## J.S. University, Shikohabad

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### **VALUE ADDED COURSE**

Medicinal Plants and Herbal Medicine:

Exploring the Healing Properties of Horticultural

Crops

**Faculty of Agricultural Sciences** 



## J.S. University, Shikohabad Faculty of Agricultural Sciences

Value Added Course

AGVAC-20

# Medicinal Plants and Herbal Medicine: Exploring the Healing Properties of Horticultural Crops

#### **Learning Objectives:**

This course focuses on the principles and practices of medicinal plants and herbal medicine using horticultural crops. The course will cover topics such as the identification and selection of medicinal plants, plant parts used in medicine, extraction and preparation of plant-based medicines, and the therapeutic properties of horticultural crops. Additionally, the course will cover the scientific basis for the effectiveness of herbal medicine, the cultural and historical use of medicinal plants, and current trends in alternative medicine. By the end of the course, students will have the skills and knowledge needed to design and implement medicinal plant gardens and to prepare and use plant-based medicines.

#### **Course Outcomes:**

Upon completion of this course, students will be able to:

- 1. Understand the principles and practices of medicinal plants and herbal medicine using horticultural crops.
- 2. Identify and select medicinal plants for specific medicinal uses.
- 3. Extract and prepare plant-based medicines from horticultural crops.
- 4. Understand the therapeutic properties of horticultural crops and their applications in medicine.
- 5. Develop and implement medicinal plant gardens for personal and/or commercial use.



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**Duration:** 8-10 weeks (depending on the pace of the student)

Intake: 60 students

#### Course Modules (Syllabus):

#### Module-1

#### Introduction to Medicinal plants and Herbal Medicine

- Overview of medicinal plants and herbal medicine
- Historical and cultural use of medicinal plants
- Scientific basis for the effectiveness of herbal medicine
- Current trends in alternative medicine

#### Module-2

#### **Identification and Selection of Medicinal Plants**

- Identification of medicinal plants
- Selection criteria for medicinal plants
- Sources of medicinal plants
- Cultivation and maintenance of medicinal plant gardens

#### Module-3

#### Plant Parts Used in Medicine

- Understanding the various plant parts used in medicine
- · Methods of extraction and preparation of plant-based medicines
- Preservation and storage of plant-based medicines

#### Module-4

Therapeutic Properties of Horticultural Crops



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- Properties and uses of horticultural crops in medicine
- Understanding the pharmacological properties of medicinal plants
- Application of horticultural crops in the prevention and treatment of diseases

#### Module-5

#### Application of Medicinal Plants and Herbal Medicine

- Developing plant-based remedies
- Understanding the ethical considerations of using medicinal plants
- Preparation and administration of plant-based medicines
- Safety and legal considerations of using medicinal plants

#### **Assessment:**

- Weekly quizzes and assignments
- Final project on designing and implementing a medicinal plant garden and developing a plant-based remedy.

#### Reference books:-

- "The Herbal Medicine-Maker's Handbook: A Home Manual" by James Green
- "Medical Herbalism: The Science Principles and Practices of Herbal Medicine" by David
- "The Earthwise Herbal, Volume I: A Complete Guide to Old World Medicinal
- Plants" by Matthew Wood
- A Complete Medicinal Herbal: A Practice Guide to the Healing Properties of Herbs" by Penelope Ody

"Herbal Antibiotics: Natural Alternatives for Treating Drug Resistant Bacteria by Stephen Harrod Buhne

(Name of Faculty)

Course Coordinator

**Director General** 

(Name of Faculty)