

BAKERY

THEORY :

1. Introduction & scope of Bakery & Confectionery, Bakery terms. Organisation chart of Bakery.
2. Structure of wheat grain.
3. Milling of wheat and role of bran and germ.
4. Flours :

Different types of flours available, constituents of flours, PH Value of flour, water absorption power of flour, gluten, diastatic capacity of flour, grade of flour.
5. Raw material required for bread making :
 - Role of flour, water, yeast, salt
 - Sugar, milk and fats
6. Methods of bread making :
 - straight dough method
 - delayed salt method
 - no time dough method
 - sponge and dough method
7. Characteristics of good bread
 - External characteristics - volume, symmetry of shape
 - Internal characteristics - colour, texture, aroma, clarity and elasticity.
8. Bread faults and their remedies.
9. Yeast – An elementary knowledge of Baker's yeast, the part it plays in the fermentation of dough and conditions influencing its working. Effect of over and under fermentation and under proofing of dough and other fermented goods.
10. Bread diseases – Rope and mold-causes and prevention.
11. Bread improvers-improving physical quality.
12. Oven & Baking : Knowledge and working of various types of oven. Baking temperatures for bread, confectionery goods.
13. Bakery layout – The required approvals for setting up of a Bakery – Government procedure and Bye-laws.
 - Selection of site
 - Selection of equipment.
 - Layout design
 - Electricity.

14. Quality control
 - of raw material
 - of finished products

PRACTICALS – BAKERY :

Bread rolls; Bread sticks & soft rolls; Buns; Hot Cross Buns; Fruit Buns; Danish; Pastry; Croissants; Brioche; Fermented dough nuts; Chelsea buns; Russian stollen Basic bun dough. Savarin dough, Bread/Brown Bread, Vienna bread; Fancy bread; French bread; whole meal bread; Masala bread; Milk bread; Raisins breads; Current loaf; Fruit bread; Pizza base.

CONFECTIONERY

THEORY :

1. Cake making ingredients – Flour, Sugar, Shortening and egg.
2. Moistening agents.
3. Fats and oil.
4. Leavening agents.
5. Cake making methods – sugar butter process, flour butter process, genoise method and blending and rubbing method.
6. Correct temperature for baking different varieties of cakes.
7. Pastry making, principles and various derivatives.
8. Characteristics of cakes : External; Internal
9. Balancing of cake formula.
10. Cake faults and their remedies.
11. Types of icing.
12. Preparation of cookies and biscuits. Factors affecting the quality of biscuits/cookies.
13. Storage of confectionery product.
14. Various types ice creams and bombs.

PRACTICALS – CONFECTIONERY :

Cakes by different methods (e.g., sponge cake; Madiera cake; Genoise; fatless sponge; rock cake; fruit cake)

Biscuits & Cookies : Plain biscuits; piping biscuits; cherry knobs; langue-de-chats; (cats tongue) salted biscuits; nut biscuits; coconut biscuits; melting moment; macaroons; tricolour; chocolate biscuits; marble biscuits; nan-khatai; short bread biscuits. Ginger biscuits; cheese biscuits; cream fingers.

Flaky/Puff pastry-khara biscuits; veg patties; chicken patties; mutton patties; cheese straws; patty cases; thousand layer cake; jalousie; apple flane; cream horns.

Choux pastry : Chocolate eclair; profitroll suchard; cream buns.

Short crust pastry : Lemon curd tart; jam tart.

Icing : Fondant; American frosting; Butter cream icing; Royal icing; gum paste; marzipan; marshmallow; lemon meringue; fudge; almond paste; glaze icing.

Toffees : Milk toffee; chocolate; stick jaws; liquor chocolate.

Ice Cream: Vanilla, Strawberry, Chocolate, Pineapple, Mango.

Pastry: Pineapple pastry, chocolate pastry.

Cakes & Gauteaux: Queen cakes; fruit cake; birthday cake; easter eggs; chocolate dippings; wedding cakes; cheese cakes; black forest; gateaus; gateau religious; apple strudel; bakery. Dough nuts; fruit gateaus; baba-au-rhum, savarin chantilly; savarin; meringue; chantilly; Swiss rolls and Madeline cake.

Pudding : Bavarois; ginger pudding; cold lemon souffle; chocolate mousse; charlottes royale; charlotte russe; charlotte arlequine; bavarois rubane; souffle praline; fruit trifle.

INDIAN SWEETS :

Chenna	-	Rasgulla, Chamcham, Pakiza, Chenna Toast, Rasmalai
Khoya	-	Gulab Jamun, Barfi
Sugar	-	Mysore Pak, Ghewar
Flour/Besan	-	Patisa, Shakarpare, Halwa, Laddo, Peda
Milk	-	Kheer, Rabri
Nuts	-	Barfi, Chekki.

HYGIENE & SANITATION

- Unit-1 : Role of Hygiene in Bakery.
- Unit-2 : Personal hygiene, care of skin, hand and feet. Food handlers hygiene, protective clothing.
- Unit-3 : Dishwashing methods – manual and machine dish washing – merits and demerits.
- Unit-4 : Garbage disposal – different methods –advantage and disadvantages.
- Unit-5 : Food Poisoning – Causative factors and the precautions to be taken by food handlers.
- Unit-6 : Food Storage – Techniques of correct storage, storage temperature of different commodities to prevent bacterial manifestation or contamination.
- Unit-7 : Pest Control - Rodents and insect control techniques, special stress on control of flies, rats and cockroaches, care premises and equipment.
- Unit-8 : Municipal health laws.
- Unit-9 : Golden rules of first aid and treatment for cuts, wounds, burns.

COMMODITIES COSTING & ACCOUNTS

Section-I (Accounts and Costing) :

- Book Keeping, double entry, journal entry, simple cash book and types of accounts.
- Purchase book, Purchase return book, Stores requisition
- Sales book, Sales return book, Cash voucher/Credit voucher book
- Percentage and discounts
- Preparation of invoices and debit/credit memos.
- Introduction to ingredient costs, labour costs, overheads, gross profit, net profit, calculation of cost price, sales price and catalogue price.

Section – II (Commodities) :

- Sugar
- Cocoa, chocolate
- Milk
- Butter
- Cream
- Cheese
- Food colours
- Flavours & essences
- Dry fruits and nuts used in confectionery
- Fresh and preserved fruits products
- Food laws – Agmark.

Computer Applications in Bakery

(to be taught in practical classes)

Unit-1 : Computer fundamentals:

History

Information concepts and processing

Elements of a computer processing system

Hardware, features and uses

Input/Output devices

Software concepts – MS DOS, MS OFFICE (use).

Unit-2 : Introduction to Windows. Introduction of computers for accounting records and controls. (TALLY software required).
