

16FT301 BAKERY AND CONFECTIONERY TECHNOLOGY

Hours Per Week :

| L | T | P | C |
|---|---|---|---|
| 3 | - | 2 | 4 |

Total Hours :

| L | T | P | WA/RA | SSH/HSB | CS | SA | S | BS |
|----|---|----|-------|---------|----|----|---|----|
| 45 | - | 30 | 5 | 40 | 5 | 8 | 6 | - |



Course Description and Objectives:

This course deals with the processing of various bakery and confectionery products, their packaging and quality maintenance. The objective of this course is to train the students in bakery and confectionery sector of food processing.

Course Outcomes:

The student will be able to:

- understand the importance and role of various ingredients used in bakery and confectionery products.
- understand the various methods of bread and cake making and their formulations.
- gain the knowledge on various types of biscuits, cookies and their methods of manufacturing.
- understand the process of cocoa processing and chocolate manufacturing.
- gain knowledge on the various types of sugar confectionery products and their process.

SKILLS:

- ✓ Determine gluten content of wheat flour.
- ✓ Determine dough raising capacity of dough.
- ✓ Determine fat content in cookies.
- ✓ Determine the rheological properties of bakery products.
- ✓ Determine the amylase activities by Falling Number Tester.

ACTIVITIES:

- Choose a food sample and quantify carbohydrate present in it.
- Choose a food sample and identify types of carbohydrate present in it.
- Choose a food sample and quantify lipids present in it.
- Choose a food sample and identify amino acids present in it.
- Determine viscosity and refractive index of fats and oil.

UNIT - 1**L- 08**

STATUS OF BAKERY AND CONFECTIONERY INDUSTRIES IN INDIA-RAW MATERIALS : Status of bakery and confectionery industries in India-Raw materials for bakery and confectionery products, Essential and optional, PFA specification of raw materials.

UNIT - 2**L- 12**

DOUGH RHEOLOGY : Bread making method, process specification for various types of breads, Biscuit manufacturing process, Cookies, Cracker, Manufacturing process buns, Preservation of bakery products.

UNIT - 3**L- 10**

WEIGHING EQUIPMENT : Manual scale, Automatic weigh, Liquid measuring mixing-blenders, Horizontal and vertical planetary continuous mixers, Make up Equipment-Divider, Rounder, Proofer, Moulder Baking equipment, Different oven, Slicer.

UNIT - 4**L- 10**

CONFECTIONERY PRODUCTS : Chocolate, Fondant, Caramels, Fudge and toffee. Equipment and process.

UNIT - 5**L- 08**

HEALTH AND SAFETY : Food safety rules and regulations for bakery and confectionery products safe practices in the work places sanitation-duties of the sanitation equipments, Code for hygiene condition in bakery and confectionery manufacturing Unit.

LABORATORY EXPERIMENTS**LIST OF EXPERIMENTS**

Total hours: 30

1. Experiment on Gluten determination of wheat flour.
2. Experiment on dough raising capacity.
3. Experiment on Amylase activity by Falling Number Tester.
4. Determination of Fat content in cookies.
5. Experiment on preparation of bread by different methods.
6. Experiment on preparation of cakes.
7. Experiment on preparation of milk and dark chocolate.
8. Experiment on preparation of different types of candy.
9. Experiment on determination of rheological properties of bakery products.
10. Experiment on preparation of Fondant and Fudge.

TEXT BOOKS:

1. W. J. Sultan, "Practical Baking", 5th edition, John Wiley & Sons, 1989.
2. John Kingslee, "A Professional Text to Bakery and Confectionery", 1st edition, New Age International, New Delhi, 2006.