### **DIPLOMA IN CULINARY ARTS**

### **Course Code: HTDCA001**

## 1) **COOKERY THEORY:**

Objectives: After the completion of Cookery Theory subject, the Students will be able to:

- a) Explain the Organizational Structure of Food Production Department.
- b) Design the layout of Kitchen.
- c) Classify raw materials and their uses.
- d) Describe the methods of mixing food.
- e) Draw the structure of egg.
- f) Explain the balancing of recipes.
- g) Define and classify sauces and soups.
- h) Breads and bread making
- i) Different types of pastries
- j) Kitchen equipment and its upkeep and interdepartmental coordination

### UNIT -I:

Origin of hotel industry - Importance of kitchen in Hotel & Catering establishments - Aims and objectives of Cooking - Classification of raw materials, preparation of ingredients - Methods of mixing foods - effect of heat on various foods - weighing and measure - texture of food - Culinary terms.

#### UNIT -II:

Methods of cooking with special Application to meat, fish, vegetables, cheese, pulses and egg - Conventional and non-conventional methods of cooking - solar cooking, microwave cooking, fast food operation.

### **UNIT -III:**

**Eggs** – Structure, selection of quality - various ways of cooking eggs with example in each method and prevention of blue ring formation - Varieties of fish, meat and vegetables - Accompaniments, garnishes and rechauffe.

### **UNIT-IV:**

Balancing of recipes - standardization of recipes - standard yield - maintaining recipe files. Menu planning - portion control - brief study of how portions are worked out - Invalid cookery - Purchase Specifications, quality control, Indenting and Costing.

#### UNIT -V:

Description and use of the following: Basic stocks, Aspics & Jellies. Roux blanc, Roux blonde and Roux brun, Recipes and quantities required to produce 10 litres of stock, white & brown. Recipes required to produce one litre of the following:

Béchamel sauce, tomato sauce, Veloute sauce, espagnole sauce, Hollandaise and mayonnaise sauce with the necessary precautions to be observed while preparing these, with minimum five derivatives of each. Soup – Definition, classification of soups with example in each group, recipe for one litre consommé, 10 popular consommés with their garnishes.

### **UNIT -VI:**

Vegetables – Effect of heat on different vegetables in acid/alkaline medium and reaction with metals - Method of cooking different vegetables with emphasis on cooking asparagus, artichokes, brussel sprouts.

#### UNIT -VII:

Theory of Bread making, Bread rolls, Bread sticks, Indian Breads.

## **UNIT -VIII:**

Pastry – Recipes of short crust pastry, puff pastry, flaky pastry choux paste, Danish pastry and their derivatives - Recipes and method of preparation of plain ice cream.

## UNIT -IX:

Kitchen stewarding and upkeep of equipment.

## UNIT -X:

Staff organization of Kitchen, coordination with the Departments.

### 2) **COOKERY PRACTICALS:**

- a. Two students to work on one station in Basic Training Kitchen.
- b. Practical in Quantity Food Kitchen shall be a team activity for bulk cooking.
- c. Each menu to be practiced in Basic Training Kitchen by preparing four portions of each dish at each station.
- d. Same menu to be practiced in Quantity Food Kitchen through team exercise on minimum twenty portions.

# Familiarisation of tools / equipment and their use.

A set of 60 menus shall be drawn, by the institute covering all the items listed below,

# 3) **LARDER THEORY:**

## UNIT 01:

Larder organization and layout - Larder control- maintenance and care of larder equipment.

### UNIT 02:

Hors d' oeuvre and salads- classification.

#### **UNIT 03:**

Fish – classification, cleaning, basic cuts and uses and storage

#### UNIT 04:

Poultry and game- classification preparation and cuts with uses

#### UNIT 05:

Butchery – cuts of beef, lamb, mutton and pork-uses and weights

#### UNIT 06

Types of force meat and uses

#### **UNIT 07:**

Assembling cold buffet, sandwiches and canapés, decorative work with ice, vegetable, butter/fat and fruit.

### **UNIT 08:**

Cleaning and care of larder equipment and tools

# 4) **HYGIENE AND SANITATION:**

#### **UNIT 01:**

#### FOOD MICROBIOLOGY

Introduction - Microorganism groups important in food microbiology

- Viruses
- Bacteria
- Fungi (Yeast & Molds)
- Algae
- Parasites

Factors affecting the growth of microbes - Beneficial role of Microorganisms

### **UNIT 02:**

#### FOOD CONTAMINATION AND SPOILAGE

Classification of Food - Contamination And Cross Contamination - Spoilages Of Various Food With The Storing Method.

