

SEMESTER-1

BAKING TECHNICIAN (HDFP-101P)

CREDIT-3

Objective

This program is aimed at training students for the job of a “Baking Technician/Operative”, in the “Food Processing” Sector/Industry and aims at building the key competencies amongst the students.

Learning Outcome

The programme will help in building the following key competencies amongst the learner:

- Prepare baked products conforming to all quality standards as per standard operating procedures;
- Operate oven, plant, and machineries/equipment.
- Follow and maintain food safety and hygiene in the work environment.

Syllabus

Unit -1 Introduction

List the various products of the bread and bakery sub-sector; List the various types of industries within the bakery sub-sector; explain the baking process; State the roles and responsibilities of a baking technician.

Unit- 2 Raw Material

Bakery ingredients and their functions- Wheat Flour, Water, Fats & Oils, Sugar, Salt, Yeast, Leavening Agents, Preservatives etc.

Unit-3 Preparation and Maintenance of Work Area

Identify the different equipment used in the baking process; Demonstrate the use of different equipment used in the bakery industry; Identify and set the machines and tools required for production in working condition

Unit-4 Preparation for the Baking Process

Plan and schedule the work order; Calculate batch size and prioritize urgent orders based on the production schedule and machine capacity; State the production processes for cake, biscuits, bread.

Unit-5 Quality Control & Food Safety

State the importance of safety, hygiene and sanitation in food processing industry; Chemical & physical analysis of wheat flour e.g. moisture content, ash content, gluten content. Pest Control in Food Processing Industry.

Note: Assessment will be done on assessment of Practical book, assignments and practical activities followed by viva voice.

COTTAGE CHEESE MAKER (HDFP-102P)

CREDIT-3

This program is aimed at skilling the students for the job of a “Cottage Cheese (Paneer) Maker”, in the “Food Processing” Sector/Industry and aims at building the key competencies amongst the students.

Learning Outcome

After completing this programme, participants will be able to:

- Prepare and maintain work area and process machineries
- Produce cottage cheese (Paneer) following specification and standards of the organization
- Follow food safety and hygiene standards at workplace

Unit-1 Introduction

State the composition and nutritive value of milk; State the need for processing of milk; State the roles and responsibilities of a cottage cheese maker;

Unit-2 Prepare and maintain work area for production of cottage cheese

State the methods of cleaning and sanitization; Preparing the work area for scheduled production; Describe the functions to be carried out before starting production;

Unit- 3 Production of cottage cheese (paneer)

List the different machineries involved in manufacturing of cottage cheese; State the working of machineries involved in the production; Demonstrate the entire production of cottage cheese

Unit- 4 Quality Control & Food Safety

Analysis of milk – Fat%, SNF%, COB, Alcohol test; Analysis of Cottage cheese – Fat%, Moisture content; Apply HACCP principles to eliminate food safety hazards in the process and products

Unit-5 Waste Management

Utilization of whey, Waste generation during cottage cheese making, safe disposal of waste.

Note: Assessment will be done on assessment of Practical book, assignments and practical activities followed by viva voice

Unit-1 Introduction

Definition, functions of food; Food Groups & nutrition; Basic rules of Hygiene, Sanitation & Safety in Food Processing

Unit- 2 Basic Principles of Food Preservation

Food spoilage- definition, types of spoilage- physical, chemical and biological;

Food Preservation- Definition, principles and importance of food preservation; Chemical Preservation; High Temperature Preservation; Low Temperature Preservation & Preservation by drying, process of preservation.

Unit-3 Food Additives

Anti-oxidants. Colouring agents. Curing agents. Emulsifiers. Flavouring agents. Leavening agents, Nutrient supplements, Sweeteners. PH controllers. Preservatives and other additives.

Unit-4 Food Packaging

Definition of packaging; functions of packaging materials; types of packaging materials e.g. paper, glass, metal, plastics.

Unit- 5 Food Safety

Food Allergens; HACCP; Food Safety Laws, sensory evolution of food.

