



Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore
Shri Vaishnav Institute of Agriculture
B.Sc. (Hons) Agriculture
Generic Elective Course

AGGE604: Post-harvest Management and Value Addition of Fruits and Vegetables 3(2+1)

Course Code	Course Name	TEACHING & EVALUATION SCHEME							
		THEORY			PRACTICAL		L	P	CREDITS
		END SEM University Exam	Two term exam*	Teachers Assessment*	END SEM University Exam	Teachers Assessment*			
AGGE604	Post-harvest Management and Value Addition of Fruits and Vegetables	50	30	00	15	05	2	1	3

1. **Legends:** L - Lecture; P – Practical; C-Credit;
2. ***Teacher Assessment** shall be based on following components: Quiz / Assignment / Project / Participation in Class,

Course Objective: To study about importance of post harvest management

Course Outcomes:

1. Student will able to understand methods and process of preservation
2. Student will able to understand how to manage fruits and vegetables after harvesting

Unit-1:Importance of post-harvest processing of fruits and vegetables, extent and possible causes of post harvest losses;

Unit-2:Pre-harvest factors affecting postharvest quality, maturity, ripening and changes occurring during ripening; Respiration and factors affecting respiration rate;

Unit-3:Harvesting and field handling; Storage (ZECC, cold storage, CA, MA, and hypobaric); Value addition concept; Principles and methods of preservation;

Unit-4:Intermediate moisture food- Jam, jelly, marmalade, preserve, candy – Concepts and Standards; Fermented and non-fermented beverages.

Unit-5:Tomato products- Concepts and Standards; Drying/ Dehydration of fruits and vegetables – Concept and methods, osmotic drying. Canning – Concepts and Standards, packaging of products.



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Practical : AGGE604

Applications of different types of packaging, containers for shelf life extension. Effect of temperature on shelf life and quality of produce. Demonstration of chilling and freezing injury in vegetables and fruits. Extraction and preservation of pulps and juices. Preparation of jam, jelly, RTS, nectar, squash, osmotically dried products, fruit bar and candy and tomato products, canned products. Quality evaluation of products -- physico-chemical and sensory. Visit to processing unit/ industry.

BOOKS:

1. Rathore, N.S., Mathur, G.K., Chasta, S.s. 2012. Post-harvest Management and Processing of Fruits and Vegetables. ICAR, New Delhi
2. Srivastava, R.P. and Sanjeev Kumar, 2002. Fruit and vegetable Preservation: Principles and Practices. International Book Distributio Company, Lucknow.
3. Giridharilal, G.S., Siddappa and Tondon, G.L. 2007. Preservation of Fruits and Vegetables. ICAR, New Delhi.