### **UNIT 03:**

#### SANITARY PROCEDURE FOLLOWED DURIN FOOD HANDLING

Receiving, Storage, Preparation, Cooking, Holding, and Service of the Food

#### **UNIT 04:**

#### SAFE FOOD HANDLER

Personal Hygiene discussing all the standard - Hand Washing Procedure - First Aid definition, types of cuts, wounds, lacerations with reasons and precautions.

### **UNIT 05:**

### HAZARD ANALYSIS CRITICAL CONTROL POINT

Introduction to HACCP – History - Principles of HACCP

#### **UNIT 06:**

## FOOD SAFETY STANDARDS AUTHORITY OF INDIA (FSSAI)

Introduction to FSSAI - Role of FSSAI - FSSAI compliance

#### **UNIT 07:**

GARBAGE DISPOSAL

Different Methods - Advantages and disadvantages - Municipal Laws and Swachh Bharat Abhiyan

# 5) **NUTRITION:**

#### **UNIT 01:**

# **BASIC ASPECTS**

Definition of Food and Nutrition - Importance of Food

- Physiological,
- Psychological and
- Social

Functions of food (in maintaining good health)

#### **UNIT 02:**

#### **CLASSIFICATION OF NUTRIENTS**

Macro Nutrients – Carbohydrates – Simple – Monosaccharides – Disaccharides – Complex – Polysaccharides – Fats – Saturated – Unsaturated – Monounsaturated – Polyunsaturated – Proteins - Based on structure – Fibrous – Globular – Intermediate - Based on composition – Simple – Conjugated – Water - Micro Nutrients – Vitamins - Water soluble - Fat soluble – Minerals - Macro elements - Trace or Micro – elements

#### **UNIT 03:**

## **MACRO NUTRIENTS**

Carbohydrates - Functions of Carbohydrates - Sources - Recommended Daily Allowances (RDA) - Effects of Deficiency and excess intake of Carbohydrates - Fats - Functions of Fats - Sources - Recommended Daily Allowances (RDA) - Effects of Deficiency and excess intake of Fats - Proteins - Functions of Proteins - Sources - Recommended Daily Allowances (RDA) - Effects of Deficiency and excess intake of Proteins - Water - Functions - Source - Recommended Daily Allowance (RDA)

### UNIT 04:

### MICRO NUTRIENT

Vitamins - Functions, sources, Recommended Daily Allowances (RDA) and Effects of Deficiency / Excess intake of - Vitamins of B-Complex Group - Vitamin C - Vitamin A - Vitamin D - Vitamin E - Vitamin K - Minerals - Functions, Sources, Recommended Daily Allowances (RDA) and Effects of Deficiency / excess intake of - Calcium - Iron - Iodine - Sodium - Phosphorous

#### **UNIT 05:**

## CONSERVING NUTRIENTS

During Storing - During Food Preparation (Pre-cooking e.g. Washing, Peeling, Cutting, Chopping, Slicing, Pounding, Grinding, Soaking, Sprouting, Fermentation, Mixing) During Cooking

### **UNIT 06:**

### **BALANCED DIET**

Definition and its importance - Factors Affecting Balanced Diet (Age, Gender and Physiological state)

#### **UNIT 07:**

### **MENU PLANNING**

Nutritionally balanced meals as per three food group system - Factors affecting meal planning - Calculation of Nutritive value of dishes and meals - Critical evaluation of a given meal

### **UNIT 08:**

MENU PLANNING - FOR SPECIAL NEEDS

Obesity – Diabetes – Hypertension – Cardiac

### 6) **COMMODITIES THEORY:**

#### **UNIT 01:**

Cereals- wheat rice maize - Breakfast cereals like cornflakes, rice flakes, Chocolate flakes and pressed rice uses and storage

### **UNIT 02:**

Pulses –its types and uses

#### **UNIT 03:**

Fruits and vegetables- classification and uses

#### UNIT 04

Dairy products- milk -its uses composition and storage, classification and uses of cheese, butter, cream

#### UNIT 05:

Prevailing food standards in INDIA - food adulterations as public health hazard and common adulterants - simple tests in detection of common food adulterants - ISI - AGMARK and FSSAI

#### **UNIT 06:**

Herbs spices and condiments- classification and uses of different types

### **UNIT 07:**

Fruits and vegetables; classification and uses

### **UNIT 08:**

Tea, coffee, cocoa and their sources, storage and uses - Food flavors, essences and food colors with brand names.