List of Practical:

1. Introduction to food laboratory.
2. Exposure visit to any food processing plant/Laboratory
3. Preservation of food by high concentration of sugar.
4. Preservation of food by high concentration of salt.
5. Preservation of food by addition of chemicals.
6. Preservation of food by drying in a cabinet drier
7. Preservation of fruits & vegetables by freezing.
8. Sensory evaluation of food for specific Food Group.

Objective

To provide understanding about raw material used in Indian sweets, processing of milk based sweets, ghee based sweets, and dry fruit based sweets, Bengali sweets, food analysis and quality control. Handling packaging, storage of Indian Sweets.

Learning Outcome

Person is responsible for producing processed food through the process of cleaning, grinding, flaking, extruding and blending. S/he is responsible for operating and maintaining process parameters of all process machineries to produce Indian sweets.

Unit 1: Raw material for Indian Sweets

Selection of raw material, analysis of raw material by visually, sensory and laboratory test, Sampling process, Handling of raw material, Storage of raw material, Stock & Record monitoring, sugar and its constituents.

Unit 2: Processing of Bengali sweets

Introduction of Bengali sweets, Steps used in processing of Bengali sweets, Quality control of Bengali sweets during the processing and after the processing. Packaging, storage, dispatch.

Unit 3: Processing of milk based sweets

Introduction of milk based sweets, Steps used in processing of milk based sweets, Quality control of milk based sweets during the processing and after the processing. Packaging, storage, dispatch.

Unit 4: Processing of Ghee based sweets

Introduction of Ghee based sweets, Steps used in processing of ghee based sweets, Quality control of ghee based sweets during the processing and after the processing. Packaging, storage, dispatch.

Unit 5: Processing of dry fruit based sweets

Introduction of dry fruit based sweets, Steps used in processing of dry fruit based sweets, Quality control of dry fruit based sweets during the processing and after the processing. Packaging, storage, dispatch.

Practical

Identify tools, equipment's and materials used in sweet processing.

To check the fat content

To check the S.N.F

To check °B of sugar syrup

Prepare different type of sweets

COMMUNICATION SKILLS (HDFP-106)

CREDIT-4 (3+1)

Objective: To equip students effectively to acquire skills in reading, writing, comprehension and communication, as also to use electronic media for business communication.

Learning Outcome

- Understand the concept, process and importance of communication
- Develop skills of effective communication
- Able to develop their interpersonal skills
- Able to understand the effectiveness of work
- Able to handle the customer calls and resolve their issues
- Enhance the employability of the students by enhancing communication skills

Contents

Unit I: Introduction

Nature, Process and Importance of Communication, Types of Communication (verbal & Non Verbal), Different forms of Communication. Barriers to Communication

Unit II: Grammar & Vocabulary

Parts of Speech, Articles, Subject Verb Agreement, Tenses, Prepositions, Antonyms and Synonyms; Paragraph & Translation.

Unit II: Business Correspondence

Letter Writing, Inviting quotations, Sending quotations, Placing orders, Sales letters, claim & adjustment letters and social correspondence, Job application letter, preparing the resume.

Unit IV: Business language and presentation

Importance of Business language, Vocabulary Words often confused, Words often misspelt, Common errors in English. Oral Presentation Importance, Characteristics, Power point presentation.

Unit V: Customer Services and Team Building

Complaint Handling, Writing a Customer Service report, Handling Different Type of Customer, Being a Good Team Player, Dress and appearance, problem-solving in intercultural communication; Character building

Suggested Readings:

Text Book

1. Essentials of Business Communication - Rajendra Pal and J. S. Korlhalli - Sultan Chand & Sons, New Delhi.

Reference Books

1. Lesikar, R.V. & Flatley, M.E.; Basic Business Communication Skills for Empowering the Internet Generation, Tata McGraw Hill Publishing Company Ltd. New Delhi.
2. Bovee, and Thill, Business Communication Today, Pearson Education
3. Shirley Taylor, Communication for Business, Pearson Education

4. Locker and Kaczmarek, Business Communication: Building Critical Skills, TMH
5. Business Communication - M. Balasubrahmanyam - Vani Educational Books.
6. Creating a Successful CV - Siman Howard - Dorling Kindersley.
7. Business Communication - K. K. Sinha - Galgotia Publishing Company, New Delhi.
8. Media and Communication Management - C. S. Rayudu - Himalaya Publishing House, Bombay.
9. Communicate to Win - Richard Denny - Kogan Page India Private Limited, New Delhi.

