

**Vocational Higher Secondary  
Education (VHSE)**

**Second Year**

**FOOD AND RESTAURANT MANAGEMENT**

*Reference Book - Teachers' Version*



Government of Kerala  
Department of Education

State Council of Educational Research and Training (SCERT),  
KERALA  
2016

## **Foreword**

Dear Teachers

This reference book (**Teachers' Version**) is intended to serve as a transactional aid to facilitate classroom transaction and as a ready reference for teachers of Vocational Higher Secondary Schools. It offers some guidelines for the transaction of the course content and for undertaking the practical work listed in the course content. As the curriculum is activity based, process oriented and rooted in constructivism focusing on the realisation of learning outcomes, it demands higher level proficiency and dedication on the part of teachers for effective transaction.

In the context of the Right- based approach, quality education has to be ensured for all learners. The learner community of Vocational Higher Secondary Education in Kerala should be empowered by providing them with the best education that strengthens their competences to become innovative entrepreneurs who contribute to the knowledge society. The change of course names, modular approach adopted for the organisation of course content, work-based pedagogy and the outcome focused assessment approach paved the way for achieving the vision of Vocational Higher Secondary Education in Kerala. The revised curriculum helps to equip the learners with multiple skills matching technological advancements and to produce skilled workforce for meeting the demands of the emerging industries and service sectors with national and global orientation. The revised curriculum attempts to enhance knowledge, skills and attitudes by giving higher priority and space for the learners to make discussions in small groups, and activities requiring hands-on experience.

The SCERT appreciates the hard work and sincere co-operation of the contributors of this book that includes subject experts, industrialists and the teachers of Vocational Higher Secondary Schools. The development of the teachers' version of reference books has been a joint venture of the State Council of Educational Research and Training (SCERT) and the Directorate of Vocational Higher Secondary Education.

The SCERT welcomes constructive criticism and creative suggestions for the improvement of the book.

With regards,

**Dr. J. Prasad**  
Director  
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## **1. ABOUT THE COURSE**

The goal of vocational higher secondary education is to fulfill the manpower requirements for national development and social security through employment. This course is designed with ample scope for self as well as wage employment. Only vocationally competent man power can increase productivity in all sectors of economy, create wealth, ensure socio economic stability and bring prosperity to nation. Realization of this basic need calls for appropriate educational input in man power development.

### **Vision**

To make available skilled, trained and competent work force in middle level blue collar job which will stimulate the economy and lead to increased productivity and faster development.

### **Mission**

To fulfill the man power requirement for national development and for social security for the citizen through employment.

### **Objectives**

- To introduce attractive courses and schools relevant to the present scenario.
- To modify curriculum to cope up with the changing trends.
- To convert schools into production / service cum training centers.
- To create avenues for OJT for confidence building of students.
- To initiate action for the modification of recruitment rules of other departments so as to incorporate VHS qualifications.
- To explore the possibility of apprenticeship training to all the pass outs.
- To make available the expertise of the specialized teachers and students for the benefit of the local community.
- To conduct awareness campaign for VHS scheme in the feeding schools.

- To conduct seminars by incorporating PTA and students about recent technological advancements.

Vocational Education is designed to prepare skilled work force in middle level in one or more group of occupations trade or job after matriculation at 10 + 2 stage of Education. The objective of the course is to enhance individual employability and to provide an alternative for those pursuing higher education without particular interest or purpose. It is a distinct stream intended to prepare students for identified occupations.

### **Food and restaurant management as a career**

As the shift from traditional set up to those of modern lifestyles took place, eating, one of the basic daily needs for survival was commercialized in the form of catering industry paving way to commercial food production and service. There is a tremendous potential for growth in this sector with spurt in tourism. To meet this growing challenges the hotel industry will have to expand. An important sector in hotel and restaurant is food and beverage production and service. Besides, there are other forms of commercial catering such as hospital catering, industrial catering, commercial catering, institutional catering ...etc. The services in each would have to meet the highest standards to compare with the best. To meet this challenge the learners have to attain skill proficiency. In view of above food and restaurant management has been conceived at vocational higher secondary level to train required manpower for the industry. On completion of the course the learners will be adequately qualified to take up responsible positions in different catering establishments or set up their own catering service. To achieve this objective the learning situations are to be provided inside and outside the classroom to develop creativity, experimentation and innovation Food and restaurant management provide a high quality education programme in the food production and service industry. We fulfill this mission through a commitment to student achievement lifelong learning. Utilizing a blend of theory, skill development and practical applications; students will gain the necessary experience to sufficiently enter the food production and service Industry.

### **Scope of food and restaurant management**

Food and restaurant management is one of the career options within the fast paced world of hospitality. Workers in this profession oversee the daily operation of a variety of

establishment in the food service industry like... hotels, restaurants, flights, cruise liners etc. apart from above mentioned sectors workplaces include cafes, restaurants, staff restaurants, transport terminals, fast food, catering or tourist establishments, and institutional foodservice facilities. A waiter/ waitress maintains customer facilities and displays products available for sale as well as presents, sells and serves the customer products and services. They serve individual customers and customer groups. They work in co-operation with other employees toward promoting customer comfort, safety and well-being. They work in accordance with the requirements for sustainability and hygiene, and observe all applicable license regulations and other sector agreements and statutes.

### **Content of the subject**

This course provides an introduction to the basic principles of food preparation including safety and sanitation. The students will cover the fundamentals of cookery, cooking methods, food preparation and enable them to make informed decisions about all aspects of food production. The components of purchasing, receiving, storing and issuing food are analyzed as they relate to menu planning. The creation of menus is demonstrated for a range of catering outlets and consumer requirements. This course also provides students with knowledge and experience in food service concentrating on practical skills of providing specialist food service advice. The steps of sales and order taking are examined and students are made familiar with various dishes and accompaniments. The correct procedures with regard to restaurant service and the important characteristics of quality customer service are examined. The course examines the basic technical knowledge, practical and social skills and computer skills required to enable the food and beverage student to achieve a proficient standard for a range of cuisines and service types in different international hospitality industry.

## 2. JOB ROLES

The requirements of vocational qualification modules and the objectives of core subjects have been defined as learning outcomes (knowledge, skills, and competence). This forms the basis for describing the targets of assessment through mastering the work process, work method, equipment and material as well as underpinning knowledge and the key competences for lifelong learning. Students earning their Vocational Qualification in Food and Restaurant Management will possess a wide range of fundamental skills for the sector. They will be able to work in hotel and food service capacities for a wide variety of companies and places of business. They will perform their duties in a customer-oriented, profitable and effective manner, ensuring product quality requirements, safety, health and aesthetics.

### **Job roles identified under various sectors:**

#### **Government/ Semi Govt. Sector**

- Steward
- Captain
- Commis Chef -II (cook grade II)
- Commis Chef -I (cook grade I)
- Hospitality assistant
- Butler

#### **Private Sector**

- Guest Service Associate
- Steward
- Captain
- Commis Chef -II (cook grade II)
- Commis Chef -I (cook grade I)
- Assistant waiter
- Butler
- Banquet steward

- Baker
- Pastry chef
- Flight steward
- Cruise liner steward
- Cruise liner cook
- Canteen staff
- Hospital catering staff
- Industrial catering staff
- Wine waiter
- Barman
- Restaurant Hostess
- Banquet secretary
- Banquet salesman
- Restaurant cashier
- Coffee brassiere
- Sandwich maker
- Counter staff in food courts
- Room service waiter
- Restaurant Operations Trainee

### **Self Employment**

Open an-

- Outdoor catering unit
- Kiosk
- Restaurant
- Fast food
- Bakery
- Cafe
- Small scale food production unit
- Home stay

### 3. MAJOR SKILLS

<b>Module 3</b>	<b>Major skill</b>	<b>Sub skill</b>
<b>Catering and Restaurant Supervisor</b>	<b>Cooking Skill</b> <b>Menu planning Skill</b> <b>Food and Beverage service skill</b> <b>Supervisory skill</b>	<b>Cutting skill</b> <b>Presentation skill</b> <b>Communication skill</b> <b>Interacting skill</b>

<b>Module 4</b>	<b>Major skill</b>	<b>Sub skill</b>
<b>Computer Application in Food and Restaurant Management</b>	<b>Information skill</b> <b>Communication skill</b> <b>Technology skill</b>	<b>Assembling computer skill</b> <b>Data Processing skill</b> <b>Malayalam Computing skill, Communication skill</b>

## 4. SUBJECT APPROACH

### **Approach to Food and Restaurant Management:**

Food and restaurant industry is probably the most diverse but specialized industry in the world. It is certainly one of the largest, employing millions of people in a bewildering array of jobs around the globe. Sectors range from the glamorous five-star resort to the less fashionable, but arguably more specialized, institutional areas such as hospitals, industrial outfits, schools and colleges. Yet of these many different sectors, catering has to be the most challenging. Whatever the size of the catering operation, the variety of opportunities available is endless. "The sky is the limit with catering". There is no industry in the world which is not directly or indirectly, one way or the other, related to the catering industry. Food and restaurant management course is designed to fulfill the task of planning, organizing, controlling and executing in food preparation and serving.

### **The major characteristics of Learner- centered pedagogy:**

- Process oriented
- Participatory learning
- Contemporary

### **Nature of learner:**

- Adolescent learner
- Curious and ready to accept challenges and act accordingly
- Adventurous
- Eager to explore
- Leadership qualities
- Interested in group activities
- Able to think critically and logically
- Have own opinion

The learners in this age group are keen to find ways to earn their livelihood and at the same time seek new vistas of professional or academic education after their present studies. The strategies selected for the transaction of class 11 curriculums are designed to cater for nature of the learner, their mental and chronological age.

### **Changing role of the teacher:**

The past few decades have seen a radical change in the concept of learning and the role of teacher in the learning process have also changed drastically. The transformation of the role of a teacher from the sole of knowledge to a facilitator, scaffold and mentor is the chief characteristic of the present day. Now the role of teacher is multi dimensional and it includes roles such as:-

- Mentor
- Facilitator
- Guide
- Motivator
- Democratic leader
- Co learner
- Researcher
- Resource person
- Friend
- Evaluator
- Philosopher

### **Application of Inclusive education in Food and Restaurant Management:**

Children with special needs can be included in the curriculum very effectively. Effective use of ICT would be helpful in our inclusive curriculum where CWSN (Children with special needs) category learners can get a better understanding of the ideas and concepts of food & restaurant management. The classroom should also be transformed so as to cater for the above. In constructivist paradigm, the learner constructs knowledge of his own through his experiences. It is the duty of the teacher to plan diverse learning

activities and help them formulate the concept in the topics by doing/ going through these. The role of the learning environment is very important in this process.

**Learning resources:**

**Use of ICT in food and restaurant management learning:**

Many a times the teacher in Food & Restaurant management needs to show the video presentation of hotel departments, cookery shows, servicing skills and their hygienic aspects. Thus the potentials of ICT in food & restaurant management curriculum transaction are high. The teacher must make use of these modern technologies in the class room, in order to make food & restaurant management learning meaningful.

**Classrooms:**

The classroom should be learner friendly democratic and inspiring. It should have all the resources to set a learner centered approaches including reference books and ICT facilities. In order to make Food & Restaurant Management learning effective, it requires some special facilities. The most important among them is food production and service lab.

**Food production and service lab:**

The food and service lab is the centre of all activities in learning the subject. There should be of two rooms with the size of 40x30 ft each. There should be all equipments sufficiently supplied for better learning and skill development. The room should be well arranged to stimulate the imagination and inspire the creativity of the student. It should be set in such a way to obtain learning outcomes. Detailed list of equipments are given in annexure. In addition LCD projector and white screen along with computers are essential in the food & restaurant management lab for this purpose. Let the lab where the learners can study Food & restaurant management with passion towards food & beverage and its production and service for the coming generations as well.

**Library:**

The Library and learning resources center is dedicated to support the activities and programmes of the food & restaurant management as they relate to hospitality sector development and advancement. It accomplishes its mission by maintaining up to date collection of books, journal, and audio-visual items related to the food & beverage sector. By ensuring these facilities, the skill oriented transactions in Food and restaurant management takes place smoothly whereby learning outcomes are also achieved. The outcomes so obtained are long-lasting, observable and measurable.

**Learning strategies:**

The various methods of strategies adopted for the desired behavioral changes are included in the curriculum are called learning strategies. The modern approach to learning strategies relies on the basic concept that student builds knowledge based on his/her experiences of activities such as field visit, demonstration, role-play etc. Selecting learning strategies for each topic should suit the age group and mental capacity of the learner.

