

Course-I

Advances in Floriculture and Landscaping

Total Teaching Hours-50

S. No.	Topics
1.	Importance and scope of floriculture.
2.	History and development of gardens.
3.	Use of plant growth regulators in floriculture.
4.	Preparation of bonsai.
5.	Flower arrangement.
6.	Indoor gardening.
7.	Special gardens like dish, terrarium, hanging basket, window boxes, miniature gardens, plant stands and vertical gardens.
8.	Role of biotechnology in floriculture.
9.	Principles and elements of landscaping.
10.	Garden features and adornments.
11.	Turf grass management.
12.	Seed production of annual flowers.
13.	Protected structures and protected cultivation of cut flower crops like-rose, gerbera, carnation, alstromera and chrysanthemum.

Course-II

Production Technology of Vegetable Crops

Total Teaching Hours-50

S. No.	Topics
1.	Introduction, importance, production and productivity of vegetable crops in India.
2.	Classification of vegetables.
3.	Factor affecting vegetable production.
4.	Organic farming of vegetables.
5.	Role of plant growth regulators in vegetable production.
6.	Protected cultivation of major vegetable crops viz.- tomato, sweet pepper and cucumber.
7.	Importance of mulching, crop rotation, weed management, inter and mixed cropping in vegetable production.
8.	Nursery raising techniques of important vegetable crops.

Course-III

Advanced Fruit Production and Nursery Management

Total Teaching Hours-50

S. No.	Topics
1.	Principles of orchard establishment.
2.	Important characteristic of planting materials.
3.	Propagation techniques of fruit crops.
4.	Stock scion relationship.
5.	Rejuvenation of old and unproductive orchard.
6.	Parthenocarpy and seedlessness.
7.	Role of plant growth regulators in fruit production.
8.	Concept of high density planting.
9.	Drip and fertigation.
10.	Orchard management practices.
11.	Role of pollination and pollinisors in fruit crops.
12.	Regulation of growth and flowering in fruit crops.
13.	Major problems in fruit crops- mango malformation, sex expression in papaya, alternate bearing, guava wilt, fruit cracking in lichi, lemon and bael, fruit drop in mango and citrus canker.
14.	Integrated nutrient management in fruit crops.
15.	Techniques of mass multiplication of selected fruit crops.

Course-IV

Post-harvest Technology of Horticultural Crops

Total Teaching Hours-50

S. No.	Topics
1.	Principles and importance of post harvest handling and processing of fruit, vegetable and flower crops.
2.	Maturity indices.
3.	Physiological processes and their influence on storage quality.
4.	Pre and post harvest techniques for enhancing storage life and quality of produce.
5.	Storage systems, controlled and modified atmosphere.
6.	Techniques of value addition.
7.	Post harvest factors influencing post harvest life and processing quality.