

Certificate Course of Medicinal Plants Cultivation

Code - SCC-04

Course Design: Credits-24

Maximum Marks: 100

Total Hours: 100

Theory Marks: 40

Lectures: 36 hrs.

Practical Marks: 60

Tutorials: 00 hrs.

Remedial: 04 hrs.

Field Work/Practicum: 60 hrs.

For Each Unit available total Hours: 25, out of which, for lectures: 9 hrs. Tutorial: 00 hrs., Field work: 15 hrs., Remedial: 01 hrs.

Learning outcomes:

After completion of this course students will be able to-

1. Identify, classify and implement the knowledge of medicinal plants in their daily life.
2. Use knowledge and practices of improved cultivation techniques, varieties of economically important medicinal crops in their personal and professional life.
3. Understand essential parameters has to be taken as prerequisite of cultivation.
4. Establish small scale industries of Medicinal plants.
5. Selection the medicinal plants according to climate and handle marketing aspects & services

UNIT -I : Fundamentals of Medicinal Plant:

- Medicinal Plant: Meaning, definition, concept, importance and properties.
- Medicinal plants of Thar Desert: Types, Properties and utility.
- Principle and Technique for Herbs Identification
- Herbal medicines, Pharmacopoeia, non-pharmacopoeia or synthetic drugs
- Spices with special to India, and Medicinal value of Spices.

Practicum / Field work:

- Identify various type of medicinal plants of your region and make a comprehensive report with diagram and specimen.
- Conduct a survey-based research on use of various spices and their effect on health.

UNIT -II: Prerequisite of Medicinal Plants Cultivation

- Genetically modified drugs and their advantage and disadvantages
- Soil Microorganisms,
- Land Preparation
- Water Management
- Establishment of green house

- Use of Organic fertilizers, Vermicompost and their application
- Selection criteria of seeds and Plant propagation.

Practicum / Field work:

- Prepare a field or a small area for cultivation of medicinal plant and make a report on soil, available water and micro-organism after a lab testing.
- How do you select appropriate compost and fertilizers for maximum production? make a report after its practical implementation.

UNIT -III: Cultivation of Medicinal Plants

- Improved cultivation techniques of economically important medicinal plants with their economics.
- Endangered plant species of medicinal values and their cultivation
- Crop rotation & intercropping.
- Greenhouse, Poly house and glass house in the cultivation of medicinal plants
- Harvest of Medicinal and Aromatic Plant crops, Diseases Protection

Practicum / Field work:

- Visits to Green house, Poly house and glass house for the cultivation of medicinal plants and select any one method for your cultivation give justification of the selection.

- Cultivate at least four different types of medicinal plants.

UNIT -IV: Post Harvesting Process

- Post-harvest processing techniques and various methods of distillation of herbal plants, Technique of storage of essential oils and medicinal herbs.
- Use of aromatic oils – description, fragrance in cosmetics, extraction from plant parts – processing – methodologies and procedures, use of Aroma chemicals for value addition, Marketing aspects of essential oils, medicinal herbs and their global status, Weeding, their preservation, package and sale.
- Diseases and Pest affecting Medicinal and Aromatic Plant Crops, their control,

Practicum / Field work:

- Prepare a survey report after field visit on marketing of medicinal herbs.
- Preservation, package and sale of cultivated Medicinal Plants or aroma oil.

References :

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