Given below are the few strategies we have selected construct knowledge to attain various learning outcomes

- Demonstration
- Role play
- Field visit
- On the job training
- Experimentation
- Discussion
- Learning by doing
- Peer evaluation

## **5. LEARNING OUTCOMES**

After the completion of third and fourth module the learner will be able to –

### **Module 3 Catering and Restaurant Supervisor**

#### **3.1 Fish and Meat Cookery**

- 3.1.1 Classifying different types of Fish
- 3.1.2 Recognize purchase specification of each fish
- 3.1.3 Prepare popular Fish dishes
- 3.1.4 Classify different types of Meat and its cuts
- 3.1.5 Recognize purchase specification of different types of Meat
- 3.1.6 Prepare popular Meat dishes

#### **3.2 Cheese, Pastas and Sandwiches**

- 3.2.1 Classify Cheese, Pastas, Sandwiches
- 3.2.2 Prepare Paneer
- 3.2.3 Prepare Cheese based dishes
- 3.2.4 Prepare Pasta dishes
- 3.2.5 Prepare popular Sandwiches

#### **3.3 Bakery and Sweets**

- 3.3.1 Recognize the role of each ingredient in Bread
- 3.3.2 Prepare Bread
- 3.3.3 Identify different baked products (Cakes, Pastry, Biscuits, Cookies etc)
- 3.3.4 Prepare different Sweet dishes

#### **3.4 International and Regional Cuisine**

- 3.4.1 Prepare popular International and Regional dishes
- 3.4.2 Identify and record recipes of popular regional and international dishes

### **3.5 Types of service and Menu Planning**

3.5.1 Acquire skill in different styles of food and beverage service

3.5.2 Construct Menu Card

### **3.6 Alcoholic beverages and their services**

3.6.1 Classify Alcoholic Beverages

3.6.2 Distinguish fermented and distilled drinks

3.6.3 Acquire skill in serving Wine

### **3.7 Function Catering**

3.7.1 Identify different types of Functions

3.7.2 Identify the job role of each employee in Banquet staff organizations

3.7.3 Acquire skill in taking a Banquet booking using function Prospectus

3.7.4 Setting an environment for outdoor Catering

## **MODULE 4 Computer application in Food and Restaurant Management**

### **4.1. Information technology**

4.1.1 Define a computer

4.1.2 Explain the characteristics of a computer

4.1.3 Distinguish between Data, Information and Knowledge

4.1.4 Familiarise with the terms Bit, Byte, Kilobyte, Megabyte and Gigabyte

4.1.5 Describe the growth and development of computers in different stages

4.1.6 Identify different computer generations

4.1.7 Classify the computers as Micro, Mini, Mainframe and Super computer.

4.1.8 Familiarise the various computer units Identify the various functions of the units

4.1.9 Recognise the various units of a computer through a block diagram

4.1.10 Identify components such as motherboard, chipset, bus and expansion slot.

4.1.11 Connect the various devices to the appropriate port

4.1.12 Familiarise the various microprocessor such as Intel and AMD

4.1.13 Compare the characteristics of the microprocessor, Intel and AMD.

4.1.14 Describe memory organisation structure of a computer

4.1.15 Acquire knowledge on different types of memory elements

- 4.1.16. Distinguish between primary and secondary memory
- 4.1.17. Identify different RAM and ROM technologies
- 4.1.18. Differentiate between sequential access and direct access device
- 4.1.19. Familiarise with various secondary storage devices
- 4.1.20. Know about the different input devices
- 4.1.21. Explain the use of each device and its significance
- 4.1.22. Know about the different output devices
- 4.1.23. Describe the use of each device and its significance.
- 4.1.24. Identify various portable storage devices.
- 4.1.25. Identify the relevance of software
- 4.1.26. Acquire knowledge on software classification
- 4.1.27. Explain the use, functions and types of operating system
- 4.1.28. Describe the stages of development of computer languages
- 4.1.29. Classify programming languages in different categories
- 4.1.30. Distinguish between different types of translators
- 4.1.31. Identify different types of malicious software
- 4.1.32. Judge the aspects of “Free software Philosophy” and software piracy.
- 4.1.33. Know the basics of Information technology
- 4.1.34. Describe the roles of IT in various areas of our lives
- 4.1.35. Explain e-commerce and m-commerce.
- 4.1.36. Understand the IT policy of Kerala.
- 4.1.37. Use internet for information generation and dissemination

## **4.2. Computer Hardware and Operating System**

- 4.2.1 Analyse the hardware components present inside CPU cabinet
- 4.2.2. Explain the functions of various components of CPU cabinet
- 4.2.3. Identify activities in the booting process
- 4.2.4. Acquire knowledge about BIOS and POST.
- 4.2.5. Start windows7
- 4.2.6. Execute commands such as Date, Time etc
- 4.2.7. Explain the file structure of windows
- 4.2.8. Create and manage files and folders

- 4.2.9. Acquire knowledge for hard drive preparation.
- 4.2.10. Install device driver
- 4.2.11. Install windows 7 Operating system
- 4.2.12. Install various application software
- 4.2.13. Describe the steps to setup an internet connection
- 4.2.14. Explain control panel, firewall and troubleshooting.
- 4.2.15. Create start up disk
- 4.2.16. Share files.
- 4.2.17. Transfer data from one computer to another
- 4.2.18. Write data to a CD or DVD
- 4.2.19. Install and use antivirus software
- 4.2.20. Clean cookies
- 4.2.21. Defragment disk

### **4.3. Office Automation**

- 4.3.1. Understand the concept of office
- 4.3.2. Understand nature of works in an office
- 4.3.3. Identify the needs for office automation
- 4.3.4. Launch MS word
- 4.3.5. Identify components of MS word
- 4.3.6. Format text paragraph
- 4.3.7. Insert tables, graphics, word art, clip art etc
- 4.3.8. Use tools spell check and grammar etc.
- 4.3.9. Explain the meaning of word processing.
- 4.3.10. List out the uses of word processing.
- 4.3.11. List out the shortcut keys
- 4.3.12. Use mail merge for business communication
- 4.3.13. Apply word processor for report, statement, letter and order preparations.
- 4.3.14. Start MS Excel
- 4.3.15. Explain the meaning of work sheet
- 4.3.16. List out the various uses of spread sheet
- 4.3.17. Perform excel functions for decision making.

- 4.3.18. Use data filtering and sorting for presentation.
- 4.3.19. Prepare budgets
- 4.3.20. Prepare pay roll
- 4.3.21. Prepare loan repayment schedule
- 4.3.22. Prepare depreciation statement
- 4.3.23. Evaluate schedule of debtors
- 4.3.24. Evaluate schedule of creditors
- 4.3.25. Report monthly purchase statement
- 4.3.26. Report monthly sales statement
- 4.3.27. Prepare monthly purchase and sales returns statement
- 4.3.28. Explain the meaning and uses of PPT
- 4.3.29. Prepare slides for information presentation.
- 4.3.30. Add effects to slides
- 4.3.31. Insert and format objects
- 4.3.32. Add transitions to slides
- 4.3.33. Identify the advantages of data base
- 4.3.34. Familiarize different types of data base system
- 4.3.35. Identify the terminologies related with RDBMS
- 4.3.36. To start MS Access, Create, Edit and Manipulate data in a data base
- 4.3.37. Apply sorting, filtering on data
- 4.3.38. Create query using query wizard
- 4.3.39. Create reports using report wizard
- 4.3.40. Import and export data

#### 4.4. **Linux and open office**

- 4.4.1. Distinguish between free and property software.
- 4.4.2. List the salient features of Linux
- 4.4.3. Understand the Linux file structure
- 4.4.4. Understand the basic Linux commands
- 4.4.5. Practice basic linux command
- 4.4.6. Understand GNU General public license
- 4.4.7. Understand Apache open office 4

- 4.4.8. Identify the general features of Open Office Package
- 4.4.9. Understand the features of Open office writer.
- 4.4.10. Format fonts
- 4.4.11. Give background colour for the text
- 4.4.12. Format paragraphs
- 4.4.13. Set indents and spacing and set different tabs
- 4.4.14. Create index
- 4.4.15. Understand the various of features of Calc
- 4.4.16. Format cells
- 4.4.17. Insert rows/columns/sheets
- 4.4.18. Understand absolute and relative referencing
- 4.4.19. Give names ranges
- 4.4.20. Add, rename and delete worksheets
- 4.4.21. To apply auto fill to data sequence
- 4.4.22. Apply filter and sort
- 4.4.23. Find totals and sub totals
- 4.4.24. Understand cell protection
- 4.4.25. Identify important features of impress
- 4.4.26. List various window components of Open office into slides
- 4.4.27. Analyze the need of grouping objects
- 4.4.28. Demonstrate inserting and cropping images
- 4.4.29. Identify the need of slide transition
- 4.4.30. Apply and remove transition and animation effects to slides
- 4.4.31. List the steps required for playing and saving presentations

#### **4.5. Internet and Malayalam Computing**

- 4.5.1 Identify the need of network
- 4.5.2. Identify different topologies
- 4.5.3. List various protocols
- 4.5.4. Identify different connectivity devices
- 4.5.5. Describe firewall settings
- 4.5.6. Identify different types of modem

- 4.5.7. Describe the advantages of Internet
- 4.5.8. Explain the concept of web page and website
- 4.5.9. Identify the use of web browser
- 4.5.10. Describe the benefits of e mail
- 4.5.11. Create email account, compose email and send email
- 4.5.12. Identify basic HTML tags
- 4.5.13. Differentiate tag and attribute
- 4.5.14. Write HTML code to create simple web pages
- 4.5.15. Create different types of lists
- 4.5.16. Use anchor tag
- 4.5.17. Create table, frameset and forms
- 4.5.18. Create simple websites
- 4.5.19. Familiarize with Malayalam computing concepts
- 4.5.20. Analyze the efforts done to strengthen our mother tongue using ICT.
- 4.5.21. Identify Malayalam fonts in Unicode
- 4.5.22. Identify the various Malayalam fonts in word processor
- 4.5.23. Download and install Malayalam Fonts
- 4.5.24. Familiarize with using Malayalam in word processor
- 4.5.25. Comprehend the ethical and social issues related to information systems
- 4.5.26. Identify the key technology trends that raise ethical issues
- 4.5.27. Recognize the information rights lie privacy and freedom in the Internet age
- 4.5.28. Understand terms intellectual property, accountability and liability in IS.

## 6. COURSE STRUCTURE

### MODULE -3 CATERING AND RESTAURANT SUPERVISOR

<b>Unit no.</b>	<b>Name of the unit</b>	<b>Periods</b>
3.1	Fish and Meat Cookery	75
3.2	Cheese, Pastas and Sandwiches	25
3.3	Bakery and Sweets	30
3.4	International and Regional Cuisine	40
3.5	Types of service and Menu Planning	60
3.6	Alcoholic beverages and their service	40
3.7	Function Catering	70
	Total periods	340

**MODULE 4- COMPUTER APPLICATION IN FOOD AND RESTAURANT  
MANAGEMENT**

<b>Unit No</b>	<b>Name Of The Unit</b>	<b>Period</b>
4.1	Information Technology	50
4.2	Computer hardware and operating system	80
4.3	Office automation	100
4.4	Linux and open office	50
4.5	Internet and Malayalam computing	60
	Total Periods	340

## **7. SYLLABUS AND LIST OF PRACTICALS**

### **Module III CATERING AND RESTAURANT SUPERVISOR**

#### **Unit I**

##### **Fish and Meat Cookery**

Classification of Fish, Purchase specification of Fish, Cuts of Fish, Meat Cookery, Beef - Purchase specification, Cuts of Beef, Mutton - Purchase specification, Cuts of Mutton, Pork - Purchase specification, Cuts of Pork, Poultry - Purchase specification, Cuts of Poultry

#### **Unit II**

##### **Cheese, Pastas and Sandwiches**

Cheese - Classification of Cheese, Pastas - Introduction to Pastas cookery, Types of Pastas  
Sandwiches - Types of sandwiches

#### **Unit III**

##### **Bakery and Sweets**

Bread - Ingredients & Bread making, Cakes, Pastry, Biscuits, Cookies, Sweets.

#### **Unit IV**

##### **International and Regional Cuisine**

Continental Cuisine, Chinese Cuisine, Indian - South Indian & North Indian Cuisine

#### **Unit V**

##### **Types of service and Menu Planning**

English Service, French Service, American Service, Silver Service, Russian Service, Room Service, Cafeteria Service, Gueridon Service, Menu Planning - Factors to be considered while planning a Menu

## **Unit VI**

### **Alcoholic beverages and their service**

Introduction to Alcoholic beverages, Classification of Alcoholic Beverages, Fermented Drinks – [Beer, Wine], Distilled Drinks – [Whisky, Brandy, Gin, Vodka, Rum, Tequila], Service of Alcoholic beverages, Cocktails and Liqueurs.

