



GOVERNMENT OF TAMIL NADU

HIGHER SECONDARY SECOND YEAR

VOCATIONAL EDUCATION

**FOOD SERVICE
MANAGEMENT**

THEORY & PRACTICAL

A publication under Free Textbook Programme of Government of Tamil Nadu

Department of School Education

Untouchability is Inhuman and a Crime

Government of Tamil Nadu

First Edition - 2019

Revised Edition - 2020, 2022

(Published under New Syllabus)

NOT FOR SALE

Content Creation



State Council of Educational Research
and Training

© SCERT 2019

Printing & Publishing



Tamil Nadu Textbook and Educational
Services Corporation

www.textbooksonline.tn.nic.in



Food Service is one of the largest and fast growing segments of the hospitality industry. In this emerging market segment, all food establishments are emphasizing quality improvement, service optimization and meeting value -for- money requirements. Having been introduced to the overview of the food service operations and the functioning of the departments in the XI Standard a comprehensive coverage of the management aspects is taken care of in this book. Enhancing professionalism for entrepreneurial development and identifying viable entrepreneurial avenues for future is the core objective of this book.

The units in the book deals with managerial aspects like organisation and tools of management and aspects related to quantity food production, service procedures, food and beverage management and food safety and quality, personnel management, marketing and entrepreneurial skills.

The pedagogical features in this book are framed in such a way that it would help students and teachers to maximise the value of this text. Each chapter begins with the learning objectives and the concepts are supported with flow diagrams, tables and pictures to enable a complete learning. Do you know? Glossary, Multiple Choice Questions, Question answers are added to aid in preparation of examination and learning. Glossary explains some of the terms dealt in the topics to enable understanding.

Teacher and Student activity helps the students analyse and discuss real-time problems with peer groups and mentors. Technological insights are included to give insight to students about how the food service industry is advancing as per times.

Technologies insights namely QR Code, you-tube linkages makes learning more interesting and provides a digital access of the topics.

The text is intended to give students a “real world” perspective of the hospitality industry and the current and future market expectations.

It is expected that the students reading this text will also supplement their reading and connect with the worldwide knowledge to grow higher with great prospects in this field.



Food Service Management

Unit No.	Chapter Title	Page No.	Month
1	Organization and Tools of Management		
	1.1	Organization Chart	1-21 June
	1.2	Types of Organization Chart	
	1.3	Organization in Departments	
	1.4	Tools of Management	
2	Quantity Food Production		
	2.1	Types of Kitchen and Kitchen Layouts	22-44 June
	2.2	Standardization of Recipes	
	2.3	Portion Control	
	2.4	Food Costing	
	2.5	Utilization of Leftovers	
3	Service Procedures		
	3.1	Definition of Cover and Table Setting Requirements	45-77 July
	3.2	Table Setting / Laying the Cover	
	3.3	Types of Cover for Different Menus	
	3.4	Services in a Restaurant	
4	Cakes, Beverages and Salads		
	4.1	Cake Making – Types, Procedure	78-109 July
	4.2	Beverages – Coffee, Tea, Fruit Juice	
	4.3	Salad – Importance and Types of Salads	
	4.4	Vegetable and Fruit Carvings	
	4.5	Ice Carving and Butter Carving	

5	Food Safety and Quality		
	5.1 Factors Affecting Safety of Food	110-133	August
	5.2 Food Adulteration		
	5.3 FSSAI		
5.4 HACCP			
6	Management		
	6.1 Principles and Functions of Management	134-144	September
6.2 Time, Money and Energy Management			
7	Human Resource Management		
	7.1 Recruitment	145-161	October
	7.2 Training and Motivation		
	7.3 Leadership Qualities		
7.4 Performance Appraisal, Wages			
8	Marketing		
	8.1 Marketing Concept	162-171	November
	8.2 Marketing Mix		
	8.3 Sales Promotion		
	8.4 Product Life Cycle		
8.5 Marketing Environment			

9	Entrepreneurship Skills		
	9.1 Entrepreneur Skills and Qualities of Entrepreneur	172-197	December
	9.2 How to Obtain License and Registration for Starting a Food Service Organization?		
	9.3 Various Acts Governing Food Establishments		
	9.4 Sources of Finance Available from Government Sector – Microfinance Loan, SHG, Government Schemes		
	<i>Food Service Management – Practical</i>	198-241	
	<i>Model Question Paper</i>	242-243	
	<i>Case Studies</i>	244-245	
	<i>Glossary</i>	246-249	
	<i>Reference</i>	250-253	



E-book



Assessment

INSTRUCTIONS TO TEACHERS

- The guide book is prepared to help the teachers and students of Food Service Management, Vocational Group.
- Simple and standardized recipes are given as sample recipes. If you want to make any changes in the recipe according to your convenience, affordability and time limitations, you can do so.
- Be ready with the food ingredients and other requirements beforehand.
- Students should be instructed to enter the lab with apron, hand towel, guide book and observation note.
- Ensure safety while cooking in the lab and handling equipment.

- Learning Objectives** ● Learning objectives are brief statements which explore what students are expected to learn in Food Service Management vocational stream by the end of Class XI.
- Chapter Content** ● A brief overview of each chapter has been mentioned.
- Do you know** ● Amazing facts and ideas to supplement the students' thinking and question.
- Glossary** ● The technical terms are explained to clarify the unknown facts related to food industry.
- Activity** ● Directions are provided to teachers and students in order to explore and enrich the concepts to create innovative ideas.
- Infographics** ● Visual representation creates interest enhance retention capacity and comprehend the topics in the book.
- Evaluation** ● Assess students and guide them effectively.
- QR Code** ● To encourage the students to further browse the content through digital access in learning.
- Tables and Flow Charts** ● The diagram and schematic presentations of the content provides a bird's eye view of the concepts.
- Career Corner** ● List of professions particularly related to the food related industry.
- References** ● List of related books for further details on each topic.
- Weblinks** ● Digital resources for extended learning.
- Exam questions** ● Model questions to prepare the students for final exam.

HOW TO USE THE BOOK



SCOPE OF VOCATIONAL COURSE ON FOOD SERVICE MANAGEMENT



- Adopting best practices to become an entrepreneur
- Set up a small scale food preservation unit
- Establish a bakery unit
- Establish a snack bar/kiosk with nutritious fast foods/salads/fresh juices/herbal drinks
- Establishment of salad corners
- Quantity production in outdoor catering, theme catering
- Manage, events for food service
- Start up a pastry shop / cafe
- Acquire skill in quantity food production and marketing
- Self-confident to become an event manager to meet the needs for various events
- Plan and develop commercial production of multi grain powders, health mixes, millet substituted powders, preserved products like vathal, vadagam, pickles, dry masala powders and salted products
- Linking the students with experts to enhance the professional skills through possible training programme. Identify the Entrepreneurial avenues for future plan.

PROFESSIONAL COURSE

- MSME: Micro, Small and Medium Enterprises Development Institute, Chennai, Coimbatore, Tuticorin, Tirunelveli.
www.chennai-smedi.com
- TNAU: Tamil Nadu Agricultural University, Coimbatore, Madurai, Chennai.
www.tnau.ac.in
- IHM: Institute of Hotel Management, Catering Technology and Applied Nutrition, Taramani, Chennai.
www.shiksha.com
- EDI: Entrepreneurship Development Institute of India.
www.ediindia.org.
- NAF: National Agro Foundation, Chennai.
<https://naf.org>.

ENTREPRENEURIAL AVENUES IN FOOD SERVICE INDUSTRY

Groups	Avenues
I. Cereals, millets and its products	<ul style="list-style-type: none"> ■ Production of multi grain powders ■ Design convenience foods ■ Production of dry mixes for breakfast ■ Preparation of extruded food products with millets
II. Pulses and Legumes	<ul style="list-style-type: none"> ■ Development of dry mixes for snacks ■ Production of germinated legumes
III. Milk and meat groups	<ul style="list-style-type: none"> ■ Preparation of readymade sweet mixes ■ Processing of organic ice creams
IV. Vegetables and fruits	<ul style="list-style-type: none"> ■ Preparation of vathal vadagam ■ Ready to serve (RTS), beverages, squash jam, preserves, jellies and herbal drinks ■ Preservation by salting and pickling
V. Nuts and Oil seeds Sugar and iggery	<ul style="list-style-type: none"> ■ Novel production of chocolates ■ Incorporation of nuts, chi seeds, flax seeds in designing chocolates
VI. Event Management	<ul style="list-style-type: none"> ■ Outdoor catering ■ Theme catering



FOOD SERVICE MANAGEMENT THEORY





Organization and Tools of Management



LEARNING OBJECTIVES

- Understand the organization of Food Service Operations with the changing needs of the Food Service Industry
- Gain knowledge on the organizational hierarchy in various departments
- Know the concept of job description and work schedule



Introduction

Food Service or Catering sector takes care of feeding people at work and during leisure. Catering in schools, colleges, universities, hospitals and health care are non-profit making outlets. Food service management remains the main focus and is evolving to become a multiple-service sector in the present day.

Food service operations, their scope and classification have been explained in the previous text book and organization and tools of management are a vital component in food service.

Food and beverage service is not just a system of delivering food and drinks to customers. Here the customer is central to the process and an active participant within it. A food service business cannot be operated by a single individual and it is performed by two or more persons. Identification of activities for each staff and the designation of

job are very crucial for the food service operation to function effectively and successfully.



1.1 Organization Chart

Organization is defined as an activity process in which people work and deal with one another in a coordinated and co-operative manner for the accomplishment of common goals.

A success of a food service operation depends on the delegation of responsibilities and duties among the personnel and to achieve this, a good organization is important.

An organization chart for a food service helps to plan and implement activities in an organized and coordinated manner.

An organization chart is the basic tool for any establishment and it shows how the various units or departments are

linked together. It simply means placing people and jobs together and the entire team involved in the running of the establishment at both operational and management levels.

Definition

Organization Chart: A graphic representation of the structure of an organization showing the relationships of the positions or jobs within it.

Uses of Organization Chart:

- It gives a bird's eye view of the organizational structure.
- It indicates line (direct), staff (lateral) and functional relationship and misunderstanding can be cleared.
- Shows channels of communication and are useful in training new employees.
- Indicates the various job positions and levels of management.
- Line of responsibilities and authority is definite and formal.



1.2 Types of Organization Chart

The structure of an organization is represented in the form of a chart. There are two types of organization charts based on authority relationship. An organization chart shows the subordinate-superior relationships and the decision making authority in an establishment.

Definition

Authority: Authority is defined as the power or right to give orders, make

decisions and enforce obedience. It is the ability to influence or control others.

The organization chart is usually constructed on the basis of the line of authority.

Organization structure indicates whether authority is centralised or decentralised.



Centralised Authority

It refers to an organizational management structure where all the decision making and authority are focused on the top tier of management.

Decentralised Authority

A decentralised authority is a system, where the decision-making authority is distributed throughout a larger group. Authority is given to lower level functionaries, executives and workers

The two types of authority relationships most often found in food service operation systems are line, line and staff relationships.

a. Line Organization

In the line organization, lines of authority are clearly drawn. Each individual is responsible to the person ranking above him on the organization chart. Thus authority and responsibility is passed downwards. In such an organization structure, each person knows to whom she/he is responsible to.

Functions and positions are graphically presented by the use of blocks or circles. Solid lines connecting the various blocks indicate formal authority relationships. Those with the greatest authority are shown at the top of the chart and those with the least at the bottom. Lines of communication are shown by use of dotted lines and represent informal relationships

For example, as shown in Fig 1.1, the catering manager of a growing cafeteria operation may add an assistant manager, thus creating another level in the chain of command. If the distance from the top to bottom is greater, the responsibilities may be redistributed horizontally through departmentalization.

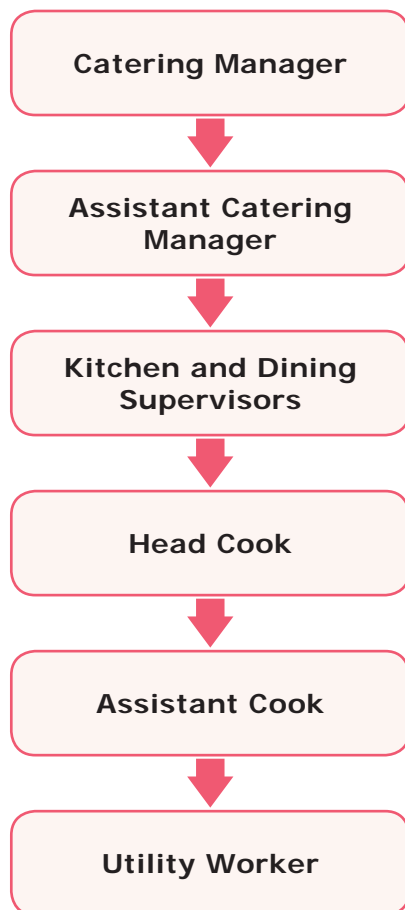


Figure 1.1 Line Organization in Food Service Establishment

b. Line and Staff Organization

As the enterprise grows, it would be difficult for the line organization to cope with many diversified responsibilities assigned by the person at the top. In the line and staff pattern, specialists are positioned at various levels to advice and support those in the line. The manager is positioned at the top and is assisted by the supervisor and specialist cook at the bottom level as depicted in Figure 1.2.

Figure 1.3 depicts the organization chart of a restaurant.



1.3 Organization in Departments

It is important that an organization is divided into departments and sub-departments to assess the staff performance to expected standards. For example, in case of hotels there are front of the house areas (front office) where the employees have direct contact with the guests such as front office and back of the house (back office) areas in which employees have less direct contact with guests such as maintenance, accounting and utility personnel.

The term department means one of the major branches of administration. There are various departments namely front office, food and beverage service, accounts, stores and back office department.

1.3.1 Front office

The front office occupies an important place in the organizational structure of a food service. It is also called the heart of the hotel. It must

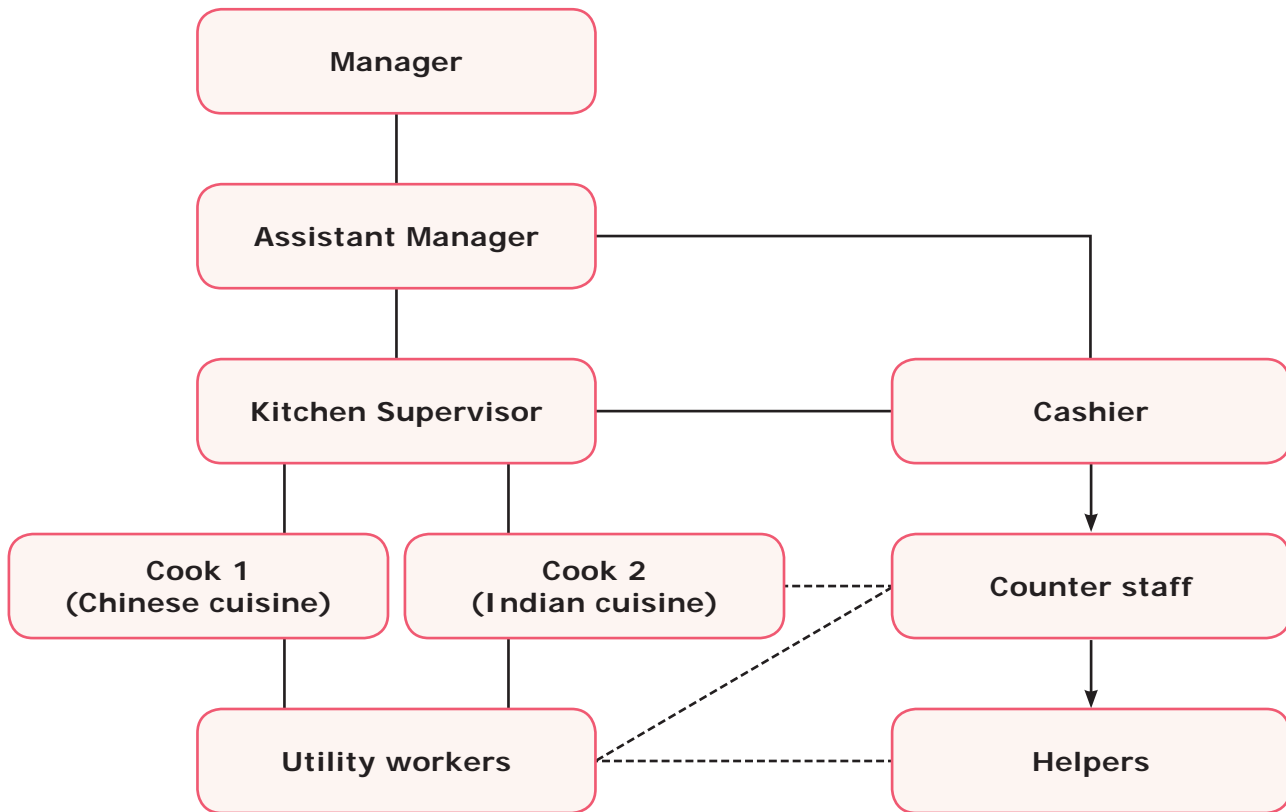


Figure 1.2 Organization Chart of Snack Bar

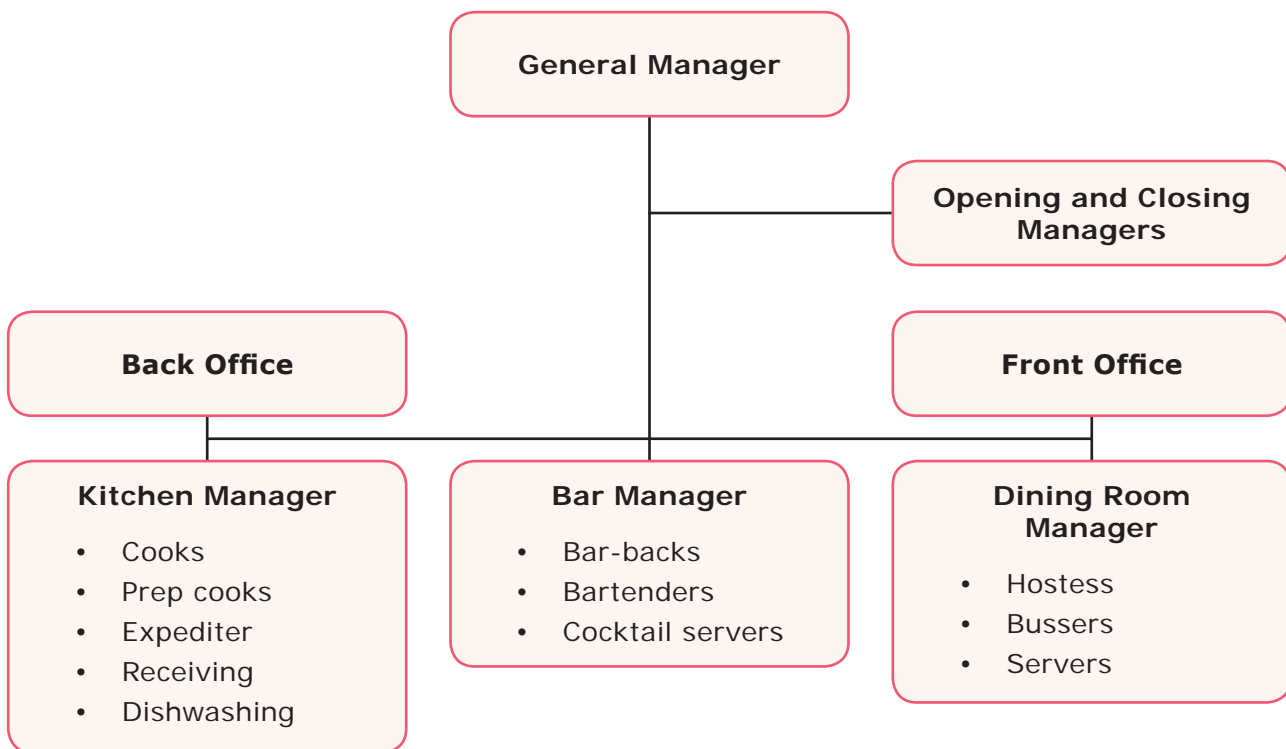


Figure 1.3 Restaurant Organization Chart



Opening and Closing Managers - In food service establishment, the opening and closing duties are performed by these managers and they efficiently adhere to opening and closing procedures with standard checklists

Bar-backs - a bartender's assistant who work in nightclubs, bars, restaurants and catering halls.

