

DEPARTMENT OF BOTANY

SEMESTER-I

Course Code:BOT101

Course Outcomes

After completion of the course the student is able to:

CO1.Understand the characteristics of bacteria and viruses

CO2. Identify the characteristics of algae

CO3. Understand the classification and characteristics of fungi

CO4. Identify the classification and characteristics of bryophytes

CO 5.Understand the morphological diversity of Bryophytes and Pteridophytes

CO 6.Know the taxonomic position, occurrence, thallus structure, reproduction of Bryophytes.

Co7.Know the evolution of Bryophytes and Pteridophytes

SEMESTER-II

Course Code:BOT201

Course Outcome

After completion of the course the student is able to:

CO1. Understand the diversity of Gymnosperms and economic importance.

CO2. Know the evolutionary trends and affinities of living gymnosperms with respect to external and

internal features

CO3. Know the conceptual development of "taxonomy" and "systematics"

CO4. Learn the types of classifications- Natural and phylogenetic.

CO5. Learn about the characters of biologically important families of angiosperms.

CO 6. Know the floral variations in angiospermic families, their phylogeny and evolution.

CO 7. Understand various rules, principles and recommendations of plant nomenclature in plant identification.

CO8. Understand the concept, types, development and functions of various ecosystems and their communication.

CO9. Study of herbarium techniques.

CO 10. Learn the taxonomic evidences from cytological, embryological, numerical and chemicals.

SEMESTER-III

Plant Anatomy and Embryology

Course Code: BOT301

Course Outcome

After completion of the course the student is able to:

CO1. Develop an understanding of concepts and fundamentals of plant anatomy

CO2. Examine the internal anatomy of plant systems and organs

CO3. Develop critical understanding on the evolution of concept of organization of shoot and root apex.

CO4. Analyze the composition of different parts of plants and their relationships

CO5. To identify and compare structural differences among different taxa of vascular plants.

CO6. Learn about double fertilization and their significance

CO 7. To know the structure and development of monocot and dicot embryos.

Semester-III
Skill Enhancement Course SEC-1 (Credits -2)

Course Outcomes:

After completion of the course the student is able to:

CO1. To Learn the importance of Nursery and Gardening, the career and occupational opportunities

CO2. To Learn the techniques of gardening - Types, methods & Tools

CO3. The students will acquire sufficient academic and practical experiences and become self-employed in the nursery ventures.

CO4. The students will learn about how to prepare suitable soil media for potting up, seedling and cutting.

CO5. To impart the skills like germinating seed and transplant seedlings and cutting into pots

CO6. To understand the entrepreneurial skills in nursery technology

Semester-III

SEC-2 Biofertilizers and Organic Farming

Course Code: SEC/BOT301

Course Outcomes:

After completion of the course the student is able to:

CO1.To Learn the importance of Nursery and Gardening, the career and occupational opportunities

CO2.To Learn the techniques of gardening - Types, methods & Tools

CO3.The students will acquire sufficient academic and practical experiences and become self-employed in the nursery ventures.

CO4.The students will learn about how to prepare suitable soil media for potting up, seedling and cutting.

CO5.To impart the skills like germinating seed and transplant seedlings and cutting into pots

CO6.To understand the entrepreneurial skills in nursery technology

Semester-IV
Cell Biology, Genetics and Plant Physiology

Course Code:BOT401

Course Outcome

After completion of the course the student is able to:

CO1. To explain the structure of Cell components and their functions.

CO2 .To describe cell division in plants.

CO3.To have knowledge of the nature and function of genes, processes of inheritance .

CO4.To describe linkage ,crossing over and mutations .

CO5. Understand water relation of plants with respect to various physiological processes.

CO 6.Explain chemical properties and deficiency symptoms in plants

CO 7.Explain the significance of Photosynthesis and respiration

Semester-v

(CELL BIOLOGY AND GENETICS)

Course Code: BOT501

Course Outcome:

After completion of the course the student is able to:

CO1. To explain the structure of Cell components and their functions.

CO2 .To describe cell division in plants.

CO3. To have knowledge of the nature and function of genes, processes of inheritance .

CO4.To describe linkage , crossing over and mutations .

SEMESTER-V
(ECOLOGY AND BIODIVERSITY)

Course Code: BOT502

Course Outcomes:

After completion of the course the student is able to:

CO1. Students learn about the interaction between biotic and abiotic components of the environment.

CO2 .To know about the concept of energy flow in the ecosystem

CO3. To understand the various concepts of Biodiversity, values and factor influence its loss

CO4. They can identify the threats to biodiversity and its habitat loss.

CO5. To Understand the need for conservation of biodiversity

SEMESTER-V
Generic Elective-I

Course Outcomes:

After completion of the course the student is able to:

CO1.Study of economic products with special reference to the Botanical name, family, morphology of useful part and the uses

Semester-V
Skill Enhancement Course
Nursery and Gardening

Course Code:SEC/BOT501

Course Outcomes:

After completion of the course the student is able :

CO1.To Learn the importance of Nursery and Gardening, the career and occupational opportunities

CO2.To Learn the techniques of gardening - Types, methods & Tools

CO3.The students will acquire sufficient academic and practical experiences and become self-employed in the nursery ventures.

CO4.The students will learn about how to prepare suitable soil media for potting up, seedling and cutting.

CO5.To impart the skills like germinating seed and transplant seedlings and cutting into pots

CO6.To understand the entrepreneurial skills in nursery technology

SEMESTER-VI
(PLANT PHYSIOLOGY)

Course Code:BOT601

Course Outcomes:

After completion of the course the student is able:

CO1. To become knowledgeable in plant and its water relations.

CO2.To Know about the requirement of mineral nutrition for plant growth

CO3. To understand the process of Photosynthesis, Respiration and Nitrogen metabolism

CO4. To Know about the Plant Growth hormones (Auxins, Gibberellins. Cytokinins, Ethylene)

SEMESTER-VI
(TISSUE CULTURE & BIOTECHNOLOGY)

Course Code: BOT602

Course Outcomes:

After completion of the course the student is able to:

- CO1. To provide students with an understanding of principles and techniques of plant tissue culture
- CO2. Understand the basic knowledge about tissue culture tools, medium, sterilization and techniques of tissue culture.
- CO3. Study about the role of tissue culture in crop improvement.
- CO4. Understand the fundamentals of Recombinant DNA Technology.
- CO5. Know about the Genetic Engineering.
- CO6. Analyze the enzymes and vectors for genetic manipulations
- CO7. Concepts, tools and techniques related to in vitro propagation of plants.
- CO8. Understand the principle and basic protocols for Plant Tissue Culture.

Semester-VI
Skill Enhancement Course
SEC-4 Mushroom Culture Technology

Course Code:SEC/BOT601

Course Outcomes:

After completion of the course the student is able:

CO1.To provide an adequate knowledge about importance and habitation of mushroom.

CO2. To get knowledge of nutritional value, cultivation unit and storage methods.

CO3. To acquire knowledge about spawn and spawning techniques.

CO4. To understand the factors influencing the mushroom cultivation and post harvesting methods.

CO5.The students will acquire sufficient academic and practical experiences and become self-employed in the mushroom

Semester-VI
Plant Biodiversity and Human Welfare
Generic Elective-II

Course Code:GE/BOT601

Course Outcome

After completion of the course the student is able to:

CO1.To identify the natural resources which can be conserved for future and sustainable development.

CO2. To know the causes of diversity loss and also about the organization who have been continuously working for biodiversity management and sustainable development.

CO3.To create awareness about conservation of nature and natural resources.