## **Unit VII**

### **Function Catering**

Types of Functions, Banquets – Staff organization, Banquet booking, Banquet Table layouts, Out Door Catering

## **MODULE IV**

### **COMPUTER APPLICATION IN FOOD AND RESTAURANT MANAGEMENT**

## **Unit I**

### **Information Technology**

Introduction to Information Technology – Data processing – Data presented inside a computer – Characteristics of computers – History of computers – Evolution of computers – Classification of computers – Hard wired programming and stored program concept – Computer Organisation – Computer as a data processing machine – Basic computer operations – Functional units – System components – Input/ Output ports (I/O ports) – Microprocessor – The Memory – Memory organisation – Types of memory – Advanced portable storage devices – Memory hierarchy – Input /Output Devices – Computer Software – Software – Classification of software – Malicious Software – Copyright – Software piracy-Licensing – Free software philosophy – Application of information Technology – Communication – Business – Medicine and Health care – Entertainment – E-Governance – Education – Engineering manufacturing – Science – IT policy in Kerala state – E-commerce – M-commerce – Online trading – Net-Banking

## **Unit II**

### **Computer hardware and operating system**

Components of a Personal Computer - Parts of a personal computer - Booting - BIOS - POST - Disk Operating System - Windows 7 OS - Basic file and folder operations - Accessories - Installing and Managing Windows 7 - Steps to install Windows 7 - Hard drive preparation - Formatting - Device Driver - Installing a printer driver - Changing file views in windows7 - Control panel - User creation and rights - Trouble shooting - Creating start-up disk - Sharing files - Internet connection and Firewall -Windows Explorer- Installing MS office- Installing DTP software - Installing Tally - Maintaining Computer Software - Transferring computer data

## **Unit III**

### **Office Automation**

Office Automation basics - Concept of office -Nature of work in office - Need for office automation - MS Word- User interface of MS word - Creating a document - MS Excel - Starting MS Excel - User interface of MS Excel- The work sheet - Formulae - Sorting - Working with chart - MS Power point - Creating presentation indifferent ways - Inserting a new slide - Adding themes - Saving a presentation- Set up the show - MS Access -Advantages of DBMS - Data Models - Terminologies used in RBDMS - MS Access - Creating a query in the query design option - Creating a form using Form wizard - Reports - Import - MS Outlook

## **Unit IV**

### **Linux and open office**

Introduction to Linux -History of Linux - Advantages of GNU Linux - Linux file system structure - Linux Kernel - Login and logout in Linux - Linux command - Open Office writer - Introduction to Open office - Apache Open Office - System requirement Starting Open Office Writer - Advanced features of Open Office Writer - Character Formatting - Background Colour - Paragraph Formatting - Bullets and Numbering - Indents - Creating

an index of a document - Open office calc -Selecting cells - Cell formatting - Inserting Rows/Columns - Built in functions - Charts in Calc - Addressing Cells - Data Range - Work sheet -Auto fill - Filter - Data Sorting - Totals and sub totals - Protection - Open office impress - Important features of impress - Bringing different objects into slides - Adding Text - Different views - Adding New Slides to Your Presentation - Background - Slide Transition -Animating objects in a slide -Watching slide show.

## **Unit V**

### **Internet and Malayalam computing**

Introduction Computer Networks - LAN Topologies - Protocols - Connectivity devices -Windows 7 Firewall Settings - Internet and Email - History of the Internet - Connecting Computer to Internet Connection - World Wide Web (WWW) - Web Browser - Search Engines - Email (Electronic mail) - Creating and using free email account with Gmail - Types of Internet Web page Designing - HTML-Starting with HTML - Attributes of <HTML> tag-Malayalam Computing - Malayalam through Computers - Free Software and Language Computing - Malayalam and Technology - Malayalam digital Technology - Unicode -Malayalam Using Transliteration - Malayalam Word Processing - Downloading and Installing Malayalam Fonts - Installing Fonts in Windows - How to enable Malayalam in Web Browsers? - Malayalam in UBUNTU - Malayalam keyboard and Typing - Ethical and Social Issues in Information Systems.

### **LIST OF PRACTICALS:**

- Identification of different part of a computer by using damage system
- Connecting port and devices and uses and functions of various devices
- Net banking and online booking
- Open bank account with net banking facility
- Practice online booking of train ticket bus ticket ,air tickets etc
- Practice fund transfer between accounts
- Browse internet for detailed application of it
- Identification of different components inside the CPU used for booting
- Install and uninstall window 7
- Installation of DTP software

- Installation MS office
- Practice data transfer between computers and devices
- Developing typing skill through typing tutorials
- Open edit, save and close a text file
- Formatting text font, paragraph, bullet, columns, tabs, drop case, text direction, change case, background, insert box , insert picture and print the created text file
- Practice mail merge
- Use find and replace
- Formatting tables
- Open edit ,save and close an excel file
- Formatting cells, formatting text, insert rows and columns
- Functions- logical ,average, sum and round
- Creating chart and diagrams- bar diagram, histogram and pie diagram
- Data filtering , sorting ad creating new work sheet from filtered data
- Page set up and printing an excel file
- Create ,edit , save , add effects and animation to power point presentation
- Create MS access file by using query wizard
- Application areas open office writer- practice letters, statements, display government orders etc
- Open, edit, save and close a Calc file
- Functions – logical ,average, sum, and round
- Formatting cells, formatting texts insert rows and columns
- Creating chart and diagrams
- Page set up and printing open office Calc file
- Create edit, save, add effects and animation to open office impress
- Malayalam typing practice
- Open an email account and use it for communication

## 8. SCHEME OF WORK

<b>Moith</b>	<b>Unit No</b>	<b>Name Of The Unit</b>	<b>Period</b>
JUNE	3.1	Fish and meat cookery	75
JULY	3.2	Cheese, pasta and sandwiches	25
	3.3	Bakery and sweets	30
	3.4	International and regional cuisine	20
AUGUST	3.4	International and regional cuisine	15
	3.5	Types of services and menu planning	60
SEPTEMBER	3.6	Alcoholic beverages and their service	45
	3.7	Function catering	30
OCTOBER	3.7	Function catering	40
	4.1	Information technology	35
NOVEMBER	4.1	Information technology	15
	4.2	Computer hardware and operating system	60
DECEMBER	4.2	Computer hardware and operating system	20
	4.3	Office automation	55
JANUARY	4.3	Office automation	45
	4.4	Linux and open office	35
FEBRUARY	4.4	Linux and open office	15
	4.5	Internet and Malayalam computing	60

## 9. CLASSROOM ACTIVITIES

- Field visit
- Interactive discussion
- Brain storming session
- Interactive session with an expert/industry staff
- Video presentation
- General discussion
- Group the learners and evaluate each other (peer evaluation)
- Plan and draw a restaurant lay out
- Demonstration
- Group discussion
- Seminar
- Collection of brochures
- Referring library books
- Illustrated chart
- Collecting pictures
- Role play

## 10. PRACTICAL ACTIVITIES

- Fish Cookery – Cuts, selection and preparations of Fish dish
- Meat Cookery – Cuts, selection, preparations of Beef, Mutton, Pork and Poultry dishes
- Preparation of Paneer
- Preparation of Cheese based dishes
- Preparation of Pastas
- Making different types of sandwiches
- Bread making
- Cake making and its decorations
- Preparing different types of Sweet dishes
- Preparing popular Chinese, Continental and Indian dishes [ South & North Indian]
- Compile different types of Menu
- Mock services [Different types of service]
- Mock Wine service and Techniques
- Filling a function prospects
- Identification of different part of a computer by using damage computer
- Connecting port and devices and uses and functions of various devices
- Net banking and online booking
- Open bank account with net banking facility
- Practice online booking of train ticket bus ticket ,air tickets etc
- Practice fund transfer between accounts
- Browse internet for detailed application of it
- Identification of different components inside the CPU used for booting
- Install and uninstall window 7

- Installation of DTP software
- Installation MS office
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- Malayalam typing practice
- Open an email account and use it for communication

## 11. OVERVIEW OF THE MODULE III

### Catering and Restaurant Supervisor

This module designed to equip the students with supervisory skills in catering and restaurant operations. Students continue their knowledge acquiring and skill practices in a more standardized and advanced environment. After completion of the module, he/she may able to supervise the food and beverage production and service activities in the establishments such as hotels, Restaurants, industrial catering, welfare catering, transport catering etc. They will be able ensure that customers are satisfied with the quality of food and service provided.

### UNIT 3.1. FISH AND MEAT COOKERY

#### Introduction:

This Unit deals with the concepts of Fish & Meat cookery in general which educates the amateur chefs in the Hospitality Industry. The classification of Fish & Meat, their cuts their purchase specification and cookery is discussed in this unit.

MODULE 3 CATERING AND RESTAURAT SUPERVISOR			
UNIT NO 3.1 FISH AND MEAT COOKERY			
Ideas/ concepts /skills	Learning outcomes	Suggested activities	Assessment
<b>Fish cookery:</b> Classification of fish Purchase specification of fish	Learner will be able to:- 3.1.1 Classifying different types of Fish 3.1.2 Recognize purchase specification of each fish.	Display the chart of various kinds of fish.  Demonstrate different types of cleaning and cutting fish.	Recipe of prepared dish.  Classification chart of fish

<p>Cuts of fish Fish cookery</p> <p><b>SKILLS:</b> Identification skill Cooking skill Observation skill</p>	<p>3.1.3. Prepare popular Fish dishes</p>	<p>Prepare popular fish cuisine.</p>	<p>Recipe of prepared dish.</p>
<p><b>Meat Cookery:</b> Types of Meat a. Mutton Purchase specification Cuts of Mutton Cookery b. Beef: Purchase specification Cuts of Beef Cookery c. Pork: Purchase specification Cuts of pork Cookery d. Poultry Purchase specification Cuts of poultry cookery</p> <p><b>SKILLS:</b> Identification skill</p>	<p>3.1.4 Classify different types of Meat and its cuts 3.1.5 Recognize purchase specification of different types of Meat 3.1.6 Prepare popular Meat dishes</p>	<p>Display the chart of various kinds of meat Demonstrate different types of cleaning and cutting meat Prepare popular meat cuisine.</p>	<p>Classification chart of meats</p>

Cooking skill			
Observation skill			

### Assessment of Activities:-

Activity -I

Conduct Field visit to the nearby market to observe different types of meat and fish. Then students are asked to group the fish and meat based on their characteristics and list out the purchase specification

### List of items in the portfolio:-

Field visit report

Classification chart of fish and meat

Purchase specification of fish and meat written in the activity log

Recipes of the practical done in the record book



Extended activities

### SAMPLE RECIPES:

#### Fish a l'anglaise - Crumb fried fish

##### *Ingredients-*

Pomfret	1no.
Egg white	1 no.
Refined flour	1 gms
Bread crumbs	2 gms
Lemon juice	5 ml
Salt	5gms
Pepper	a pinch
Mustard powder	5 gms

##### *Method of preparation-*

- Cut out fillets of the fish.

- Marinade the fish in lemon juice , mix with salt , pepper and mustard powder [30 mts].
- Take the fish and dust it with refined flour.
- Coat it with egg white and top layer of bread crumbs.
- Deep fry in a kadai.
- Serve hot with Tartar sauce.

### **Chilly Fish Manchurian**

#### ***Ingredients-***

Fish fillet	25 gms
Corn flour	1 <sup>1</sup> / <sub>2</sub> Tbsp
Plain Flour	1 <sup>1</sup> / <sub>2</sub> Tbsp
Garlic minced	3 cloves
Spring onion	2 Tbsp
Soya sauce	1 tsp
Vinegar	1 tsp
Red chilly sauce	2 tsp
Sugar	<sup>1</sup> / <sub>2</sub> tsp

#### ***For marinating-***

Soya sauce	<sup>3</sup> / <sub>4</sub> tsp
Pepper powder	<sup>1</sup> / <sub>8</sub> tsp
Ginger garlic paste	1 <sup>1</sup> / <sub>2</sub> tsp
Salt	to taste

#### ***Method of preparation-***

- Wash the fish and cut to cube sized pieces.
- Marinate with the ingredients for 30 mts.
- Heat a pan with oil and shallow fry.
- Add corn flour, plain flour and salt. Stir well.
- Add the sauces and stir well.
- When it bubbles, add fish.
- Garnish with chopped spring onion.

### **Goan Fish Curry**

#### *Ingredients -*

Fish            2 medium sized fishes  
Salt            a pinch

#### *For the masala-*

Cumin seeds            ½ tsp  
Turmeric powder        ½ tsp  
Garlic flakes            4 cloves  
Kashmiri red chilly     8 nos.  
Coriander seeds        1 Tbsp  
Grated coconut         1 no.  
Tamarind                1 inch  
Water                    ½ cup  
Onion sliced            1 no.  
Green chilly sliced     2 no.