Busser - who works in the restaurant and catering industry, clearing and setting tables.

Bartenders - A person serving drinks at a bar

Expediter: who speeds up a process or completes a project. An example of expediter is a person taking orders from cars, waiting in line at a drive through restaurant.



Plate 1.1 Front Office Desk

1.3.2 House-keeping

House-keeping has been recognised as an indispensable operation and is the backbone of hotel operation. It is very much at par with other functional departments such as front office, food production, and food and beverage services. It has a major role to play towards the ultimate goal of hoteliering i.e. “excellence in service quality”.

Organization in House Keeping

Currently, house-keeping is not limited to cleaning and up keeping the hotel but includes marketing survey, maintaining customer relations, coordinating with other departments, purchasing and effective utilisation of available resources. Moreover, its focus is to add value and perfection in products and services.

In order to plan, direct, co-ordinate and control complex activities, a good organizational structure is required.

The following organizational structure depicts the structure of house-keeping line authority and of communication within the structure.

be well designed, maintained and organized. The front office has to perform various functions to secure all round success such as reservation, reception, registration, billing, accounting and communication with other departments. It is the department which maximises room revenue. Hence its organizational structure must be formal and should define the duties and responsibilities more clearly. Front office manager, who performs various types of activities and functions, heads the front office.

Thus, to manage the activities and affairs of the front office, a well-designed organizational structure is essential.

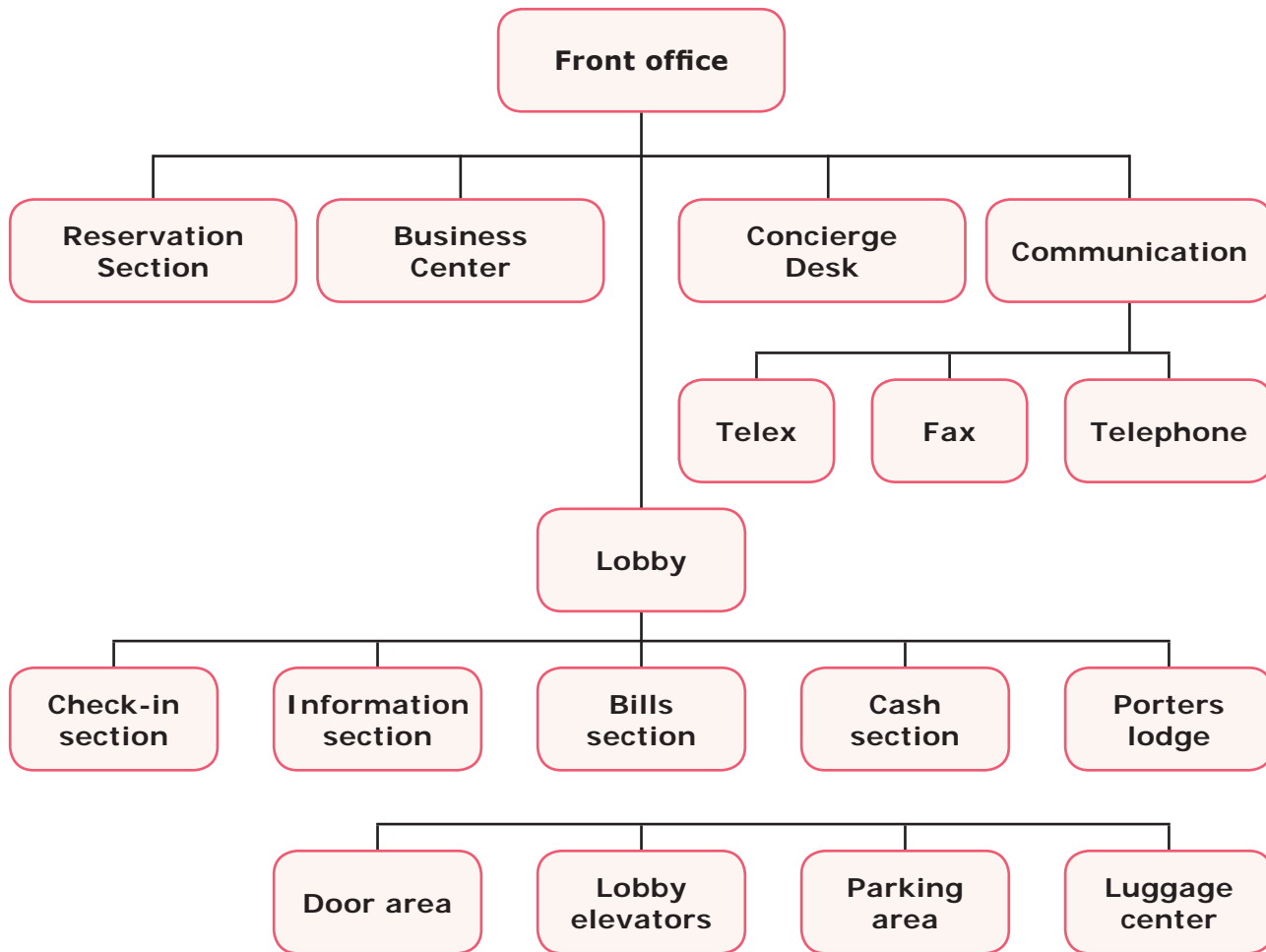


Figure 1.4 Functional Organization of Front Office Department



Concierge - A hotel employee whose job is to assist guest by booking tours, making theatre / restaurant reservations

Reservation Section - is located behind the front desk, responsible for taking room reservation by the guest through systematic procedures

Business Centre - is an area with some desks, computer and printer and providing office facilities and services

Porters Lodge - place near the entrance of the building where one or

more porters can be found to respond to enquiries of the guest



Plate 1.2 Concierge Service Desk



Plate 1.3 Housekeeping Workers Making Bed



Plate 1.4: Housekeeping Workers Cleaning Floor

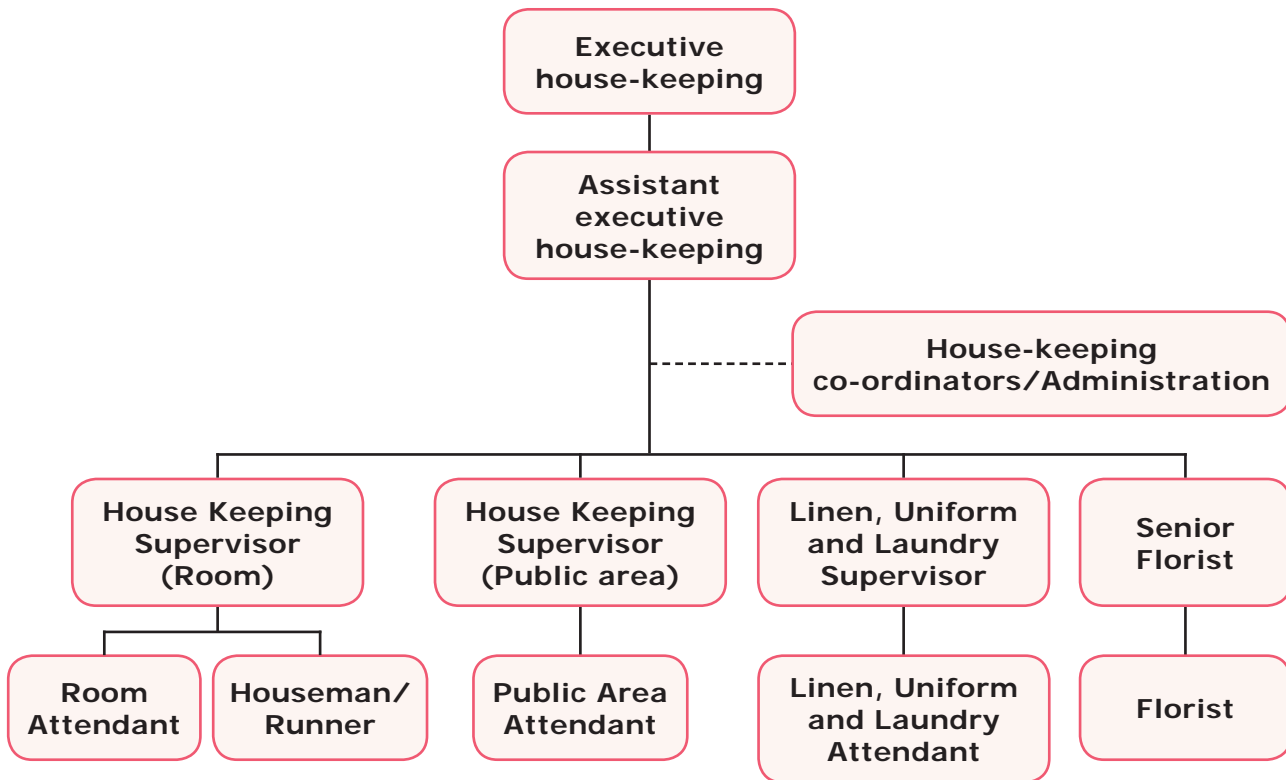


Figure 1.5 Structure of House Keeping



Florist - a person who sells and arranges cut flowers

Houseman/Runner - role typically involves a range of activities related to ensuring a hotel is kept clean, sanitized and well stocked with amenities

Laundry

Laundry is an essential element of food service cleanliness and business perceptions. Planning for laundry involves the selection of location, site, ventilation, equipment, labour and other cost in a food service.



Plate 1.5 Hotel linen cleaning services



Plate 1.6 Banquet chef with the dishes ready

Objectives of laundry services

- To provide clean and sanitised linen, bed linen for a room
- To supply uninterrupted supply of linen to user department and
- To improve the image of the hotel

1.3.3 Food and beverage service

Food and beverage department in a hotel, restaurant or any catering establishment consists of closely linked system comprising of the kitchen, restaurant and bar. The service of food and beverages is an essential link between

the menu, those who produce food and drink and the customers.

Organizational Chart (fig. 1.6) gives the details on direction, co-ordination and controls the food and beverage services and activities. It ensures the right flow of food and beverage services and motivates the staff to achieve the targets. A formal food and beverage service organization structure alone cannot achieve productivity, performance, perfection and overall success in the operation.

The organizational structure of food and beverage service (fig. 1.6) clearly depicts the hierarchical level of each section-restaurant, stewarding, floor/room service, banquet and bar service.

1.3.4 Back office

In the hotel industry, the level of guest movement defines the practical areas and the guests have maximum contact with the front office. The front office depends on the support of the back office to function effectively. Those who serve more of a supportive role, with the minimal guests contact are considered as back of the house or back office. The maintenance department, accounts and stores department are dealt below.

a. Maintenance

The maintenance programme of a food service department must be planned to bring about 'sanitation' as 'a way of life'. Proper sanitation can be obtained through establishing high standards, on-going training, proper use of cleaning

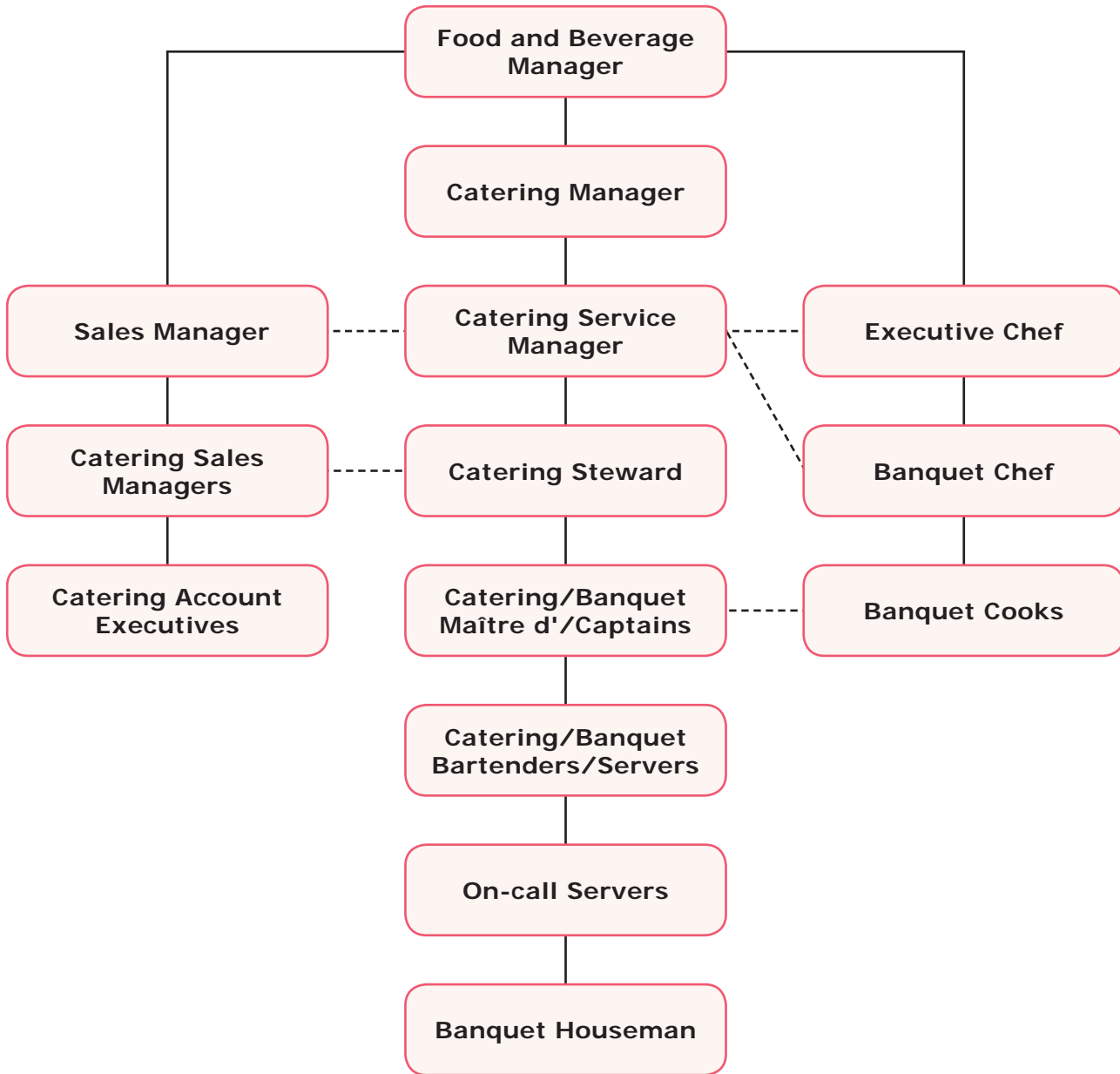


Figure 1.6 Organization Chart of Food and Beverage Service



Plate 1.7 Caution Board for Wet Floor

supplies, proper equipments and frequent inspections and performance reviews.

The organization for maintenance begins with a list of duties to be performed daily, weekly and monthly. Sanitation is a part of every person’s job and daily cleaning is essential. General cleaning of floors, windows, walls, lighting fixtures and equipment is assigned to personnel. The tasks should be scheduled in rotation so a few of them are performed each day; at the end of the week or month.