### **UNIT 09:**

Food Preservation – long term and short term methods. Convenience food, sugar preserves and confectionery gums

## 7) **FOOD COSTING:**

### UNIT 01:**Pricing**

Menu pricing styles - Types of menu - Different methods in pricing

### **UNIT 02:Costing**

Importance of food costing - Methods of costing - Costing techniques

# **UNIT 03:Standard recipes**

Use of standardized recipes - Developing standardized recipes - Adjustment factor

## **UNIT 04: Material costing**

Through purchasing – receiving – issuing – production - sales and accounting

# UNIT 05:Control of

Food cost - labor cost - overhead cost - miscellaneous cost

#### UNIT 06:Yield

Butchers yield - cooking yield - portion control

#### UNIT 07:Costs

Determining standard food cost - calculating portion cost - calculating dinner cost

## 8) **COMPUTER AWARENESS:**

### UNIT 01:KNOWING COMPUTER

What is computer - Basic Applications of Computer - Components of Computer System - Central Processing Unit - Keyboard, mouse and VDU - Other Input devices - Other Output devices - Computer Memory - Concept of Hardware and Software - Hardware - Software - Application Software - Systems software - Concept of computing, data and information - Applications of IECT - e-governance - Entertainment - Bringing computer to life - Connecting keyboard, mouse, monitor and printer to CPU - Checking power supply

### UNIT 02:OPERATING COMPUTER USING GUI BASED OPERATING SYSTEM

Basics of Operating System - Operating system - Basics of popular operating system (LINUX, WINDOWS) - The User Interface - Task Bar – Icons – Menu - Running an Application - Operating System Simple Setting - Changing System Date And Time - Changing Display Properties - To Add Or Remove A Windows Component - Changing Mouse Properties - Adding and removing Printers - File and Directory Management - Creating and renaming of files and directories.

### UNIT 03: UNDERSTANDING WORD PROCESSING

Word Processing Basics - Opening Word Processing - Menu Bar - Using The Help - Using The Icons Below Menu Bar - Opening and closing Documents - Opening Documents - Save and Save as - Page Setup - Print Preview - Printing of Documents - Text Creation and manipulation - Document Creation - Editing Text - Text Selection - Cut, Copy and Paste - Spell check - Thesaurus - Formatting the Text - Font and Size selection - Alignment of Text - Paragraph Indenting - Bullets and Numbering - Changing case - Table Manipulation - Draw Table - Changing cell width and height - Alignment of Text in cell - Delete / Insertion of row and column - Border and shading

### **UNIT 04:USING SPREAD SHEET**

Elements of Electronic Spread Sheet - Opening of Spread Sheet - Addressing of Cells - Printing of Spread Sheet - Saving Workbooks - Manipulation of Cells - Entering Text, Numbers and Dates - Creating Text, Number and Date Series - Editing Worksheet Data - Inserting and Deleting Rows, Column - Changing Cell Height and Width - Formulas and Function - Using Formulas – Function

### UNIT 05:INTRODUCTION TO INTERNET, WWW AND WEB BROWSERS

Basic of Computer Networks - Local Area Network (LAN) - Wide Area Network (WAN) - Internet - Concept of Internet - Applications of Internet - Connecting to the Internet - Troubleshooting - World Wide Web (WWW) - Web Browsing Softwares - Popular Web Browsing Software - Search Engines - Popular Search Engines / Search for content - Accessing Web Browser - Using Favorites Folder - Downloading Web Pages - Printing Web Pages - Understanding URL - Surfing the web - Using e-governance website

## UNIT 06: COMMUNICATIONS AND COLLABORATION

Basics of E-mail - What is an Electronic Mail - Using E-mails - Opening Email account - Mailbox: Inbox and Outbox - Creating and Sending a new E-mail - Replying to an E-mail message - Forwarding an E-mail message - Sorting and Searching emails - Document collaboration - Instant Messaging and Collaboration - Using Instant messaging - Instant messaging providers - Netiquettes

## UNIT 07:MAKING SMALL PRESENTATIONS

Basics - Using PowerPoint - Opening A PowerPoint Presentation - Saving A Presentation - Creation of Presentation - Creating a Presentation Using a Template - Creating a Blank Presentation - Entering and Editing Text - Inserting And Deleting Slides in a Presentation - Preparation of Slides - Inserting Word Table or An Excel Worksheet - Adding Clip Art Pictures - Inserting Other Objects - Resizing and Scaling an Object - Presentation of Slides - Viewing A Presentation - Choosing a Set Up for Presentation - Printing Slides And Hand-outs - Slide Show - Running a Slide Show - Transition and Slide Timings - Automating a Slide Show