#### *Method of preparation-*

- Marinate the fish in salt and lime juice for 10 minutes.
- Grind all masala together.
- Add the onion and green chilly to the masala and place the pan over the flame.
- Cook the masala for 10 mts.
- Add the marinated fish and cook.
- Serve hot with rice.

### **Mughlai Fish Curry**

#### *Ingredients -*

Fish                      1no.  
Poppy seeds            ¾ cup  
Onion                    2 no.

Tomato	1no.
Green chilly	2no.
Ginger garlic paste	2 tsp
Garam masala powder	$\frac{3}{4}$ tsp
Chilly powder	1tsp
Turmeric powder	$\frac{1}{2}$ tsp
Curd	$\frac{1}{2}$ cup
Cumin seeds	$\frac{3}{4}$ tsp
Cashew nuts	5 nos.
Coriander leaves	a handful
Cooking oil	as required
Salt	as required

***Method of preparation-***

- Marinate the cleaned and cut fish with salt and turmeric powder for about 10 mts.
- Grind the mixture of poppy seeds, cashews and curd.
- Fry the marinated fish in oil.
- Heat the oil in another pan.
- Splutter mustard seeds; add finely chopped onions and sauté.
- Add ginger garlic paste, cumin powder and fry for 2 mts.
- Add the ground mixture of poppy seeds, curd and cashews.
- Add sliced tomato and green chillies, heat it for some time.
- Add water followed by coriander powder, chilli powder , turmeric powder & salt.
- Add the fried fish and cook for 10 mts.
- Add required amount of water and boil.
- Garnish with chopped coriander leaves and serve.

**Mutton Rogan Josh**

***Ingredients-***

Mutton cut into 1½ inch pieces	800 grams
Oil	4 tablespoons
Asafoetida	1¼ teaspoon

Cinnamon	2 one-inch
Cloves	6-8
Ratanjot	4-6 inch pieces
Black peppercorns	5-6
Black cardamoms	4
Kashmiri red chilli powder	1 tablespoon
Fennel seed (saunf) powder	2 teaspoons
Dry ginger powder (soonth)	1 tablespoon
Coriander powder	1 tablespoon
Salt	to taste
Yogurt, whisked	1 cup

***Method of preparation -***

1. Heat oil in a thick-bottomed pan. Add asafoetida, cinnamon, cloves, black peppercorns and black cardamoms. Sauté till fragrant.
2. Add lamb pieces and cook on medium heat, stirring constantly till lamb pieces turn a nice reddish brown colour. This may take twelve to fifteen minutes.
3. Sprinkle a little water and continue cooking for twelve to fifteen minutes more on low heat. Make sure to stir constantly and scrape all the sediments from the bottom of the pan. Add Kashmiri red chilly powder, fennel powder, dry ginger powder, coriander powder and salt.
4. Add yogurt and two cups of water. Cook, covered, till lamb is tender, stirring occasionally. Serve hot.

**Beef Stroganoff**

***Ingredients -***

Butter	5 Tbsp
Sirloin or tenderloin	cut thin into 1-inch wide by 2 1/2-inch strips
Shallots / onions	1/3 cup chopped
Cremini mushrooms	sliced ½ kg
Salt	to taste
Pepper	to taste

Nutmeg	1/8 teaspoon
Dry tarragon	1/2 teaspoon
Sour cream	1 cup

***Method of preparation-***

1. Brown the strips of beef in butter: Melt 3 Tbsp of butter in a large skillet on medium heat. Increase the heat to high/med-high and add the strips of beef. You want to cook the beef quickly, browning on each side, so the temp needs to be high enough to brown the beef, but not so high as to burn the butter. You may need to work in batches.
2. While cooking the beef, sprinkle generously with salt and pepper. When both sides are browned, remove the beef to a bowl and set aside.
3. Sauté the shallots: In the same pan, reduce the heat to medium and add the shallots. Cook the shallots for a minute or two, allowing them to soak up any meat drippings. Remove the shallots to the same bowl as the meat and set aside.
4. Sauté the mushrooms: In the same pan, melt another 2 Tbsp of butter. Increase heat to medium high and add the mushrooms. Cook, stirring occasionally for about 4 minutes. While cooking, sprinkle the nutmeg and the tarragon on the mushrooms.
5. Add sour cream, beef, and shallots: Reduce the heat to low and add the sour cream to the mushrooms. You may want to add a tablespoon or two of water or stock to thin the sauce (or not).
6. Mix in the sour cream thoroughly. Do not let it come to a simmer or boil or the sour cream may curdle. Stir in the beef and shallots.
7. Add salt and pepper to taste. Note that you will likely need more salt than you expect. Taste, and if it needs salt, add 1/2 teaspoon or more.
8. Serve immediately over egg noodles, fettuccine, mashed potatoes, or rice. (Potatoes, rice, and gluten-free pasta are gluten-free options.)

**Pork Vindaloo**

***Ingredients -***

Pork shoulder, trimmed and cut into bite-sized cubes	1kg
Vegetable oil	3 tbsp

Onions, finely chopped	2 large
Mild chilly powder	1 tbsp
Chicken stock	250ml
Coriander leaves	handful

***For the marinade -***

Green cardamom pods	6 no.
Black peppercorns	½ tsp
Red wine vinegar	125ml
Finely grated ginger	1 heaped tbsp
Garlic cloves, finely grated	4 large
Golden caster sugar	1 tsp
Dried chillies	8 small
Ground cloves	a pinch
Ground coriander	2 tsp
Ground cumin	1 tsp
Turmeric	¼ tsp

***Method of preparation -***

1. To make the marinade, remove the seeds from the cardamom pods and grind with the peppercorns using a pestle and mortar. Mix with the rest of the marinade ingredients, and then pour over the pork. Mix everything together well, then cover and leave to marinate overnight or for at least 8 hrs.
2. Heat the oil in a large pan over a medium heat and cook the onions for about 5 mts until starting to soften. Add the chilly powder to the pan and cook for 1 min. Using a slotted spoon, remove the pork from the marinade and add to the pan. Turn up the heat a little and cook for about 5 mts, stirring all the time. Add the leftover marinade to the pan with the stock. Bring to the boil, then turn down to a simmer and cook for 40-45 mts until the pork is soft and the sauce thickened – it should be thick rather than saucy. Pick out the dried chillies, if you like, season, scatter with the coriander leaves, and serve with steamed rice and naan.

## **Butter Chicken**

### ***Ingredients -***

Boneless chicken	cut into 1½ inch pieces 400 grams
Lemon juice	1 tablespoon
Kashmiri red chilly powder	1 teaspoon
Salt	to taste
Butter	2 tablespoons

### ***For marinade -***

Yogurt	1/2 cup
Ginger paste	2 teaspoons
Garlic paste	2 teaspoons
Kashmiri red chilly powder	1/2 teaspoon
Garam masala powder	1/2 teaspoon
Salt	to taste
Mustard oil	2 teaspoons

### ***For Makhni Gravy-***

Butter	2 tablespoons
Green cardamom	2 no.
Clove	2 no.
Black peppercorns	2-3 no.
Cinnamon	1 inch piece
Ginger paste	1 teaspoon
Garlic paste	1 teaspoon
Tomato puree	1/2 cup
Red chilly powder	1/2 teaspoon
Salt	to taste
Sugar	2 tablespoons
Kasoori methi	1/2 teaspoon
Fresh cream	1/2 cup

### *Method of preparation-*

1. Apply a mixture of red chilly powder, lemon juice and salt to the chicken pieces and set aside for half an hour in the refrigerator.
2. Hang the yogurt in a muslin cloth for fifteen to twenty minutes to remove extra water. Add the ginger and garlic pastes, red chilly and garam masala powders, salt and mustard oil.
3. Apply this marinade to the chicken pieces and place them in the refrigerator for three to four hours.
4. Preheat the oven to 200°C/400°F/Gas Mark 6. String the chicken pieces onto skewers and cook in the preheated oven or a moderately hot tandoor for ten to twelve minutes or until almost done.
5. Baste with the butter and cook for another two minutes. Remove and set aside.
6. To make the makhni gravy, heat the butter in a non-stick pan. Add the green cardamoms, cloves, peppercorns and cinnamon.
7. Sauté for two minutes, add the ginger and garlic pastes and sauté for two minutes. Add the tomato puree, red chilly powder, salt and half cup of water.
8. Bring the mixture to a boil. Reduce the heat and simmer for ten minutes. Add the sugar or honey and powdered kasoori methi.
9. Add the cooked tandoori chicken pieces. Simmer for five minutes and add the fresh cream. Serve hot with naan or parantha.

## **UNIT 3.2\_CHEESE, PASTA AND SANDWICHES**

### **Introduction**

This chapter deals with the food categorization such as Sandwiches, cheese, pasta and Burger. Their classification is done here .The detailed study of the products are discussed hereby. The various dishes prepared with respective ingredients are given with examples

MODULE 3 CATERING AND RESTAURAT SUPERVISOR

UNIT NO 3.2 CHEESE, PASTA AND SANDWICHES

Ideas/ concepts /skills	Learning outcomes	Suggested activities	Assessment
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<p><b>Cheese :</b> Classification of cheese Cheese cookery</p> <p><b>Skills:</b> Identification skill Cooking skill Observation skill Comparison skill</p>	<p><b>Learner will be able to:-</b> 3.2.1 Classify Cheese, Pastas, Sandwiches 3.2.2 Prepare Paneer 3.2.3 Prepare Cheese based dishes</p>	<p>Video presentation of the chart of various kinds of cheese. Prepare popular cheese based dishes in the kitchen. Demonstration of cheese based cookery.</p>	<p>Recipe of prepared dish. Classification chart Of cheese based on countries and skin colour.</p>
<p><b>Pasta :</b> Types of pasta Pasta- varieties Cookery.</p>	<p>3.2.4 Prepare Pasta dishes</p>	<p>Video presentation of the chart of various kinds of pasta. Prepare popular pasta based dishes in the kitchen. Demonstration of pasta based cookery.</p>	<p>Recipe of prepared dish. Notes prepared in the activity log.</p>
<p><b>Sandwiches:</b> Types of sandwiches. Burgers.</p>	<p>3.2.5 Prepare popular Sandwiches and burger</p>	<p>Sandwich and burger preparation in the pantry of the kitchen.</p>	<p>Process evaluated.</p>

**Assessment Activities:-**

Activity -I

After a video presentation the students identify different types of sandwiches and write a report in the activity log

**List of items in the Portfolio:-**

Classification chart

Recipe of prepared dish in the record

Notes prepared in the activity log.



**Extended activities**

**SAMPLE RECIPES**

**Basic Cheese Pizza**

***Ingredients-***

dry yeast	1/4ounce
water, lukewarm	1cup
sugar	1teaspoon
bread flour	3cups
salt	1/2teaspoon
olive oil	1tablespoon
tomato puree	1/2cup
tomato paste	2tablespoons
garlic clove	1
fresh basil	1tablespoon
mozzarella cheese	4ounces

***Methods of preparation -***

1. In a glass or plastic bowl, combine yeast, water, and sugar (the water can just be water from the tap, make sure it's below 100°F).

2. Stir to dissolve the yeast and let the yeast "bloom" for 15 minutes.
3. Stir in 1 cup flour, add salt, and then stir in another cup of flour (the remaining cup of flour will be your "bench" flour and added flour).
4. Dump mixture onto kneading board and work in last cup of flour, kneading until dough is soft and elastic, but not sticky. Form dough into a ball.
5. In another bowl, pour in the 1 tbsp olive oil and spread around.
6. Coat ball of dough with oil and cover bowl with a damp towel and let dough rise for 40 minutes.
7. Punch down dough and knead on board about 2 minutes. Dough is now ready to spread in the pan.
8. To avoid sticking of crust, lightly spray pizza pan with olive oil or vegetable oil spray and then work dough to pan (or use free form pan) - this dough is enough for 1 14-in pizza with a thin bottom crust and enough dough around the edge to munch.
9. Sauce:.
10. Combine pureed tomatoes, tomato paste, minced garlic, and basil.
11. Spread onto prepared pizza dough.
12. Top with sliced mozzarella cheese and bake at 500°F for 11-13 minutes.