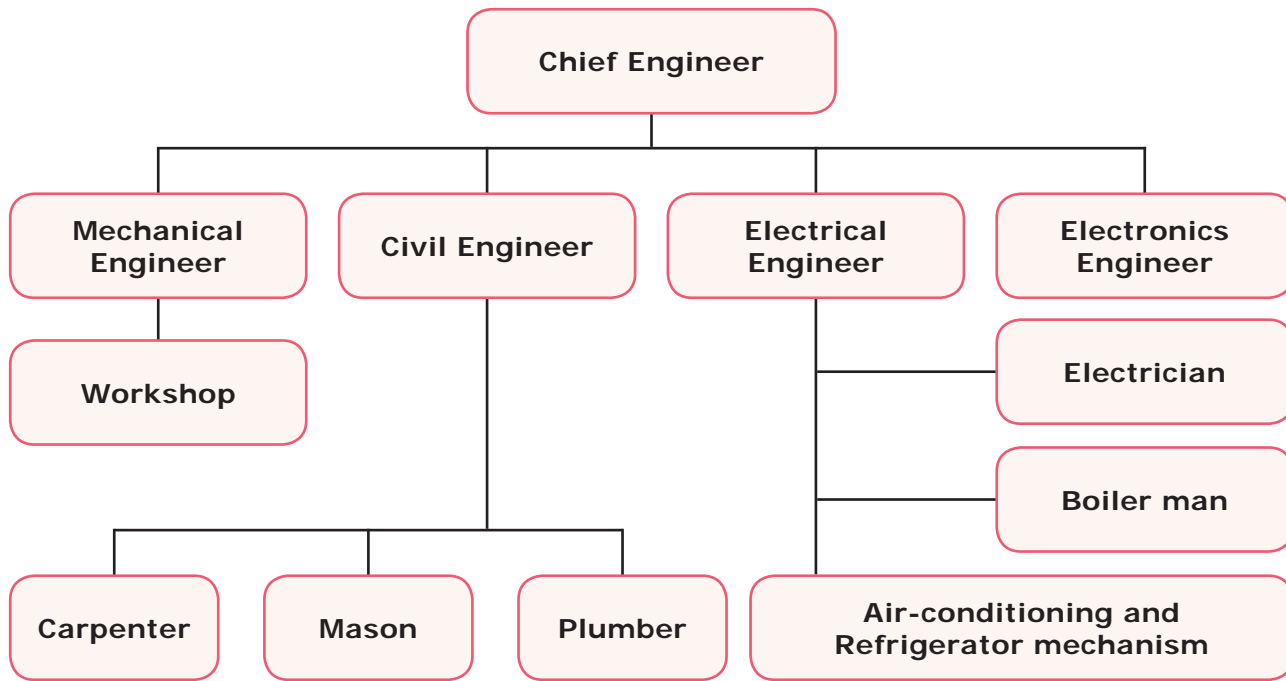


Figure 1.7 Organization Chart for Maintenance

The **Engineering department** is responsible for the supply of air-conditioning, lighting, mechanical, electrical, carpentry, electronic and civil works of the food service. The climate control, mechanical equipment and maintenance of furniture are taken care of by them.

b. Security

Both customers and employees need to feel secure while on the premises. The guest coming to the hotel should be provided with safety and security and hence it is important to have a proper security system. It should protect the human beings (guests



Plate 1.8 CCTV Security System Monitor with Multiple Camera Views of Hotel

and staff) and physical resources and assets such as equipment, appliances, buildings, gardens. The security manager or the chief of security is the key person responsible for safety and security.

The objectives of the security department are to protect

- Customers and their assets on the premises
- Employees and their assets while on the premises
- The hotel's assets
- Data of the hotel, employees and customers.



Boiler Man - A man who looks after boilers.

Patrols

Security guards in hotels must move around to patrol the various parts of a property. They check the doors and stairwells to make sure the locks are secure. Guards must patrol outdoors as

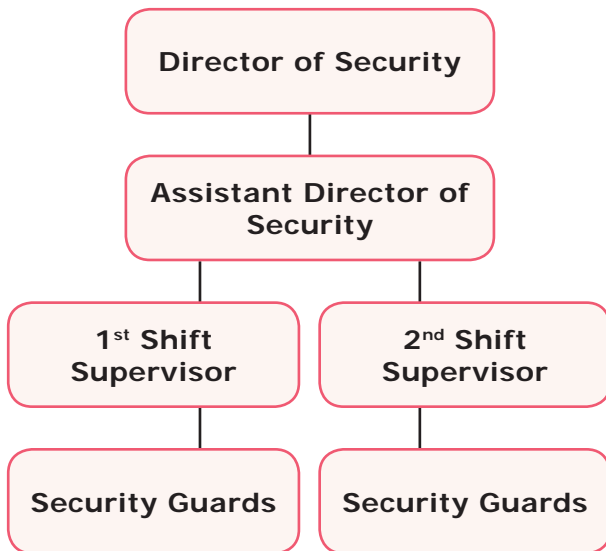


Figure 1.8 Organization Chart of Security Department

well as activity areas such as pool and spa. Large properties may employ a number of guards to keep up patrols and maintain communication through radios.

The director of security is a trained professional who must ensure that a busy hotel filled with guests, employees and equipment stays safe. One of the department's goals is to prevent emergencies through planning.

Thus the security department must react with speed and efficiency to serve the guest. It is a very active department, setting policies, organising programmes and delivering training programs to promote guest and employee safety.

c. Accounts

The organization of the accounting department varies with the size and scope of the food service. The finance and accounts department is responsible for two major activities – the finance section and the accounts section.



Plate 1.9 Financial Controller in the Accounting Department

The finance section is responsible for raising funds and multiplying profits. The account section monitors the revenues and expenditure of the hotel. They ensure that cash flows are available for daily operations. This is done by controlling the bank accounts and making cash available through the cashier. The account section will prepare the balance sheets and profit and loss statements of the hotel.

The account section has important professionals like income accountant, ledger clerk, accounts payable clerk, salary and wage clerk, food and beverage controller and financial controller.

d. Stores

Proper storing of materials is very important to prevent losses from damage, pilferage and deterioration in quality of materials. The stores must therefore,



Ledger Clerk - A person whose job is to add and check information relating to company's accounts in a ledger.

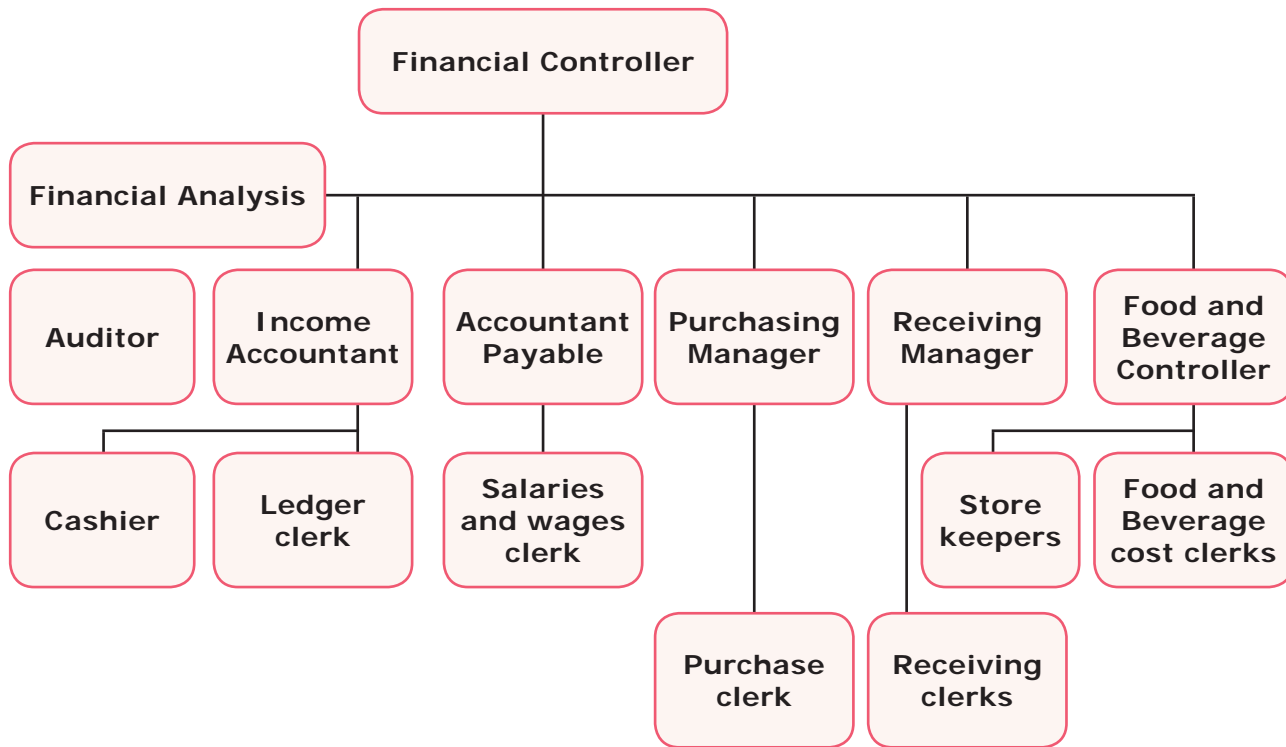


Figure 1.9 Organizational Structure of Accounting Department

be properly organised and equipped for the handling of raw materials.

Ideal stock levels must be maintained for every item of raw material so that the production department gets the required quantity of materials in time. The working capital should not be locked up in overstocking. The store department should be under the control of a technically qualified store officer.

Functions of a store-keeper

The store keeper is a responsible person. He has to receive the materials purchased, maintain proper records, arrange the materials properly in store, prepare purchase requisition to purchase department, report on waste and scrap, prevent unauthorised persons from entering stores and keep stores tidy and clean.

The above functions of the store-keeper demonstrate that store-keeping

is an important factor and can make a substantial contribution to the efficient operations of a food service business.

Thus, organization is the foundation for building hotel management structure and the evolution of all form of

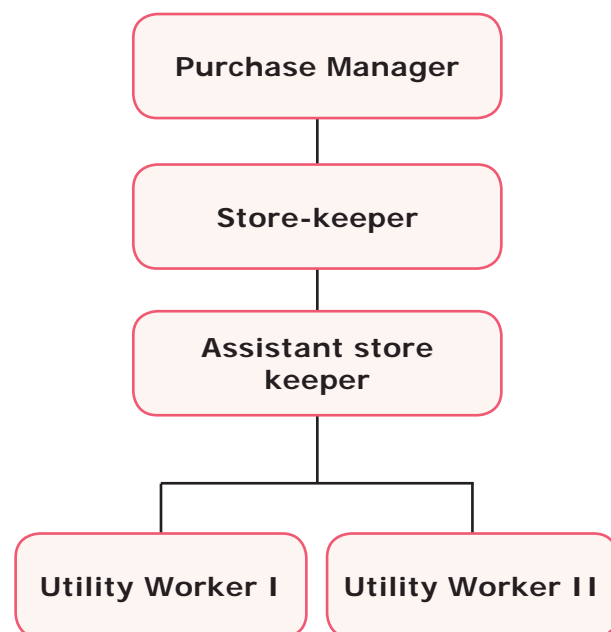


Figure 1.10 Organization Chart of Stores

life of human society show the need for organization. It is important to understand the different departments in a hotel and how these departments work together. A guest coming to the hotel is interested in professional and efficient delivery of service and good quality product and hence a well-planned organizational structure and culture will be able to orient, motivate and train the human resources to the maximum benefit for both the hotel as well as the employees.



1.4 Tools of Management

Tools of management refer to materials which have been developed by managers and used as an aid to effective management.

The tools required by a food service manager for efficient management are Job description, Job specification and work schedule.

1.4.1 Job Description

A job description, by its very nomenclature is a written description of



Plate 1.10 Waitress Servicing in a Restaurant

the job to be performed in a job position. It is an effective tool for managing at every level of the organization structure.

Job description specifies the parameters within which a job is done. It is a realistic guide to any employee. The duties and responsibilities of a position, reporting relationships, authority and control, co-ordination with other departments and job positions are clearly spelt out.

Definition

Job description refers to the definition of a job in a precise manner indicating exactly what is to be done by people who are occupying or would be occupying a job position in an establishment.

Uses

A good job description can be used for matching qualified applicants to the job, for orientation and training of employees, for performance appraisal, for fixing pay and defining authority responsibility limits. In many organizations, the job descriptions are incorporated into a procedure manual or kept in leaflets for easy access.

Job description at various levels

At higher operative level, where mental work increases, greater flexibility in timing their work is possible. They can adjust their schedule and feed information required by operating staff at the right time.

For example, in a food service operation job description of a chef and a manager varies. Chef has to report on duty at 8.00 a.m to complete his various jobs and supervise those of his team in the kitchen for lunch service. On the other hand, the manager can work on a more flexible schedule so long as the menus are planned in advance, food materials ordered in time and meals checked for quality before they are served to customers.

Thus job description not only aids in job performance at all levels of an organization, but also helps to draw up recruitment plans, aids in controlling



Plate 1.11 Restaurant Manager interacting with Head Chef and Kitchen Staff

activities within the establishment and removes conflicts between people in terms of specifying each person's job responsibilities.

Table 1.1 Job Description

Job description of a catering manager	Job description of a catering supervisor	Job description of a head chef
Title: Catering Manager	Title: Catering Supervisor	Title: Head Chef
Code Number:	Code Number:	Code Number:
Establishment:	Establishment:	Establishment:
<p>Job Summary: The job carries with it the responsibilities for:</p> <ol style="list-style-type: none"> Gathering customer requirements Planning food and beverages menu Determining requirements in ingredients and setting portions. Train and manage wait staff and kitchen personnel. Oversee food preparation and customer service. 	<p>Job Summary: The job carries with it the responsibilities for</p> <ol style="list-style-type: none"> Efficient operation of catering facilities for management, staff and employees Administration of bar facilities Liaising with related departments Holding additional charges in the absence of superior 	<p>Job Summary: The job involves:</p> <ol style="list-style-type: none"> Planning menus with catering supervisor Requisitioning ingredients for food preparation Checking deliveries with requisition slips Checking quality of food received and getting it issued for use or storage in kitchen as required Allotting work to assistant cooks

1.4.2 Job Specification

A job specification is a statement indicating standards to be achieved for a particular job. It also covers duties expected to be performed, working conditions in which the job would be carried out and the qualifications required.

A job specification is generally used as a tool for selection of the right employee for a particular job. Many small institutions use the job description as a job specification also. A sample job specification is shown below:

Job specification of cook

Job title	: Cook
Department	: Kitchen
Supervisor	: Catering Manager
Job Summary	: as under job description
Education	: Craft course in catering
Experience requires	: At least two years experience in an institutional kitchen
Knowledge and skills	: Knowledge of Indian and continental cooking
Personal standards	: Clear appearance and habits
Reference required	: One at work and one personal
Hours of work	: 40 hours a week
Promotional opportunities	: To head cook, and with extra qualification to kitchen supervisor
Ability tests	: Actual performance tests to be passed to expected standards

1.4.3 Work Schedule

Work schedule is an outline of the work to be done by an employee. When the work schedule is completed within a time schedule, it is referred as a time and activity plan.

Any task in the food service has to be segmented into an organised plan so that time and sequence of operations can be known easily. Work schedules

are especially helpful in training new employees. They are given to the employees after the person has been hired



A **schedule** is also called a rote or roster. It is a list of employees and associated information. Eg. Location, working time and responsibilities for a given time period.

Table 1.2 Weekly Rota for a Chef

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7 a.m.							
8 a.m.							
9 a.m.							
10a.m.							

and for training new employees. Work schedules should be reviewed periodically and adjustments made as needed to adapt to changes in procedures.

A work schedule includes the days of the week and times of the day a particular employee is scheduled to work at a job. Normally a full time work week involves eight hours per day. However, many employees offer part time and alternative schedules to cover their work needs and attract workers. Work schedule for employees in the food service operations is different from that in other businesses. These employees work in a variety of shifts covering busy and slow times.

Reasons to schedule work and staff

Work and staff need to be scheduled properly for two main reasons: to have the right type of skills as and when required and for maximum efficiency. For example, more service staff will be needed at lunch service rather than lounge staff.

Maximum efficiency can be achieved only if production and service are not over crowded. Working conditions such as the physical factors of temperature, humidity, lighting and safety influences the scheduling of personnel and thus affects worker's performance.

1. Organization and Tools of Management

Work Simplification

The distance each employee must travel within his or her work area should be kept at a minimum in order to conserve the individual's energy and time.

Scheduling the task

Proper scheduling involves analysis of tasks that are to be performed on a particular day. Before scheduling tasks, an understanding of low and high production period is important. Workers can be scheduled successfully only after thorough analysis and study of the jobs to be done and the working conditions.

The task has to be segmented or broken into fragments and allotted to the staff. The task that requires minimum effort, time and attention should be scheduled during low production periods. The best time to schedule complicated task is as first task in the morning, when workers are fresh. The normal work hours



Work Simplification: It is a technique for identifying and eliminating the uneconomical use of time, equipment, materials, space or human effort.

is mostly eight hours in a day and would vary according to situations in a food service.

Types of work schedules

Three basic types of work schedules namely, individual, daily unit and organization may be used.

Individual work schedule: Schedules made on an individual basis day to day. It is too time consuming for most managers.

Daily unit schedule: Schedules prepared for the unit as a whole on a daily basis.

Organization work schedule: It gives the standing assignments by half-

an-hour periods for all employees in chart form. This type of schedule shows graphically the total workload and its division among employees. It would be effective only when accompanied by daily assignments or a production schedule.

Sample work schedule for a self-service canteen

The task is a sample work schedule for a canteen offering self-service operating between 10.00 am and 5.00 pm offering a choice of plated lunches, snacks, sweets and beverages.

Thus, work schedule is an important tool for giving a clear idea about the responsibilities of each worker and give workers a feeling of security.

