

Floriculturist (Protected Cultivation)

(Job Role)

Qualification Pack: Ref. Id. AGR/Q0702)
Sector: Agriculture

Textbook for Class XI

विद्यया ऽ मृतमश्नुते



एन सी ई आर टी
NCERT

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FOREWORD

The National Curriculum Framework–2005 (NCF–2005) recommends bringing work and education into the domain of the curricular, infusing it in all areas of learning while giving it an identity of its own at relevant stages. It explains that work transforms knowledge into experience and generates important personal and social values such as self-reliance, creativity and cooperation. Through work one learns to find one's place in the society. It is an educational activity with an inherent potential for inclusion. Therefore, an experience of involvement in productive work in an educational setting will make one appreciate the worth of social life and what is valued and appreciated in society. Work involves interaction with material or other people (mostly both), thus creating a deeper comprehension and increased practical knowledge of natural substances and social relationships.

Through work and education, school knowledge can be easily linked to learners' life outside the school. This also makes a departure from the legacy of bookish learning and bridges the gap between the school, home, community and the workplace. The NCF–2005 also emphasises on Vocational Education and Training (VET) for all those children who wish to acquire additional skills and/or seek livelihood through vocational education after either discontinuing or completing their school education. VET is expected to provide a 'preferred and dignified' choice rather than a terminal or 'last-resort' option.

As a follow-up of this, NCERT has attempted to infuse work across the subject areas and also contributed in the development of the National Skill Qualification Framework (NSQF) for the country, which was notified on 27 December 2013. It is a quality assurance framework that organises all qualifications according to levels of knowledge, skills and attitude. These levels, graded from one to ten, are defined in terms of learning outcomes, which the learner must possess regardless of whether they are obtained through formal, non-formal or informal learning. The NSQF sets common principles and guidelines for a nationally

recognised qualification system covering Schools, Vocational Education and Training Institutions, Technical Education Institutions, Colleges and Universities.

It is under this backdrop that Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal, a constituent of NCERT has developed learning outcomes based modular curricula for the vocational subjects from Classes IX to XII. This has been developed under the Centrally Sponsored Scheme of Vocationalisation of Secondary and Higher Secondary Education of the Ministry of Human Resource Development.

This textbook has been developed as per the learning outcomes based curriculum, keeping in view the National Occupational Standards (NOS) for the job role and to promote experiential learning related to the vocation. This will enable the students to acquire necessary skills, knowledge and attitude.

I acknowledge the contribution of the development team, reviewers and all the institutions and organisations, which have supported in the development of this textbook.

NCERT would welcome suggestions from students, teachers and parents, which would help us to further improve the quality of the material in subsequent editions.

New Delhi
June 2018

HRUSHIKESH SENAPATY
Director
National Council of Educational
Research and Training

ABOUT THE TEXTBOOK

Agriculture is an important part of India's economy, which accounts for about 18 per cent of country's GDP and occupies almost 43 per cent of India's geographical area. Agriculture industry employs a large number of people in the organised and the unorganised sector. The requirement of the skilled workforce in this sector is increasing day by day. The various job roles such as Floriculturist–protected cultivation, Floriculturist–open cultivation, Tuber Crop Cultivator, Micro Irrigation Technician, Solanaceous Crop Cultivator, etc., are being in demand by the states for preparing skilled manpower.

A Floriculturist (Protected Cultivation) is a person who has undertaken various activities of flower cultivation involving preparatory cultivation, cultivation and post harvest management in a greenhouse. Their responsibility also involves 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 an efficient manner to allow the production of high quality flowers, their harvesting and post harvest management towards getting higher returns.

The textbook for the job role of Floriculturist (Protected Cultivation) has been developed to impart knowledge skills through hands-on learning experience, which forms a part of the experimental learning. Experimental learning focuses on the learning process for the individual, therefore, the learning activities are student-centred rather than teacher-centred.

The textbook has been developed with contributions of the subject experts, vocational teachers and industry experts and academicians for making it a useful and inspiring teaching-learning resource material for the vocational students. Adequate care has been taken to align the content of the textbook with the National Occupational Standards (NOS) for the job role so that the students acquire the necessary knowledge and skills as per the performance criteria mentioned in the respective NOS of the Qualification Pack (QP). It has been reviewed by experts so

as to make sure that the content is not only aligned with the NOS, but is also of high quality. The NOS for the job role of Floriculturist (Protected Cultivation) covered through this textbook are as follows:

1. AGR/N0704-Pre-cultivation Operations of Floriculture in the Greenhouse.
2. AGR/N0705-Cultivation Operations of Floriculture in Greenhouse.

Unit 1 of this textbook introduces the importance of protected cultivation, criteria of site selection and suitable crops for protected cultivation. Unit 2 focuses on the types of protected structures, classification of greenhouses and major components of greenhouse. Unit 3 deals with the growing media, its composition, sterilisation of growing media, preparation of beds and containers for growing flower crops. Unit 4 focuses on micro irrigation systems and their application under protected cultivation, fertilisers and their scheduling. Unit 5 deals with the equipment for environmental parameters monitoring in greenhouses, and management of environmental parameters.

I hope this textbook will be useful for students and teachers who will opt for this job role. Any further suggestions for improving this textbook are always welcome.

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Do You Know

According to the 86th Constitutional Amendment Act, 2002, free and compulsory education for all children in 6-14 year age group is now a Fundamental Right under Article 21-A of the Constitution.

**EDUCATION IS NEITHER A
PRIVILEGE NOR FAVOUR BUT A
BASIC HUMAN RIGHT TO
WHICH ALL GIRLS AND WOMEN
ARE ENTITLED**

*Give Girls
Their Chance !*

