

Format for Syllabus of Theory Paper
Government Autonomous P.G. College, Chhindwara (M.P.)
Format for Syllabus of Theory Paper

Part A Introduction		
1 st Year Generic Elective course in Botany		
Program: Certificate	Class: 1 st year	Year: 2021 Session: 2021-22
Subject: Botany		
1	Course Code	SI-BOTAIG
2	Course Title	Nursery Management (paper ...)
3	Course Type (Core Course/Elective/Generic Elective/Vocational/.....)	Elective
4	Pre-requisite (if any)	This course can be opted as an elective by the students of any subjects/ Open for all
5	Course Learning outcomes (CLO)	<ul style="list-style-type: none"> • It is directly related with entrepreneurship development at small and large scale. • It gives an opportunity to understand the methods of propagation, techniques of implementation, advance knowledge of micro propagation including commercial management practices. • High-tech nursery establishment as a venture is possible after completing this course. • It also provides skills of practical application for nursery establishment and related businesses such as marketing of coco peat, compost, green manure, soil media and perlite etc.
6	Credit Value	4 Credits Theory
7	Total Marks	Max. Marks: 25+75 Min. Passing Marks: 33
Part B- Content of the Course		
Total No. of Lectures- 60 Hours Tutorials- 00-Practical-00 (2 hours per week):		
L-T-P:		
Unit	Topics	No. of Lectures
I	Introduction to nursery 1.1 Introduction, Nursery tools & Containers, Types of nursery. 1.2 Nursery techniques. 1.3 Factors affecting plant growth, Plant growth regulators. 1.4 Introduction to landscaping & Lawn making. 1.5 Special practices in nursery management- Micro-propagation (in vitro culture), soilless culture.	15
II	Vegetative propagation-	15

	1.1 Plant propagation- Importance, advantages, methods and classification. 1.2 Propagation through stolons, runners, offsets, bulbs, corms, rooted crowns, division, cuttings, layering. 1.3 Grafting and budding. 1.4 Rootstock-scion relationship. Top working.	
III	Regular nursery management- 1.1 Nursery- Site selection, lay out, Record Keeping 1.2 Nursery Structures, Seed treatments. 1.3 Soil preparation, Potting, Repotting. 1.4 Preparation of nursery beds and sowing of seeds. 1.5 Progeny orchard establishment and management.	15
IV	Commercial nursery management 1.1 Nursery management of major crops in India, 1.2 Nursery accreditation and certification. 1.3 Problems in nursery management and its control. 1.4 Pest and disease management. 1.5 Hi-tech nursery establishment and management. 1.6 Marketing strategies.	15

Keywords/Tags: Nursery Tools, Nursery Techniques, Landscaping, Vegetative propagation, Plant tissue culture Seed treatment, Progeny orchard. Pest and Disease Management, Marketing Strategies, High tech nursery.

Part C-Learning Resources

Text Books, Reference Books, Other resources

Suggested Readings:

1. Singh Jitendra, Basic Horticulture., Kalyani Publications, New Delhi 2011. Kirad KS,
2. Barche Swati and Gupta NK, Fundamentals of Horticulture, Brillion Publishing, New Delhi. 2018.
3. Chadha KL, Hand book of Horticulture, (ICAR) ICAR, New Delhi 2001.
4. Hartmann H.T, and Kester, D.E. Plant Propagation Principles and practices Prentice hall of India Pvt.Ltd., Bombay. 1976 (9th Edition 2018)
5. Saiprasad SV, Shri Dhar, Iqbal Sanjeeda and Choudhry J. Agri-Facts Objective Horticulture, New Vishal Publication, New Delhi. 2017

Suggested equivalent online courses:

Part D-Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks : 100

Continuous Comprehensive Evaluation (CCE) : 25marks University Exam (UE) 75 marks

Internal Assessment :	Class Test Assignment/Presentation	15
Continuous Comprehensive		10