

Skill Enhancement Course (SEC)

Plant Diversity and Human Welfare

Credits: 3(Theory: 2+ Practical: 1); (Total Marks: 75)

Distribution of Marks:

1. End Semester Examination: Total Marks: 30
 2. Sessional Examination: Total Marks: 20
 3. Practical: Total Marks: 25
 4. Theory Credit: 02; Practical Credit: 01
 5. No. of Required Classes: 30 hours (Theory) + 30 hours (Practical).
- Course Designer: Department of Botany, Jawaharlal Nehru College, Boko.

Learning Objectives:

- ❖ Create awareness about the plant diversity.
- ❖ Understand the role of plants in human welfare.
- ❖ Learn about different ornamental plants.
- ❖ To generate interest in the students about the different economically important plants.
- ❖ To know the vegetation type in the locality.

Learning outcome:

On successful completion of the course, students will be able to:

- ❖ Develop understanding of the concept and scope of plant diversity
- ❖ Identify the causes and implications of loss of biodiversity.
- ❖ Apply skills to manage plant diversity.
- ❖ Utilize various strategies for the conservation of biodiversity.
- ❖ Conceptualize the role of plants in human welfare with special reference to India.

Theory:

Unit 1: Plant diversity and its Scope - Genetic diversity, Species diversity, Plant diversity at the ecosystem level, Agro-biodiversity and cultivated plant taxa, wild taxa. Values and uses of Biodiversity: Ethical and aesthetic values, Precautionary principle, Methodologies for valuation, Uses of plants, Uses of microbes.	Hour : 8 Hours	Marks : 6
Unit 2: Loss of Biodiversity : Loss of genetic	Hours: 9 Hours	Marks : 8

diversity, Loss of species diversity, Loss of ecosystem diversity, Loss of Agro-biodiversity, Projected scenario for biodiversity loss, Management of Plant Biodiversity: Organizations associated with biodiversity management. Methodology for execution- IUCN, UNEP, UNESCO, WWF, NBPGR; Biodiversity legislation and conservations, Biodiversity information management and communication.		
Unit 3: Conservation of Biodiversity: Conservation of genetic diversity, species diversity and ecosystem diversity, In situ and ex situ conservation, Social approaches to conservation, Biodiversity awareness programmes, Sustainable development.	Hours: 7 hours	Marks : 8
Unit 4: Role of plants in relation to Human Welfare; a) Importance of forestry their utilization and commercial aspects b) Avenue trees, c) Ornamental plants of India. d) Alcoholic beverages through ages. e) Fruits and nuts: Important fruit crops their commercial importance. f) Wood and its uses.	Hours: 6 hours	Marks : 8

Practical Classes:

Practical	Hours: 30 hours	Marks: 25
1. Enumerate Agro-biodiversity in your area.		
2. Prepare a list of fermented food items and methods of production found in your locality.		
3. Prepare a list of exotic flora found in your locality.		
4. Study of ornamental plants.		
5. Study of different ecosystem.		
6. Study about vegetation types of your locality.		
7. Study of wild vegetables of your locality.		
