GANPAT UNIVERSITY									
FACULTY OF AGRICULTURE, ALLIED SCIENCES AND TECHNOLOGY									
Programme	B.Sc. (Hons.)					Branch/Spec.	Agriculture		
Semester	IV					Version	1.1.1.0		
Effective from Academic Year			2026-27			Effective for the Batch admitted in			July 2025
Course Code	IVA02PTV		Course Name			Production Technology of Vegetables and Spices			
Teaching Scheme						Examination Scheme (Marks)			
(Per week)	Lecture (DT)		Practical (Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	1	0	1	0	2	Theory	40	40	80
Hours	1	0	2	0	3	Practical	20	00	20

Pre-requisites
Not Applicable

Course Outcomes	
On successful completion of the course, the students will be able to:	
CO1	Students understand the importance of vegetables & spices in improving human nutrition and the national economy.
CO2	Students will understand knowledge on specialized production techniques of vegetables andspices.
CO3	Students will knowledge about quality requirement and production and techniques.
CO4	Understand subject with practical learning and managing skill for solving field problems.

Theory Syllabus		
Unit	Content	Hrs.
1	Importance of vegetables and spices in human nutrition and national economy, kitchen gardening, brief about origin, area, climate, soil, improved varieties and cultivation practices such as time of sowing, transplanting techniques, planting distance, fertilizer requirements, irrigation, weed management, harvesting and yield, physiological disorders of important vegetable and spices (tomato, okra, brinjal, chili, capsicum, cucumber, bitter gourd , bottle gourd, sweet potato, cassava and moringa, pumpkin, French bean, peas	4
2	Cole crops such as cabbage, cauliflower, knol-khol; bulb crops such as onion, garlic; root crops such as carrot, radish, beetroot	4
3	Tuber crops such as potato, leafy vegetables such as amaranth, palak, perennial vegetables.	3
4	Spice crops like turmeric, zinger, garlic, coriander, cumin, black pepper, cardamom, fenugreek, fennel, clove, nutmeg, cinnamon, curry leaf, tamarind and herbal spices	4

Practical Content
1. Identification of vegetables and spice crops and their seeds.
2. Description of varieties.
3. Propagation methods - rapid multiplication techniques - seed collection and extraction.
4. Nursery raising. Direct seed sowing and transplanting.
5. Study of morphological characters of different vegetables and spices.
6. Fertilizers applications.
7. Harvesting and post-harvest practices.
8. Economics of vegetables and spices cultivation.
9. Visit to spice gardens.

Text Books	
1	Olericulture, Fundamentals of Vegetable Production (Vol.1) by K.P. Singh, Anant Bahadur

Reference Books	
1	Vegetable crops by J. Kabir, T.K. Bose, M.G. Som
2	Vegetable crops (Production technology, Vol II) by M.S. Fagaria, B.R. Choudhury, R.S. Dhaka

Note: Version 1.0.0.0 (First Digit= New syllabus/Revision in Full Syllabus, Second Digit=Revision in Teaching Scheme, Third Digit=Revision in Exam Scheme, Forth Digit= Content Revision)
L=Lecture, TU=Tutorial, P= Practical/Lab., TW= Term work, DT= Direct Teaching, Lab.= Laboratory work
CE= Continuous Evaluation, SEE= Semester End Examination

	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	2	3	2	2	3	3	2	2	3	2	2
CO2	3	2	3	2	3	3	3	3	2	3	3	3
CO3	3	2	3	2	1	1	3	3	2	2	1	1
CO4	3	2	3	3	2	2	3	3	3	2	1	2

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