

FOUR YEAR UNDERGRADUATE PROGRAM (2024 – 28)
Department of Home Science
Course Curriculum

PART-A: Introduction (VALUE ADDITION COURSE (VAC))			
Program: Bachelor in Arts (Certificate / Diploma / Degree/Honors)		Semeter – I/III/V	Session:2024-2025
1	CourseCode	HSVAC-01	
2	CourseTitle	TECHNIQUES OF FOOD PRESERVATION	
3	CourseType	VAC	
4	Pre-requisite (if, any)	<i>Asperrequirement</i>	
5	CourseLearning.O utcomes(CLO)	<ul style="list-style-type: none"> • Know the principles of preservation behind the methods of preservation • Understand the stages of sugar cookery, quality of pectin and acidity in the development of preserved food products • Acquire skills to formulate food-based products • Explore the principles of preservation in fruits and vegetables-based products • Skills to prepare cereals and pulse based preserved products and develop new products with retention of quality 	
6	CreditValue	2Credits	<i>Credit = 15 Hours - learning & Observation</i>
7	TotalMarks	Max.Marks:50	MinPassingMarks:20
PART-B: Content of the Course			
Total No. of Teaching-learning Periods (01 Hr. per period) - 30 Periods (30 Hours)			
Unit	Topics (Course contents)		No. of Period
I	Concept of Food Preservation	<ul style="list-style-type: none"> • Importance of Food Preservation, • Types of Food spoilage by Micro organisms and by Enzymes • Basic Principles of Food Preservation • Food preservatives- Use of Salt, Acid, Sugar, natural food preservatives and artificial preservatives 	08
II	Preparation of dehydrated products	<ul style="list-style-type: none"> • Methods of drying & dehydration , different types of driers, freeze drying- lyophilisation , packing & storage • Drying methods. • Preparation of salted, dehydrated, preserves (Traditional Indian varieties of chips, Papads, Khakharasetc and Masala Powders, onion, garlic, ginger powder etc) • Hands on experience :Drying of vegetables- peas, potato, carrot, French beans, Reconstitution of dried vegetables, Drying & preparation of powders- garlic, ginger, spices mix etc 	07

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III	Preservation by Using Sugar	<ul style="list-style-type: none"> • Role of Pectin in Preserved foods • Sugar Concentrates – Principles of Gel Formation • Hands on Experience: Preparation of Jam, Jelly, Marmalades, Sauce and Squash • Preserves, Candied, Glazed, Crystallized Fruits, Toffee 	08
IV	Preservation by Using Chemicals and Salts and Fermentation	<ul style="list-style-type: none"> • Preparation and Preservation of Fruit Juices, RTS • Pickling – Principles Involved and Types of Pickles • Chemical Preservatives – Definition, Role of Preservation • Permitted Preservatives, FSSAI guidelines • Foods fermented by Yeasts • Foods fermented by Bacteria 	07
	Preservation by Advanced Preservation Technology	Freezing, Pasteurization, Food Irradiation, Canning and Bottling	
Keywords	<i>Preservation, Spoilage, Canning, Pasteurization, chemical preservation, Crystallized and glazed fruit..</i>		

PART-C: Learning Resources

TextBooks, Reference Books and Others

TextBooks Recommended –

- Srivastava R.P. (2012), Fruit and vegetable preservation – Principles and Practices, International Book Distributing Co., (IBDC), New Delhi.
- Maria Parloa (2009), canned fruit, preserves and jellies: Household methods of preparation, US Department of Agriculture, Washington.
- Shafiur, Rahman, M. (2007), Handbook of Food Preservation, 2nd edition, CRC press, New Delhi.

Online Resources–

1. food preservation: <https://www.sciencedirect.com/topics/food-science/food-preservation>
2. chemical methods of food preservation: <https://www.reagents.co.uk/blog/chemical-method-of-food-prservation/>
3. Principle of the food processing & preservation- simple book Publishing: <https://ebooks.infibnet.ac.in/ftp1/>

Online Resources–

- **e-Resources/e-books and e-learning portals**

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PART -D: Assessment and Evaluation		
Suggested Continuous Evaluation Methods:		
Maximum Marks: 50 Marks		
Continuous Internal Assessment(CIA): 15 Marks		
End Semester Exam(ESE): 35 Marks		
Continuous Internal Assessment(CIA): (By Course Teacher)	Internal Test / Quiz-(2): 10 & 10 Assignment/Seminar +Attendance - 05 Total Marks - 15	Better marks out of the two Test / Quiz +obtained marks in Assignment shall be considered against 15 Marks
End Semester Exam (ESE):	Laboratory / Field Skill Performance: On spot Assessment A. Performed the Task based on lab. work - 20 Marks B. Spotting based on tools & technology (written) – 10 Marks C. Viva-voce (based on principle/technology) - 05 Marks	Managed by Course teacher as per lab. status

Name and Signature of Convener & Members of CBOS:



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