### **Spagetti Marinara**

#### ***Ingredients-***

Olive oil	1/4 cup [60ml]
Garlic cloves, finely chopped	4 no.
Anchovy fillets	6 no.
Chopped tomatoes <sup>8</sup>	800g
Dry white wine	200ml
Spaghetti	500g
Mussels, scrubbed, debearded	300g
Good-quality marinara	800g
Peeled green prawns	200g
Torn flat-leaf parsley leaves	to serve

1. Heat 2 tablespoons oil in a large frypan over medium-low heat and add garlic and anchovies. Cook, stirring, for 1-2 minutes until anchovies have melted. Add tomatoes and wine and bring to a simmer, then reduce the heat to low and cook for 20 minutes until slightly reduced.
  2. Meanwhile, cook the pasta in a large pan of boiling salted water according to packet instructions. Drain, then return to the pan and toss in a little olive oil.
  3. Add the mussels to the pan of sauce, cover and cook for 1 minute, shaking the pan occasionally. Add the remaining seafood and cook for a further 2-3 minutes until the marinara mix and prawns are cooked through and the mussels have opened (discard any that haven't opened after this time). Season to taste with sea salt and freshly ground black pepper. Add the drained pasta, toss to combine, then divide among bowls and serve garnished with parsley leaves.
- 

### **Basic Club Sandwich**

#### *Ingredients-*

Whole wheat bread , toasted      6 slices  
 mint and onion chutney      2 tbsp

#### *For the Filling -*

lettuce leaves      2 no.  
 slices of unpeeled cucumber      8 no.  
 slices of tomatoes      8 no.  
 chilas      2 no.

#### *For the Chilas -*

whole wheat flour (gehun ka atta)      2 tbsp  
 besan (bengal gram flour)      1 1/2 tbsp  
 jowar (white millet) flour      1 1/2 tbsp  
 chopped onions      3 tbsp  
 chopped tomatoes      1/4 cup  
 chopped coriander (dhania)      2 tbsp  
 green chilli , finely chopped      1 no.  
 salt      to taste  
 oil for cooking      1 tsp

***Method of preparation -***

For the chilas -

1. Mix together all the ingredients in a bowl and add enough water to make a smooth batter and divide into 2 equal portions.
2. Heat a non-stick pan and grease it lightly with oil.
3. Spread one portion of the batter on it to form a thick round chila of 100 mm (4") diameter.
4. Cook on both sides till golden brown, using a little oil.
5. Repeat with the remaining batter to make 1 more chila. Keep aside.

How to proceed -

1. Apply little chutney on all the toasted bread slices and keep aside.
2. Place a toasted bread slice on a flat dry surface, put one chila on it. Cover with another toasted bread slice with the chutney side facing up.
3. Place a lettuce leaf, 4 slices cucumber and 4 slices of tomatoes on it and cover with the third toasted bread slice.
4. Repeat with the remaining ingredients to make 1 more sandwich.
5. Cut each sandwich into 4 equal portions and serve immediately.

**UNIT 3.3. BAKERY AND SWEETS**

**Introduction**

When you mix or blend many dry ingredients, liquids and leavening agents together, expose the mixture to heat; a variety of actions combine as one unit. Butter and sugar melt, egg coagulates, liquids make steam, flour and starch swell, baking powder/baking soda/yeast form gases. In this unit the learner acquires knowledge and skills in handling bakery equipments, ingredients and baking.

MODULE 3 CATERING AND RESTAURANT SUPERVISOR			
UNIT NO 3.3 BAKERY AND SWEETS			
Ideas/ concepts /skills	Learning outcomes	Suggested activities	Assessment
<b>Bakery:</b> Bread – Ingredients & Bread making Cakes Pastry Quick bread Sweets <b>SKILLS:</b> Identification skill Cooking skill Observation skill Comparison skill	<b>Learner will be able to:-</b> 3.3.1 Recognize the role of each ingredient in Bread 3.3.2 Prepare Bread & cake 3.3.3 Identify different baked products (Cakes, Pastry, quick bread etc) 3.3.4 Prepare different Sweet dishes	Demonstration of Bread making process in the bakery section.  Demonstration of cake preparation.  Demonstration of Pastry preparation.  Video presentation of Biscuits. & cookies.  Demonstration of sweet preparation.	Recipe of prepared dish.  Classification chart of bread, cakes, pastries, biscuits, cookies and sweets.  Notes prepared in the activity log.  Process evaluated

### Assessment activities:-

#### Activity -I

Conduct of field visit to nearby Bakery production Unit and make a list of dishes available and in which category they can be grouped like cakes, sweets, bread, pastry etc

#### Activity -II

Conduct an experiment to show the growth of yeast (fermentation process). The students record their observation in the activity log.

### List of items in the portfolio:-

Field visit report

Recipe of Bread ,cakes pastries , Biscuits, cookies and sweets.

Notes prepared in the activity log



### Extended activities

## SAMPLE RECIPES

### Plain Sponge Cake

#### *Ingredients -*

Self-raising flour	4oz/100g
Sugar	4oz/100g
Butter	4oz/100g
Eggs	2 no.
Or	
Plain flour	4oz/100g
Baking powder	1 teaspoon
Sugar	4oz/100g
Butter	4oz/100g
Eggs	2 no.

### *Method of Preparation -*

1. Whisk the butter and sugar.
2. Add the eggs then flour.
3. Mix to get a creamy batter.
4. Put it in a cake tin with baking paper.
5. Put it in the oven for 18-20 minutes on 200°c or more.

### **Basic Chocolate Cake**

#### *Ingredients -*

Butter, softened	2/3 cup
Sugar	1 2/3 cups
Eggs	3 no.
All-purpose flour	2 cups
Baking cocoa	2/3 cup
Baking soda	1 1/4 Teaspoons
Salt	1 teaspoon
Milk	1 1/3 cups

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#### *Methods of preparation -*

1. In a bowl, cream butter and sugar until fluffy. Add eggs, one at a time, beating well after each addition. Combine flour, cocoa, baking soda and salt; add to creamed mixture alternately with milk, beating until smooth after each addition. Pour batter into a greased and floured 13-in. x 9-in. pan.
2. Bake at 350° for 35-40 minutes or until cake tests done. Cool on a wire rack. When cake is cool, dust with confectioners' sugar or frost with your favorite frosting.

### **Basic Biscuit**

### *Ingredients -*

All-purpose flour 2 cups  
Baking powder 1 tablespoon  
Salt 1/2 teaspoon  
Shortening 1/2 cup  
Milk 3/4 cup  
Add all ingredients to list

### *Methods of preparation -*

1. Preheat oven to 450 degrees F (230 degrees C).
2. In a large mixing bowl sift together flour, baking powder and salt. Cut in shortening with fork or pastry blender until mixture resembles coarse crumbs.
3. Pour milk into flour mixture while stirring with a fork. Mix in milk until dough is soft, moist and pulls away from the side of the bowl.
4. Turn dough out onto a lightly floured surface and toss with flour until no longer sticky. Roll dough out into a 1/2 inch thick sheet and cut with a floured biscuit or cookie cutter. Press together unused dough and repeat rolling and cutting procedure.
5. Place biscuits on ungreased baking sheets and bake in preheated oven until golden brown, about 10 minutes

### **Caramel Custard**

#### *Ingredients -*

milk 2 1/4 cups  
sugar 12 tsp  
large eggs 3 no.  
vanilla essence 1 tsp

#### *Method of preparation -*

1. Mix the milk with 9 teaspoons of sugar and boil for 5 minutes. Cool.
2. Beat the eggs very well and add to the cold milk.
3. Add the vanilla essence. Mix well.

4. Mix 3 teaspoons of sugar and 1 teaspoon of water in a vessel. Melt on a slow flame. When the liquid becomes dark in colour, spread it evenly over the base of a vessel.
5. Wait for a few minutes. The sugar will become dry.
6. Pour the eggs - milk mixture over it.
7. Cover the vessel with a lid or tie a piece of brown paper on top.
8. Put the vessel in a pressure cooker and cook. Alternatively, steam the pudding but this requires about 1 hour.
9. Cool the pudding and chill in the freezer compartment of a refrigerator.
10. When you want to serve, turn it on a plate. It drops easily.
11. Serve cold.

### **Gulab Jamoon**

#### ***Ingredients -***

Milk powder	1 cup
All-purpose flour / maida	¼ cup
Unsalted butter or ghee	1 ½ tbsp
Baking soda	1 pinch
Milk	60 ml
Ghee / oil	for deep frying

#### ***For sugar syrup -***

Sugar	1 ¼ cups
Water	1 cup
Cardamom powder	¼ tsp
Few drops of rose essence	(optional)
Few strands of saffron	(optional)

#### ***Methods of preparation -***

1. Sieve milk powder, flour and baking powder twice for uniform mixing.
2. Transfer the mix to a bowl, add butter or ghee and mix well. Add few tbsps. of milk at one time and knead. Continue adding milk little by little to make a uniform, smooth and firm dough. Use only as needed.
3. Add sugar and water in a wide utensil and bring it a boil.

4. Add cardamom powder and then reduce the heat to low and continue to boil until it thickens slightly. It should not reach a 1 string consistency else the Jamuns will not absorb the syrup. Set aside.
5. Divide the dough into 12 to 13 equal parts. Roll them to smooth balls. They should be free from any cracks and lines else they do not look good and sometimes even they disintegrate while frying. If you feel they have cracks and cannot smoothen them, just sprinkle very little milk and roll the dough once more.
6. Heat oil or ghee in a deep fry pan. Reduce the flame to medium; fry these balls few at a time evenly till they turn golden. To get them evenly browned, avoid crowding the balls in the fry pan. I usually take a long stain less steel chop stick place it in the center of the fry pan and stir it around the pan without touching the jamun. I do this few times for each batch. This way I feel they are beautifully fried evenly.
7. Drop these fried balls in the sugar syrup, let them soak for at least 3 to 6 hrs. Garnish gulab jamun with chopped pistachios if desired.

## Introduction

This unit deals with the different cooking of the world's many countries. Each country has its own cuisine and each cuisine is an art in itself. Favorite cuisines of the world are Continental cooking or European cooking, Chinese, Italian, Thai, Indian etc.

MODULE 3 CATERING AND RESTAURAT SUPERVISOR			
UNIT NO 3.4 INTERNATIONAL AND REGIONAL CUISINES			
Ideas/ concepts /skills	Learning outcomes	Suggested activities	Assessment
<b>International and Regional cuisines:</b> Continental Cuisine Chinese Cuisine Indian - South Indian & North Indian Cuisine	<b>Learner will be able to:-</b> 3.4.1 Prepare popular International and Regional dishes 3.4.2 Identify and record recipes of popular International and Regional dishes	Practical cookery in the Advance Training kitchen.  Demonstration of the North Indian, and south Indian cuisine.	Recipes of famous International and Regional delicacies.  Process evaluated.

### Assessment activities:-

Activity -I

Seminar on characteristics of international and regional dishes and recent developments are done in the class

Activity -II

Prepare the Recipe album of different international and regional cuisines.

### **List of items in the portfolio**

1. Seminar Report
2. Recipe album.
3. Process Evaluated on cost of the project and activity log



Extentended activity

### **List of Continental dishes:**

1. Deviled eggs
2. Chicken ceaser salad
3. Yorkshire Lamb patties
4. Batter fried fish
5. Paneer steak
6. Sausage and potato casserole
7. Grilled chicken breast with lemon grass and chilly
8. Paprika roast chicken
9. Sticky toffee pudding
10. Cream of asparagus

### **Chinese Dishes:**

1. Vegetable Manchow soup
2. Chicken Manchurian
3. Chilly fish
4. Oriental dragon fruit salad
5. Duck spring rolls
6. Stir fried chilly chicken
7. Chicken chopsuey
8. Vegetable Chowmein
9. Chicken fried Noodles

10. Egg fried rice

**Italian dishes :**

1. Spaghetti in pesto sauce
2. Lasagna
3. Pasta with mint sauce
4. Chicken Italiano
5. Spaghetti bolognaise
6. Macaroni cheese surprise
7. Cannelloni
8. Pizza
9. Ravioli
10. Meat balls

**Indian regional dishes:**

1. Kashmiri mutton kofta
2. Fish Amritsari
3. Chicken chettinad
4. Paneer butter masala
5. Neelgiri khorma
6. Hydrabadi biryani
7. Sheek kebab
8. Vegetable Jalfresi
9. Palak mutton
10. Rasgulla

**UNIT 3.5 TYPES OF SERVICE AND MENU PLANNING**

**Introduction**

There are some basic principles in food and beverage service that a waiter must know. It is equally important to understand various types of food service methods followed worldwide. Menu planning is another area where restaurant staff has to show his skill in compiling the menu. In this chapter we deal with these skill areas.

UNIT NO 3.5 TYPES OF SERVICE AND MENU PLANNING.