Table 1.3 Sample Work Schedule

Menu					
Chicken curry rice					
Dahi vada					
Vegetable burger					
Samosa					
Hot and cold beverages					
Time	Manager	Head cook	Assistant Cook I	Assistant Cook II	Utility Worker

Table 1.4 Staff Time Schedule

8am	9am	10am	11am	12pm	1pm	2pm	3pm	4pm	5pm	
										Assistant cook I
										Assistant cook II
										Utility worker

It gives workers a sense of achievement at the end of a task. Food services can adjust their work schedule depending on the technological and other environmental changes.

It can be concluded that tools of management are as varied as the type of

managers who develop them. Tools thus evolve and get adapted to the needs of particular situations. Tools to a manager are as useful as he can make them. If he has initiative and the will to succeed, he can create new tools or shape old ones to suit his particular needs.

A-Z GLOSSARY

Hierarchy	:	A system in which members of an organization are ranked according to relative status or authority
Front of the house	:	Hotel departments with traditionally high amounts of guest contact
Back of the house	:	Hotel departments with traditionally low amounts of guest contact
Steward	:	A hotel employee responsible for supplies of food to a guest or to a hotel, club or other institutions
Maitre d'	:	The head waiter of a restaurant
Banquet	:	An elaborate and a formal meal for many people
On-Call Servers	:	Servers who are available on call for work
Utility workers	:	Workers who perform routine maintenance activities in a variety of work environment
Banquet houseman	:	Those responsible for maintaining the cleanliness and organization of any banquet rooms, hallways, storage and service areas.
Prep cook	:	Also known as a food preparation worker as an individual, who assists the chef in preparing the food, maintains the cooking environment, clean and safe for all staff members.
Chauffeur	:	Driver

LINKAGES

- <https://www.youtube.com/watch?v=Os76mQrQvQM>-hotel-front office/lobby equipment
- <https://www.youtube.com/watch?v=wVz0YZPVSVw> - Job Description of a chef and a cook
- https://www.youtube.com/watch?v=zG8BBpZX_7w- Food and Beverage service.

STUDENT ACTIVITY

- Depict an organizational structure of a nearby food service operation
- Illustrate work simplification techniques for a house-keeping attendant
- Prepare a work schedule for a front office manager

TEACHER ACTIVITY

- Demonstrate a role play of maitred in a restaurant.



QUESTIONS



I. Choose the Correct answer (1 Mark)

1. _____ is defined as an activity process in which people work and deal with one another in a co-ordinated manner to achieve common goals.
 - a) Schedule
 - b) Organization
 - c) Management
 - d) Authority
2. The tool that indicates activity and authority relationships which exists in the establishment is _____.
 - a) Job Position
 - b) Work Schedule
 - c) Organization Chart
 - d) Organising Ability
3. Organization structure also indicate whether authority is _____.
 - a) Formal or Informal
 - b) Centralised or De-Centralised
 - c) Functional or Non-Functional
 - d) Tangible or In-Tangible
4. TOutline of work to be done within a time frame is that
 - a) Job Description
 - b) Job Specification
 - c) Work Schedule
 - d) Job Analysis
5. _____ is used as a tool for selection of the right employee for a particular job.
 - a) Communication
 - b) Job Description
 - c) Work Schedule
 - d) Job Specification
6. The job description apart from aiding in job performance at all levels of an organization, help to draw _____.
 - a) Recruitment plans
 - b) Relationships
 - c) Communication
 - d) Authority

7. When the work schedule is completed within a time schedule as well, it is referred as _____
- Time and Activity Plan
 - Task Plan
 - Busy Schedule
 - Time Plan
8. _____ is a technique for identifying and eliminating the un-economical use of time, equipment, materials and effort.
- Work Completion
 - Work Simplification
 - Work Schedule
 - Time Schedule
9. The normal work hours of the food service employees is mostly _____ a day and would vary according to situations
- 10 hrs
 - 12 hrs
 - 8 hrs
 - 5 hrs
10. _____ increases the room revenue.
- Front Office
 - Back Office
 - Reservation Desk
 - Maintenance
11. _____ is an operational department in a hotel responsible for cleanliness and maintenance
- Floor Office
 - Engineering
 - House Keeping
 - Security
12. Security Department protects assets of _____
- Only Customer and Employee
 - Only Customer and Hotel
 - Only Employee and Hotel
 - Customer, Employee and Hotel
13. _____ is a person responsible for providing guest services and needs
- Banquet Houseman
 - Steward
 - Concierge
 - Chauffeur
14. Minimum amount of guest contact is observed in _____
- Lounge
 - Back Office
 - Concierge Desk
 - Reception
15. The maintenance program of a food service department must be planned to bring about _____ as a way of life.
- Satisfaction
 - Security
 - Scheduling
 - Sanitation
- II. Write in 3 lines (3 Marks)**
- What is an Organization Chart?
 - Define Authority.

3. Differentiate centralised and decentralised authority.
4. Draw the functional organisational chart of the Front Office.
5. State Job Description with example.
6. What is a Roster?
7. Give the meaning of Concierge.
8. Enumerate the role of Back Office.
9. Draw the organisational chart for Maintenance Department.
10. List the objectives of Laundry services.

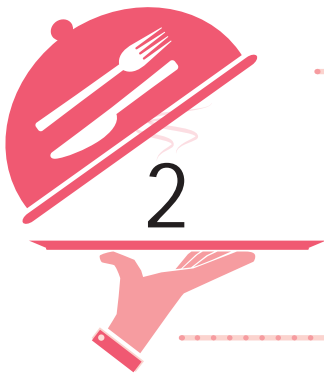
III. Write in a paragraph (5 Marks)

1. Elaborate on the two types of authority relationships in Food Service Operation System.
2. State the responsibility of Accounts Department.
3. Outline the Job Description of a Catering Supervisor.
4. Enumerate the types of Work Schedules and give a sample Work Schedule.

5. What are the functions of a Store-Keeper? Draw the organisational chart of Stores.

IV. Write in one page (10 Marks)

1. Explain in detail the Organization Chart of a Small-Scale Restaurant with suitable illustrations.
2. Compare the Job Description of a Small Level – Medium Level – Top level designation in a food service establishment and explain.
3. Give a detailed account of the Front Office operations in a food service establishment.
4. How is the Food and Beverage Service Operation established in a large hotel? Explain with the help of a Flow Chart.
5. “House Keeping has been recognised as an indispensable operation in the hotel industry” – Discuss in detail.



Quantity Food Production



LEARNING OBJECTIVES

- Understand the concept of quantity food production and recipe standardization.
- Gain knowledge about the different types of kitchens.
- Learn portion control methods and food costing.
- Understand how to recycle leftover foods.

Quantity food production is defined as the preparation of food in large amounts to serve people within a designated period of time. It is an activity of preparing food on large scale and all the operations pertaining to it. Food production and its related operations are integral elements of hospitality management and it requires skilled staff to produce a wide variety of quality foods. In addition, the culinary staff of a hotel or a restaurant are also required to produce food in large quantity.

Factors responsible for Quantity Food Production

- Type of food service operation – Commercial (E.g.. Airline catering) or non-commercial (E.g.. School canteen)
- Size of the food service operation – Catering to below 100 clients is small size, 100-300 is medium size and more than 300 is large size.
- Menu – The list of food items chosen by the food service operation or

the customer for quantity food production.

- Customer turnover – The average number of customers visiting the food service operation.
- Food production for various occasions – Each occasion has a specific kind of menu chosen and prepared.

The most important function of a foodservice operation is to prepare food from the raw ingredients and serve them in the most desirable way to satisfy the customers. The food service personnel needs a combination of science and art at all stages of production and serving the food. Hence, in quantity food production adequate planning is essential.

Steps in planning

- Selecting the menu
- Preparing the market list and purchasing the raw ingredients
- Receiving and storage

- Standardization of the recipes
- Portion control
- Serving and packing of the finished product

Sections in Production Department

The production department is the most important part of the food service operation. A variety of food items are prepared here. A large-scale food service production in a Five Star Hotel it is made of several sections (Table 2.1).

Table 2.1 Sections in Production Department

Main Sections	Sub – Sections
Receiving section	Weighing and checking
Stores	Dry storage Cold storage a. Refrigerator b. Deep freezer
Hot food section	Sauce/Grill/Frying section Roast Section Fish Section Soup section Vegetable section
Cold kitchen	Appetizer section Salad preparation Juice pantry Sandwich section Showpiece section

Main Sections	Sub – Sections
Baking and Confectionary	Mixing station Dough holding and proofing Dough rolling section Baking and cooling section Dessert preparation Plating dessert section
Banquet section	Bulk cooking Dry heat cooking (roasting, broiling) Holding and pick up section
Room service	Grill station Fry station Hot range section
Wash up	Plate and Pot wash



Plate 2.1 Wash up



Plate 2.2 Cold kitchen



Plate 2.3 Hot Food Section



Plate 2.4 Bakery and Confectionary



Plate 2.5 Banquet Section



2.1 Types of Kitchen and Kitchen Layouts

Kitchens are the heart of any food service. A kitchen is a room or part of a room used for cooking and food preparation. The kitchens in food service

2. Quantity Food Production

operations are generally larger and equipped with bigger and more heavy-duty equipment than a residential kitchen. For example, a large restaurant may have a huge walk-in refrigerator and a large commercial dishwasher machine.

Quantity food production was initiated with fire wood chulah. In the early 19th century, Benjamin Thompson's Energy Saving Stove with fully closed iron stove using one fire to heat several pots was used in large kitchens. Later with advancement of technology gas stove and electric stove came into existence. Now-a-days solar energy has come into practice for quantity food production.

The details of different types of kitchens are given below:

Professional kitchens are often equipped with gas stoves, as these allow cooks to regulate the heat more quickly and more finely than electrical stoves. Some special appliances are typical for professional kitchens, such as large installed deep fryers, steamers, or a bain-marie.



Plate 2.6 Professional Kitchen

The kitchens in fast food and convenience food outlets have changed the type of kitchens in the restaurants. They just reheat completely prepared meals

(E.g.: Samosa, puffs). Since the early 21st century, convenience stores have attracted greater market share by preparing more food on-site and better customer service than some fast food outlets.



Plate 2.7 Fast food Kitchen

The kitchens in railway dining cars have presented special challenges since space is limited. The food service personnel need to serve a great number of meals quickly.

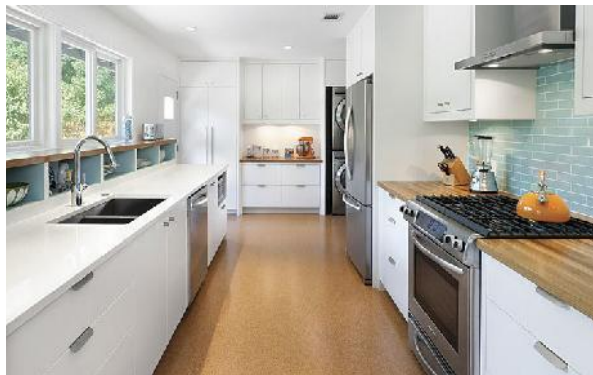


Plate 2.8 Galley

Kitchens aboard ships and aircraft are often referred to as galleys. On yachts, galleys are often cramped, with one or two burners fueled by small LPG cylinders. On passenger airliners, the kitchen is reduced to a pantry. The crew's role is to heat and serve in-flight meals delivered by a catering company.

An outdoor kitchen at a campsite might be placed near a well, water pump,

or water tap. It might provide tables for food preparation and cooking using portable camp stoves. Some campsite kitchen areas have a large tank of propane connected to burners, so that campers can cook their meals. Military camps and similar temporary settlements of nomads may have dedicated kitchen tents, which have a vent to enable cooking smoke to escape.



Plate 2.9 Outdoor Kitchen

Depending on the type of kitchen, it is mandatory to follow a work triangle.

2.1.2 Work triangle

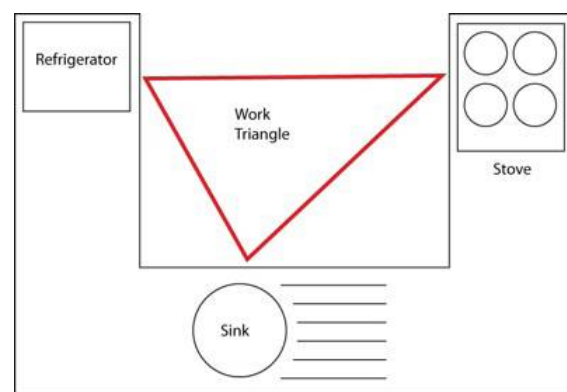


Plate 2.10 Work Triangle

The kitchen work triangle is a concept used to determine efficient kitchen layouts that are both aesthetic and functional. The primary tasks in a kitchen are carried out between the cook top, the

sink and the refrigerator (store). These three points and the imaginary lines between them, make up what kitchen experts call the work triangle. The idea is that when these three elements are in close proximity to one other, the kitchen will be easy and efficient to use, cutting down on wasted steps.

If the kitchen has only one sink, it should be placed between or across from the cooking surface, preparation area, or refrigerator (store).

No major traffic patterns should cross through the triangle.

The main goal of the triangle is efficiency. It keeps all the major work stations near the cook, without cramping the kitchen. The work triangle is also designed to minimize traffic within the kitchen so the cook is not interrupted.

Besides the work triangle, following **thumb rules** need to be considered when planning a kitchen. They are as follows:

- Work aisles should not be less than 42 inches (110 cm) for one cook, or 48 inches (120 cm) for multiple cooks.
- A sink should have a clear counter area of at least 24 inches (61 cm) on one side, and at least 18 inches (46 cm) on the other side.
- A refrigerator should have a clear counter area of at least 15 inches (38 cm) on the handle side; or the same on either side of a side-by-side refrigerator; or the same area on a counter no more than 48 inches (120 cm) across from the refrigerator.
- A stove or cook top should have a clear 15 inches (38 cm) area on one

side, and at least 12 inches (30 cm) on the other side.

- At least 36 inches (91 cm) of food preparation area should be located next to the sink.
- The work flow in the kitchen must be organized in a way to gain efficiency, save time and work in a conducive environment.



Plate 2.11 Single-file Kitchen

Types of kitchen layouts

- A **single-file kitchen**, also known as a one-way galley or a straight-line kitchen has the entire work triangle along one wall and is the only solution due to restriction of space. This may be common in an attic space that is being converted into a living space, or a studio apartment.
- The **double-file kitchen or two-way galley** has two rows of cabinets at opposite walls, one containing the stove and the sink, the other the refrigerator. This is the classical work kitchen and makes efficient use of space.
- The **L-kitchen** has the cabinets occupying the two adjacent walls. Again, the work triangle is preserved, and there may even be space for an additional table at a third wall, provided it does not intersect the triangle.



Plate 2.12 L- Kitchen

- **The U- shaped kitchens** can work both in large spaces, as well as in small space. The design concept of work triangle is well fitted in this type. It is practical, time efficient and has sufficient moving space.



Plate 2.13 U-Shaped Kitchen

- **The G-kitchen** has cabinets along three walls, like the U-kitchen, and also a partial fourth wall, often with a double basin sink at the corner of the G shape. The G-kitchen provides additional work and storage space, and can support two work triangles.
- **The block kitchen or island kitchen** is a more recent development, typically found in open kitchens. Here, the stove or both the stove and the sink are placed where L or U shaped kitchen would

have a table, in a free-standing “island”, separated from the other cabinets. This makes the stove accessible from all sides such that two persons can cook together. Additionally, the kitchen island’s counter-top can function as an overflow-surface for serving buffet style meals or sitting down to eat breakfast and snacks. It is an open layout that favours staff communication. It also leaves an adequate open floor space for cleaning. This layout is followed in large kitchens.



Plate 2.14 Island Kitchen



2.2 Standardization of Recipes

According to the U.S. Department of Agriculture, a standardized recipe is one that “has been tried, adapted and retried several times for use by a given foodservice operation and has been found to produce the same good results and yield every time when the exact procedures are used with the same type of equipment and the same quantity and quality of ingredients.”

Recipes that are tested for quality, quantity, procedure, time, temperature, equipment and yield are called

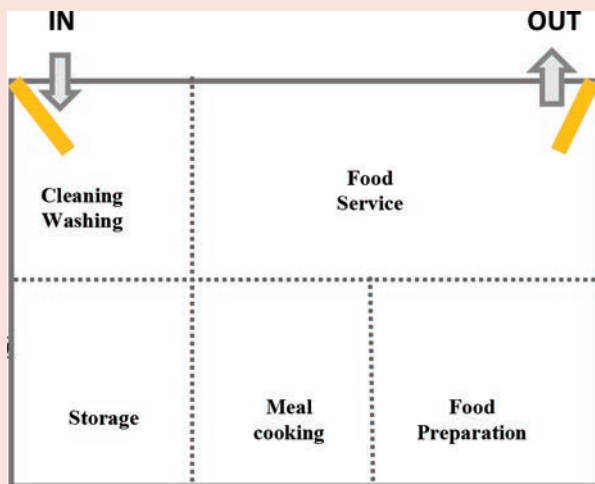


Commercial kitchens

The **Zonal kitchen** space is divided into different zones for various activities. The big and important equipment are located along the walls. The layout follows an appropriate order. In this layout, staff communication and supervision are easy as the central space is completely open.

Assembly Line layout has the kitchen equipment organized in a row. The food preparation is kept at one end and the service at the other end. The area for cleaning, washing, receiving and storage are kept behind the assembly line to keep them separate from the busy area. This allows the cooks to send the food quickly down the line. The layout provides very high efficiency, excellent communication and work flow. This layout is very effective in establishments where there is limited menu with large momentum.

