

GANPAT UNIVERSITY									
FACULTY OF AGRICULTURE, ALLIED SCIENCES & TECHNOLOGY									
Programme	B.Sc. (Hons) Agriculture				Branch/Spec.	Agriculture			
Semester	I				Version	1.1.1.0			
Effective from Academic Year	2025-26		Effective for the batch Admitted in			July 2025			
Subject code	2IA06FHC		Subject Name		Fundamentals of Horticulture				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture (DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	T U	P	TW					
Credit	2	0	1	-	3	Theory	40	40	80
Hours	2	0	2	-	4	Practical	20	0	20
Objectives of the course:									
<p>To acquaint the students with the basic concepts of Horticulture and their application in agriculture. The syllabus aims to</p> <p>CO 1. Understand the concepts and fundamentals of horticulture</p> <p>CO 2. Learn different propagation method and orchard development theoretically and practically.</p> <p>CO 3. Learn methods and importance of pruning, pollination and fertilization in horticultural plants</p> <p>CO 4. Learn about medicinal and aromatic plants with their importance</p> <p>CO 5. Learn methods and uses of irrigation in horticultural crops.</p> <p>CO 6. Understand the subject with practical learning and exposure.</p>									
Theory Syllabus									
Unit	Content								Hrs
1	Horticulture - Its definition and branches, importance and scope; horticultural and botanical classification; climate and soil for horticultural crops;								6
2	Plant propagation-methods and propagating structures; Seed dormancy, Seed germination, Merits and demerits of sexual and asexual propagation Stock-scion relationship, principles of orchard establishment;								8
3	Principles and methods of training and pruning, juvenility and flower bud differentiation; unfruitfulness; pollination, pollinizers and pollinators; fertilization and parthenocarpy;								8
4	Medicinal and aromatic plants; importance of plant bio-regulators in horticulture. Irrigation –methods, Fertilizer application in horticultural crops.								8
Practical Content-									
<ol style="list-style-type: none"> 1. Identification and nomenclature of fruit, 2. Layout of an orchard, pit making and system of planting, 3. Nursery raising techniques of fruit crops, 4. Understanding of plant propagation structures, 5. Propagation through seeds and plant parts, 6. Propagation techniques for horticultural crops, Container, potting mixture, potting and repotting, 									

7. Training and pruning methods on fruit crops,
8. Preparation of fertilizer mixture and application,
9. Preparation and application of PGR,
10. Layout of different irrigation systems,
11. Maturity studies, harvesting, grading, packaging and storage.

Reference book

1. Basics of Horticulture by Jitendra Singh
2. Introduction to Horticulture by N. Kumar
3. Handbook of Horticulture by ICAR