Ideas/ concepts /skills	Learning outcomes	Suggested activities	Assessment
<p><b>Types of service and menu planning</b></p> <p>English service</p> <p>French service</p> <p>American service</p> <p>Silver service</p> <p>Russian service</p> <p>Room service</p> <p>Cafeteria service</p> <p>Gueridon service</p> <p>Menu planning – factors to be considered while planning a menu</p> <p><b>SKILLS:</b></p> <p>Identification skills</p> <p>Categorizing</p> <p>Sequencing</p> <p>Service</p> <p>Compilation</p>	<p>3.5.1 Acquire skill in different styles of food and beverage service</p> <p>3.5.2 Construct Menu Card</p>	<p>Practical session</p> <p>Demonstration</p> <p>Video presentation</p> <p>Of various types of services.</p> <p>Role play in restaurant where students act as guest with respective hotel designations.</p> <p>Group discussions</p> <p>Collection of menu cards from outside restaurants.</p>	<p>Process evaluated</p> <p>Notes recorded in portfolio.</p> <p>Preparing a menu card.</p>

**Assessment activities:-**

Activity -I

Role play of silver service where students are playing the role of waiters and guest.

Activity-II

Preparation of Menu card for the given specification of a Restaurant.

**List of items in the portfolio**

- 1 process evaluated of role play
2. Service procedure recorded in record book.
3. Menu card

**UNIT 3.6 ALCOHOLIC BEVERAGES AND THEIR SERVICE**

**Introduction**

Alcoholic beverage is any potable liquid containing 1 % to 75 % of ethyl alcohol by volume. Fermentation is a process where sugar in fruit or grain is converted into alcohol by the action of yeast. Carbon dioxide is a by- product. Distillation means the fermented mash of fruits or grains is heated. Alcohol which evaporates at a lower temperature is condensed to a liquid by cooling. Pure alcohol has no color, taste or smell. In this unit we learn the different types of alcohol and its service.

MODULE 3 CATERING AND RESTAURANT SUPERVISOR, UNIT NO 3.6. ALCOHOLIC BEVERAGES AND ITS SERVICE.			
Ideas/ concepts /skills	Learning outcomes	Suggested activities	Assessment
<b>Alcoholic beverages:</b> Classification of Alcoholic Beverages Fermented Drinks – Beer, Wine Distilled Drinks – Whisky, Brandy, Gin, Vodka, Rum, Tequila Cocktails and Liqueurs	<b>Learner will be able to:-</b> 3.6.1 Classify Alcoholic Beverages 3.6.2 Distinguish fermented and distilled drinks 3.6.3 Acquire skill in serving Wine	Collection of Bar menu from outside restaurants.  Conduct a Field visit.  Classroom discussion on alcoholic beverages.	Prepare a bar menu.  Write a note of service procedure in the record book  Seminar report.

<b>SKILLS:</b> Identifications Classification Service Observation		Seminar on bad effects of alcoholic beverages  Mock alcoholic beverage service in a catering lab.  Video presentation of alcoholic beverage and manufacturing.	Process evaluation  Notes prepared on portfolio.
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**Assessment Activity:-**

Activity -I

Conduct of seminar on –Bad effects of alcohol.

Activity –II

Activity – III

Prepare a sample Bar Menu card.

**List of items in portfolio:-**

Prepare a bar menu.

Write a note of service procedure in the record book

Seminar report.

Process evaluation

Notes prepared on portfolio.

## UNIT 3.7. FUNCTION CATERING

### Introduction

Banquets or Function Catering are special functions organized for professional, social or state occasions. Banqueting is the service for these functions and is different from the usual service offered in restaurants. Normally such functions are organized when the number of people involved is 15 or more.

Banquet functions are organized by the Banquet Department with the help of other coordinating departments.

MODULE 3 CATERING AND RESTAURANT SUPERVISOR			
UNIT NO 3.7. FUNCTION CATERING.			
Ideas /concepts /skills	Learning outcomes	Suggested activities	Assessment
Functional catering: Types of Functions Banquets – Staff organization Banquet booking Banquet Table layouts Out Door Catering <b>Skills:</b> Observation Identification Service Managerial entrepreneurial	3.7.1 Identify different types of Functions 3.7.2 Identify the job role of each employee in Banquet staff organizations 3.7.3 Acquire skill in taking a Banquet booking using function Prospectus 3.7.4 Setting an environment for outdoor Catering	Field survey of banquet halls and auditorium. Outdoor catering service. Event planning and organizing for the events Setting up of banquet hall preparation	Function prospectus preparation for the events Survey report. Banquet layout designing

**Assessment activities:-**

Activity -I

Students are directed to conduct survey in well known star hotels with the aid of marketing tools such as

Questionnaires

Sampling tools

Activity -II

Conduct a brain storming session to prepare Function Prospects and to draw table layout.

**List of items in portfolio:-**

Function prospectus preparation for the events

Survey report.

Banquet layout design.



Extended Information

Students may take part on the Job training on different function catering outlets.

## 12. OVERVIEW OF THE MODULE IV

### COMPUTER APPLICATION IN FOOD AND RESTAURANT MANAGEMENT

The purpose of introducing this module is to determine the extent to which computers are being utilized as a tool in catering and restaurant management concepts in an effective way. Concepts most often taught with computer-assistance were budgeting, accounting, menu and recipe analysis, and inventory control. Hospitality educators reported a need for increased utilization of the computer in the curriculum of catering and restaurant management concepts and provide additional training in the use of the computer to the learners.

#### UNIT 1 INFORMATION TECHNOLOGY

##### Introduction

During the last several decades, the computer has become undoubtedly the most important invention of humankind. When and where did this most important invention actually happen? Who are the pioneers of the world of computers? This chapter deals with definitions of basic terms in information technology, briefly explain the history and generations of computers, and classification of computers.

<b>Module 4 Computer Application In Food And Restaurant Management</b>			
Unit Name	<b>4.1 Information Technology</b>		Periods 50
Idea/Concept/Skill	Learning Outcome	Suggested Activities	Assessment
<b>Information Technology:</b> Computer Data processing Data presented inside a computer Characteristics of computers	<b>The learner will be able to:</b> Define a computer Explain the characteristics of a computer Distinguish between Data,	Brain storming and discussion. Students are required to recollect their prior knowledge	Notes in the activity log. Participation and involvement in discussion

<p>History of computers Evolution of computers Classification of computers Hard wired programming and stored program concept</p> <p>SKILLS: Observation skill Analytical skill Communication skill Interaction skill</p>	<p>Information and Knowledge Familiarise with the terms Bit, Byte, Kilobyte, Megabyte and Gigabyte Identify different computer generations Classify the computers as Micro, Mini, Mainframe and Super computer.</p>	<p>in computer and its fundamentals. PPT on computer history and generations Discussion about hard wired and stored program concept. Seminar on characteristics of a computer</p>	
<p><b>Computer Organisation:</b> Computer as a data processing machine. Basic computer operations Functional units System components Microprocessor</p> <p>SKILLS: Observation skill Analytical skill Communication skill Interaction skill</p>	<p><b>The learner will be able to:</b> Familiarise with the various computer units such as CPU, memory unit, input unit and output unit. Identify the various functions of the units Recognise the various units of a computer through a block diagram Identify different components such as motherboard,</p>	<p>Brain storming and discussion. Students are required to recollect their prior knowledge in computer operations and functions. PPT on system components PPT comparing Intel and AMD microprocessor</p>	<p>Notes in the activity log. Participation and involvement in discussion PPT evaluation</p>

	<p>chipset, BUS and expansion slot.</p> <p>Connect the various devices to the appropriate port</p> <p>Familiarise the various microprocessor such as Intel and AMD</p> <p>Compare the characteristics of the microprocessor, Intel and AMD.</p>		
<p><b>The Memory:</b></p> <p>Memory organisation</p> <p>Types of memory</p> <p>Advanced portable storage devices</p> <p>Memory hierarchy</p> <p>SKILLS</p> <p>Reporting</p> <p>Analytical skill</p> <p>Communication skill</p> <p>Interaction skill</p> <p>Judging skill</p>	<p><b>The learner will be able to:</b></p> <p>Describe memory organisation</p> <p>Acquire knowledge on different types of memory elements</p> <p>Distinguish between primary and secondary memory</p> <p>Identify different RAM and ROM technologies</p> <p>Differentiate between sequential access and direct access device</p>	<p>Brain storming and discussion.</p> <p>PPT on computer memory</p> <p>Interactive lecturer</p> <p>PPT on RAM vs ROM</p>	<p>Notes in the activity log.</p> <p>Participation and involvement in discussion</p> <p>Class test</p>

	Familiarise with various secondary storage devices Identify various portable storage devices.		
<b>Input/ Output devices:</b> Input devices Output devices SKILLS Analytical skill Communication skill Interaction skill Judging skill	<b>The learner will be able to:</b>  Know about the different input devices such as keyboard, mouse, Joystick, Scanner, Optical Mark Reader, Bar code Reader, Smart card Reader, web camera and Microphones. Explain the use of each device and its significance Know about the different output devices such as monitor, printer, plotter, projector, and speaker	Brain storming and discussion. Seminar on i/o devices Interactive lecturer Visual representation of i/o devices	Notes in the activity log. Participation and involvement in discussion Lists prepared Evaluation of seminar report.
<b>Computer Software:</b> Software Classification of	<b>The learner will be able to:</b>	Brain storming and discussion. Interactive	Notes in the activity log. Participation and

software Malicious Software Copyright Software piracy Licensing Free software philosophy  SKILLS Reporting Analytical skill Communication skill Interaction skill Judging skill	Identify the relevance of software Acquire knowledge on software classification Explain the types and uses of different software Classify programming languages in different categories Distinguish between different types of translators Identify different types of malicious software Judge the aspects of “Free software Philosophy” and software piracy.	lecturer PPT presentation Seminar	involvement in discussion Involvement in seminar.
<b>Application of Information Technology:</b> Communication Business Medicine and Health care Entertainment E-Governance Education	<b>The learner will be able to:</b> Know the basics of Information technology Describe the roles of IT in various areas of our lives Explain e-	Brain storming and discussion. Interactive lecturer PPT presentation Seminar application of	Notes in the activity log. Participation and involvement in discussion Involvement in seminar.

Engineering manufacturing Science IT policy in Kerala state. E-commerce M-commerce Online trading Net-Banking SKILLS: Reporting Analytical skill Communication skill Interaction skill Judging skill	commerce and m-commerce. Understand the IT policy of Kerala. Use internet for information generation and dissemination	information technology Field visit	Report prepared
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### Assessment activities

#### Activity 1

Power point presentation on input output devices computer memory, hardware and software.

With the help of PPT, the teacher elicited responses from students on input/ output devices, memory, hardware and software. Teacher asked students to categorize and list out some components as input and output devices.

#### Activity 2:

Components	Input	Output
Mouse		
Scanner		

#### Activity 3

Based on PPT the learners are asked to compare computer generation with technology used in each generation.

Generation	Period	Technology used
1st Generation Vacuum	1940 - 1956	Tube

#### Activity 4

Seminar on Hardware Software and its classification Learners are grouped into five consisting of 5 students and each group is assigned different topics, they required to collect details and present it in an open seminar. The teacher should provide sufficient materials and support the students to actively participate in seminar. A moderator is selected amongst the group for controlling the proceedings. During the seminar the teacher may observe the performance of each group. Finally consolidate the main ideas of each topic. Groups are required to submit a seminar report.

#### List of items in the portfolio

- Notes written on the activity log
- Seminar report

## UNIT 4.2 COMPUTER HARDWARE AND OPERATING SYSTEM

### Introduction

In this unit, we will learn about the components present inside the CPU cabinet. You have already learnt about various functional units of Computer Such as input unit, output unit, Central processing etc.

Unit Name:	<b>1.2 Computer Hardware and Operating System</b>		Periods 80
Idea/concept/skill	Learning outcome	Suggested activities	Assessment
<b>Components of a personal Computer:</b> Parts of a personal computer	<b>The learner will be able to:</b> Analyse the hardware	Brain storming and discussion.	Notes in the activity log.