Zonal Kitchen Layout



Assembly Line Layout

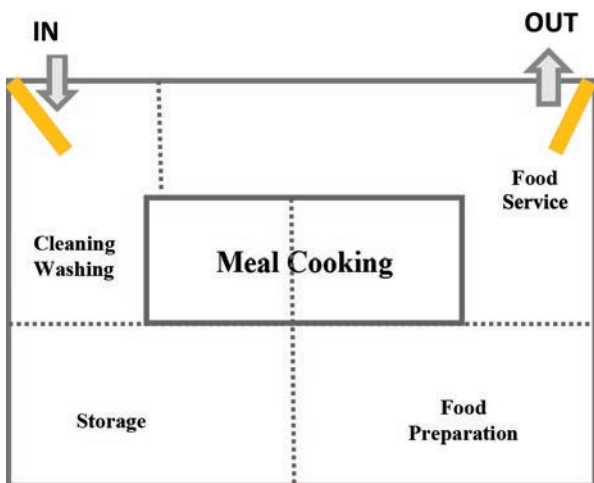
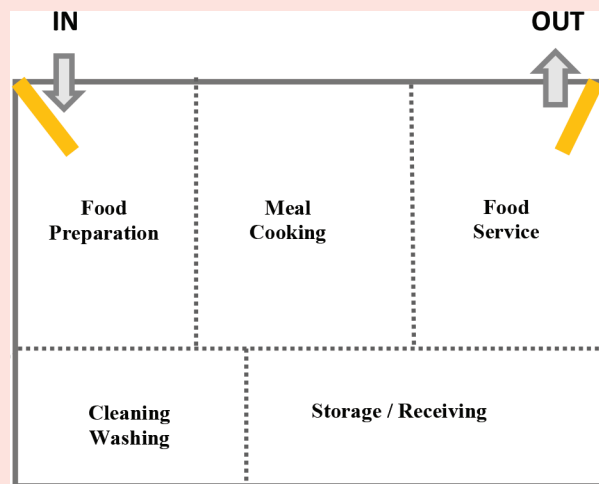


Figure 2.1 Island Kitchen Layout

standardized recipes. The recipes that are standardized always give the similar end product whenever the specified conditions are followed. Standardization of recipes needs very careful assessment, testing and evaluation. If there are variations in the conditions (like equipment or procedure or temperature) then there will be a considerable change in the end product. Therefore, the testing should be carried out in the same conditions that will be used for the actual food preparation. In many food service operations it is the

management that takes care of this job with the help of supervisors and dietitians.

2.2.1 Benefits of recipe standardization

The benefits of standardization for food service management programmes are given below:

- **Customer satisfaction:** Recipe standardization ensures that the consumers get the same quality, presentation and portion size that they are accustomed to each time the meal is served.
- **Increased employee confidence:** Prevents cooks from preparing a substandard product. It helps training the employees in good food production and handling procedures.
- **Portion and yield control:** The amount of food that will be produced is the same every time with a standardized recipe. Hence, it will reduce leftover food and shortages.
- **Quality control:** Standardized recipes provide the same high-quality food every time they are used because they have been thoroughly tested and evaluated.
- **Consistent nutrient content:** The standardized recipe ensures the exact nutritional content of the food. This is very useful in hospital food service where the nutrient content of each recipe is to be considered.
- **Cost control:** It is easier to manage buying and storing food when using the same ingredients in the same quantities every time a particular recipe is made.

- **Reduce record keeping:** A record of the standardized recipes helps the food production team to refer the recipe when needed. Hence, even if there is a change of personnel it does not affect the quality or quantity of food.

2.2.2 Features of a standardized recipe

- It should be written in simple, understandable language.
- It should present the name of the recipe.
- It should include ingredients with quantities.
- Details of procedures, yield of recipe, portion size and cost of recipe.
- Equipment needed for the preparation of the recipe should be listed.

Standardization Procedures

Standardization involves the careful adjustment and readjustment of ingredients and their proportions to produce the most acceptable quality. There is a need for subjective as well as objective evaluation. Tests for achieving the best taste should be done for producing quality products.

Step 1: Preparation of original recipe

- The original recipe- Source of the recipe can be from cook books, magazines, family recipe files and commercial food companies.
- Recipe has to be prepared for a minimum serving of five portions.

- The finished product has to be evaluated based on preparation method, ingredient proportion, availability of ingredients, cost, yield and equipment.
- The preparation should be repeated until the desired quantity and quality is achieved.

Step 2: Enlargement of recipe

The original recipe is enlarged at this stage. When it is multiplied and tested the ratio of the ingredients play a very important role in the yield and taste. For example, in a cake recipe the ratio between the flour, sugar and shortening is very important to be assessed carefully.

The two general methods followed while enlarging the recipes are

- Trial and error method
 - Factor method
- a. **Trial and error method** – In this method, the original recipe is multiplied twice and the yield with

other characteristics are evaluated. If the quality and quantity are acceptable it is further multiplied. If not, adjustments are made and retested before multiplying. This method is time consuming and tedious, since the adjustments may be difficult.

- Used in simple recipes where there are limited number of ingredients.
- Special attention should be given in processes such as, cooking temperatures and speed of the mixers.

- b. **Factor method** – In this method, a factor is used to calculate and multiply the ingredients carefully. The conversion factor is derived as follows:

$$\text{Conversion factor} = \frac{\text{Desired yield from enlarged recipe}}{\text{Yield from original recipe}}$$

Table 2.2 Recipe Enlargement Method

1	2	3	4	5
Ingredients	Original Recipe (g)	Original Recipe (g x factor)	New Recipe in Weight (g)	Remarks
Maida	250	5x250	1250	
Butter	250	5x 250	1250	
Sugar	250	5x250	1250	
Eggs	5 nos.	5x5	25 nos.	
Baking powder	2.5	2.5x5	10.5	
Baking soda	1	1x5	5	
Vanilla essence	5 drops	5x5	25 drops	
Salt	A pinch	A pinch	A pinch	

For example, a standardized cake recipe which yields a kilo of cake gives 20 cake pieces of 50 grams each. If the desired yield is for 100 cake pieces then the original recipe which is serving only 20 cake pieces needs to be enlarged. The conversion factor would be $100/20=5$. The number 5 is the factor that will be used for conversion. First, all the ingredients with their measures are listed from the original recipe. The equivalent measure should be multiplied by the factor. The amount got will be used and tested in the enlarged recipe.

It should be noted that when recipes are increased the factor will be greater than 1 and when the recipes are decreased the factor will be less than 1.

Step 3: Standardized Recipe

A recipe card should be prepared outlining the ingredients, procedures and other important information. Then it can be filed and kept for further use.

How to write a standardized recipe in the cook book:

- The name of the recipe (Origins/History of the dish)
- Yield: The number of servings that the dish provides.



Pakadar panam is the first Indian cook book with recipes of Indian cooking written by King Nalan.

- List all ingredients in the order of its use. Describe it in step by step instructions.
- Listing ingredients by the quantity (Write out abbreviations- 'g' for grams).
- Mention the time taken to prepare the dish and cooking time for the dish.
- Necessary equipment used for the dish.
- Cooking procedures. Temperature and bake time if necessary.
- Serving procedures (Served while warm/cold).
- Review of the dish (Would you recommend this dish to a friend?).
- Photograph of the dish (Optional).
- Nutritional Value: Helps for dietary restrictions. Includes number of calories or grams per serving.



2.3 Portion Control

Portion control may be defined as the amount or size of a portion of food which is served to each customer. The purpose is to satisfy customer's demand and to control food costs within set down specifications. If the portion is too small, then the customer feels cheated at not getting value for money and will not return to the establishment. If the portion is too big, then the food cost will be greater than the planned price, thus affecting profits. Thus, portion control is important not only in the control of costs but also in creating and maintaining guest or customer satisfaction and goodwill.

Planning the size of portions to be served depends on type of establishment, menu and customer, quality of food and the prices charged.



Plate 2.15 Portion size for Fried Rice

There are several systems of serving food to customers. The prepared food should reach the customers in the most appealing manner and several aspects have to be taken care of before the food reaches the customer. One such aspect is portion control, which is extremely important. This is because portion control has a cumulative effect on food production and service.

Standardized recipes require effective portion control. It is possible by using standard measuring utensils such as ladles, scoops and other equipment. Portion control means giving a definite quantity of good food, well processed and properly served in the right atmosphere for a definite price to ensure a definite margin of profit in return for the money, time, labour and interest that have been expended.

Methods of portion control

- Standard sized pans permit portions to be cut or served as needed.

2. Quantity Food Production

- Ladles that are labeled in ounces may be used to serve soups, gravies, stews and sauces. The most frequently used sizes of ladles are 2 oz (1/4 cup), 4 oz (1/2 cup), 6 oz (3/4 cup) and 8 oz (1 cup). (1 ounce = 30 ml)



Plate 2.16 Soup Ladle

- Serving spoons (solid or perforated) are used for portioning. It is better to measure or weigh food to get an approximate serving.
- Scoops can be used to portion out items like drop cookies, muffins, meat patties, vegetables, salads and sandwich fillings.



Plate 2.17 Ice cream Scoop

- Portion scales can be used for meat or vegetable portions. Weighed samples can be used as an approximate measure.

- Cutting markers are used for pies, casseroles and other entrees.



Plate 2.18 Pie Pan

- Meat and egg slicers help in cutting equal sliced portions.
- Individual cups, glasses, gelatin molds, soufflé cups and custard cups are good portion control utensils.
- Individually weighed, measured and packed items like sandwiches provide efficient portion control.



It is important to know the most commonly used equivalent weights and measures when implementing portion control. The common measures are

- 3 teaspoons = 1 tablespoon
- 16 table spoons = 1 cup
- 2 cups = 1 pint
- 2 pints = 1 quart
- 4 quarts = 1 gallon
- 16 oz = 1 pound
- 1 cup = 200 grams*

*Weight varies with type of food.



Standard serving portions of some dishes

Dish	Portion size	Indication on portion guide
Soup	250 ml	1 soup bowl or 2 ladles
Rice	100 – 150g	1 ladle
Vegetables	50 – 75g	Two ladles
Meat	50 – 75g	2 fillets
Fish	50 – 75g	2 fillets
Chicken	200 – 250g	1 bowl or 2 ladles
Curry	200 – 250g	1 ladle
Sauce	50g	1 spoon
Cake	50g	2 pieces
Snacks	50 – 100g	2 pieces



Plate 2.19 Egg Slicer



Plate 2.20 Soufflé Cup

Portion control is an essential element of food cost and quality control. It reduces food waste, ensures a consistent and quality product, expedites food preparation and service, and has a big impact on food cost.



2.4 Food Costing

The foremost objective of any food service establishment is to provide quality food and to be profitable at the same time. Food costs play a vital role in determining the profitability of the establishment. The chefs and managers of the establishment are responsible to control food costs to ensure profit.

Food cost may be defined as the cost of material used in producing the food sold. The main objectives of food costing are:

- To analyse income and expenditure
- To ascertain the price
- To ascertain the food cost of particular item on the menu.
- To ascertain the total expenditure on food over a period of time.
- To control cost, price, profit margins and provide information for formulating an effective pricing policy.
- To disclose faulty purchasing and inefficient storing
- To prevent pilferage and wastage.
- To ensure customer satisfactions.
- To bring cost-consciousness among the employees.
- To reduce cost and improve quality.

2. Quantity Food Production

- To provide cost estimates to manager for developing budgets.
- To assist manager in making control decision and
- To evaluate pricing and establish future pricing.

2.4.1 Calculation of Food Cost

The formula to calculate food cost is

$$1. \text{ Food Cost} = \text{Opening inventory} + \text{Purchases} - \text{Closing inventory}$$



Inventory or stock is the goods and materials that a business holds for the ultimate goal of resale (or repair). An inventory is everything that is found within a food service establishment. Dry stores, pots and pans, uniforms, liquor, linens, or anything that costs money to the business should be counted as part of inventory.

The value of the inventory can be obtained from monthly stock takings.

$$2. \text{ Food Cost Percent} = \frac{\text{Food cost}}{\text{Food sale}}$$

A profitable establishment typically has a 20-30 percent food cost percentage. The food costs in any catering establishment may vary between 40-60 percent of total sales.

3. Q - Factor

A Q - factor is the cost of items that is needed in addition in the production and service of a dish. The common Q- factors are salt, pepper, sugar, sauce, ketch-up, other accompaniments and also the waste that ends up from over production. Q - factor add up to 10 percent to the food cost.

2.4.2 Cost components

In a food service establishment three types of costs are involved. They are

1. Material costs
2. Employee costs and
3. Overhead costs

Material costs

Material costs include raw foods and other ingredients that make up a dish. Materials fall under two categories namely,

- Direct materials
- Indirect materials

The direct materials are the items used in production and service of a dish. Indirect materials are used in production process, but not related directly to the prepared dish. Linen, kitchen clothes, cleaning materials are some of the indirect materials. It is necessary to consider both direct and indirect materials while calculating food cost.

Employee costs

Employee cost is the next cost component. It encompasses the

remuneration of employees and the benefits rendered to them like food, lodging, uniforms, insurance, incentives, pension, bonus, medical benefits, overtime work and others.

Overhead costs

Overhead cost, the third component of cost is the operational cost not related to the material and labour cost. It includes rent, fuel, depreciation, selling costs, travelling expenses, insurance, legal fees, telephone bills, taxes, accounting fees.

Along with these components, the behaviour cost should be considered.

2.4.3 Behaviour of cost

Cost behaviour is the sensitivity of costs to the changes in volume of sales. The three main types of costs according to cost behaviour are

- Fixed costs
- Variable costs
- Semi - fixed or semi - variable or mixed costs

Fixed costs

Fixed costs do not vary with the volume of sales, within a relevant range. Rent, property taxes, insurance premiums are some fixed costs. However fixed costs might change over time, normally after a long term.

Variable costs

Variable costs vary directly in proportion with the volume of sales. These include food costs, beverage costs.

Semi - fixed / Semi - variable / Mixed costs

These costs vary with the volume of sales, but not proportionately. They have both fixed and variable components. Telephone expenses, fuel costs, laundry, cost of cleaning materials fall under this category.

2.4.4 Break-Even Point

Break-even point can be defined as a point where total costs and total sales are equal. It indicates the point where there is neither profit nor loss. The establishment just 'breaks even'. The target of calculating the break-even point is to find out the minimum production of units that must be exceeded for an establishment to be profitable. Break-even point is reached when,

Sales = Labour + overhead + food costs

To calculate cost of each menu

- List all ingredients required to prepare each dish.
- Obtain the prices of all ingredients from invoice.
- Calculate the food cost.
- Fix the selling price for the product.

A certain percentage of gross profit / kitchen profit is added to the food cost of each dish in order to determine the selling price. Constant surveillance must be kept on the food cost. If the food cost percentage shows unusual variance, this could be investigated and immediate corrective action should be taken.

2. Quantity Food Production

Ways of controlling cost

- All purchase must be controlled.
- Details of all merchandise received must be recorded, as and when issued.
- Production-ingredient amount must be checked before preparation.
- Any overproduction of food must be checked and if possible, reuse in the best and most economical way
- Check the sales.
- An efficient system of cash control must be maintained.
- Total daily wage cost must be recorded.
- A weekly summary of all the relevant details must be prepared.
- Profit and loss account of the food service operation should be prepared.



Gross profit = Sales – Food cost

Net profit = Sales – (Food cost + labour cost + overhead cost)

Selling Price = Food cost (40%) + labour cost (10%) + Overhead cost (10%) + Profit (40%)



2.5 Utilization of Leftovers

The thought of leftover food makes everyone associate with staleness, unwholesomeness, digestive difficulty and unsound nutrition. Leftover food can be thought of positively if they are stored as ingredients at the right temperature for a short period of time.



Plate 2.21 Leftover Food

The ultimate use of leftovers depends on where the meal was eaten, preferences of the diner, and the prevailing social culture. People often save home cooking leftovers to eat later. This is facilitated by the private environment and convenience of airtight containers and refrigeration. People may eat some leftover food cold from the refrigerator, or reheated it in a microwave or conventional oven, or mix it with additional ingredients and recooked to make a new dish.

Types of Leftover Foods

There are three classes into which leftover food can be divided in catering establishments.

a. Raw foods



Plate 2.22 Leftover Vegetables

Raw foods are perishable and semi-perishable that are supplied to the kitchens for preparation. The fresh forms of foods are also considered as leftovers when the quantities are not enough for serving single portion.

b. Partly cooked food

These include marinated meats, paneer, unserved salads in refrigeration, juices, boiled eggs, fermented mixtures as dough and batter. These can be creatively used as barbecued meats with vegetables added on before cooking. Small amount of juices can be used as toppings for fruit pies, custards, shakes, puddings and cakes.



Plate 2.23 Leftover Paneer

c. Cooked Foods

When cooked food remains in large quantities it usually gets pilfered or wasted though mishandling and spoilage unless it is reused in some way and presented to customers again soon after.



Plate 2.23 Leftover Vegetable Pulao

Since cooked food cannot be stored for too long without its quality deteriorating, it is important to devise ways of incorporating it as soon as possible

into new dishes or into dishes in which the food is unrecognizable. Yet there must be no relaxation in terms of the standards of quality food offered to customers.

