

Polyhouse and Greenhouse Consultant

1. Department: Botany
2. Title: Polyhouse and Greenhouse Consultant
3. Sector: - M.Sc. II (Botany)
4. Year of implementation: 2024-2025

Course Structure

Skill Level	Theory Hours	Practical Hours	Total Hours	Credits	No. of students in batch
7	15	30	45	02	09

Syllabus

Learning Objectives:

This subject is aimed to develop an understanding among the students on

1. Protected cultivation techniques
2. Modern technologies in agricultural and horticultural production

Theory Syllabus (15 Hrs, Credit: 01)

Unit 1: Construction of Polyhouse and Greenhouse

Importance of polyhouse and greenhouse; energy management, low-cost structures; types of greenhouses and polyhouse; Insect and disease management in protected structures; Types of loans and classification of agricultural credit. Sources of agricultural finance.

Unit II Cultivation of vegetable & floricultural crops

Cultivation practices of Tomato, Broccoli, Carrot, Rose, Tuberose, Chrysanthemum w. r. t. soil, irrigation, fertigation, varieties, Problem of growing vegetable and floricultural crops in protected structures and their remedies, insect and disease management in protected structures.

Practical Syllabus (30 Hrs, Credit: 01)

List of Experiments:

24 hr

1. Fertigation and nutrient management,
2. control of insect-pests and disease in greenhouse
3. marketing survey of the selected crops

4. Seed germination and establishment of seedlings
5. Application of phytohormones
6. Identification and management of pest and diseases

Project/ Field Visits/ Industrial Visit

06 hr

Learning Outcomes:

After completing the course, the student will be able to:

1. Assist the construction of polyhouse or greenhouse
2. Produce seedlings to sell in the market

Recommended Books:

1. Technical standards for naturally ventilated Fan & Pad Greenhouse and shade net house: Protected production under NHB Scheme. By National Horticultural Board, Ministry of Agri., Govt. of India.
2. Greenhouse Operator: A Facilitator Guide. Ministry of Skill Development and Entrepreneurship. National Skill Development Corporation.
3. <https://avtorganic.in/index.php/poly-house>.

BOS Sub Committee:

1. Prof. (Dr.) D. D. Namdas -Chairman
2. Mr. S. M. Gojare- Member

Expert:

1. Mr. B. K. Pawar – Industrial Expert
2. Dr. B. M. Yadgirwar – Academic Expert