<p>Booting BIOS POST</p> <p>SKILLS</p> <p>Reporting Analytical skill Communication skill Interaction skill Judging skill</p>	<p>components inside the CPU cabinet</p> <p>Explain the functions of various components of CPU cabinet</p> <p>List out various parts of a personal computer.</p> <p>Identify activities in the booting process</p> <p>Acquire knowledge about BIOS and POST.</p>	<p>Video describing components. Assignments</p>	<p>Participation and involvement in discussion</p> <p>Assignment checking</p> <p>Response on video.</p>
<p><b>Disk operating system:</b></p> <p>Meaning of disc operating system</p> <p>Windows 7 operating system</p> <p>Basic file and folder operations</p> <p>Accessories</p> <p>SKILLS</p> <p>Analytical skill Communication skill Interaction skill</p>	<p><b>The learner will be able to:</b></p> <p>Start windows7</p> <p>Execute commands such as Date, Time etc</p> <p>Explain the file structure of windows</p> <p>Create and manage files and folders</p>	<p>Group discussion. Video describing windows7 Assignments Interactive lecture PPT presentation</p>	<p>Notes in the activity log.</p> <p>Participation and involvement in discussion</p>

<p><b>Installing and managing Windows 7:</b></p> <p>Installing windows7</p> <p>Steps to install Windows 7</p> <p>Hard drive preparation</p> <p>Formatting</p> <p>Device Driver</p> <p>Installing a printer driver</p> <p>Changing file views in windows7</p> <p>Control panel</p> <p>User creation and rights</p> <p>Trouble shooting</p> <p>Creating start-up disk</p> <p>Sharing files</p> <p>Internet connection and Firewall</p> <p>Windows Explorer</p> <p>Installing MS office</p> <p>Installing DTP software</p> <p>Installing TALLY</p> <p>Maintaining computer software.</p> <p>Transferring computer data</p> <p>SKILLS</p> <p>Reporting</p>	<p><b>The learner will be able to:</b></p> <p>Acquire knowledge for hard drive preparation.</p> <p>Install device driver</p> <p>Install windows 7 Operating system</p> <p>Install various application software</p> <p>Describe the steps to setup an internet connection</p> <p>Explain control panel, firewall and troubleshooting.</p> <p>Create start up disk</p> <p>Share files.</p> <p>Transfer data from one computer to another</p> <p>Write data to a CD or DVD</p> <p>Install and use antivirus software</p> <p>Clean cookies</p> <p>Defragment disk</p>	<p>Group discussion.</p> <p>Assignments</p> <p>Interactive lecture</p> <p>PPT presentation</p> <p>Demonstration of installation process</p> <p>Animated video on installation.</p> <p>Online tutorials.</p>	<p>Notes in the activity log.</p> <p>Participation and involvement in discussion</p> <p>Responses on demonstration</p> <p>Evaluation of lab activities</p>
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Analytical skill			
Communication skill			
Interaction skill			
Critical thinking			
Demonstration skill			

**Assessment activities**

Conduct a seminar on different parts of a computer

Identify the components of a damaged computer by disconnecting

**List of items in the portfolio**

- Notes in the activity log
- Seminar report

**UNIT 4.3 OFFICE AUTOMATION**

**Introduction**

Microsoft office suite is an essential collection of desktop applications that include word for document preparation, excel for spreadsheet, power point for presentations, access for databases and much more. Different versions of Microsoft office are available.

Unit name:	<b>4.3 OFFICE AUTOMATION</b>		Periods 100
Idea/concept/skill	Learning outcome	Suggested activities	Assessment
<b>Office automation:</b> basics Concept of office Nature of work in office Need for office automation Skills Reporting Analytical skill Communication skill	<b>The learner will be able to:</b> Understand the concept of office Understand nature of works in an office Identify the needs for office automation.	Discussion about an office Videos on typical office Field visit	Notes in the activity log. Participation and involvement in discussion Field visit report

<p><b>MS office:</b></p> <p>ms word</p> <p>User interface of ms word</p> <p>Creating a document</p> <p>Skills:</p> <p>Observing skill</p> <p>Analytical skill</p> <p>Communication skill</p>	<p><b>The learner will be able to:</b></p> <p>Launch ms word</p> <p>Identify components of ms word</p> <p>Format text paragraph</p> <p>Insert tables, graphics, word art, clip art etc</p> <p>Use tools spell check and grammar etc.</p> <p>Explain the meaning of word processing.</p> <p>List out the uses of word processing.</p> <p>List out the shortcut keys</p> <p>Use mail merge for business communication</p> <p>Apply word processor for report, statement, letter and order preparations in business.</p>	<p>Ppt on word and its uses.</p> <p>Discussion about the uses of word processor in business communication.</p> <p>Group work for identifying and list out short cut keys.</p> <p>Lab activity</p>	<p>Notes in the activity log.</p> <p>Participation and involvement in group discussion</p> <p>Lab assessment</p>
<p><b>MS Excel:</b></p> <p>Starting ms excel</p> <p>User interface of ms excel</p> <p>The work sheet</p>	<p><b>The learner will be able to:</b></p> <p>Start ms excel</p> <p>Explain the meaning of work sheet</p> <p>List out the various</p>	<p>Ppt on excel window</p> <p>Brain storming and discussion. Students</p>	<p>Notes in the activity log.</p> <p>Prepared list of uses.</p>

<p>Formulae</p> <p>Sorting</p> <p>Working with chart</p> <p>Skill:</p> <p>Observing skill</p> <p>Communication skill</p> <p>Interaction skill</p> <p>Logical thinking</p>	<p>uses of spread sheet</p> <p>Perform excel functions for decision making.</p> <p>Use data filtering and sorting for presentation.</p> <p>Prepare budgets and payroll</p> <p>Prepare loan repayment schedule</p> <p>Prepare depreciation statement</p> <p>Create schedule of debtors and creditors</p> <p>Report monthly purchase and sales statement.</p> <p>Prepare monthly purchase and sales returns statement</p>	<p>are required to recollect their prior knowledge in spread sheet.</p> <p>Lab activities</p>	<p>Eliciting response of the students</p> <p>Evaluating lab performance</p>
<p><b>MS Power Point:</b></p> <p>Ms power point</p> <p>Creating presentation in different ways</p> <p>Inserting a new slide</p> <p>Adding themes</p> <p>Saving a presentation</p> <p>Set up the show</p> <p>Skills:</p>	<p><b>The learner will be able to:</b></p> <p>Explain the meaning and uses of ppt</p> <p>Prepare slides for information presentation.</p> <p>Add effects to slides</p> <p>Insert and format objects</p>	<p>Presentation on power point.</p> <p>Group discussion</p> <p>Lab works</p>	<p>Notes in the activity log.</p> <p>Prepared ppt</p> <p>Response of the students</p> <p>Evaluating lab activity</p>

Observing skill	Add transitions to slides		
Communication skill			
Interaction skill	Save a presentation		
Presentation skill	Set up slide show		
<b>MS Access:</b>	<b>The learner will be able to:</b>		
Advantages of dbms	Identify the advantages of data base	Ppt on dbms	Notes in the activity log.
Data models		Lab activities	
Terminologies used in rbdms	Familiarise different types of data base system	Ppt on ms access	Response in group discussion
Ms access	Identify the terminologies related with rdbms	Group discussion.	
Creating a query in the query design option	To start ms access, create, edit and manipulate data in a data base	Workshop.	Performance in work shop
Creating a form using form wizard		Assignment	Checking assignment
Reports			
Import			
Skills:			
Observing skill	Apply sorting, filtering on data		
Communication skill	Create query using query wizard		
Interaction skill	Create reports using report wizard		
Critical thinking	Import and export data		
Presentation skill			

### Assessment activities

1. Conduct a seminar use of ms office software in catering restaurant operations
2. Type a report on various vegetables and meats used in cooking with the help of bullets and numbering options and other paragraph formatting options.

3. Type a recipe of a popular dish and the method of preparation in Ms Word.
4. Create an ms word document about the facilities of a restaurant you know, that contains character and paragraph formatting and bullets and numbering
5. Write a leave application letter in ms word to the manager of a restaurant
6. Create a ms word document, about a memo to a staff of a restaurant about the importance of punctuality
7. Prepare a resume of the student in ms word to apply for a restaurant vacancy.
8. Create a BOT in ms word document.
9. Create a bill format in an MS excel.
10. Enter the sales of dishes in a restaurant of the month, calculate total sales and prepare a list of name of dishes that sells most in that restaurant in ms excel format.
11. Prepare an attractive chart on percentage of dishes sold in the restaurant in last 3 years in ms excel format.
12. Prepare an MS excel sheet on the raw materials purchased, consumed and stock in hand for a particular period.
13. Create a function prospectus in ms word or ms excel format to take banquet booking.
14. Prepare an MS PowerPoint slide show in an attractive manner about the five star hotel chains operating in India
15. Create an MS PowerPoint slide show on banquet menu for different occasions.
16. Prepare an MS PowerPoint slide show about the job opportunities in catering and restaurant industry and higher study options.

### **List of items in the portfolio**

Students should create a folder of their own in the system and should save the following portfolio items in the folder:

1. A seminar report on the uses of computers in catering and restaurant industry
2. A MS word document report on meats and vegetables used in cookery
3. A MS Word document on a popular recipe and method of preparation.
4. A MS Word document on the facilities of a nearby restaurant.
5. A MS Word document of leave application.

6. A MS Word document of a manager's memo to staff.
7. A resume for a restaurant vacancy.
8. A BOT in MS Word format.
9. A bill in MS excel format.
10. A sales analysis on MS excel sheet.
11. A restaurant sales chart in MS excels.
12. A purchase indent on MS excel sheet.
13. A function prospectus in ms word or MS excel format.
14. A MS Power point slide show on five star hotels in India.
15. A MS Power point slide show on a banquet menu.
16. A MS Power point slide show on career opportunities in catering and restaurant industry.

## UNIT 4.4 LINUX AND OPEN OFFICE

### Introduction

In this chapter we are going to discuss about GNU LINUX operating system – free software. The free software foundation, a nonprofit organization, was started in 1985 by the computer programmer Richard M Stallman. This organization comprises of talented software engineers and programmers voluntarily committed to the idea of writing and sharing of software with each other for the welfare of humanity. Today any one can be part of it and benefit from this community.

Unit Name:	1.4 LINUX AND OPEN OFFICE		Periods 50
Idea/Concept/Skill	Learning Outcome	Suggested Activities	Assessment
<b>Introduction to Linux:</b> History of Linux Advantages of GNU Linux Linux file system	<b>The learner will be able to:</b> Distinguish between free and property software. List the salient	Seminar to check the prior knowledge of students.	Notes in the activity log. Response in group discussion

<p>structure</p> <p>Linux Kernel</p> <p>Login and logout in Linux</p> <p>Linux commands</p> <p>SKILLS:</p> <p>Observing skill</p> <p>Communication skill</p> <p>Interaction skill</p> <p>Presentation skill</p>	<p>features of Linux</p> <p>Understand the Linux file structure</p> <p>Understand the basic Linux commands</p> <p>Practice basic Linux command</p>	<p>PPT on Linux file structure</p> <p>Discussion of Linux Commands</p> <p>Assignments on advantages.</p>	<p>Evaluation of seminar report</p> <p>Checking assignments.</p>
<p><b>Open office writer:</b></p> <p>Introduction to Open office</p> <p>Apache Open Office System requirement</p> <p>Starting Open Office writer.</p> <p>SKILLS:</p> <p>Observing skill</p> <p>Communication skill</p> <p>Interaction skill</p> <p>Presentation skill</p>	<p><b>The learner will be able to:</b></p> <p>Understand GNU General public license</p> <p>Understand Apache open office 4</p> <p>Identify the general features of Open Office Package</p> <p>Understand the features of Open office writer.</p>	<p>Discussion of Linux Commands</p> <p>Assignments on advantages.</p> <p>Workshop</p>	<p>Notes in the activity log.</p> <p>Response in group discussion</p> <p>Checking assignments</p> <p>Involvement in work shop</p>
<p><b>Advanced features of open office writer:</b></p> <p>Character Formatting</p> <p>Background Colour</p> <p>Paragraph Formatting</p>	<p><b>The learner will be able to:</b></p> <p>Format fonts</p> <p>Give background color for the text</p>	<p>PPT presentation</p> <p>Demonstration</p> <p>Discussion</p>	<p>Notes in the activity log.</p> <p>Response in group</p>

<p>Bullets and Numbering</p> <p>Indents</p> <p>Creating an index of a document.</p> <p>Skills</p> <p>Observing skill</p> <p>Communication skill</p> <p>Interaction skill</p> <p>Critical thinking</p>	<p>Format paragraphs</p> <p>Set indents and spacing and set different tabs</p> <p>Create index</p>	<p>Lab work</p>	<p>discussion</p> <p>Evaluating lab work</p>
<p><b>Open Office calc:</b></p> <p>Open office Calc</p> <p>Selecting cells</p> <p>Cell formatting</p> <p>Inserting</p> <p>Rows/Columns</p> <p>Built in functions</p> <p>Charts in Calc</p> <p>Addressing Cells</p> <p>Data Range</p> <p>Work sheets</p> <p>Auto fill</p> <p>Filter</p> <p>Data Sorting</p> <p>Totals and sub totals</p> <p>Protection</p> <p>Skill</p> <p>Observing skill</p>	<p><b>The learner will be able to:</b></p> <p>Understand the various of features of Calc</p> <p>Enter and edit data in cells</p> <p>Enter formulae in cells</p> <p>Format cells</p> <p>Insert rows/columns/sheets</p> <p>Understand absolute and relative referencing</p> <p>Give names ranges</p> <p>Add, rename and delete worksheets</p> <p>To apply auto fill to data sequence</p>	<p>Interactive lecture</p> <p>PPT of office calc</p> <p>Group Discussion</p> <p>Class test</p>	<p>Notes in the activity log.</p> <p>Response in group discussion</p> <p>Evaluating class test performance</p>