Web Links

<http://cec.nic.in/E-Content/Pages/default.aspx>

<http://learnenglish.britishcouncil.org/en>

<https://www.duolingo.com/>

<http://www.bbc.co.uk/learningenglish>

<https://www.slideshare.net/FurrukhAliBaig/importance-of-communication-in-business>

SLIPS, TRIPS AND FALLS

- The significance of injuries received through slips, trips and falls.
- The appropriate measures to prevent slips, trips and falls.

MACHINERY AND EQUIPMENT

- The main hazards associated with machinery, equipment and measures to control these hazards.

MANUAL HANDLING

- The significance of body injuries and their management in the workplace.
- The correct procedure for lifting and carrying.

PERSONAL PROTECTIVE EQUIPMENT

- The different types of PPE and the hazards against which they provide protection.

FIRE

- The dangers associated with fire.
- The “fire triangle” and the three conditions required for fire to start and continue to burn.
- Fire Extinguishers (how they work, types)

ACCIDENTS AND EMERGENCIES

- The human factors which can cause accidents.
- The importance of reporting and recording all accidents or near miss incidents.
- The need for first aid and First Aid equipment and facilities.

ENVIRONMENT

- Air Emissions and Ambient Air Quality
- Energy Conservation
- Water Conservation
- Hazardous Materials Management
- Waste Management
- Noise
- Contaminated Land

SEMESTER- 2

TRADITIONAL SNACKS & SAVOURY PROCESSING (HDFP-201P) CREDIT-3

The objective of the course is to make students aware and understand about preparation and maintenance of work area and the process related to Snacks and Savoury

Learning outcome

The students will be able to:

- Prepare raw material for snack and savoury,
- Prepare snack and savoury products,
- Complete documentation and record keeping related to making traditional snack and savoury,
- Ensure food safety hygiene and sanitation for processing food products

Unit 1: Introduction

List the various products produced in snack and savoury; List the machineries used in traditional snack and savoury processing;

Unit 2: Prepare for production of snack and savoury

Understand the Production order; Planning production sequence, Grouping Products: raw materials, packaging materials, equipment and manpower; CAYG (Clean as you go process);

Unit-3: Resource management

Capacity utilization of machineries, planning; Efficient utilization of resources/manpower; Calculating Batch size, Raw material requirement, Process Time, Process Chart, Product Chart,

Unit 4: Recipe Standardization

Balancing of recipes, standardization of recipes, standard yield, maintaining recipe files. Menu planning, yield management.

Unit 5: Cost management

Intending, Portion control, brief study of how portions are worked out. Purchase Specifications, quality control, Indenting and Costing.

Note: Assessment will be done on assessment of Practical book, assignments and practical activities followed by viva voice.

CONVENIENCE FOOD MAKER (HDFP-202P)

CREDIT-3

Objective

This program is aimed at skilling candidates for the job of a “Convenience Food Maker”, in the “Food Processing” Sector/Industry and aims at building the key competencies amongst the Students.

Learning outcome

After completing this programme, participants will be able to:

- Operate various convenience food processing machineries;
- Plan production sequence as per production order;
- Produce various convenience food following specification and standards of the organization;
- Observe food safety and hygiene standards at work.

Unit 1: Introduction

Understanding the roles and responsibilities of convenience food maker; Awareness of the nature and availability of job opportunities; State the need for processing packaged food; Describe convenience food; State the composition of different convenience food

Unit 2: Prepare and Maintain Work for production of convenience foods

List the machineries used in convenience food processing plant; Prepare the machines and tools required for production of convenience food; Describe the procedure for processing various convenience food;

Unit 3: Carry out production of convenience food

List the ingredients required for production; Demonstrate the process of weighing required raw material; Explain the standard operating procedures followed in a convenience food industry; Document daily records.

