**DEPARTMENT OF BOTANY**

**B.Sc. IISemester**

 **Botany**

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| **Part A: Introduction** |
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| **Course Certificate: Nursery and Gardening** | Class: **B.Sc.II Semester** | Year: **2022** | Session:**2022-2023** |
|  | Course Code | **Skill Enhancement Course** |
|  | Course Title |  **Nursery and Gardening** |
|  | Course Type | **Theory** |
|  | Pre-requisite(if any)  | NO |
|  | Course Learning.Outcomes (CLO) | On successful completion of this course, students will be able to* Apply the basic principles and components of gardening
* Conceptualize flower arrangement and bio-aesthetic planning Design various types of gardens according to the culture and art of bonsai
* Distinguish between formal, informal, and freestyle gardens
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|  | **Credit Value** | **Theory: 2** |
|  | **Total Marks** | **Max. Marks: 75** | **Min Passing Marks: 28** |

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| **Part B: Content of the Course** |
| Total Periods: 30 |
| **Unit** | **Topics** | **No. of Period** |
| **I** | Nursery: definition, objectives, and scope and building up of infrastructure for nursery, planning and seasonal activities - Planting - direct seeding and transplants**.** | 4 |
| **II** | Seed: Structure and types - Seed dormancy; causes and methods of breaking dormancy. Seed storage, factors affecting seed viability. Sowing/raising of seeds and seedlings - Transplanting of seedlings - Study of cultivation of different vegetables: cabbage, brinjal, onion, garlic, and carrots.  | 9 |
| **III** | Vegetative propagation: air-layering, cutting, selection of cutting, collecting season, treatment of cutting, rooting medium and planting of cuttings - Hardening off plants - greenhouse – mist chamber, shed root, shade house, and glass house | 9 |
|  **IV** | Gardening: definition, objectives, and scope - different types of gardening - landscape and home gardening - parks and their components - plant materials and design - computer applications in landscaping - Gardening operations: soil laying, manuring, watering, management of pests and diseases, and harvesting. | 9 |

**Key Words**:

Landscaping. Propagation, Green House, Seed Dormancy, Sowing, Transplant.

**Suggested Reading**

1. Agrawal, P.K. (1993). Hand Book of Seed Technology. New Delhi, Delhi: Dept. of Agriculture and Cooperation, National Seed Corporation Ltd.
2. Bose T.K., Mukherjee, D. (1972). Gardening in India. New Delhi, Delhi: Oxford & IBH Publishing Co.
3. Jules, J. (1979). Horticultural Science, 3rd edition. San Francisco, California: W.H. Freeman and Co.
4. Kumar, N. (1997). Introduction to Horticulture. Nagercoil, Tamil Nadu: Rajalakshmi Publications.