

CBSE | DEPARTMENT OF SKILL EDUCATION

CURRICULUM FOR SESSION 2022-2023

HORTICULTURE (SUBJECT CODE 816)

JOB ROLE: FLORICULTURIST (PROTECTED/ENTREPRENEUR)

CLASS XII

1. Introduction

Horticulture is associated with the cultivation of vegetables, fruits, flowers, crops, tuber crops and medicinal, aromatic and ornamental plants where one can attain knowledge about crop production, plant propagation, plant breeding, genetic engineering, preparation of soil and plant physiology and biochemistry and simultaneously can work in various fields including floral design, garden centers, teaching, fruit and vegetable production, arboriculture, landscape construction, etc.

A Floriculturist (Protected Cultivation) is a person who has under taken the various activities of flower cultivation involving preparatory cultivation, cultivation and post-harvest management in green house. He also performs maintenance and care of plant, design and maintenance of green house, preparing media and various other inputs essential for flower crop cultivation. The job is to be performed in efficient manner to allow the production of high quality of flowers, their harvesting and post-harvest management towards getting higher return.

2. Course Objectives

On completion of the course, students should be able to:

1. Apply effective oral and written communication skills to interact with people and customers;
2. Identify the principal components of a computer system;
3. Demonstrate the basic skills of using computer;
4. Demonstrate self-management skills;
5. Demonstrate the ability to provide a self-analysis in context of entrepreneurial skills & abilities;
6. Demonstrate the knowledge of the importance of green skills in meeting the challenges of sustainable development and environment protection;
7. Communicate effectively with the client, identify the principal components of a computer system, identify different types of protected structure and identify and categories crops for protected cultivation
8. Prepare media for protected cultivation
9. Demonstrate irrigation and fertigation, green house operations, irrigation and fertigation, care and maintenance of protected structure Demonstrate special horticultural practices in protected cultivation Identify and control of insect-pest and diseases demonstrate the harvest and post-harvest practices
10. Administer first aid to a casualty with small cuts, grazes, bruises, external bleeding, minor burns and scalds

3. Curriculum

This course is a planned sequence of instructions consisting of Units meant for developing employability and Skills competencies of students of Class XI opting for Skills subject along with general education subjects.

| | |
|-------------|-----------|
| Theory | 60 marks |
| Practical | 40 marks |
| Total Marks | 100 marks |

HORTICULTURE XII (SUBJECT CODE 816)

Total Marks: 100 (Theory-60 + Practical-40)

| | UNITS | NO. OF HOURS for Theory and Practical | MAX. MARKS for Theory and Practical |
|---------------|---|---|---|
| Part A | Employability Skills | | |
| | Unit 1: Communication Skills- IV* | 10 | - |
| | Unit 2: Self-Management Skills- IV | 10 | 3 |
| | Unit 3: ICT Skills- IV | 10 | 3 |
| | Unit 4: Entrepreneurial Skills- IV | 15 | 4 |
| | Unit 5: Green Skills- IV* | 05 | - |
| | Total | 50 | 10 |
| Part B | Subject Specific Skills | | Marks |
| | Unit 1: Present scenario and scope of floriculture in global market | 08 | 05 |
| | Unit 2: Employment avenues in floriculture sector | 08 | 06 |
| | Unit 3: Study of outdoor room concept: public area, private area and service area | 08 | 06 |
| | Unit 4: Different features of gardens like gate, walls, arches, pergolas, paths, roads, edges, hedges, stepping stones, sun dial, bird bath, statues, water fountain, lawns, herbaceous borders, bonsai, topiary etc. | 15 | 08 |
| | Unit 5: Concept of CAD (Computer Aided Designs) for landscape designs. | 10 | 04 |
| | Unit 6: Methods of establishing lawns and their management including irrigation, fertilization, Mowing, insect-pest and diseases and their control. | 10 | 03 |
| | Unit 7: Production of indoor plants and their maintenance. | 10 | 02 |
| | Unit 8: Commercial cultivation of rose, chrysanthemum, gladiolus, marigold, tuberose, jasmine and crossandra. | 25 | 02 |
| | Unit 9: Protected cultivation of commercial flower crops like rose, carnation, chrysanthemum, gerbera, orchids, antirrhinum etc. | 25 | 02 |

