

Certificate/ Diploma in Horticulture

Objectives:

To enable student to:

- 1) Acquire knowledge of Horticulture
- 2) Acquire knowledge of Fruit Science , Vegetable Science , Floriculture & Landscaping

Duration of the Course: Certificate: 6 months Diploma: 1 Year

Eligibility: Any student enrolled in the degree program of the college

Subjects covered under Certificate Course are Sr No. 1, 2 and 3	
Name of Paper	Credits
GC-HT-01T Horticulture I	06
GC-HT-02T Horticulture II	06
GC-HT-03P Practical and Project Work I	06
Subjects covered under Diploma Course are Sr No. 1, 2, 3, 4, 5 and 6	
GC-HT-04T Horticulture III	06
GC-HT-05T Horticulture IV	06
GC-HT-06P Practical and Project Work II	06 (Lab Only)

Horticulture I

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 6
Pass Percentage: 40%

Section A

Unit I -Basics of Horticulture

- Importance and Scope of Horticultural Crops
- Current Scenario of Fruit Crops in India

Unit II -Fruit Science

- Nutritional Importance of Fruits
- Nutritional Deficiency and their Management.

Section B

Unit III -Vegetable Science

- Nutritional Importance of Vegetables; Nutritional Deficiency and their Management.
- Cultivation Practices of important Vegetables Crops.

Unit IV -Floriculture

- Importance and Scope of Flower Cultivation
- Present Status of Floriculture in India

Horticulture II

Total Marks:100
External Marks:70
Internal Marks:30
Credits:6
Pass Percentage:40%

Section A

Unit I -Basics of Horticulture

- Role of Horticulture in Diversification of Agriculture
- Current Scenario of Vegetable Crops in India

Unit II -Fruit Science

- Soil and Climatic requirement of Different Fruit Crops
- Climate Zones and Areas Suitable for Fruit Cultivation

Section B

Unit III -Vegetable Science

- Soil and Climate requirement for different Vegetable Crops
- Irrigation Requirement, Manuring and Fertilization, Weed Management

Unit IV -Floriculture

- Soil requirement for Floriculture
- Climate requirement for Floriculture

Practical and Project Work I

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 6
Pass Percentage: 40%

Practical:

- 1) Identification of differed Horticulture crops
Max. Marks: 50
- 2) Identification and working of
Practical: 40
 - Nursery raising tools
Int.Ass.: 10
 - Farm Implements
Periods:4 hrs/ week
- 3) Sowing of seeds for raising nurseries and root stocks of Horticulture crops

Scheme of practical examination

Internal practical examination		40
Marks	Preparation	20
	marks	
I)	II) Identification	10
	marks	
	III) Submissionof practical record book	5
	marks	
	IV) Viva– Voce	5
	marks	

References:

- 1) ChadhaK L(2003) *HandbookofHorticulture*ICAR Publications .
- 2) Srivastava R P and Kumar S (2019) *Fruit and Vegetable Preservation*.3rd Edition ,CBSPublishers , New Delhi
- 3) FAO*FruitsandVegetableProcessing*.InternationalBookdistributingCo. Chammastudiobuilding, 2ndfloor, Charbagh,Lucknow-226004
- 4) RajD(2015) *Floricultureat aGlance*.KalyaniPublishers, NewDelhi.

Horticulture III

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 6
Pass Percentage: 40%

Section A

Unit I - Elements of Horticulture

- Elements of Horticulture
- Branches of Horticulture

Unit II -Fruit Science

- Importance of Healthy Fruit Plants Nursery and their requirement for establishment
- Fruit Nutrition garden-layout and importance

Section B

Unit III - Vegetable Science

- Diseases of Vegetables and their management.
- Kitchen Gardening – suitable crops and varieties

Unit IV - Landscaping

- Different types of Landscaping
- Production and management of important trees, shrubs, climbers, pot plants, seasonal flowers and perennials

Horticulture IV

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 6
Pass Percentage: 40%

Section A

Unit I - Challenges of Horticulture

- Major Challenges of Fruits Crops
- Major Challenges of Vegetables Crops

Unit II - Fruit Science

- Cultivation practices of important fruit crops – soil and climate requirement, varieties, irrigation requirements.
- Manuring and fertilization, weed management, training and pruning; harvesting and post-harvest handling of fruits

Section B

Unit III -Vegetable Science

- Harvesting and maturity indices
- Post-harvest handling and processing

Unit IV -Landscaping

- Basic Planning and principles of Landscaping
- Vertical Gardening

Practical and Project Work II

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 6
Pass Percentage: 40%

Practical:

- 1) Methods of propagation Horticulture crops
Max. Marks: 50
- 2) Layout and methods of establishment of orchards
Practical: 40
- 3) Training and pruning of Horticulture crops
Int. Ass.: 10
- 4) Identification of deficiency symptoms and physiological disorder
Periods: 4 hrs / week

Scheme of practical examination

Internal practical examination	40 marks
V) Preparation	20marks
VI) Identification	10marks
VII) Submission of practical record book	5marks
VIII) Viva- Voce	5marks

References:

- 1) Mehta S and Yadav A (2017) *Treasure of Fruit Science* , New Vishal Publication ,NewDelhi
- 2) Thamburaj S N (2014) *Textbook of Vegetables , Tuber crops and Spices* . ICARPublication
- 3) Singh U and Kumar S (2005) *Glimpses of Post-Harvest Technology* . 2nd RevisedEdition, New Vishal Publication , NewDelhi