Table 2.3 Common Leftover Foods and its Utilization

Type of foods	Ways of utilisation
Raw foods Leftover vegetables	<ul style="list-style-type: none"> ■ Combine with other vegetables to prepare mixed grills, vegetable cutlets, using potatoes or cereals as the main base ingredients. ■ Steam as accompaniments to main meat dishes such as tandoori chicken or roasts, in stews, soups and sauces. ■ Use it raw for raithas, salads, garnishes and sandwich fillings. ■ Prepare vegetable carvings for display.
Leftover fruits	<ul style="list-style-type: none"> ■ Eat as such if uncut. ■ Cut into fruit salad or chaat. ■ Mix with custard as dessert. ■ Blend into milkshake. ■ Extract juice. ■ Make ice-cream or cake. ■ Serve with fresh cream or ice-cream. ■ Prepare fruit carvings for display.
Partly cooked food Leftover eggs	<ul style="list-style-type: none"> ■ Omelettes can be used as garnishes and for French toast. ■ Boiled eggs or fried eggs can be used as garnishing for biryani, pastes and spreads for sandwiches. ■ Eggs can be made into scotch eggs and as an ingredient in desserts.
Leftover Tomato onion salad	<ul style="list-style-type: none"> ■ The tomato and onion can be separated and incorporated into dishes as an ingredient or used as garnishes. <p>They can also be used as</p> <ul style="list-style-type: none"> ■ An ingredient in soups, curries and sauces. ■ A garnishing in pizza topping, omelette, and dry mixtures

Type of foods	Ways of utilisation
<p>Cooked Foods</p> <p>Leftover Tandoori chicken</p>	<p>This can be used as such or deboned and the meat can be used to prepare other dishes for the next day if properly refrigerated.</p> <p>In boned form:</p> <ul style="list-style-type: none"> ■ Mini meal with salad. ■ Converted into curried or butter chicken. ■ Chicken biryani or pulao. <p>In deboned form:</p> <ul style="list-style-type: none"> ■ Minced and mixed with binding ingredients, shaped into fingers, cutlets or balls and deep fried to be served into snacks. ■ Shredded to prepare salads, noodles and fried rice. ■ Minced and used to prepare sandwich spreads. ■ To make soups, stews and mixed with sautéed vegetables. ■ Used in samosas, pizzas and stuffed parathas.
<p>Left over vegetable pulao</p>	<p>This can be converted into</p> <ul style="list-style-type: none"> ■ Vegetable balls or bondas, cutlets or tikkis to be served as snack. ■ Made into koftas or curry or deep fried. ■ Minced and used as coating or covering for cheese pakoras or fritters, scotch eggs, nargisikoftas. ■ Baked in an oven, mixed with white sauce and covered with cheese.

The possibilities of using leftovers still maintaining the high standards of quality in terms of freshness, appearance, colour, texture and acceptability is very important. Utilization of leftover foods require creative and careful regarding methods of storage.

In large food service operations leftovers are served to inmates of social institutions, like homes for the handicapped and orphanages. So food wastage can be prevented.

“**Réchauffé**” in the early 19th century from the French; it is the past participle of their verb “réchauffer,” which means “to reheat.” Nineteenth-century French speakers were using it figuratively to designate something that was already old hat-you might say, “warmed over.” English speakers adopted that same meaning, which is still common. But within decades someone had apparently decided that leftovers would seem more appealing with a French name. The notion

caught on. A recipe for “Réchauffé of Beef a la Jardiniere,” for example, instructs the cook to reheat “yesterday’s piece of meat” in a little water with some tomatoes added, and serve it on a platter with peas

and carrots and potatoes. “Réchauffé” shares its root with another English word, “chafing dish,” the name of a receptacle for keeping food warm at the table.



The word “**ort**”, meaning a small scrap of food left after a meal is completed, is not commonly heard in conversation, but is frequently encountered in crossword puzzles.

Chop suey - During the late 19th and early 20th centuries, Chinese cuisine gained a foothold in the United States with the opening of several chop suey restaurants. “Chop suey” means “assorted pieces” or “miscellaneous leftovers”. But actual leftovers are not served at any chop suey restaurants.

Doggy-bag - Diners in a restaurant may leave uneaten food for the restaurant to discard, or take it away for later consumption. To take the food away, the diner might request a container, or ask a server to package it. Such a container is colloquially called a *doggy bag* or *doggie bag*.

A-Z GLOSSARY

Gross profit	:	Profit a company makes after deducting the costs associated with making and selling its products, or the costs associated with providing its services.
Net profit	:	Net profit is calculated by subtracting a company’s total expenses from total revenue, thus showing what the company has earned (or lost) in a given period of time (usually one year). It is also called net income or net earnings.
Aesthetics	:	Concerning the appreciation of beauty or good taste
Cabinetry		Kitchen cabinets collectively.
Optimum		Most conducive to a favourable outcome; best.
Convenience store		It is a small retail business that stocks a range of everyday items such as groceries, snack foods, confectionery, soft drinks, toiletries, over-the county medicines, newspapers and magazines.


LINKAGES

- <https://www.bing.com/videos/search?q=leftover+foods&&view=detail&mid=2C11CEB128293951C7422C11CEB128293951C742&&FORM=VRDGAR>
- <https://www.bing.com/videos/search?q=portioning+of+food+in+hotels+videos&qpv=portioning+of+food+in+hotels+videos&view=detail&mid=68DE09264FED9E500A3F68DE09264FED9E500A3F&&FORM=VRDGAR>
- <https://www.bing.com/videos/search?q=portioning+of+food+in+hotels+videos&qpv=portioning+of+food+in+hotels+videos&view=detail&mid=10748B35FDCF8F55327E10748B35FDCF8F55327E&&FORM=VRDGAR>
- <https://www.bing.com/videos/search?q=standardization+of+recipes&&view=detail&mid=A136D4D974456A9CAF53A136D4D974456A9CAF53&&FORM=VRDGAR>

STUDENT ACTIVITY

- Write a report on the kitchen layout of the hotel visited.
- Collect recipes that are unique (from mothers or grandmothers) and standardize them.
- Prepare a recipe for 25 persons and make a profit at the food mela.
- Collect recipes or innovate new recipes with leftover foods

TEACHER ACTIVITY

- Planning a visit to a hotel and preparing a questionnaire to write a report on the kitchen layout.
- Demonstrate on how to standardize a recipe.
- Plan a food mela and teach the students how to maintain portion control and calculate cost for the food.
- Plan a competition on careful use of leftovers.



QUESTIONS



I. Choose the Correct answer (1 Mark)

- The average number of customers visiting the food service operation is called _____
 - customer turnover
 - customer percentage
 - customer satisfaction
 - customer control
- _____ is the heart of any food service.
 - Front office
 - Back office
 - Kitchen
 - Lounge
- Kitchens aboard ships and aircrafts are referred as _____
 - Lounge
 - Galleys
 - Work stations
 - Chulahs
- The kitchen _____ is a concept used to determine efficient kitchen layouts that are both aesthetic and functional.
 - Work triangle
 - Work station
 - Task bar
 - Work place
- The main goal of the work triangle is _____
 - Competency
 - Cooking
 - Proximity
 - Efficiency
- The _____ has the cabinets occupying two adjacent walls.
 - Single file kitchen
 - L-kitchen
 - U-kitchen
 - G-kitchen
- _____ involves the careful adjustment and readjustment of ingredients and their proportions to produce the most acceptable quality.
 - Standardization
 - Quantification
 - Testing
 - Rehearsing
- _____ is defined as the amount or size of the food of a portion which is served to each customer.
 - Portion size
 - Portion control
 - Portioning
 - Portion rate
- _____ is defined as the cost of material used in producing the item sold.
 - Profit
 - Loss
 - Labour cost
 - Food cost

10. Identify which is a Q-factor.
- Fried rice
 - Steak
 - Cutlet
 - Ketch-up
11. _____ is the sensitivity of costs to the changes in volume of sales.
- Employee cost
 - Overhead cost
 - Behaviour cost
 - Fixed cost
12. Rent of the establishment is a _____
- Employee cost
 - Material cost
 - Behaviour cost
 - Fixed cost
13. Laundry in an establishment comes under _____
- Mixed cost
 - Overhead cost
 - Behaviour cost
 - Fixed cost
14. _____ are perishable and semi perishable that are supplied to the kitchens for preparation.
- Partly cooked foods
 - cooked foods
 - Raw foods
 - Good food
15. _____ is an example for partly cooked foods.
- Chopped onions
 - Paneer

- Fried rice
- Apple

II. Write in 3 lines (3 Marks)

- Define quantity food production.
- What is an outdoor kitchen?
- Explain work triangle.
- Define standardization.
- What is portion control?
- How is Q-factor calculated?
- List the types of kitchens.
- Write on overhead cost.
- What are raw foods?
- Mention the ways of using left over tomato onion salad.

III. Write in a paragraph: (5 marks)

- What are the factors responsible for quantity food production?
- State the thumb rules to be considered while planning a kitchen?
- Write on G shaped and U shaped Kitchen
- What are the benefits of standardization?
- You have left over chapathis. How will you use it the next day?

IV. Write in one page (10 Marks)

- What are the concepts of kitchen layout?
- Explain trial and error method and factor method. Use a recipe and show how you can enlarge recipes.

3. Make a menu for a wedding. Explain how the portion control methods are followed to serve the food.
4. How will you calculate the cost of a menu. Give an example. What are the ways of controlling cost.
5. Enumerate the types of leftovers with an example for each on how you will reuse them.



Service Procedures



LEARNING OBJECTIVES

- Know the requirement of a cover
- Acquire skill in cover laying
- Gain knowledge in different styles and types of food services
- Understand the importance of implementing effective service procedures

Serving food is an art which can make or break the reputation of a catering establishment. Serving food is a complete and wholesome dining experience for the customer and this is important to get repeat customers. A wholesome dining experience represents the manner, ambience and the way in which food is served to the customer. Even well prepared, good quality dishes can be rejected if the service is poor and the waiter is unkept in appearance, impolite and careless.



Plate 3.1 Service in a Restaurant

Creating a pleasant atmosphere, delivering enjoyable food, responding to feedback and treating customers more

than their expectations should be the motto of all food service establishments to maintain quality.

The first impression a guest has, is at the dining table and hence it is important that the table is set neatly and efficiently. Table laying in a food service is termed as cover laying and one of the technical terms used is a **cover**.



3.1 Definition of Cover and Table Setting Requirements

A “cover” is a table setting for a person to dine in a restaurant. If the table can accommodate four persons/guests, then it could be “four covers” or if for two then “two covers”.

The term is marked as cover since a cloth is used to cover the items and protect from dust when the table is set in advance for dining before the guests enter.

3.1.1 Definition

A **cover** is a place allotted on a table for an individual guest to have a meal where all the accessories including glassware, chinaware and tableware along with linen are laid for a particular type of meal.



Generally cover will occupy 24" x 18" space on a guest table for each person.

It includes

- Number of guests attending a certain party
- Number of seats in a restaurant or dining room, for example, a restaurant will have a maximum of 85 covers (guests) or more
- Number of necessary cutlery, flatware, crockery, glassware and linen to lay

a certain type of place-setting for a single person.

3.1.2 Table Setting Requirements

For laying cover and service procedures, the following items are essential in a food establishment.

A. Furniture

Furniture in a restaurant should be chosen according to the needs, styles and décor. The kind, quality and design of the furniture used affect the atmosphere of the restaurant. It can be made up of metals like aluminium, wood and stainless steel. Currently plastics and fiberglass furniture are used extensively. They are durable, light, inexpensive and easy to clean.

The following points to be kept in mind while arranging the furniture in a restaurant:

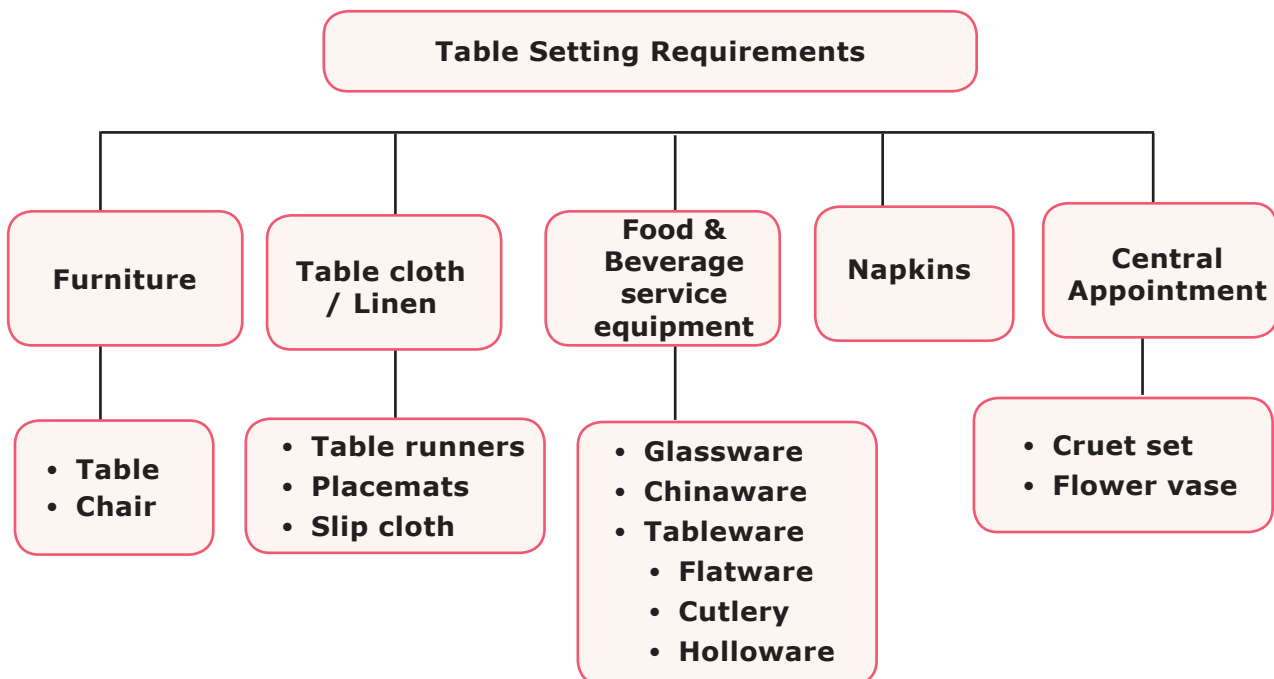


Figure 3.1 Table Setting Requirements

Tables and chairs are placed according to the plan of the restaurant.

- Furniture must be clean and sturdy.
- Necessary gangway between table and chair is essential, so that the service staff / waiter can move freely.



Plate 3.2 Round Table

- If only two covers are laid, it should be laid opposite to each other.



Plate 3.3 Square Table

1. Table

Round, square and rectangular shapes of tables are more common. A restaurant may have a mixture of shapes to have variety or uniform shapes depending on the food outlet.

Dimensions

- Round Table (4 Covers) – 4 feet in diameter
- Round Table (8 Covers) – 5 feet in diameter

- Rectangular Table (4 Covers) – 4 feet 6 inches x 2 feet 6 inches
- Square Table (2 Covers) – 2 feet 6 inches square
- Square Table (4 Covers) – 3 feet square



Side Boards

- Side boards in a restaurant hold the necessary cutlery, crockery, holloware, menu cards, check pads and sauces. The side board is also termed as a 'dummy waiter' and is equipped with drawers, compartments and shelves.



Plate 3.4 Side Boards

2. Chair

The dimension of the chair should be relative to table dimension. The chair size, height, shape and even the variety of seating required should be considered while purchasing.

Dimensions

- Height of Chair – 18–23 inches from the ground to base.
- Height of Table – 02 feet 6 inches from ground to top



Plate 3.5 Chairs

B. Table cloths / Linens



Plate 3.6 Table Linen

The table cloth is a decorative and essential accessory that unifies the components of the table setting. The design elements in a table cloth are dominance, visual, weight, colour, texture and pattern. The various varieties of linen clothes are cotton, synthetic, nylon and viscose. The type of linen used will depend on the service.

1. **Slip cloth:** A slip cloth is laid on top of an already placed table linen. The dimensions of the slip cloth will

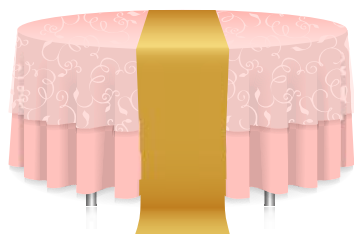


Plate 3.7 Slip Cloth

usually differ from those of the base table linen. It protects the main table cloth from the spillage and reduces the number of linens used.

2. **Frills:** It can be seen in different colours used to skirt the buffet table with the help of pins. It can be used in a guest table for banquets/functions. The common size is 10m x 1m.

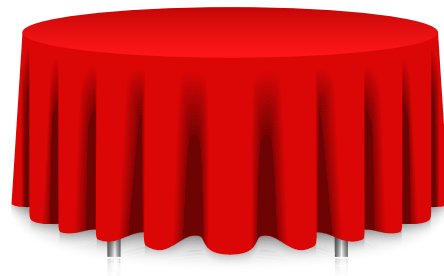


Plate 3.8 Frills

3. **Buffet cloth:** It is used on the buffet table; the standard size is 2m x 4m. The length is more than the width.



The length of the table cloth overhang

The overhang is the distance between the top of the table and the hem of the table cloth, a dimension that depends on the size of the table and weight of the fabric.



Plate 3.9 Buffet Cloth





Dimensions

- Round Table (4 covers) – 54 inches x 54 inches
- Square Table (2 covers) – 54 inches x 54 inches
- Square Table (4 covers) – 72 inches x 72 inches
- Rectangular Table (4 covers) – 72 inches x 54 inches

4. Table Runners

The table runner is a narrow length of cloth laid on top of the table cloths or laid across the table to define seating or used to carry out a theme. To accommodate average place setting, the table runner is approximately 14 to 17 inches wide and the drop at the ends is about 15 inches deep.



Plate 3.10 Table Runners

5. **Placemats/Tablemats:** It should be positioned straight and parallel to the



Plate 3.11 Table Mats

edge of the table. Each diner should have plenty of space to move around. Before placing the mats, it should be clean without any food markings or dust.

C. Food and Beverage Service Equipment

Food and beverage service equipment may be divided into glassware, chinaware and tableware. ‘**Tableware**’ is a term includes flatware, cutlery and hollow ware. ‘**Flatware**’ is a term used to denote spoon and fork, as well as serving flats. ‘**Cutlery**’ refers to knives and other cutting implements. ‘**Holloware**’ consists of any other item apart from flatware and cutlery. For example, tea pots, milk jugs and serving dishes.