| | UNITS | NO. OF HOURS for Theory and Practical | MAX. MARKS for Theory and Practical |
|--------------------|--|--|--|
| | Unit 10: Flower arrangements: types and styles. | 10 | 05 |
| | Unit 11: Methods of dry flower making like air drying, embedded drying, water drying, press drying, glycerin drying, freeze drying etc. and other value added products. | 11 | 04 |
| | Unit 12: Post-harvest handling of commercial flower crops including harvesting, pre cooling, pulsing, holding, dry and wet storage, packing, packaging and transportation. | 20 | 03 |
| | Total | 160 | 50 |
| Part C | Practical Work | | |
| | Practical Examination | | 15 |
| | Written Test | | 10 |
| | Viva Voce | | 05 |
| | Total | | 30 |
| Part D | Project Work/ Field Visit | | |
| | Practical File/ Student Portfolio | | 10 |
| | Total | | 10 |
| GRAND TOTAL | | | 100 |

Note: * marked units are to be assessed through Internal Assessment/ Student Activities. They are not to be assessed in Theory Exams

DETAILED CURRICULUM/TOPICS FOR CLASS XII:

Part-A: EMPLOYABILITY SKILLS

| S. No. | Units | Duration(in Hours) |
|---------------|---|---------------------------|
| 1. | Unit 1: Communication Skills- IV* | 10 |
| 2. | Unit 2: Self-management Skills- IV | 10 |
| 3. | Unit 3: Information and Communication Technology Skills- IV | 10 |
| 4. | Unit 4: Entrepreneurial Skills- IV | 15 |
| 5. | Unit 5: Green Skills- IV* | 05 |
| | TOTAL DURATION | 50 |

Note: * marked units are to be assessed through Internal Assessment/ Student Activities. They are not to be assessed in Theory Exams

The detailed curriculum/ topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

Part-B – SUBJECT SPECIFIC SKILLS

| | |
|----------------|---|
| Unit-1 | Present scenario and scope of floriculture in global market |
| Unit-2 | Employment avenues in floriculture sector |
| Unit-3 | Study of outdoor room concept: public area, private area and service area |
| Unit-4 | Different features of gardens like gate, walls, arches, pergolas, paths, roads, edges, hedges, stepping stones, sun dial, bird bath, statues, water fountain, lawns, herbaceous borders, bonsai, topiary etc. (Other features like rock garden, vertical garden, shrubbery, dry wall, water garden to be assessed in practicals only, no question to be asked in theory examination from this portion) |
| Unit-5 | Concept of CAD (Computer aided designs) for landscape designs |
| Unit-6 | Methods of establishing lawns and their management including irrigation, fertilization, mowing, (insect-pest and diseases and their control to be assessed in practicals only, no question to be asked in theory examination from this portion) |
| Unit-7 | Production of indoor plants and their maintenance (Nutrition, irrigation, insect-pest and diseases and their control to be assessed in practicals only, no question to be asked in theory examination from this portion) |
| Unit-8 | Commercial cultivation of rose, chrysanthemum, gladiolus, marigold, tuberose, jasmine and crossandra. (Propagation method, planting time, planting distance, harvesting (To be assessed in practicals only, no question to be asked in theory examination from this portion) |
| Unit-9 | Protected cultivation of commercial flower crops like rose, carnation, chrysanthemum, gerbera, orchids, antirrhinum etc. (Propagation method, planting time, planting distance, harvesting to be assessed in practicals only, no question to be asked in theory examination from this portion) |
| Unit-10 | Flower arrangements: types and styles |
| Unit-11 | Methods of dry flower making like air drying, embedded drying, water drying, press drying, glycerin drying, freeze drying etc. and other value added products (Preparation of value added products to be assessed in practicals only, no question to be asked in theory examination from this portion) |
| Unit-12 | Post-harvest handling of commercial flower crops including harvesting, pre-cooling, pulsing, holding, dry and wet storage, (packing, packaging and transportation to be assessed in practicals only, no question to be asked in theory examination from this portion) |

***NOTE: Please note that no question shall be asked from the highlighted portion in theory examination. These topics shall be assessed through Practical only.**