

Certificate/Diploma in Horticulture

Objectives :

To enable student –

- 1) To acquire Knowledge of Horticulture
- 2) To 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 Horticulure I	06
GC-HT-02T Horticulure 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 Horticulure III	06
GC-HT-05T Horticulure 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: 35%

INSTRUCTIONS FOR THE PAPER SETTER/EXAMINER:

1. The syllabus prescribed should be strictly adhered to.
2. The question paper will consist of three sections: A, B, and C. Sections A and B will have four questions from the respective sections of the syllabus and will carry 10 marks each. The candidates will attempt two questions from each section.
3. Section C will have fifteen short answer questions covering the entire syllabus. Each question will carry 3 marks. Candidates will attempt any ten questions from this section.
4. The examiner shall give a clear instruction to the candidates to attempt questions only at one place and only once. Second or subsequent attempts, unless the earlier ones have been crossed out, shall not be evaluated.
5. The duration of each paper will be three hours.

INSTRUCTIONS FOR THE CANDIDATES:

Candidates are required to attempt any two questions each from the sections A and B of the question paper and any ten short questions from Section C. They have to attempt questions only at one place and only once. Second or subsequent attempts, unless the earlier ones have been crossed out, shall not be evaluated.

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: 35%

INSTRUCTIONS FOR THE PAPER SETTER/EXAMINER:

1. The syllabus prescribed should be strictly adhered to.
2. The question paper will consist of three sections: A, B, and C. Sections A and B will have four questions from the respective sections of the syllabus and will carry 10 marks each. The candidates will attempt two questions from each section.
3. Section C will have fifteen short answer questions covering the entire syllabus. Each question will carry 3 marks. Candidates will attempt any ten questions from this section.
4. The examiner shall give a clear instruction to the candidates to attempt questions only at one place and only once. Second or subsequent attempts, unless the earlier ones have been crossed out, shall not be evaluated.
5. The duration of each paper will be three hours.

INSTRUCTIONS FOR THE CANDIDATES:

Candidates are required to attempt any two questions each from the sections A and B of the question paper and any ten short questions from Section C. They have to attempt questions only at one place and only once. Second or subsequent attempts, unless the earlier ones have been crossed out, shall not be evaluated.

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: 35%

Practical :

- 1) Identification of different 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 rootstocks of Horticulture crops

Scheme of practical examination

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

References :

- 1) Chadha K L (2003) Handbook of Horticulture ICAR Publications .
- 2) Srivastava R P and Kumar S (2019) Fruit and Vegetable Preservation.3rd Edition , CBS Publishers , New Delhi
- 3) FAO Fruits and vegetable processing. International Book distributing Co. Chamma studio building, 2nd floor, Charbagh, Lucknow-226004
- 4) Raj D (2015) Floriculture at a Glance . Kalyani Publishers, New Delhi

Horticulture III

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 6
Pass Percentage: 35%

INSTRUCTIONS FOR THE PAPER SETTER/EXAMINER:

1. The syllabus prescribed should be strictly adhered to.
2. The question paper will consist of three sections: A, B, and C. Sections A and B will have four questions from the respective sections of the syllabus and will carry 10 marks each. The candidates will attempt two questions from each section.
3. Section C will have fifteen short answer questions covering the entire syllabus. Each question will carry 3 marks. Candidates will attempt any ten questions from this section.
4. The examiner shall give a clear instruction to the candidates to attempt questions only at one place and only once. Second or subsequent attempts, unless the earlier ones have been crossed out, shall not be evaluated.
5. The duration of each paper will be three hours.

INSTRUCTIONS FOR THE CANDIDATES:

Candidates are required to attempt any two questions each from the sections A and B of the question paper and any ten short questions from Section C. They have to attempt questions only at one place and only once. Second or subsequent attempts, unless the earlier ones have been crossed out, shall not be evaluated.

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: 35%

INSTRUCTIONS FOR THE PAPER SETTER/EXAMINER:

1. The syllabus prescribed should be strictly adhered to.
2. The question paper will consist of three sections: A, B, and C. Sections A and B will have four questions from the respective sections of the syllabus and will carry 10 marks each. The candidates will attempt two questions from each section.
3. Section C will have fifteen short answer questions covering the entire syllabus. Each question will carry 3 marks. Candidates will attempt any ten questions from this section.
4. The examiner shall give a clear instruction to the candidates to attempt questions only at one place and only once. Second or subsequent attempts, unless the earlier ones have been crossed out, shall not be evaluated.
5. The duration of each paper will be three hours.

INSTRUCTIONS FOR THE CANDIDATES:

Candidates are required to attempt any two questions each from the sections A and B of the question paper and any ten short questions from Section C. They have to attempt questions only at one place and only once. Second or subsequent attempts, unless the earlier ones have been crossed out, shall not be evaluated.

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: 35%

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

References :

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