1. Glassware

Glassware refers to glass and drink ware items besides table ware. The term usually refers to the drinking vessels. Well-designed glassware combines elegance, strength and stability. It should be fine and smooth rimmed. Many standard patterns and sizes of glassware are available to serve each drink. The raw materials used for manufacturing glassware are silica, sand and lime (soda ash).

Some of the types of glassware are given below:

- a. **Tom Collins:** Tall and thin glasses used for serving drinks.
- b. **Champagne Glasses:** They are fluted with the tall and narrow bowl for holding champagne. The small opening helps to keep the carbonation inside the glass for longer time.





- c. **White wine glass:** It is used to serve white wine and it has a smaller rim than the red wine. The person holds the stem instead of the glass as it retains the chillness of the drink for a long time.
- d. **Red wine glass:** Red wine is served only half the glass. The tulip shaped helps to hold the aroma.
- e. **Coffee glasses:** These are used to hold warm or iced beverages such as coffee, tea or cider.
- f. **Water glasses:** It can hold 5 to 14 ounces of water.
- g. **Beer mug:** Heavy thick mugs with sturdy handles for easier lifting.

Glassware is highly fragile, delicate and most expensive. Hence care must be taken while handling, cleaning, storing and serving.



Plate 3.14 White Wine



Plate 3.15 Red Wine Glass



Plate 3.12 Tom Collins



Plate 3.16 Glass Coffee Cup



Plate 3.13 Champagne Glass



Plate 3.17 Water Glass





Plate 3.18 Beer Mug

2. Chinaware

Chinaware refers to the crockery made up of bone China (expensive and fine), earth ware (opaque and cheaper) or vitrified (metalized). Chinaware is made of silica, soda ash and china clay, glazed to give a fine finish. It can be found in different colours and designs and it is more resistant to heat than glassware.

- a. **Joint plate:** 25 cms in diameter and used for main courses.
- b. **Side plate:** A plate smaller than a dinner plate, used for bread or other accompaniments to a meal.
- c. **Fish plate:** 8 to 9 inches in size and it is used to serve appetizers.
- d. **Soup plate:** A deep plate with the wide rim, used for serving soup 20 cms in diameter.
- e. **Soup bowl:** Shallow bowl with 9 to 10 inches diameter. Soup bowls hold 8-12 ounces of soup.
- f. **Desert / Sweet plate:** 18 cms in diameter used for serving deserts.
- g. **Cheese plate:** 16 cms in diameter used for serving cheese and biscuits.
- h. **Cereal bowl:** 13 cms in diameter used for the service of cereals and puddings.
- i. **Butter dish:** Holds butter or margarine, keeps it fresh and reduces absorption of odours.

- j. **Others:** Teapot, Tea cups, Milk jugs, Cream jugs, Coffee pot, Coffee cups, Sugar pot, Ash trays.



Plate 3.19 Joint Plate



Plate 3.20 Side Plate



Plate 3.21 Fish Plate



Plate 3.22 Soup Plate



Plate 3.23 Soup Bowl



Plate 3.27 Butter Dish



Plate 3.24 Dessert / Sweet Plate



Plate 3.28 Tea Set



Plate 3.25 Cheese Plate



Plate 3.26 Cereal Bowl

Vitrified Chinaware is stronger, it has a high breakage rate and therefore needs careful handling and storage.

3. Table Ware

- a. **Cutlery:** In modern food industry cutlery is referred to all knives, spoons and forks used for eating. Majority of food service use either plated silverware or stainless steel.



Plate 3.29 Cutlery

i. Knife

There are different types of knives used for specific purposes in serving.

A knife can be designed for chopping, tearing, dicing, spreading, carving and slicing. It depends on the blade of the knife, whether it is pointed, blunt and serrated.

Dull blades are used to cut soft or cooked food. Serrated knives are used to cut and part fruits. Knife with a broad flat blade is suitable for eating fish while knife with blunt ends is used to spread butter, cheese spread and marmalades.

Knives can be classified according to its size and use.

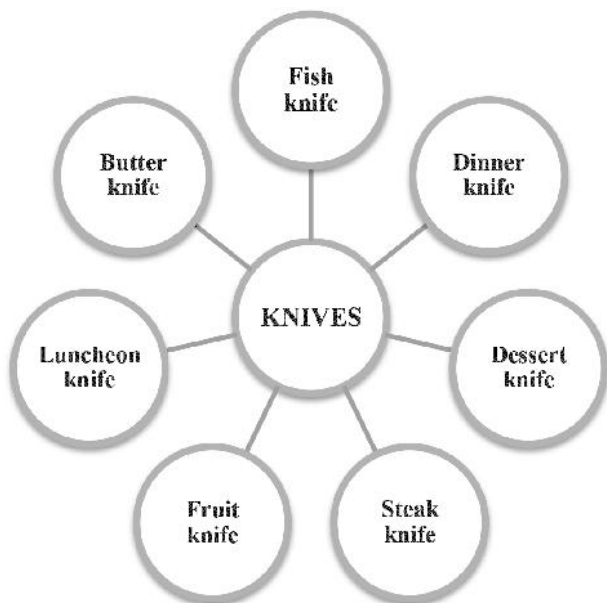


Figure 3.2 Types of Knives

- **Dinner knife:** The size is between 9½ and 10 inches and is used to cut and push food.
- **Steak knife:** It can be used in place of dinner knife, serrated or non-serrated depending on specific steak cuts and 4 to 6 inches long.
- **Dessert knife:** It can be used for dessert, fresh or candied fruits. This can be used to cut cakes and pastries.
- **Fruit knife:** It measures around 6½ to 7½ inches. It has a pointed tip and

a narrow straight. The blade can be serrated or slightly curved and meant to cut and peel fruits.

- **Luncheon knife:** It is slightly smaller than dinner knife to suit the size of the luncheon plate for meals.
- **Fish knife:** It measures 8¾ inches with a wide blade and dull edge. It helps to slide between the skin and flesh of the fish, the broad blade assists in lifting the fish to the fork.
- **Butter knife:** It is small in size, measures 5 to 6 inches. It has a rounded point to avoid damage to the bread while spreading butter.



Plate 3.30 Dinner Knife



Plate 3.31 Steak Knife



Plate 3.32 Dessert Knife



Plate 3.33 Fruit Knife



Plate 3.34 Luncheon Knife



Plate 3.35 Fish Knife



Plate 3.36 Butter Knife

ii. Spoons

Spoons are used to transfer food from plates or bowl to mouth. They are classified according to their size, shape and use.

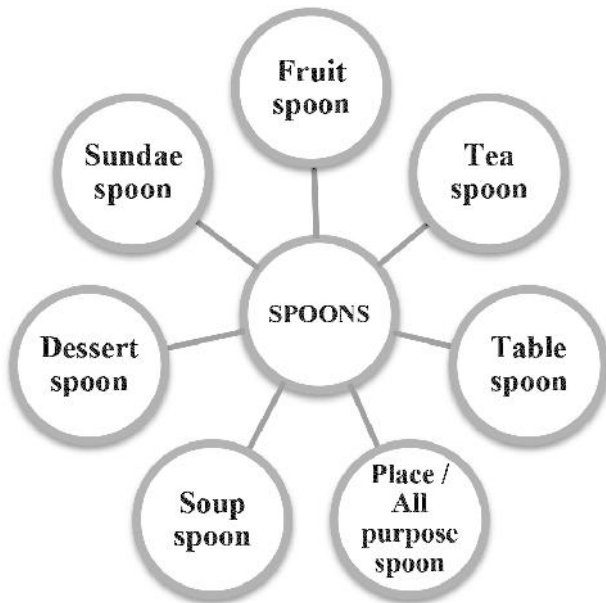


Figure 3.3 Types of Spoons

- **Teaspoon:** It is used for stirring coffee, tea and for eating purpose.

3. Service Procedures

- **Table spoon:** It is bigger than a teaspoon and is used for serving food from serving bowls.
- **Place spoon/All purpose spoon:** It is an all purpose spoon bigger than a teaspoon but smaller than a table spoon.
- **Soup spoon:** A large rounded spoon used for eating soups.
- **Dessert spoon:** It is used for eating sweets, dishes and puddings.
- **Sundae spoon:** Long spoon to reach the bottom of sundae glass and eat semi liquid foods like ice cream toppings, floats and jelly.
- **Fruit spoon:** It has an elongated bowl and a pointed tip that helps in cutting fruit and eating fruits like grapes, oranges and melons.



Plate 3.37 Tea Spoon



Plate 3.38 Table Spoon



Plate 3.39 All Purpose Spoon



Plate 3.40 Soup Spoon



Plate 3.41 Dessert Spoon



Plate 3.42 Sundae Spoon



Plate 3.43 Fruit Spoon

iii. Forks

Forks are used along with knives and spoons in serving. Forks are classified according to its uses.

- **Dinner fork:** It is used for the main course and measures seven inches.
- **Salad fork:** It is used for eating salad, the outer tines are notched, wider and longer than inner tines and its length is six inches.
- **Forks with extra tines:** It is used for eating spaghetti and noodles.

- **Dessert fork:** It is similar to salad fork and used for eating cakes, pies and pastries.
- **Fish fork:** A four tined fork longer than a salad fork that is used for holding and serving fish. The tines are uniform in width and length.
- **Seafood fork:** It is used for eating crustaceans and also called crab fork or lobster fork. It is a small, narrow, three tine fork made with short tines and a long handle. The pronged stem end helps to pick seafood while the curved scraper is used to scoop out the meat.

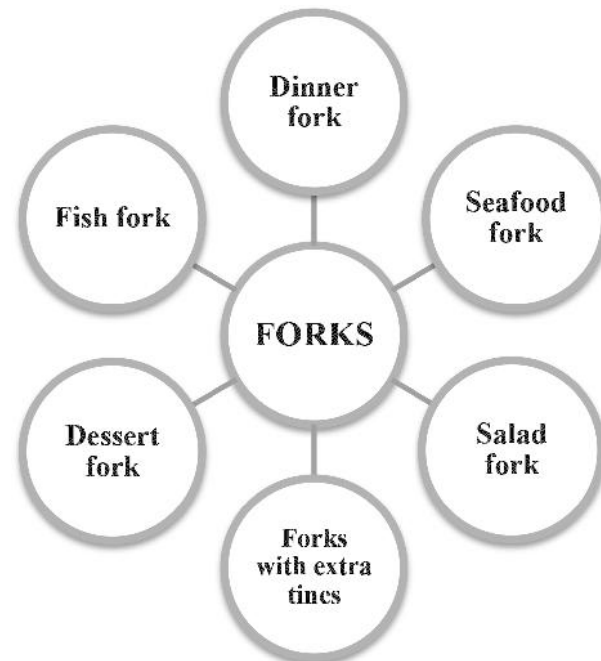


Figure 3.4 Types of Forks



Plate 3.44 Dinner Fork



Plate 3.45 Salad Fork



Plate 3.49 Seafood Fork



Plate 3.46 Forks with extra tines



Plate 3.47 Dessert Fork



Plate 3.48 Fish Fork

b. Holloware

Holloware is metal tableware such as sugar bowl, creamers, coffee pots, soup tureens, hot food covers, water jugs, platters and other items go with the dishware on a table. It does not include cutlery or other metal utensils. Holloware is constructed for durability.

Salver for serving drinks

A salver is a flat object (like a tray), usually made of silver on which things are carried.

- Salver for serving
- Salver for clearing
- Ice tongs
- Ice bucket



Plate 3.50 Service Salver





Plate 3.51 Ice tongs



Plate 3.52 Ice Bucket

Special tableware

- Sugar tongs – required for cube sugars
- Asparagus tongs – used to hold asparagus spears when eating
- Oyster forks – for shellfish cocktail / oyster
- Mud vessels and cutleries made of brass
- Sauce and soup ladles – service from sauce boat



Plate 3.53 Sugar Tongs



The Service Salver

A service salver consists of round silver with a serviette set on it. It may be used in a number of ways during the meal service.

- Carrying clean glasses and removing dirty glasses from a table.
- Removing used cutlery, flatware from the table.
- Placing clean cutlery, flatware on the table.
- Cleaning side plates and side knives.
- Placing coffee services on the table

- Cruet sets
- Nut cracker
- Ice cream scoops
- Finger bowls – a small bowl containing water for rinsing fingers after a meal



Plate 3.54 Asparagus Tongs

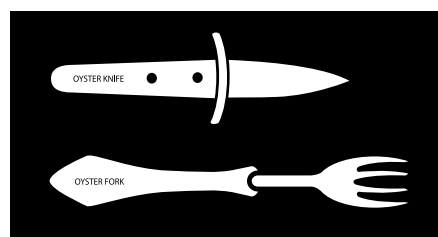


Plate 3.55 Oyster Knife, Fork



Plate 3.56 Brass Cutlery



Plate 3.57 Soup Ladle



Plate 3.58 Cruet Set



Plate 3.59 Nut Cracker



Plate 3.60 Ice Cream Scoops



Plate 3.61 Finger Bowls

3. Service Procedures

D. Napkins

The basic function of the napkin is to wipe fingers and mouth. Napkins are usually square. They are called as serviettes. The size may vary depend on the type of meal. (Eg. Formal or multiple course meals –Large napkins (22-26 inches square).



Plate 3.62 Napkins

- Colour of napkins should match the colour and texture of the table cloth.
- Napkins texture should allow absorbing moisture.
- Napkins should be placed in the centre of the service plate to save space.
- Napkin in napkin ring is placed on the table with the tip of the napkin point towards the guest.
- Napkin folds add fineness and creativity and they can be done in a number of ways.

Dimensions

- Dinner Napkin - 18 inches square
- Cocktail Napkin - six inches square

E. Central Appointments

- Ash tray
- Flower vase
- Cruet set (Salt and pepper)



Plate 3.63 Ash Tray

Central appointments add an extra tone and attention to the table. They are usually placed at the centre of the table.

1. **Flower arrangement:** A small flower vase is an apt centerpiece. The flowers used should be fresh and healthy and not too fragrant. Large flower arrangement should not be kept on the table, because it can block visions of the guests sitting opposite to each other.



Plate 3.64 Flower Arrangement

2. **Cruet set:** The cruet set should be filled with salt and pepper which can be made up of metal, ceramic, glass or stainless steel. The contents should be free flowing with appropriate number of holes depend on the style of service (commonly three holes for pepper and two holes for salt). Adding a few uncooked rice grains to the salt shaker soaks up the excess moisture and keeps the salt from clumping.

In Southern India, along with cruet set may contain pickles, different types of podis (like paruppu podi, idli podi) and chutneys.



Plate 3.65 Cruet Set



3.2 Table Setting / Laying the Cover

Courteous and personalized service is an essential quality of service staff in all restaurants. Setting up cover for servicing by following standardized norms, will not only help staff to concentrate on guests satisfaction but also give a feel of royal treatment to the guests. Using covers as a basis for predicting sales revenue enables a restaurant to decide the number of servers or waiters needed. Careful serving timing also can increase the value of covers.

It is essential for service staff to master the art of setting up cover, as per the need of the service (example A'la carte or Table d'hôte). One of the important activities of service staff is setting of cover prior to the arrival of the guests and after taking the food order. The cover with inappropriate cutlery or using a wrong cutlery may lead to bad experience for the guest and affect the business.



Cover Charge

A cover charge is an entrance fee sometimes charged at bars, night clubs or restaurants. “Fixed amount added to the bill at a night club or restaurant for entertainment of service.”



Plate 3.66 Laying the Cover

Laying the table cloth must be done by the following steps:

- Make sure that the table is well positioned.
- Pull the chairs away so that laying could be done easier.
- A molleton (silence pad) will prevent the table cloth from sliding, tempers noise of dishes and silverware against the table.
- Lay the ironed table cloth and napkin of correct size, colour (according to the theme).
- Unfold the tablecloth from the centre of the table out to the edges.
- Make sure the four corners of the tablecloth are of equal distance from the floor on each side of the table and the centre fold is exactly in the middle of the table.
- The correct side of the table cloth should be always up and centered on the table.

3. Service Procedures

- Straighten the tablecloth if necessary with quick moves.
- Put on the table runner and make sure edges hang over.
- If placemats are used, then make sure the pattern is right side up and facing the guest, so the words in it can be read by them.
- Knives and spoons should be placed towards the right of the plate and all forks on the left except for the butter knife.
- The cutting edge of the knives should always face the plate except the butter knife.
- Napkins may be folded and kept ready earlier, so that layout process might be easier.
- A simple, but elegant napkin folding which does not require too much handling is ideal for restaurants.



Plate 3.67 Folded Napkin

- Cruet set should be placed on the top of the cover.
- Align the needed number of chairs, spaced evenly and leave enough space between them (20cm).
- Place a cover plate in front exactly to the middle of the chair. The edge of the plate should be two cm from the edge of the table.

- Use the thumb finger in horizontal position to estimate the right distance
- Put the folded napkin on the cover plate.



3.3 Types of Cover for different menus

There are mainly two types of covers.

1. A'la Carte Cover

A'la Carte is a selective menu offering choice in food and beverages within each course and its categories. Since there are choices in each course, this type of cover setting usually has a standard cover laid down for the entire meal.

- As in A'la Carte menu, orders are placed on the spot and therefore other cutlery required for specific courses are supplied along with dishes.
- A simple A'la Carte cover will be set with a soup spoon, knife and fork and others may be elaborate.

A'la Carte Cover Requirements

- (a) Side plate with side knife
- (b) Fish plate (centre of cover)

- (c) Fish fork
- (d) Napkin
- (e) Cruet set
- (f) Sauce and oil pot
- (g) Water glass
- (h) Wine glass

There are now a variety of approaches to lay the A'la carte form of service. This can include using large decorative cover plate and a side plate and knife only, or replacing the knife and fork with a joint knife and fork.



Plate 3.68 A'la Carte Cover

The cutlery required by the customer for the chosen dishes will be laid course by course when the first course is finished, the cutlery used will be cleaned and replaced with the new one for the next course.

