

FOUR YEAR UNDERGRADUATE PROGRAM 2024-28
FACULTY OF Home Science
COURSE CURRICULUM

PART A: Introduction			
Program: Bachelor in Home Science <i>(Degree/Honors)</i>		Semester : V	
Session:2024-25			
1	Course Code	HSSC – 14T	
2	Course Title	Food Preservation	
3	Course Type	DSC	
4	Pre-requisite (if any)	As per Program	
5	Course Learning Outcomes (CLO)	<ul style="list-style-type: none"> • To learn Basic Knowledge of Principles of Preservation. • To assess Basic Knowledge of Asepsis, Temperature. • To identify Basic Knowledge of Food Processing. • To analyze Basic Knowledge of Traditional Foods. • To apply Basic Knowledge of Effects of Food Storage. • To classify Basic Knowledge of Dehydration and Pasteurization. 	
6	Credit Value	3 C	1 Credit = 15 Hours - learning & Observation
7	Total Marks	Max. Marks: 100	Min Passing Marks : 40

PART B: Content of the Course		
Total No. of Teaching – learning Periods (01 hr per period) : 45Period (45 hours)		
Unit	Topics (Course Contents)	No. of Period
I	Food Preservation -Food and its preservation. Home and community level including commercial operations.Principles of food Preservation. Causes of spoilage of food.	12
II	Food Storage -Food Storage Principles -Plant product. Storage, Animal product Storage, Effects of Storage. Canning-Principles and methodology. Pasteurization - Principles & Methodology Effect on food quality. Drying & Dehydration - Methods used and effect on food quality.	11
III	Uses of low temperature - Refrigeration and freezing methods, Principles and applications. Shelf-life of frozen foods Pickling and Fermentation- Pickles, chutneys, ketchups sauces. Fermentation- Types, products and method, use	11
IV	Chemical Preservatives - Preparation of Fruit, Juices, Squashes, Fruited Syrups, Cordials, Jam Jelly. Nutritional Implications of food processing- Causes for loss of Vitamins and minerals, Enrichment and Fortification	11
Keywords: - Food preservation, Food Storage, Pasteurization, Drying & Dehydration, Uses of low temperature, Pickling and Fermentation, Chemical Preservatives, Nutritional Implications of food processing.		

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PART C:**Learning Resources : Text Books, Reference Books, Other Resources****Text books Recommended –**

1. Fruit and vegetable preservation, R.P.Shrivastava, 3rd Edition, CBS Publication,
2. Food processing and preservation, G.Subulakshmi, 2nd Edition, New age International Publication.
3. Food science, B. Shrilaxmi, 7th Edition, New age International Publication.
4. Food processing and preservation, DS Warris 1st Edition, CBS Publication.
5. Food processing and technology, Atul Agnihotri, 2nd Edition, Crescent publication.
6. Food processing, packaging, preservation and safety, R.D.Joshi, 3rd Edition, Agrotech press Publication
7. Handbook of Food Preservation, M.shafiqur Rahman, 5th Edition, CRC publication.

Online Resources:

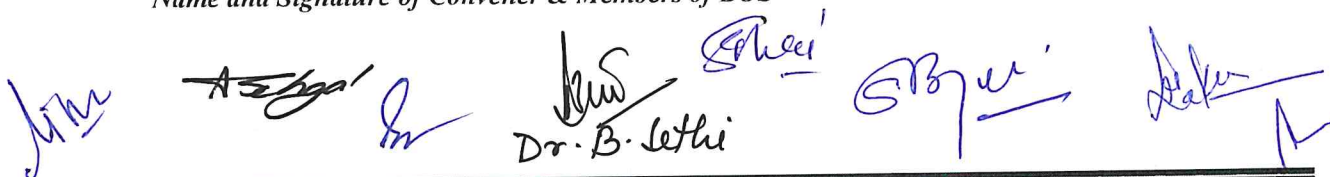
- Food preservation
<https://youtu.be/2PgVWLjK0gE>
- Food Preservation Part II. Preservation by Chemical preservatives.
<https://youtu.be/HTIetKeQx1g>
- Food chemistry : preservatives & additives (beginners guide)
<https://youtu.be/9dhjmfdbQh8>
- Physical and chemical methods of food preservation | Food and industrial Microbiology
<https://youtu.be/ItmBg5FBdRM>
- Principles and methods of food preservation
<https://youtu.be/sE6ABn7qbmY>
- CANNING: canning of fruits and vegetables. Types of cans process of canning.
https://youtu.be/XKvo9_Jdt4
- खाद्यपरिरक्षण //Food preservation
<https://youtu.be/WngqPRYWvAY>
- Food Preservation Techniques? Definition, Principle, Physical & Chemical Methods
<https://youtu.be/M-5pgPzyCS4>
- Chemical Preservation of Foods | Food Preservation Methods - Lesson 11 Food Processing Technology
<https://youtu.be/BQFC4APvqDo>
- Food Preservation and Storage
<https://youtu.be/uRd3VzOfOJc>

