

# University of Kota

## Skill Enhancement Course (S.E.C.): Nursery and Gardening

**Course Code:**

**Maximum Marks:** 50

**Credits:** 2

### Objectives

The program is aimed to teach students the basic knowledge required to develop entrepreneurship skills in the development of Nursery and Gardening. This course would train students to initiate a remunerative enterprise owing to a high demand of skilled professionals in this field.

Plant nurseries and gardening are specialized areas for raising seedlings, cuttings, and grafts with utmost care before transplanting. They are important for improving seedling survival, and managing plant quality. In nurseries, tender seedlings can be looked after properly and protected from pests, and reduce the duration of care in the main field. They also facilitate the efficient use of land and the cultivation of small, valuable seeds.

### Course Outcomes

1. Students will understand the importance of nursery and basic infrastructure to establish nursery.
2. Students will learn to develop entrepreneurship skill through establishing their own Nursery units. We can have various well-raised plants, including flowers, indoor plants, and trees from nurseries.
3. Acquire skills for production, maintenance and propagation techniques of different horticulturally important plants.
4. Acquire skills to establish and maintain different types of Gardens.

**There will be a single multiple choice based (OMR based) question paper of one and half hours.**

### Course Contents

#### Unit 1: Introduction

Definition of Nursery, Objectives, scope and importance of nursery, building up of infrastructure for nursery planning, nursery beds, Manure used in gardening and nurseries. Nursery management and seasonal activities, Nursery regulations.

#### Unit 2: Seed

Seed technology, causes and methods of breaking dormancy, Seed banks, sowing methods, raising of seeds and seedlings, care and transplanting of seedlings.

#### Unit 3: Vegetative Propagation

Air-layering, mound layering, stem root and leaf cutting, selection of Cuttings, treatment of Cuttings, planting of Cuttings, rooting medium, collecting season and Grafting and budding, stock scion relation. Examples of Vegetatively propagated nursery plant.

#### **Unit 4: Protected Cultivation Structures**

Understanding of polyhouses, green houses, mist chambers and shade houses, glass house, hardening of plants, Economics of nursery development, pricing and record maintenance.

#### **Unit 5: Gardening**

Definition, objectives and scope; different types of gardening. Gardening operations: Soil laying, manuring, watering, management of pests and diseases, harvesting. Examples of Ornamental plants : Herbs, Shrubs, Trees and climber.

#### **Suggested Readings**

1. Ratha Krishnan, M., et al. (2014). Plant nursery management: Principles and Practices. Central Arid Zone Research Institute (ICAR), Jodhpur, Rajasthan.
2. Bose, T.K. & Mukherjee, D. (1972).
3. Kumar Mishra, K., N.K. Mishra and Satish Chand (1994). Plant Propagation. John Wiley & Sons, Nsssssssew Jersey.