

Maharashtra ShikshanSamiti,
Maharashtra Mahavidyalaya, Nilanga

Academic Year 2022-23

Department of B. Voc. Food Processing, Preservation and Storage

Add On / Certificate Course Syllabus

Title : Certificate Course on Confectionery Technology

Duration : 30 Hrs.

Marks : 50

Course Objectives :

1. To provide an updated education to the students at large in order to know the importance and scope of the discipline and to provide mobility to students from one university or state to other.
2. To develop a scientific attitude to make students open minded, critical and curious.
3. To develop an ability to work on their own and to make them fit for the society.
4. To develop skill in field work, experiments, equipment and laboratory use along with collection and interpretation of materials and data.
5. To make aware of natural resources and environment and the importance of conserving the same.
6. To develop ability for the application of the acquired knowledge in the relevant fields so as to make our country self-reliant and self-sufficient.

Course Outcomes :

1. This program will train and orient the students in the field of Bakery and Confectionery Technology under the field of Agriculture (Food processing).
2. This program will help the students for their career development.
3. This program shall train and orient the students for industrial Bakery and Confectionery Technology skills and serve as human resource for the industries and other organizations.
4. The programme also has a strong interdisciplinary component. Emphasis is given on the experimental learning through hands-on laboratory exercises, field trips and assignments.
5. This skill oriented course will provide job opportunities and additional specific skills to the students for self-employability through the development of their own enterprises.

Course Content

Module I: Introduction of confectionery:

(05 hours)

History, Traditional confectionary goods, Types of confectionary, classification of confectionery products Raw Materials/ ingredients-Sugar, Sugar qualities, Physical, Chemical, Optical properties. Sugar grinding, Dextrose, Fructose, Lactose, caramel, maltose, Honey, sorbitol, xylitol, Iso-malt, soy maltose, Poly-dextrose, Mannitol. Whipping, Release agent, thickeners, Acidulents, Milk and Milk Products, Flavours for confectionery, emulsifiers and other additives, Starch derivatives, colours used in confectionary. Production of glucose syrup, Acid hydrolysis, enzyme hydrolysis.

Module II: Cocoa Processing:

(05 hours)

Cocoa Processing: Cocoa bean, processing, roasting, Fermentation, Production of Cocoa butter Cocoa powder, its quality. Chocolate Processing: Ingredients, Mixing, Refining, Conching, Tempering, Molding, Cooling, Coating, Fat bloom.

Module III: High Boiled Sweets:

(05 hours)

High Boiled Sweets: Introduction, Composition, Properties of high boiled sweets, preparation of high boiled sweets, Traditional, batch and continuous Method of preparation, Different types of higher boiled sweets, Recipes. Caramel: Definition, Composition, Factors affecting quality of caramel, caramel Manufacture process, batch type, continuous types, checking of faults in caramel.

Module IV: Toffee Tablets Processing:

(05 hours)

Toffee: Definition, Composition, types of toffee Ingredient and their role. Batch and Continuous method of toffee Fondant: Fudge/Creamy: ingredients, Methods, Productivity Lozenges: Definition recipe, Method of Manufacture, Compositions, factors affecting quality, Industrial production, checklist of faults and remedy.

Tablets: Definitions, recipe, composition, wet granulation, Slugging, Manufacture of

Tablet, and Checklist of tablet faults. Marshmallow and. Nougat: Definition, composition, recipe, and method of manufacture. Nougat

Reference Books;

Sugar Confectionary and Chocolate Manufacture - R. Less and E.B. Jackson

Industrial Chocolate Manufactory and Use- S.T. Beekelt

Chocolate, Cocoa& Confectionary Sci. & Tech. - Bernared W. Minifie

Basic Baking- S.C. Dube

Practical Based on Confectionery Technology

10 hours

Pr. No.	Practical Title
1	Production of invert sugar
2	Preparation of High boiled sweets;
3	Preparation of Toffee
4	Preparation of Groundnut Chikki
5	Preparation of decorative cake
6	Preparation of Chocolate
7	Preparation of Traditional ; Indian Confection;
8	Preparation of shrikhandwadi
9	Preparation of milk chocolate
10	Preparation fruit toffee
11	Preparation of flour based confectionery
12	Preparation of milk cake
13	Preparation of petha
14	Preparation of fruit candy
15	Preparation of rasgulla
16	Visit to Confectionary Industry

Scheme of Evaluation

Q.1. Multiple Choice Question - 25

Credit - 1 (25 points)

Q.2. Practical Test

Credit - 1 (25 points)

Presentation / Group Discussion / Oral Test
