

AMFT23 BAKING AND CONFECTIONERY TECHNOLOGY

UNIT-1 INTRODUCTION TO BAKING

- 1.1 Classification of bakery products.
- 1.2 Bakery ingredients and their functions-
- 1.3 Essential ingredients: Flour, yeast and sour dough, water, salt
- 1.4 Other ingredients: Sugar, color, flavor, fat, milk, milk powder and bread improvers.
- 1.5 Leaveners and yeast foods. Shortenings, emulsifiers and antioxidants.

UNIT-2 EQUIPMENTS

- 2.1 Introduction to utensils and equipments used in bakery industry with their purpose.
- 2.2 Bulk handling of ingredients- Dough mixing and mixers, dividing, rounding, sheeting, and laminating
- 2.3 Fermentation enclosures and brew equipment- Ovens and Slicers; Extrusion.
- 2.4 Rheology of dough-Farinograph, Amyl graph, Alveograph and Extensigraph.

UNIT-3 BREAD MAKING PROCESS

- 3.1 The Chemistry of dough Development.
- 3.2 Bread making methods- Straight dough/bulk fermentation- Sponge and dough- Activated dough development Chorley wood bread process
- 3.3 Dough retarding and freezing-emergency No time process.
- 3.4 Advantages and disadvantages of various methods of bread-making.
- 3.5 Characteristics of good bread: Internal characters; external characters.
- 3.6 Bread defects/faults and remedies.
- 3.7 Spoilage of bread-Causes, detection and prevention.

UNIT-4 BAKERY PRODUCTS

- 4.1 Production of cakes and cookies/biscuits.
- 4.2 Types of biscuit dough's- Developed dough, short dough's, semi-sweet, enzyme modified dough's and batters.
- 4.3 Cake making: Ingredients and their function Structure builders.
- 4.4 Tenderizers, moisteners and flavor enhancers.
- 4.5 Production process for Wafers- type of flour, raising agents and maturing.
- 4.6 Other miscellaneous products- puff pastry, chemically leavened. Problems of baking.

UNIT-5 CONFECTIONERY PRODUCTS

- 5.1 Definition, importance of sugar confectionery.
- 5.2 General technical aspects of industrial sugar confectionery manufacture- compositional effects.
- 5.3 Manufacture methods of high boiled sweets: - Ingredients -.prevention of recrystallization and stickiness
- 5.4 Types of confectionery products Caramel, Toffee and Fudge and other confections-:- ingredients- Formulation - Processing method- Quality control- Aerated confectionery-

- 5.5 Methods of aeration- Manufacturing process Chemistry of Hydrocolloids,
5.6 Hydrocolloid pretreatment Processes-product quality parameters, faults and corrective measures. Spoilage of confectionery products.

References Books

- 1 Edwards W.P. "Science of bakery products", RSC, UK, 2007
- 2 Samuel A. Matz., "Equipment for Bakers", Pan Tech International Publication. 1988.
- 3 Sugar Confectionery manufacture-(Ed) E.B.Jackson, II edition, Blackie Academic and professional, Glasgow, 1995.

