

Course Code	Course Name	Credits
26BY954	MEDICINAL PLANTS – CULTIVATION AND CONSERVATION	02

Course Description

This course introduces students to the scope, importance and applications of medicinal plants, indigenous medicinal systems, ethnobotany and conservation strategies. It also provides practical training in identification, propagation, herbal formulation and sustainable utilization of medicinal plants for skill development and community welfare.

Course Objectives

- To introduce concepts of ethnobotany, medicinal plants, folk medicine and traditional knowledge systems.
- To familiarize learners with Ayurveda, Siddha and Unani medicinal systems and their applications.
- To create awareness about endemic and endangered medicinal plants and their conservation methods.
- To develop practical skills in propagation, identification and documentation of medicinal plants.
- To enable the study of local medicinal plants with emphasis on medicinal applications and herbal formulations.

Skill Enhancement Outcomes

Upon successful completion of this course, the learner will be able to:

- Identify common medicinal plants and their economically useful parts for household and commercial use.
- Document ethnobotanical knowledge through simple surveys, interviews and field studies.
- Practice conservation methods for endangered and threatened medicinal plant species.
- Create suitable techniques for cultivation, propagation and maintenance of medicinal plants for self-employment and commercial ventures.
- Prepare herbal products and plant specimens for academic, domestic and small-scale enterprise purposes.
- Utilize traditional medicinal knowledge in sustainable livelihood and community healthcare practices.

Course Content and Practical Training

- Introduction to medicinal plants in traditional healthcare, modern medicine, industry and economy.
- Study of Ayurveda including history, origin, Panchamahabhutas, Saptadhatu, Tridosha concepts, Rasayana therapy and medicinal plants used in Ayurvedic treatments.
- Study of Siddha medicinal system covering its origin, basis and important plants used in treatments.
- Study of Unani medicinal system including its history, concept of Umoor-e-Tabiya, principles of treatment, polyherbal formulations and tumor therapies.
- Observation and recording of endangered and endemic medicinal plants.
- Understanding Red List criteria and status evaluation of threatened medicinal plant species.
- In situ conservation practices through biosphere reserves, sacred groves and national parks.
- Ex situ conservation practices through botanical gardens, herbal gardens and ethnomedicinal plant gardens.
- Nursery practices for medicinal plants propagation through seeds, stem cuttings and layering.
- Ethnobotany in India and methods for conducting ethnobotanical surveys and documentation.
- Study of ethnic communities and their traditional medicinal knowledge systems.
- Documentation of local medicinal plants and their traditional uses.
- Preparation of simple herbal formulations such as powders, decoctions, extracts and pastes.
- Preparation and preservation of herbarium specimens of medicinal plants.
- Field visit to medicinal plant gardens, forests, local communities, biosphere reserves or national parks.

Learning Outcome

At the end of the course, learners will gain foundational knowledge and practical skills in medicinal plant identification and herbal formulations, conservation, traditional healthcare systems and sustainable utilization for academic, entrepreneurial and community-based applications.