<p>Communication skill</p> <p>Interaction skill</p> <p>Logical thinking</p> <p>Presentation skill</p>	<p>Apply filter</p> <p>Sort data</p> <p>To find totals and sub totals</p> <p>Understand cell protection.</p>		
<p><b>Open office Impress:</b></p> <p>Important features of impress</p> <p>Bringing different objects into slides</p> <p>Adding Text</p> <p>Different views</p> <p>Adding New Slides to Your Presentation</p> <p>Background</p> <p>Slide Transition</p> <p>Animating objects in a slide</p> <p>Watching slide show</p>	<p><b>The learner will be able to:</b></p> <p>Identify important features of impress</p> <p>List various window components of Open office into slides</p> <p>Analyze the need of grouping objects</p> <p>Demonstrate inserting and cropping images</p> <p>Identify the need of slide transition</p> <p>Apply and remove transition effects to slides</p> <p>Apply and remove animation effects to an object</p> <p>List the steps required for playing and saving presentations.</p>	<p>Discussion</p> <p>Demonstration</p> <p>PPT on office impress</p>	<p>Notes in the activity log.</p> <p>Response in group discussion</p>

## Assessment activities

1. Conduct a seminar use of Linux and Open office software in catering restaurant operations
2. Type a report on various vegetables and meats used in cooking using bullets and numbering options and other paragraph formatting options.
3. Type a recipe of a popular dish and the method of preparation in
4. Open Office Format.
5. Create an open office writer document about a restaurant you know, that contains character and paragraph formatting and bullets and numbering
6. Write a leave application letter in open office writer to the manager of a restaurant
7. Create a writer document about a memo to staff of a restaurant about the importance of punctuality
8. Prepare a bio data of the student in open office writer to apply for a restaurant job
9. Create a KOT in writer document.
10. Create a bill format in a calc sheet.
11. Enter the sales of dishes in a restaurant of the month, calculate total sales and prepare a list of name of dishes that sells most in that restaurant in calc format
12. Prepare an attractive chart on percentage dishes sold in the restaurant in last 3 years in calc format
13. Prepare a calc sheet on the raw materials purchased, consumed and stock in hand for a particular period
14. Create a function prospectus in calc or writer format to take banquet booking
15. Prepare an Impress slide show in an attractive manner about the five star hotel chains operating in India
16. Create an Impress slide show on banquet menu for different occasions.
17. Prepare an impress slide show about the job opportunities in catering and restaurant industry and higher study options.

### **List of items in the portfolio**

1. Students should create a folder of their own in the system and should save the following portfolio items in the folder and can be printed and recorded.
2. A Seminar report on uses of computers in catering and restaurant industry
3. A writer document report on meats and vegetables used in cookery
4. A writer document Collected recipe and method of preparation
5. A writer document on a Restaurant nearby
6. A writer document of leave application
7. A writer document of a manager's memo
8. A Bio data for a restaurant job
9. A KOT format
10. A Bill format
11. A sales analysis calc sheet
12. A restaurant sales chart in calc
13. A purchase indent
14. A function prospectus format
15. A slide show on five star hotels in India
16. A slide show on banquet menu
17. A slide show on career opportunities in catering and Restaurant industry

## **UNIT 4.5 INTERNET AND MALAYALAM COMPUTING**

### **Introduction**

A computer networking is a group of interconnected computers. In other words a computer network is a set of different computers connected together using networking devices such as switches and hubs. The computer may be linked through cables, telephone lines, radio waves, satellites or infrared light beams. In this chapter we discuss internet connectivity, worldwide web and Malayalam computing etc.

UNIT NAME:	4. 5 INTERNET AND MALAYALAM COMPUTING		Periods 60
Idea/Concept/Skill	Learning Outcome	Suggested Activities	Assessment
<b>Computer Networks:</b> Computer network LAN Topologies Protocols Connectivity devices Windows 7 Fire wall settings Skill Observing skill Communication skill Interaction skill Logical thinking Presentation skill	<b>The learner will be able to:</b> Identify the need of network Identify different topologies List various protocols Identify different connectivity devices Describe firewall settings Identify different types of modem	Discussion Demonstration Seminar PPT on net works	Notes in activity log Seminar report Responses in group discussion
<b>Internet and e-mail:</b> History of the Internet Connecting Computer to Internet Types of Internet Connection World Wide Web (WWW) Web Browser Search Engines E-mail (Electronic mail) Creating and using free email account with Gmail	<b>The learner will be able to:</b> Describe the advantages of Internet Explain the concept of web page and website Identify the use of web browser Describe the benefits of e- mail Create email account, compose e-mail and send e-mail.	PPT internet history and types internet connection Discussion Assignment on email benefits	Notes in activity log Seminar report Responses in group discussion

<p><b>Web page designing</b></p> <p><b>HTML:</b></p> <p>Starting with HTML</p> <p>Attributes of&lt;HTML&gt; tag</p> <p>Skills</p> <p>Observing skill</p> <p>Communication skill</p> <p>Interaction skill</p> <p>Logical thinking</p>	<p><b>The learner will be able to:</b></p> <p>Identify basic HTML tags</p> <p>Differentiate tag and attribute</p> <p>Write HTML code to create simple web pages</p> <p>Create different types of lists</p> <p>Use anchor tag</p> <p>Create table, frameset and forms</p> <p>Create simple websites</p>	<p>PPT on HTML attributes</p> <p>Discussion</p>	<p>Notes in activity log</p> <p>Seminar report</p> <p>Responses in group discussion</p>
<p><b>Malayalam Computing:</b></p> <p>Malayalam through Computers</p> <p>Free Software and Language Computing</p> <p>Malayalam and Technology</p> <p>Malayalam digital Technology</p> <p>Unicode</p> <p>Malayalam Using Transliteration</p> <p>Malayalam Word Processing</p> <p>Downloading and Installing Malayalam Fonts</p> <p>Installing Fonts in Windows</p> <p>How to enable Malayalam</p>	<p><b>The learner will be able to:</b></p> <p>Familiarize with Malayalam computing concepts</p> <p>Analyze the efforts done so far to strengthen our mother tongue using the possibilities provided by Information and Communication Technologies</p> <p>Identify Malayalam fonts in Unicode</p> <p>Identify the various Malayalam fonts in word processor</p> <p>Download and install</p>	<p>PPT Malayalam key board practice</p> <p>Discussion</p> <p>Lab work to prepare Malayalam documents</p>	<p>Lab assessment</p> <p>Notes in activity log</p> <p>Participation in group discussion</p>

<p>in Web Browsers?  Malayalam in UBUNTU  Malayalam keyboard and typing  Skills  Observing skill  Communication skill  Interaction skill  Typing skill</p>	<p>Malayalam Fonts  Familiarize with using Malayalam in word processor</p>		
<p><b>Ethical and Social issues in information system:</b>    Skill  Logical thinking  Presentation skill</p>	<p><b>The learner will be able to:</b>    Comprehend the ethical and social issues related to information systems  Identify the key technology trends that raise ethical Issues</p>	<p>PPT presentation  Group Discussion.  Collection of internet related ethical issues from various Medias.</p>	<p>Notes in activity log  Seminar report  Responses in group discussion</p>

**Assessment activities**

Activity 1

Power point presentation

Teacher demonstrates a PPT to stimulate the concept of students on networks. Responses are elicited to arrive at the concept and its classification. Based on the responses teacher consolidated the proceedings

- ❖ Networks
- ❖ Types of networks (LAN , WAN, MAN, Internet)

## Activity 2

### Seminar

Assigned a seminar on the internet applications, its advantages and limitations. For this learners are grouped into five. Support the group with enough materials and group performance are observed and evaluated. Groups are required to submit a seminar report.

## Activity 3

### Case Study

Students are given with handout containing a case.

#### Case

India affected by "BIOAZIH" - Trojan -.....

Press trust of India on 14-05-2015

Indian cyber space has been threatened by malicious software that attacks and alters cyber user's personal data. The computer emergency response team of India has identified the malware and named as BIOAZIH.

On completion of reading the teacher put forth the given discussion points.

- ❖ Name the matter discussed.
- ❖ How it affects the computer
- ❖ How can we protect the system from this threat?
- ❖ List down the examples.

Eliciting the responses to arrive at the concept of virus and antivirus.

Sl. No	Attribute	Yes/No
1	Participation	
2	Idea Sharing	
3	Clarity	
4	Writing on activity log	
5	Require Assistance	

### **13. ON THE JOB TRAINING**

On-the-Job Training is an integral component of Vocational Education, which aims at the development of proficiency and self-confidence among students. On-the-Job Training takes place in a real job situation under the supervision of an expert in-plant supervisor or master craftsman. It is designed to supplement in-school instruction by providing the dimension of practical training in a real work situation, under the guidance and supervision of a practicing and skilled supervisor.

#### Concept of On-the-Job Training

It is a planned and organized work experience programme. A programme of the On-the-Job Training is planned by the educational institution and the training is given in an established or organized industry or work spot. It helps the student assimilate the theory which was learnt in the classroom and practice it in the actual work spot by following part of the curriculum of each vocational course. It gives the student a supervised experience. This facilitates the student to attain mastery on the work by observation and working, supervised by a master craftsman.

Generally, the theory subjects taught within the classroom and the laboratory give little scope of exposure to the student to the real work situation. But the On-the-Job Training provided to the student enables him to feel the implications and intricacies during the work. It gives an opportunity to the student to participate in the actual production of goods and services, which leads to securing of some gainful employment. The student gets motivated by actual participation in the production and service of food and beverage at the time of learning or training and develops self-confidence. It prepares the student psychologically to develop entrepreneurship qualities, so that he / she is in a position to take up self-employment.

It helps in continuous evaluation of the student's work and knowledge since an expert workman and the teacher guide at the work spot supervise it. The student, as an employee, is expected to take advantage of opportunities to work in teams. This method is employed when learners have acquired a certain level of proficiency before they face live

situation. This is the most effective method of training. The main challenge is to perform task under pressure of time and dealing with guest.

#### On-the-Job Training in Food and Restaurant Management.

OJT program aims to give the student practical skills and hands on experience in the food and beverage industry. The OJT period is of a minimum one month and students will be able to perform their training in either one or a multiple number of Food & Beverage outlets, preferably with the one employer. The duration of these days of OJT can be at a stretch or split.

The teacher coordinator assists with placements and contractual arrangements with the employers, and feedback from employers is given directly to students. Students are encouraged to excel at their work and must complete OJT and submit a report / diary. The OJT performance of the learner should be assessed in co-ordination with the employer and the teacher coordinator. Common indicators should be prepared for the assessment.

#### ON THE JOB TRAINING CENTRES IDENTIFIED -

##### **GOVERNMENT SECTOR**

KTDC Hotels and Motels

Govt. guest houses

Govt. Canteens

Railway Catering

##### **PRIVATE SECTOR**

Hotels

Restaurants

Outdoor Catering

Cafes

Transport Terminals

Fast food outlets

Catering tourist establishment

Institutional foodservice facilities

Shopping malls & Food courts

Bakery

## 15. LIST OF REFERENCE BOOKS

- K.Arora & K.N.Gupta - Theory of cookery
- Philip Thangam - Modern cookery for teaching &The Trade( Orient Longmans ltd)
- Gisslen wayne - professional cookery (john wiley and sons)
- Montage - Larousse gasrtronomique (Himalaya publishing group)
- H.L.Craschnell and G Nobis - Mastering restaurant service
- Sudhir Andrews - Food and beverage training manual
- D.R.Lilicrap - Food and beverage service
- John fuller - Modern restaurant service
- John fuller - Essential table service-
- Bernard Davis - Food and beverage management
- Habisthayar - Professional food service management
- Stephen Moffat - MS. Word 2010 Advanced Part 1
- Torben Lage Frandsen - MS Office word 2007.
- VR Suresh kumar &VR Sudheer - MS Dos Windows Office, Gowri Publishers
- Vishnu Priya Singh - MS Office 2007 - Computech publications
- S. Saxena - MS Office 2007 IN A NUTSHELL
- MS Office 2007 E-Learning and E-Book
- Books of Diploma in Computer application of open school.