Unit 4: Cleaning & Sanitation

Objective of Cleaning and Sanitation; Basics of cleaning; Basics of Sanitation; Properties of Food Soils; Different equipments and tools used for cleaning & sanitation.

Unit 5: Sensory Evaluation of Food

Objective of Sensory analysis; General requirements for sensory testing; Sensory Evaluation Methods; Perform various method of sensory analysis.

Note: Assessment will be done on assessment of Practical book, assignments and practical activities followed by viva voice.

INDIAN ETHNIC FOOD (HDFP-204)

CREDIT-4 (3+1)

Unit-1 Introduction to North Indian Food

Introduction and Features; Important spices and Ingredients; Common Recipes & processing of North Indian Food.

Unit-2 Introduction to South Indian Food

Introduction and Features; Important spices and Ingredients; Common Recipes & processing of South Indian Food.

Unit-3 Introduction to East Indian Food

Introduction and Features; Important spices and Ingredients; Common Recipes & processing of East Indian Food.

Unit-4 Introduction to West Indian Food

Introduction and Features; Important spices and Ingredients; Common Recipes & processing of East Indian Food.

Unit-5 Introduction to Indo-Chinese and Indo-Continental Food

Introduction and Features; Important spices and Ingredients; Common Recipes & processing of Indo-Chinese and Indo-Continental Food

Practical-

1. Collect information about different types of Masala, Paste, Spices and condiments used in Indian foods.
2. Prepare different types of Recipes.
3. Prepare a Menu and design recipes card.
4. Assignment on Indo-Chinese cuisine origin and features in India.

Unit 1: Hotel Kitchen

Culinary History- Development of the Culinary Art from the middle ages to modern cookery. modern hotel kitchen; Kitchen and its sections; Food Production Organizational Hierarchy; Introduction, duties and responsibilities of staff; Layout of Kitchen

Unit 2: Knives, ethnic Gravies and Curries

Introduction, Types, Their uses, preventive measures, Handling of Knife.

Different types of Indian gravies and curries- preparations, method of making.

Unit 3: Preparation Techniques

Introduction to Raw Material used in kitchen, Pre-Preparation, Preparation, Misa-en.place, Misa-en-scene, Different types of cooking methods, their characteristics.

Unit 4 Preparation of Vegetable and chutneys

Cuts of vegetables and fruits, their identification and types; RICE & PULSES COOKING
Identification of types of rice varieties & pulses. Simple preparation of Boiled rice and pulses.

Haryanvi ethnic chutneys.

Unit 5 Stock, Soup & Sauces

Stock - Introduction, Classification, and their recipes

Soup – Introduction, Classification, and their recipes

Sauce – Introduction, Classification, and their recipes

Practical

Identify tools, equipment's, fuels and materials used in cooking.

Apply good housekeeping practices, proper handling of materials and disposal of waste,

Check quality of raw materials as per standards,

First-Aid, treatments given during kitchen injury

Different types of vegetables and fruits cuts,

Prepare different type of food.

Objective

The objective of this course is to expose the learner to the fields of entrepreneurship development. Focus will be to train the students to develop new projects and encouraging them to start their own ventures.

Learning Outcome

- Create awareness among the students about the entrepreneurship
- Build skills needed to start new ventures.
- Student will be able to develop Business Plans
- Will be able to explore the potential institutes for starting new business/venture
- Provide understanding about quality assurance programmes

Unit I - Entrepreneurship: Concept, characteristics of successful entrepreneurs; entrepreneurship process; managerial vs. entrepreneurial approach

Unit II - Starting the Venture: Generating business idea –methods of generating ideas, environmental scanning, Porter’s Five Forces Model of competition Sources of finance: debt or equity financing, commercial banks, venture capital

Unit III - Feasibility study: Business Plan, Presenting Business Plans to the Investors, Future of Entrepreneurship in India,

Unit IV - Project Management: Project, Introduction to Project Management, Objective of Project Management, Classification of Projects; the Project Life Cycle.

Unit V – Industrial Best Practices: Quality Control; Process control; Kaizen, Five S (5S),

Practical:

1. 5S implementation on shop floor
2. Preparation of a business plan
3. Case studies, bibliography of great Indian entrepreneurs.