



(Master of Science - Home Science) (Food Biotechnology)  
(M.Sc. - H.Sc.) (Food Biotechnology) Semester (II)

Course Code	PH02EFDN51	Title of the Course	Food Processing Technology
Total Credits of the Course	04	Hours per Week	04

Course Objective:	1. To understand the processing steps involved in the commercial manufacture of different food products from different food groups
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Course Content		
Unit	Description	Weightage (%)
1.	(a) Basic issues of the food processing industry, Basic problems of the food processing industry, present status, status of food processing technology, growth trend and growth strategy, Govt. policies and programmes for food processing industry (b) Flesh foods: Meat processing, processed meat products, poultry processing, dried egg powder, fish processing, fish meal	20
2.	Processing of cereal grains: Milling process of rice, milling process of wheat, milling of cereals and legumes, breakfast cereals, pasta products, rice flakes, puffed rice, bakery product processing, maize processing- starch preparation, puffed maize; fermentation of cereals, nutrient loss during processing, fortification etc	26
3.	Processing of milk and milk products : Pasteurization and sterilization of milk, different types of milk and its processing, milk powder, processing steps and machinery, cheese processing steps and machinery, butter processing steps and machinery, nutrient loss during processing, fortification of processed milk for infant food	28
4.	(a) Processing of fruits and vegetables: Dehydration of fruits and vegetables, different methods of dehydration, canning, processing steps equipments, nutrient losses eluring processing. (b) Legume, oil seed processing: Processing steps, equipments, soya flour processing texturized soya protein foods, legume flour preparation, other legume based products	20
5.	Packaging: New trends in of packaging, packaging for specific foods in detail	6

Teaching-	Classroom lectures (Blackboard/Power Point Presentations), Discussion
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Learning Methodology	on recent updates with related examples
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcome: Having completed this course, the learner will be able to	
1.	Compare and contrast the operation of different food processing techniques.
2.	Gain knowledge of the appropriate use of food processing technology.

Suggested References:	
Sr. No.	References
1.	Sewa Ram & Mishra, B. (2010). <i>Cereal Processing &amp; Nutritional Quality</i> . New India Publishing Agency, New Delhi.
2.	Woodroof & Luh. (1975). <i>Commercial Fruit Processing</i> . The Avi Publishing Company, Inc. Connecticut.
3.	Woodroof & Luh. (1975). <i>Commercial Vegetable Processing</i> . The Avi Publishing Company, Inc. Connecticut.
4.	<i>Edible Oil Processing</i> . (Editors: Hann & Hamilton). Blackwell Publishing.
5.	Sukumar De. <i>Outlines of Dairy Technology</i> . Oxford University Press.
6.	<i>Nutritional Evaluation of Food Processing</i> . (1975). (Editors: Harris & Karmas). (Second Edition). The Avi Publishing Company, INC.
7.	Neelam Khetarpaul & Darshan Punia. (2008). <i>Food Packaging</i> . Daya Publishing House, New Delhi.





8.	International Journal of Food Processing & Technology.
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On-line resources to be used if available as reference material
<a href="https://epgp.inflibnet.ac.in">https://epgp.inflibnet.ac.in</a>
Journal of Food Science and Technology (JFST), Springer
Journal of Food Processing and Preservation, Wiley
Food Quality and Preference, Elsevier
International Journal of Vegetable Science, Taylor And Francis
Journal of Dairy Research, Cambridge University Press
Food Quality and Safety, Oxford University Press
Dairy Science and Technology, Springer Nature
International Journal of Food Science and Technology, CFTRI

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