

BAKERY AND CONFECTIONARY TECHNOLOGY

THEORY

Paper No.	:	5
Maximum Marks	:	150
Credits	:	4
Teaching Periods	:	4 Theory + 1 Students Presentation/ Week
Teaching Load	:	48 Theory Periods + 12 Students Presentation/ Semester

Objectives

- Understanding status of bakery and confectionary industry in India
- To learn the technologies behind bakery and confectionary products.
- To know about innovations in this sector.

CONTENTS

UNIT-I BAKERY

(26 lectures)

Current status, growth rate, and economic importance of Bakery and Confectionary Industry in India. Product types, nutritional quality and safety of products, pertinent standards & regulations.

Bakery Products: Ingredients & processes for breads, buns, pizza base, biscuits, cookies & crackers, cakes & pastries, doughnuts and rusks.

Equipments used, product quality characteristics, faults and corrective measures for above bakery products. Defining and assessing quality of ingredients & products.

Part I, (Chapter 1, 2, 3 & 4. Part II, Chapter 1 – 7, Dubey.)

UNIT II CONFECTIONARY

(12 lectures)

Sugars- Types and sources, methods of preparation of sugars, jaggery, khandsari, raw and refined sugar. Principles of sugar cookery, crystalline and non-crystalline candies.

Chapter 26–Manay .

Confectionary Products: Cake icings, hard-boiled candies, toffees, fruit drops, chocolates and other confections- ingredients, equipments & processes, product quality parameters, faults and corrective measures. (Chapter 5, 7 & 8 – Minifie .)

UNIT-III

(6 lectures)

Production & quality of breakfast cereals, macaroni products and malt.
(Chapter 15–Manay .)

UNIT IV

(4 lectures)

Modification of bakery products for people with special nutritional requirements e.g. high fibre, low sugar, low fat, gluten free bakery products. **(Chapter 10–Barndt)**

Recommended Readings:

1. Dubey, S.C. (2007). Basic Baking 5th Ed. Chanakya Mudrak Pvt. Ltd.
2. Raina et.al. (2003). Basic Food Preparation-A complete Manual. 3rd Ed. Orient Longman Pvt. Ltd.
3. Manay, S. & Shadaksharaswami, M. (2004). Foods: Facts and Principles, New Age Publishers.
4. Barndt R. L. (1993). Fat & Calorie – Modified Bakery Products, Springer US.
5. Samuel A. Matz (1999). Bakery Technology and Engineering, PAN-TECH International Incorporated.
6. Beckett S.T. (2009). Industrial Chocolate Manufacture, Blackwell Publishing Ltd.
7. Faridi Faubion (1997). Dough Rheology and Baked Product Texture, CBS Publications.
8. Minifie B.W. (1999). Chocolate, Cocoa and Confectionary, Aspen Publication.
9. Samuel A. Matz (1992). Cookies & Cracker Technology, Van Nostrand Reinhold

PRACTICALS IN BAKERY AND CONFECTIONARY TECHNOLOGY

Maximum Marks	:	50
Credits	:	4
Teaching Periods	:	4 / week
Teaching Load	:	48/Semester

CONTENTS

1. Preparation of pizza base and assessment of its quality
2. Preparation of bread by straight dough method with and without dough improvers and to study the difference.
3. Preparation of butter cake and assessment of its quality.
4. Preparation of sponge cake with icing and assessment of its quality.
5. Preparation of cookies/biscuits and assessment of quality.
6. Preparation of fondant, fudge and brittles.
7. Preparation of candy and toffee and to perform quality assessment tests.

Recommended Readings:

1. Dubey, S.C. (2007). Basic Baking 5th Ed. Chanakya Mudrak Pvt. Ltd.
2. Raina et.al. (2003). Basic Food Preparation-A complete Manual. 3rd Ed. Orient Longman Pvt. Ltd