



BAKERY SCIENCE

Credits:2

Subject Code: MFSN20102 (SEC-1)

1 Year/ 1 Semester

No. of Lecture Hours: 30

Objectives:

1. To impart students with knowledge related to baking technology
2. To introduce them to the techniques of cakes, biscuits and pastry processing.

Outcomes:

Students gain knowledge about different baking techniques and processing of bakery products.

(6Hrs)

Unit I:

INTRODUCTION TO BAKERY

- Baking industry and its scope in the Indian economy.
- Present Trends and Prospects
- Baking principles - classification - role of ingredients in bakery products - chemistry and technology.
- Dough rheology - equipments used for quality evaluation.
- Baking principles and classification of bakery products
- Role of ingredients in bakery products

(6Hrs)

Unit II:

Biscuits and cookies

- Role of ingredients - various types of biscuits - basic procedure in production
- Role of ingredients in biscuits and cookies
- Types of biscuits
- Basic procedure of biscuits and cookies
- Characteristic features of ingredients of cookies
- Quality assessment of raw ingredients used in cookies

(6Hrs)

UNIT-III:

Cakes

- Cake-role of ingredients - flours, oils and fats, eggs, sugar, dried fruits and nuts.- types of cakes - methods of mixing - preparation of fancy cakes and techniques - quality - cake faults and remedies.
- Role of ingredients in sponge goods
- Types of cakes
- Techniques and quality of fancy cakes
- Cake faults and remedies

(6Hrs)

UNIT -IV:

Pastry

- Pastry basic formulation - different types - flaky, puff and danish pastry- bakery products that combines flour and fat.
- Pie - types and methods.

Chairman

Board of Studies (Food Technology)

University College of Technology (A)

Osmania University, Hyderabad-500 075, India

w.e.f. Academic Year 2022-2023, Batch 2022-20



Loyola Academy Degree & PG College, Alwal, Secunderabad -500 010

- Introduction to pastry preparation
- Types of pastries and preparation
- Preparation methods of danish pastries and the role of ingredients used.
- Cold and hot pastries

(6Hrs)

UNIT- V:

Bakery products – standards and quality control

- Standards, regulations and quality control for bakery products.
- Specifications for bakery ingredients BIS/FSSA standards for ingredients and products
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- Morphology, types of baker's yeast, yeast freshness test gassing activity of yeast.
- Reproduction, physiology, quality tests of yeast

RECOMMENDED READINGS:

- Dubey SC. Basic Baking-Science and Craft. Society of Indian Bakers, Delhi 2007.
- Encyclopedia of Food Science and Technology, Academic Press. 1993.
- Khanna K, Gupta S, Seth R, Mahana R, Rekhi T. The Art and Science of Cooking. Phoenix Publishing House Private Limited, Delhi .2004.
- Matz A. Bakery Technology and Engineering. CBS Publishers, Delhi. 1998.

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