

Course Code	Course Name	Credits
26BY906	TRADITIONAL KNOWLEGDE AND HERBAL MEDICINE	04

### Course Objectives

- Provide basic knowledge of medicinal plants and their role in health and society.
- Introduce key concepts of traditional medicinal systems such as Ayurveda, Siddha, and Unani.
- Create awareness about conservation of medicinal plants and biodiversity.
- Familiarize students with ethnobotany and indigenous knowledge systems.

### Learning Outcomes

Upon successful completion of this course it is intended that a student will be able to:

- Explain the importance and uses of medicinal plants in everyday life.
- Describe the basic principles of major traditional systems of medicine.
- Identify and understand conservation methods for medicinal plant resources.
- Recognize the role of ethnobotany and traditional knowledge in healthcare and culture.

### Unit 1 - Introduction to Medicinal Plants and Indian Traditional Knowledge (12 Hrs.)

Meaning, history, scope and importance of medicinal plants in daily life; Role of medicinal plants in healthcare, culture and economy; Overview of indigenous medicinal systems in India; Basic concepts of Ayurveda: Historical background and origin, Concept of Panchamahabhutas (five elements), Concept of Tridosha (Vata, Pitta, Kapha), Concept of Saptadhatu (body tissues), Idea of Rasayana (rejuvenation therapy); Common medicinal plants used in Ayurvedic practices and home remedies

### Unit 2- Traditional Systems of Medicine in India (12 Hrs.)

Siddha System of Medicine: Origin and historical development, Fundamental principles and philosophy, important medicinal plants used in Siddha treatments. Unani System of Medicine: Historical background and evolution, Concept of Umoor-e-Tabiya (basic physiological principles), Use of herbal formulations and natural therapies, Introduction to polyherbal medicines, Comparative understanding of traditional systems and their relevance in modern society

### Unit 3- Conservation of Medicinal Plants and Biodiversity (12 Hrs.)

Conservation of endangered and endemic medicinal plants. Definition: endemic and endangered medicinal plants, Red list criteria; In situ conservation: Biosphere reserves, sacred groves, National Parks; Ex situ conservation: Botanic Gardens, Ethnomedicinal plant Gardens, Seed banks and nurseries, Role of communities, government, and students in conservation

### Unit 4- Ethnobotany and Folk Medicine (12 Hrs.)

Definition and scope of Ethnobotany, Relationship between plants and indigenous communities, Methods of studying ethnobotany (field surveys, interviews, documentation), Applications of ethnobotany: Healthcare, Agriculture, Cultural practices, Folk medicinal practices of different ethnic communities of India, Importance of preserving traditional knowledge systems.

### Unit 5 - Study of local medicinal plants (12 Hrs.)

(Parts used and uses only): Neem, Tulsi, Drumstick (Moringa), Fenugreek (Methi), Periwinkle (Vinca), Gooseberry (Amla), Bael (Aegle), Centella (Thankuni), Sweet flag (Bach), Gymnema, Cynodon (Durba ghas), Aloe vera, Tinospora (Gulanchara), Ashwagandha.

### Reference Books:

1. Kirtikar, K. R., & Basu, B. D. (2006). *Indian medicinal plants* (Vol. 1–4). International Book Distributors.
2. Indian Council of Medical Research. (2002). *Medicinal plants of India*. ICMR.
3. Martin, G. J. (1995). *Ethnobotany: A methods manual*. Chapman & Hall.
4. Levetin, E., & McMahon, K. (2016). *Plants and society* (8th ed.). McGraw-Hill Education.
5. Lad, V. (1994). *Ayurveda: The science of self-healing*. Lotus Press.
6. Lad, V. (2002). *The complete book of Ayurvedic home remedies*. Three Rivers Press.
7. Central Council for Research in Unani Medicine. (2010). *Unani medicine: Introduction and present status in India*. CCRUM.
8. Jain, S. K. (1991). *Dictionary of Indian folk medicine and ethnobotany*. Deep Publications.
9. Jain, S. K., & Rao, R. R. (1977). *A handbook of field and herbarium methods*. Today & Tomorrow's Printers and Publishers.
10. International Union for Conservation of Nature. (2023). *The IUCN Red List of threatened species*. <https://www.iucnredlist.org>