossil study. • Understand the climatic conditions of the past and realize the changes happened • Recognize the phytogeographic zones of India
Bryology, Pteridology, Gymnosperms, Palaeobotany	• Understand the role of gymnosperms as a connecting link between pteridophytes and angiosperms • Realize the importance of fossil study. • Appreciate the diversity and evolutionary significance of lower plant groups. • Economic important of lower groups
Angiosperm Morphology, Plant Anatomy Reproductive Botany and plant palynology	• Appreciate the diverse morphology of angiosperms. • Explain various developmental details of angiosperms. • Realize the significance and applications of palynology. • Demonstrate ability to differentiate plant organs by observing anatomical features • Understand non-living inclusions of plants their significance • Differentiate tissues and their functions • Primary and secondary growth of plant organs

Angiosperm Morphology and Systematics	• Appreciate the diverse morphology of angiosperms. • Identify and classify plants based on taxonomic principles. • Make scientific illustrations of vegetative and reproductive structures of plants. • Develop the skill of scientific imaging of plants. • Realize the importance of field study. • Change their attitude towards over exploitation of rare/endemic plants.
Angiosperm Systematics, Economic Botany and Etnobotany	• Identify and classify plants based on taxonomic principles. • Make scientific illustrations of vegetative and reproductive structures of plants. • Develop the skill of scientific imaging of plants. • Realize the importance of field study. • Change their attitude towards over exploitation of rare/endemic plants
Embryology, Palynology, Economic botany, Ethnobotany & Horticulture	• Explain various developmental details of angiosperms. • Realize the significance and applications of palynology. • Apply various horticultural practices in the field. • Experiment on the subject and try to become entrepreneurs. • Identify the economically important plants.
General and Bioinformatics, Introductory Biotechnology, Molecular Biology	• Critically evaluate the advantages of tissue culture and horticulture over conventional methods of propagation. • Analyze the role of biotechnology in daily life. • Understand the basic aspects of bioinformatics. • Explain the concepts in molecular biology.
Genetics and Plant Breeding	• Appreciate the facts behind heredity and variations. • Understand the basic principles of inheritance. • Solve problems related to classical genetics. • Predict the pattern of inheritance. • Understand various plant breeding techniques. • Realize the role of plant breeding in increasing crop productivity.
Environmental Science, Phytogeography and Evolution	• Appreciate the process of organic evolution. • Understand the climatic conditions of the past and

	realize the changes happened • Recognize the zones of India • Realize the importance of ecological studies. • Develop environmental concern in all their actions and practice Reduce, Reuse and Recycle. • Try to reduce pollution and environmental hazards and change their attitude towards throwing away plastic wastes. • Spread awareness of the need of conservation of biodiversity and natural resources. • Analyze the reasons for climate change and find out ways to combat it.
Cell biology and Biochemistry	• Appreciate the ultra-structure of a plant cell. • Enumerate the functions of each cell organelle. • Draw and explain the structure of biomolecules.
Plant Physiology, Metabolism and Biochemistry	• Identify the physiological responses of plants. • Analyze the role of external factors in controlling the physiology of plants. • Explain the metabolic processes taking place in each cell. • Appreciate the energy fixing and energy releasing processes taking place in cells. • Draw and explain the structure of biomolecules.
Environmental Science	• Realize the importance of ecological studies. • Develop environmental concern in all their actions and practice Reduce, Reuse and Recycle. • Try to reduce pollution and environmental hazards and change their attitude towards throwing away plastic wastes. • Spread awareness of the need of conservation of biodiversity and natural resources. • Analyze the reasons for climate change and find out ways to combat it.
Cell biology, Genetics and Plant Breeding	• Understand various techniques employed for increasing crop productivity. • Identify diseases affecting crop plants. • Attain general awareness on various crop research stations of the country. • Appreciate the ultra-structure of a plant cell. • Enumerate the functions of each cell organelle.

Plant Physiology and Metabolism	• Identify the physiological responses of plants. • Analyze the role of external factors in controlling the physiology of plants. • Explain the metabolic processes taking place in each cell. • Appreciate the energy fixing and energy releasing processes taking place in cells.
Genetics and Crop Improvement	• Understand various techniques employed for increasing crop productivity. • Identify diseases affecting crop plants. • Attain general awareness on various crop research stations of the country.