PART D:Assessment and Evaluation**Suggested Continuous Evaluation Methods:**

Maximum Marks:	100 marks
Continuous Comprehensive Evaluation(CCE):	30 Marks
Semester End Exam (SEE):	70 Marks

Internal Assessment:	Internal Test / Quiz(2) –20+20	Better marks out of the two tests/ Quiz + Obtained marks in assignment shall be considered against 30 Marks
Continuous Internal Assessment (CIA)	Assignment/Seminar – 10	
	Total Marks–30	
End Semester Exam (ESE):	Two section – A & B	
	Section A: Q1. Objective – 10 x1= 10 Mark; Q2. Short answer type- 5x4 =20Marks	
	Section B: Descriptive answer type qts.,1 out of 2 from each unit-4x10=40 Marks	

Name and Signature of Convener & Members of BOS




 Dr. B. Sethi

(71)

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2	Course Title	Food Preservation (<i>Practical</i>)	
3	Course Type	DSC	
4	Pre-requisite (if any)	<i>As per Program</i>	
5	Course Learning Outcomes (CLO)	<ul style="list-style-type: none"> • To learn Basic Knowledge of Principles of Preservation. • To assess Basic Knowledge of Asepsis, Temperature. • To identify Basic Knowledge of Food Processing. • To analyze Basic Knowledge of Traditional Foods. • To apply Basic Knowledge of Effects of Food Storage. • To classify Basic Knowledge of Dehydration and Pasteurization. 	
6	Credit Value	1 C	<i>1 Credit = 30 Hrs Laboratory/ Field learning/ Training</i>
7	Total Marks	Max. Marks: 50	Min Passing Marks : 20

PART B: Content of the Course		No. of Periods
Total No. of Teaching – learning / Performance Periods : 30 periods (30 hours)		
Module	Topics (Course Contents)	
Lab/ Field Training/ Experiment contents of the course	<ol style="list-style-type: none"> 1. Preparation of Jam, Jellies marmalades. 2. Preparation of Pickles & chutneys. 3. Dehydration of Vegetables & Fruits. 4. Preparation of synthetic syrups & squashes. 5. Preparation of Sauces. 6. Preparation of preserved foods by using chemical preservatives by using quantities suggested by FAD and to observe their shelf life. 7. Preparation of Papad, Badi, Chips. 8. Survey of market products. 9. Packaging technique 10. Project- Survey of popular preserved foods in market 	30
Key Words	Preservation, Nutritive value, shelf life, Freezing,	



PART C:**Learning Resources : Text Books. Reference Books, Other Resources****Text Books Recommended :**

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6. Food processing, packaging, preservation and safety, R.D.Joshi, 3rd Edition, Agrotech press Publication
7. Handbook of Food Preservation, M.shafiur Rahman, 5th Edition, CRC publication.

Online Resources :

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<https://youtu.be/HTIetKeQxlg>
- Food chemistry : preservatives & additives (beginners guide)
<https://youtu.be/9dhjmfdbQh8>
- Physical and chemical methods of food preservation | Food and industrial Microbiology
<https://youtu.be/ItmBg5FBdRM>
- Principles and methods of food preservation
<https://youtu.be/sE6ABn7qbmY>
- CANNING: canning of fruits and vegetables. Types of cans process of canning.
https://youtu.be/XKvo9_Jdt4
- खाद्यपरिरक्षण //Food preservation
<https://youtu.be/WngqPRYWvAY>
- Food Preservation Techniques? Definition, Principle, Physical & Chemical Methods
<https://youtu.be/M-5pgPzyCS4>
- Chemical Preservation of Foods | Food Preservation Methods - Lesson 11 | Food Processing Technology
<https://youtu.be/BQFC4APvqDo>
- Food Preservation and Storage
<https://youtu.be/uRd3VzOfOJc>

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

Internal Assessment:	Internal Test / Quiz (2) -	10 & 10	Better marks out of the two tests/ Quiz + Obtained marks in Assignment shall be considered against 15 Marks
Continuous Internal Assessment (CIA)	Assignment/Seminar+ Attendance -	05	
	Total Marks -	15	

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

Signature of Convener and Members (CBoS):