

Department of Botany

COURSE OUTCOME

Semester I

Plant Diversity

BOT-H-CC-1/ Minor

1. Will be conscious about the scientific debates and reaching goals by experimental evidences and will develop scientific attitude.
2. Know the importance of plants in day to day life from food to fuel.
3. Know the classification, morphology, reproduction and economic and ecological importance of cryptogams.
4. Handling and observation of Algae, Fungi, Bryophytes and Pteridophytes.

BOT-H-SEC 1 –Mushroom cultivation technology

1. Know the basics to identify edible mushrooms.
2. Know the infrastructure needed for mushroom cultivation.
3. Know the strategies for mushroom cultivation.
4. Development of skills for entrepreneurship.

IDC –Plant around us

1. Know the characteristics of different plant groups.
2. Know the contribution of different plant scientists.
3. Know the external and internal morphology of plants.
4. Know the role of plants in maintaining ecosystems.
5. Know the role of plants in providing food, furniture and beverages for human society.
6. Know the utilization of plants in controlling diseases.

Semester II

Plant Systematics

BOT-H-CC-2/ Minor

1. Know the rules for naming of a plant.
2. Know the sources of collecting data for classification.
3. Know the techniques for identifying plants.
4. Know the methods of collecting and preserving plants from different localities of varied geographical regions.

Biofertilizer and Biopesticides

BOT-H-SEC 2

1. Know the needs for less use of chemical fertilizers and more use of Biofertilizer and Biopesticides for sustainable agricultural practices.
2. Know the identification and culturing of N₂ fixing, P, K and Zn solubilising bacteria.
3. Know the techniques to isolate arbuscular mycorrhiza.
4. Know the techniques to culture and use of a biopesticide.

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Semester III
Economic Botany
BOT-H-CC-3-3

1. Know the concept and evolution of new crops.
2. Know the cultivation, processing and uses of different cereals, pulses and rubber.
3. Know the processing and uses of products and by-products of different sugar, starch, spices and beverage yielding plants.
4. Know the processing, uses and health hazards of poppy, cannabis and tobacco.
5. Know about different vegetables and fruits and the morphological nature of their edible parts.
6. Will identify the aforesaid plants in field as well as in laboratory.

Plant anatomy and Embryology
BOT-H-CC-4-3

1. Know about different plant cells and tissues.
2. Know about different growth patterns viz. primary, secondary and anomalous.
3. Know about different adaptive anatomical features.
4. Know about different applications of plant anatomy in systematics, forensic and pharmacognosy.
5. Know about different pre and post fertilisation changes in male and female gametophytes.
6. Know about embryo development and apomixes.
7. Will perform slide preparation with different plant parts of academic and economic interest.

Plant tissue culture and horticulture practices
BOT-H-SEC-3

1. Know about history, importance and future prospects of Plant tissue culture.
2. Know the requisites of plant tissue culture and plant regeneration.
3. Know the techniques plant tissue culture and plant regeneration.
4. Know the techniques of production of useful metabolites.
5. Know the scope importance and employment generation by horticulture practices.
6. Know the techniques of manuring, weed control and propagation and processing of different ornamentals, fruits and vegetables.

Plant Diversity

Minor

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Semester IV

Phycology BOT-H-CC-5-4

1. Know about the general account of different algal species.
2. Know about the classification and characteristics of different algal groups.
3. Know about the role of phytoplanktons in aquatic ecosystems.
4. Know about the techniques of algal culture and uses of algae as food, fuel and biofertilizer.
5. Will collect algae from different aquatic habitat and identify them.

Archaeogniates BOT-H-CC-6-4

1. Know about the unifying features, classification, origin and evolution of Bryophytes.
2. Know about the role of Bryophytes as pollution indicators.
3. Know about the unifying features, origin and evolution of Pteridophytes.
4. Know about the economic importance of Pteridophyte.
5. Know about the origin of seed habit.
6. Know about the life history of some Bryophytes, Pteridophytes and Gymnosperms.
7. Know about the phylogeny and evolutionary significance of Gymnosperm.

Palaeobotany and Palynology BOT-H-CC-7

1. Know about the geological time table and origin and evolution of flora.
2. Know about the plant fossils.
3. Know about the fossil Pteridophytes and Gymnosperms.
4. Know about the Indian Gondwana system.
5. Know about the pollen morphology.
6. Know about the applied palynology e.g forensic analysis, melissopalynology.

Pharmacognosy and Ethnobotany

BOT-H-CC-8

1. Know the scope and importance of medicinal plants.
2. Know about the plant drugs.
3. Know the secondary metabolites.
4. Know the pharmacologically active constituents.
5. Know about the folk medicine.
6. Know about the nutraceuticals.

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