

INTERNSHIP PROGRAMME FOR UG DEGREE (SEMESTER-V)

(For the students admitted under New Curriculum and Credit Framework from the academic session 2023-24)



Course Title: Hands-on Training in Bakery & Confectionery	
Internship Providing Organization (IPO):	Department of Nutrition, Bankura Sammilani College
Category of Course:	For UG DEGREE (SEM-V)
Duration:	60 Hours
Course Coordinator and Contact Details:	Mr. Malay Maji Mob: 9635094546
Mentors:	Mrs. Mousumi Ganguly Mrs. Rumpa Dhua
Intake Capacity:	35 Students
Course Fees:	Rs. 200/- (Students from Host Institution) Rs. 400/- (Students from Other Institution)

SYLLABUS

Course Title: Hands-on Training in Bakery & Confectionery
[50 Marks/2 Credits/60 Hours]

Learning Outcomes (LO)

- Understand the industrial significance of bakery and confectionery in the food processing sector.
- Identify and operate various primary bakery and confectionery equipment such as flour mill mixer, moulding machine, oven, etc.
- Differentiate between types of bakery products and understand the ingredients and procedures involved in their preparation.
- Explain the quality aspects of flour and other raw materials used in baking.
- Demonstrate knowledge of confectionery production including chocolate, boiled sweets, gelatine-based, and crystallized products.
- Analyze the characteristics and ingredients of different types of confectionery items.
- Determine gluten content and its role in bakery product quality.
- Prepare a variety of bakery and confectionery products such as bread, cookies, biscuits, chikki, cakes, and candies.
- Gain exposure to real-world practices through visits to food processing units (cereal, pulse, oil, and spice-based units).
- Apply safety and hygiene practices while handling food and operating machinery.

Theory (36 hours)

Unit-I: Introduction to bakery and confectionery industry: Importance of bakery and confectionery in food industry; Primary processing equipment's used in Bakery and confectionery; Flour Mill mixer, moulding machine, balance, packing machines, measuring glass, moulds, Knives, extruder, oven. **[9 hours]**

Unit-II: Bakery Products: Ingredients used in Bakery products; Types and quality of flour; Principles involved in bakery Products; Procedures of Different types of bakery products. **[9 hours]**

Unit III: Introduction to confectionary products: Types of confectionary Products; Characteristics of confectionary Products; Ingredients used in confectionary Products. **[9 hours]**

Unit-IV: Confectionary Products: chocolate Processing; Boiled sweets; Gelatine sweet; Crystallized confectionery. **[9 hours]**

References:

1. John Kingslee: A professional text bakery and confectionery, New Age International Publication.
2. NIIR Borad; the complete technology book on bakery products
3. W.P Edwards: Science of Bakery Products.
4. Emmanueleobene: Chocolate Science and Technology

Practical (24 hours)

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| 1) Introduction to Bakery and Confectionery Equipment. | [3 hours] |
| 2) Determination of gluten content | [3 hours] |
| 3) Preparation of Bread, Biscuit, Cookies, Cake, Chikki, Chocolate, Boiled candy. | [18 hours] |

References:

- 1.Sivasankar B (2004) Food Processing and Preservation. PHI Learning Pvt. Ltd., New Delhi
2. Adams M R and Moss M O (2018) Food Microbiology. New Age International Private Limited, New Delhi
- 3.Kalila M and Sood S (1996) Food Preservation and processing Ist Edition Kalyani Publishers, New Delhi.
- 4.Khader V (1999) Text Book on Food Storage and Preservation Ist Edition Kalyani Publishers, New Delhi.
- 5.Nagi M and Bajaj S (1982) Home Preservation of Fruits and Vegetables. Centre for Communication and International Linkages, PAU, Ludhiana
- 6.John Kingslee: A professional text bakery and confectionery, New Age, International