



GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP
DIRECTORATE GENERAL OF TRAINING

COMPETENCY BASED CURRICULUM

HORTICULTURE

(Duration: One Year)

CRAFTSMEN TRAINING SCHEME (CTS)

NSQF LEVEL- 4



SECTOR –AGRICULTURE



Directorate General of Training

HORTICULTURE

(Non-Engineering Trade)

(Revised in 2019)

Version: 1.2

CRAFTSMEN TRAINING SCHEME (CTS)

NSQF LEVEL- 4

Developed By

Ministry of Skill Development and Entrepreneurship

Directorate General of Training

CENTRAL STAFF TRAINING AND RESEARCH INSTITUTE

EN-81, Sector-V, Salt Lake City,

Kolkata – 700 091

www.cstaricalcutta.gov.in

1. COURSE INFORMATION

During the one-year duration of 'Horticulture' trade a candidate is trained on professional skill, professional knowledge and Employability skill related to job role. In addition to this a candidate is entrusted to undertake project work, extracurricular activities and on job training to build up confidence. The broad components covered under Professional Skill subject are as below:-

During the one-year duration the trainee learns about agro-meteorology, importance of different elements of weather & climate of agriculture, farm power and machinery, types and application of farm power, farm electricity, agricultural implements, basic knowledge on plant biology, Renewable energy, Soil properties, concept of formation of soil moisture and its conservation, role of organic matter in soil and its recycling water and their management, Soil fertility, fertilizers, manures & management of soil fertility and productivity, Introductory horticulture, fundamentals of horticultures, Importance and scope of horticulture, classification of horticultural plants etc. The trainee learns about importance of fruits, flowers and vegetables, distribution of area production and productivity of fruits, vegetables and flowers, present situation and scope of development of horticultural crops, schemes on horticultural development, layout of plots and gardens, planning for home gardens, landscape gardens, experimental designs, fruit culture, vegetable propagation, cultivation of fruits & vegetables and its preservation, management of orchards, present situation of cultivation of different fruits, Vegetative propagation, different methods of vegetative propagation of fruits and flowers. cultivation of vegetables & spices, present situation in the cultivation of different vegetable crops, cultivation of flowers, climbers, foliages & other crops, cultivation of mushroom, care and management of potted plants, pest management, classes of insect pests diseases, integrated pest management, Seed production, marketing & trade management, quality of seeds and classification of seeds, Inventory control & maintenance of records, markets and marketing, trade and trading, methods of management of store, types of market, export of products etc.

Learning outcomes are a reflection of total competencies of a trainee and assessment will be carried out as per the assessment criteria.

5.1 LEARNING OUTCOMES (TRADE SPECIFIC)

1. Identify metrological instruments and the diversity within the profession of horticulture following safety precautions.
2. Plan and prepare life cycles of plants, scope of horticulture and introduction to fruits, flowers & vegetables.
3. Classify fruits and vegetables based on season and edible parts.
4. Install agro-meteorology instruments, analyze metrological data and record the data.
5. Identify, select and maintain different farm power machinery.
6. Measure physical and chemical properties of soil, soil pH, different methods and ingredient use for correction of Acid soil.
7. Plan, install and use different irrigation systems, Water lifting systems and water quality assessment systems.
8. Identify different types of soil, methods of soil sampling and collection, study on soil physical characters, Interpret soil test reports and different soil correction methods.
9. Analyze Soil water holding capacity, Different methods and ingredients used for correction of Saline soil. Field visit for identification of soil problems.
10. Plan and execute different soil correction method through drainage and agronomic practices.
11. Measure soil fertility and apply soil fertility management for improvement of fertility of soil.
12. Apply Integrated Nutrient Management System (INMS) in the field.
13. Identify, prepare and apply Bio-fertilizers.
14. Identify the role of major and minor plant nutrients and its deficiency symptoms.
15. Produce different types of fruits, vegetables and flowers as per the requirements.
16. Apply various cultivation techniques & methods to fruit crops & vegetable farms.
17. Plan and execute different garden layouts and designs.
18. Identify and select different Vegetative propagation method & use of plant hormones.
19. Apply propagation techniques viz cutting, grafting, budding and layering.
20. Process and preserve vegetables and fruits using different techniques to prepare jam, jelly, squash, sauce, pickle, ketchup etc. its preservation and storage.
21. Develop the Cultivation techniques of different vegetables and spice crops.
22. Perform Floriculture and cultivation techniques for different Flowers, Climbers, Foliages and Medicinal plants to decorate.
23. Perform Cultivation of Betel Vine and Mushroom farming.

24. Apply Pest Management and control the Pest and Diseases of Horticultural Crops.
25. Use techniques of Seed Production, Processing and Packaging.
26. Maintain the records viz. Inventory Control, Maintenance of Records and Store management.
27. Conduct Market Survey and follow the legal requirement for trading as part of entrepreneurship development.