

## Programme outcome of Botany (Gen.)

- Gain basic knowledge on plant biodiversity including bacteria and virus and importance of plant biodiversity.
- Acquire basic knowledge on plant ecology, ecosystem, and classification of plants.
- Build up a basic knowledge plant anatomy, plant pollination and process of fertilisation.
- Gain deep knowledge on plant physiology including photosynthesis, plant growth hormone activities.
- Acquire basic knowledge on economically important plants cultivation process techniques uses in plant science like TLC, GLC, Chromatography.
- Gives knowledge on genetics, basic concepts of research.

## Course outcome of Botany (Gen.)

CO1.1: Imparts basic knowledge on virus and bacteria types and their reproduction and economic importance

CO1.2: Acquire basic knowledge on algal classification and life cycle of some listed algae.

CO1.3: Gain basic knowledge on fungi and their life cycle and process of mushroom cultivation.

CO1.4: Acquire a basic idea on archagoniate.

CO1.5: Gain basic knowledge on some mosses and their life cycle.

CO1.6: Gives an idea in some extinct ferns and local ferns with their life patterns.

CO1.7: Imparts a basic knowledge on gymnosperms classification and their economical Importance.

CO2.1: Gain basic knowledge plant ecology and plant classification.

CO2.2: Acquire basic knowledge different types of ecological factors and adaptation of aquatic, xerophytic and halophytic plants.

CO2.3: Imparts a basic knowledge on plant succession and types.

CO2.4: Gives an idea structure of ecosystem and biogeochemical cycle.

CO2.5: Acquire a basic idea on principal of plant geography.

CO2.6: Imparts basic knowledge on identification, classification and nomenclature of plants.

CO2.7: Acquire basic knowledge on herbarium and herbarium sheets including keys of plant identification.

CO2.8: Gets basic knowledge on taxonomic evidence like phytochemistry, cytology and palynology.

CO2.9: Imparts basic knowledge on plants taxonomics ranks and categories.

CO2.10: Acquire a basic idea on principal and rules of plant nomenclature.

CO2.11: Gets basic knowledge on different types of plant classification.

CO2.12: Acquire basic knowledge on plant biometrics and cladistics.

CO3.1: Imparts basic knowledge on plant simple and complex tissue.  
CO3.2: Acquire basic knowledge on structure of dicot and monocot stem and leaf.  
CO3.3: Gets basic knowledge on plant secondary growth.  
CO3.4: Gets basic knowledge on plant protective system.  
CO3.5: Imparts basic knowledge on structure of flowers.  
CO3.6: Gives an idea about plant fertilisation and types of pollination.  
CO3.7: Acquire basic knowledge on structure of endosperm and types of endosperm.  
CO3.8: Imparts basic knowledge on polyembryony and its application.

CO4.1: Gives an idea about plant and water relation including transpiration.  
CO4.2: Acquire basic knowledge on importance macro and micro nutrients.  
CO4.3: Imparts basic knowledge on translocation of phloem including loading and unloading.  
CO4.4: Gets basic knowledge on photosynthesis and its importance.  
CO4.5: Gives an idea about plants respiration and its process.  
CO4.6: Imparts basic knowledge on enzyme and its classification.  
CO4.7: Acquire basic knowledge on biological nitrogen fixation.  
CO4.8: Gets basic knowledge on plant growth regulators like auxin, ethylene, gibberellins etc.  
CO4.9: Gives an idea about plant response to light that means plant photoperiodism.

#### **DSE A**

##### DSE (2A)

CO5.1: Acquire basic knowledge on microscopy and its importance.  
CO5.2: Gives an idea about cell fractionation and application.  
CO5.3: Gives an idea about application of radioisotopes.  
CO5.4: Imparts basic knowledge on spectrophotometry and its uses.  
CO5.5: Acquire basic knowledge on chromatography.  
CO5.6: Gets basic knowledge on protein separation techniques.  
CO5.7: Gives complete idea about plant statistics.

#### **DSE B**

##### DSE (2B)

CO6.1: Acquire basic knowledge on techniques use in plant science like TEM,SEM etc.  
CO6.2: Gets basic knowledge on cell and its importance.  
CO6.3: Imparts basic knowledge on linkage and crossing over.  
CO6.4: Gets basic knowledge on mutation and its application.  
CO6.5: Imparts basic knowledge on different types cell organelles.  
CO6.6: Acquire basic knowledge on cell wall and cell membranes.  
CO6.7: Gets basic knowledge on cell cycle and its importance.  
CO6.8: Acquire basic knowledge on DNA and RNA and its importance including protein synthesis in prokaryotics.  
CO6.8: Gets basic knowledge on protein synthesis in prokaryotics.  
CO6.9: Acquire basic knowledge on gene expression regulation.

**SEC 1**

## SEC(1)

CO7.1: Acquire basic knowledge on Utilisation of biofertilizer.

CO7.2: Gets basic knowledge on carrier base cultivation of some bacteria for biofertilizer.

CO7.3: Gets basic knowledge on azolla some blue green algae cultivation process.

CO7.4: Imparts basic knowledge on mycorrhizal types and its application.

CO7.5: Imparts basic idea on organic farming and its uses.

**SEC 3**

## SEC (1)

CO8.1: Gives an basic idea on scope of plant nursery and infrastructure.

CO8.2: Gets basic knowledge on seeds structure and its storage process.

CO8.3: Acquire basic knowledge on different types of vegetative propagation and its importance.

CO8.4: Gives proper idea for gardening and its operations.

CO8.5: Build basic ideas for transplantation of seedling and cultivation of different vegetables.