Table 3.1 A'la Carte Cover (Indian Menu)

Course	Description	Cover
Soup	Vegetarian/Non-vegetarian	Soup bowl on an under plate with soup spoon Cruet set (Salt and pepper shakers)
Appetizer/ Starter	Vegetarian Non-vegetarian	Half plate with small knife and fork Half plate, fish knife and fork
Entrée/Main course	Roti/Chappati/Rumoli roti Rice	Full plate, large knife and fork Full plate, all purpose spoon

Course	Description	Cover
	Meat/Poultry Seafoods Eggs	Steak knife Fish knife and fork Half plate with small knife and fork
Salads	Vegetable/Fruit salad	Salad fork
Desserts	Fresh fruits and nuts	Half plate, fruit knife and fork
Savoury/ Sweets	All kinds of sweets	Half plate, dessert spoon and fork
Beverages	Coffee/Tea	Coffee mug/Tea cup

11. Table d'hôte cover

- This is a set menu offering a complete meal of fixed number of courses at fixed price.
- The cover set up for this service is simple, less time consuming and less labour involved.

- (d) Soup spoon
- (e) All purpose spoon and fork
- (f) Dinner knife and fork
- (g) Dessert spoon and fork
- (h) Cruet set
- (i) Sauce and oil pots

Table d'hôte cover requirements

- (a) Side plate with a side knife
- (b) Water goblet
- (c) Fish fork and knife



Plate 3.69 Table d'hôte Cover

Table 3.2 Table d'hôte cover (Indian Menu)

Course	Description	Cover
Soup	Cream of tomato soup	Soup bowls on an under plate with soup spoon, Cruet set
Starter	Onion Bhajji, Chicken Tikka with mint chutney	Half plate with small knife and fork
Main course	Pulao rice, chilli chicken/ prawn fry, raita, Paratha, butter chicken masala	Full plate, large knife and fork All purpose spoon, steak knife
Dessert	Rice pudding, Mango kulfi, Seasonal fruits	Dessert spoon Fruit knife and fork
Beverages	Tea/Coffee	Coffee mug, Tea cup Cruet set

Appropriate cover for the courses of menu is given in Table 3.3.

Table 3.3 Courses and their Covers

S.No.	Course	Description	Cover
1.	Hors d'oeuvre (appetizer)	Varieties of appetizers	Cold half plate, fish knife and fork
		Fish appetizer	Half plate, fish knife and fork
		Appetizer presented in a coupe	Coupe on an under plate with doily and teaspoon
		Vegetable appetizer	Half plate with small knife and fork
2.	Potage (Soup)	Thin soup	Soup cup on an under plate with dessert spoon
		Thick soup	Soup bowl on an under plate with soup spoon, Cruet set
3.	Oeufs (eggs)	Omelette, poached egg	Half plate with knife and fork
4.	Farineux (Pastas)	Spaghetti	Half plate, large fork to the right and dessert spoon to the left. If it is a main course, full plate should be used
5.	Poisson (Fish)	All kinds of fish preparation except smoked fish	Half plate, fish knife and fork
6.	Entrée / roti Main course	Entrée will have small knife, fork and half plate	Full plate, large knife and fork
7.	Legumes / Vegetables	All kinds of vegetable preparations	Half plate, dessert spoons and fork
8.	Entremets (Sweets)	All kinds of sweets	Half plate, dessert spoon and fork
		Served in coupe / glass	Coupe / glass on an underplate with teaspoon
9.	Fromage (Cheese)	All kinds of cheese	Quarter plate, small knife and fork
10.	Savoureux (Savoury)	All kinds of savoury	Half plate, small knife and fork
11.	Dessert (Fruits)	Fresh fruits and nuts	Half plate, fruit knife and fork



3.4 Services in a Restaurant

A restaurant service should focus around customer's satisfaction and provide a fine dining experience. Every employee should take part in providing a wholesome dining experience to the guest and for this certain steps have to be followed during service.

3.4.1 Steps to be followed in a Restaurant service

For proper service of a restaurant, the following procedures should be followed by the employees.



Plate 3.70 Welcoming the Guest

- Greeting and seating the guests
- Taking orders
- Service
- Payment

1. Greeting and seating the guests

- A host (manager or supervisor in a restaurant) is responsible for greeting customers at the entrance.
- When the customer comes in, letting them know whether there will be a waiter find out the guests reservations. Verify the reservation dining and

guide them to their table. If they have not reserved the table then find out the available table appropriate to the number of guests.

- Pull out the chair slightly so as to make it convenient for the guests to occupy the seat.
- If there are any small children in the group, offer them high chairs or booster seats.
- Opening napkins – When the guests take their seats, most of them unfold the napkins on their own and spread them on their laps. However, some guests wait for the waiters to do it for them.
- After the guests are seated, water is offered in most Indian restaurants. Chilled or warm water is offered according to the weather. These days most of them prefer mineral water.

2. Taking orders

- Once guests are seated, they are attended by the waiter.
- Menu card is presented to the guest from the right side.
- Waiters who take orders should have as much information as possible about the menu, day's special including ingredients.



Plate 3.71 Taking Orders

- Appetizers should be ordered first and conveyed to the kitchen staff.
- Should take orders at the same point at each table for entrée depending on the type of food establishment so that it will help him deliver plates to the right diners.
- Food service restaurants that have multiple course meals take their diner's course orders after the appetizer, so that the courses needed are prepared in the kitchen and delivered with a set time frame.
- A waiter is responsible for periodic checking on diners, to ensure they are satisfied with their meal and he should ensure that all required cutleries have set up and placed on the table properly.

3. Service



Plate 3.72 Service

- A skilled waiter will balance the customer's need.
- There are some basic principles in food and beverage service that a waiter must know
- When food is served by the server at the table from a platter on to guest plate, the service is done from the right.



Crumbing down

It is a procedure generally carried out by the waiter after the main course has been consumed and all the dirty items of equipment cleared from the table.

- When food is preplated, the service to the guest is usually done from the right.
- All beverages are served from the right.
- Soups are served from the right. Sometimes if it is poured from a large tureen into a soup bowl by a waiter means it is done from the left to the guest.
- Ladies and children are always served first and the remaining guests clockwise.
- Soiled plates should always be cleaned from the right.
- Empty crockery and fresh cutlery are always served from the right.
- When a guest is present at the table, all items and the equipment on the right of guest must be placed from the right and left from the left.

Food safety is important during restaurant service. Though waiters and hostesses do not cook the food, they still come in contact with the food. It is helpful for the servers to undergo food safety and sanitation training programme.

4. Payment

- Payment (Cash, cheque, card) protocols vary by the type of food service organization, volume and location.
- Check the bill if it belongs to the right guest and the dishes they have eaten.
- Present the bill neatly in a bill folder to the guest.
- Guests settle bill by cash or cheque or debit or credit card.
- Due to demonetization in India, nowadays guests prefer to pay cashless by using credit or debit card. If settled by card, the swiping machine can be brought to the table for payment.
- Do not expect tips and thank the guests politely with smile.
- Clean table and set cover for the next guests or meal.



Plate 3.73 Payment





3.4.2 Types of service





The service of meal can be carried out in many ways depending on the type of food service, customer, time available for the meal, type of menu, cost of the meal and the turnover of the establishment. There are various types and styles of food service are followed in restaurants.

The different types of services are given in Table 3.4.

Table 3.4 Types of Service

S.No.	Type of service	Main features
1.	Gueridon Service  Plate 3.74 Gueridon Service	<ul style="list-style-type: none"> ■ Elaborate service and offers great personal attention to the guest ■ Foods are brought to the dining area by gueridon trolley fitted with gas burners in a raw or partially prepared manner and completed at the guest table side. ■ Expensive menu items ■ Need skilled waiters trained in filleting, carving and flaming the food.

S.No.	Type of service	Main features
2.	Cafeteria Service  Plate 3.75 Cafeteria Service	<ul style="list-style-type: none"> ■ Quick and self service exists in industrial canteens, colleges, hospitals and hostels ■ The guest may have coupons in advance and present them in the counter to choose the food items ■ The food is served preplated with cutleries in the counter. ■ High tables are provided to stand and eat.
3.	Counter Service  Plate 3.76 Counter Service	<ul style="list-style-type: none"> ■ Food is displayed behind the counter for the guest to choose ■ Tall stools are placed along a counter for the guests to sit and eat.
4.	Mobile Pantries  Plate 3.77 Mobile Pantries	<ul style="list-style-type: none"> ■ Catering vans are parked in central areas outside educational institutions, offices and on roadsides. It has lower fixed cost and offer meals at lower prices to customers. ■ Large hotels install mechanised dispensing units in rooms, which will eject preplated food and beverages for guest consumption.
5.	Grill Room Service  Plate 3.78 Grill Room Service	<ul style="list-style-type: none"> ■ Non-vegetarian foods such as meat, chicken and fish are displayed behind a counter ■ The guest can choose his / her exact cut of meat, grilled and served preplated.




S.No.	Type of service	Main features
6.	Room Service  Plate 3.79 Room Service	<ul style="list-style-type: none"> ■ Serving of food and beverages to the room as small or major orders. ■ Room service orders are received by the waiters and transmits to the kitchen. ■ Waiter prepares his tray or trolley and delivered to the guests in the rooms
7.	Buffet Service  Plate 3.80 Buffet Service	<ul style="list-style-type: none"> ■ A self-service, where food and beverages is displayed in chafing dishes on tables which are simple to very elaborate varieties ■ For sit down buffet service, tables are laid with crockery and cutlery ■ Special attention and planning are required for buffet layout.
8.	Take away service  Plate 3.81 Take away Service	<ul style="list-style-type: none"> ■ Orders are received either over the counter, drive way, website or mobile app. ■ Payments are either made in advance via online payments or paid at the time of pick up. ■ Automated vending machine is also used for this type of service.
9.	Robotic Service  Plate 3.82 Robotic Service	<ul style="list-style-type: none"> ■ Robots are used in big hotels for food preparation and service ■ Guests make the order on the touch screen, which is sent to the robotic arm processors. ■ The order is then prepared by the robotic arm and served through robots or waiters. ■ Smart phones with the hotels mobile application installed are also used for placing the orders.


3.4.3 Style of Service



Food service has a number of different styles of service. It should be selected based on the type of food being

served and the place of the restaurant. There are various methods in which the service of the food can be done on the guest table. Some of the styles are given in Table 3.5.

Table 3.5 Style of Service

S.No.	Name of the service	Main features
1.	English Service  Plate 3.83 English Service	<ul style="list-style-type: none"> ■ Referred as host / butler service. ■ The most hospitable form of service done by a single waiter because he serves every course in the menu. ■ Food is brought on platters by the host and he portions the food in to the guest plate directly from left.
2.	French Service  Plate 3.84 French Service	<ul style="list-style-type: none"> ■ Elaborate, most labour intensive and expensive service. ■ High priced food items are served to the guest with great deal of attention. ■ Semi prepared / unprepared food items are carried on heavy platters on a gueridon and completed at a side table in front of the guests. ■ All foods are served and cleared from the right side of the guest.
3.	Silver Service  Plate 3.85 Silver Service	<ul style="list-style-type: none"> ■ Food is presented in silverware with elaborate dressing. ■ Cover is layed with sterling silverware. ■ Food is portioned into silver platters of the kitchen and completed in front of the guests at the side board. ■ Waiter present the dish to the host approval and serve from the left.

S.No.	Name of the service	Main features
4.	American Service  Plate 3.86 American Service	<ul style="list-style-type: none"> ■ Preplated service, where the preparation of food is completed in the kitchen except for the salad and the bread and butter. ■ The portion is determined by the chef and the accompaniments are also served with the dish. ■ The meal is served and garnished on one plate. ■ Requires less labour and quick service.
5.	Russian Service  Plate 3.87 Russian Service	<ul style="list-style-type: none"> ■ Food is fully prepared and portioned in the kitchen and arranged on silver platters. ■ The waiter shows the platter to the guest as a polite gesture and serves the food.
6.	Chinese Service  Plate 3.88 Chinese Service	<ul style="list-style-type: none"> ■ Lazy Susan is a common feature at the centre of large tables, to facilitate passing of serving dishes. ■ A basic place-setting consists of a small tea cup, a large plate with a small empty rice bowl, a set of chopsticks on the right and a spoon. ■ All the dishes for a course are placed around the Lazy Susan. ■ The dishes are served to the guest of honor first and then rotated clockwise around the table for others.
7.	Italian Service  Plate 3.89 Italian Service	<ul style="list-style-type: none"> ■ Italians serve white wine with fish, seafood and pasta, red wine with meat. ■ Italian portion sizes are smaller but it is healthier.

S.No.	Name of the service	Main features
		<ul style="list-style-type: none"> Italians do not switch knives. The knife remains in the right hand and the fork remains in the left. When the meal is finished, the knife and fork are laid parallel to each other across the right side of the plate, with the tines of the fork facing downward
8.	<p>Japanese Service</p>  <p>Plate 3.90 Japanese Service</p>	<ul style="list-style-type: none"> Service is associated with standard customs and language. Waiters should speak a polite form of respectful language called 'keigs'. Dinner is usually served with free glass of water or tea. Chopsticks are not already set, the customer can find in a box on the table.
9.	<p>Continental Style of Service</p>  <p>Plate 3.91 Continental Service</p>	<ul style="list-style-type: none"> It is a more graceful way of eating, but it does take practice. The fork stays in the left hand, with the tines pointed down and the knife is hold by the right hand. Food is speared by the fork and eaten. In between bites (resting position), the knife and fork are crossed in the centre of the plate, fork tines pointed down. "I am finished" position is that the knife and fork are placed side by side on the right side of the plate.

3.4.4 Indian Food Service

The traditional food services commonly followed in India are 'Thali meals' and banana leaf service. In India meals are eaten while seated either on the floor or very low stools or mattress. Food is often eaten with the right hand rather than using a cutlery. The left hand is used to serve oneself when the courses

are not served by the host. Vegetarian or non-vegetarian meals are common in Tamil Nadu and Northern parts of India.

a. 'Thali meal'

'Thali meal' is an Indian style meal made up of a selection of various dishes which are served on a platter. 'Thali' offers six different flavours of sweet, salt,



Lazy Susan

A lazy Susan is a circular rotating tray placed at the centre of a table and used to easily share number of dishes among the various dishes. They are made of glass, wood or plastic. One should try to avoid moving the Lazy Susan cover slightly, when someone is in the act of transferring food from the dishes to their plate or bowl.



The ‘**tea ceremony**’ also called the ‘**Way of Tea**’ is a Japanese cultural activity involving the ceremonial preparation and presentation of powdered green tea.

Customers are greeted with the expression “irasshaimase” meaning “welcome, please come in”.

bitter, sour, astringent and spicy on one single plate. It is commonly followed in Northern India.

Dishes served in a Thali vary from region to region. Dishes are usually served in small bowls called ‘Katori’. These katories are placed at the edge of the round tray or a steel tray with multiple compartments. Typical dishes include rice, dhal, vegetables, roti, papad, dahi (yoghurt), small amounts of chutney or pickle and a sweet dish. Sometimes a round cut banana leaf is placed on the plate for serving.



Plate 3.92 Thali meals

b. Banana leaf service

Banana leaf service is a traditional method of serving rich dishes in south Indian cuisine. Cleaned banana leaves are used for serving food. When food is served on banana leaves, the leaves add distinctive aromas and add taste to the food.

In banana leaf meals, white rice is served on a banana leaf with an assortment of vegetables, pickles, papad and other regional condiments. Traditionally there will be two servings of rice with the first being served with gravy or sambar, than pulikuzhambu, rasam and finally with the second serve of rice with curd or butter milk. In Chettinad cuisine boiled eggs, curried or fried meat or seafood are served as well. Banana leaf meals are eaten by hand. After finishing the meal the guest must always fold the banana leaf inward to show the sign of gratitude. Even this etiquette is followed in a restaurant.



Plate 3.93 Banana Leaf Service

Depending on the nature of establishment and the requirement of particular occasions, food may be served in many ways. It is for the catering manager to

adapt the methods to progressive minds of the changing society. Success of a food service depends on customer's changing interest and to make the meal pleasant for them.

A-Z GLOSSARY

Cruet set	:	Set of containers used at the dining table to hold salt, pepper and oil.
Water Goblet	:	A bowl/conically shaped drinking vessel without handles
Molleton	:	A silence pad used under a table cloth (as a flannel or felt)
Bone China	:	Porcelain made of clay mixed with bone ash
Banquet	:	A large formal meal for many people
Marmalade	:	A preserve made from citrus fruits slightly in bitter taste.
Candied fruit	:	Crystalized fruit / Glace fruit. A whole fruit / smaller pieces of fruit / pieces of peel are placed in heated sugar syrup.
Spaghetti	:	Pasta made in solid strings, between macroni and vermicelli in thickness.
Platters	:	A tray or a large plate typically made of silver and used in formal circumstances for serving a meal.
Pastries	:	Sweet baked foods consist of sweet filling with cream or jam or fruit filling.
Luncheon plate	:	Sized between the dinner and salad plates
Sundae glass	:	Glass served with ice cream with syrup poured over it.
Crustaceans	:	An arthropod group includes crabs, lobsters, shrimp and crayfish.
Soup tureens	:	A tureen is a serving dish for serving soups or stews with broad, deep vessel and fixed handles.
Nut cracker	:	It is a tool designed to open nuts by cracking their shells.
Ice tongs	:	Having two handles and hooked points for lifting large blocks of ice.
Half plate	:	Plate with 20 cm diameter in size
Quarter plate	:	Plate with 15 cm diameter in size
Full plate	:	Plate with 25 cm diameter in size.
Oyster fork	:	Three short, wide curved tines that are made to follow the shape of the shell.
Doily	:	A small ornamental mat or paper with a lace pattern.
Coupe	:	A glass dish with a stem in which desserts are served.
Buffet	:	Meal consists of several dishes from which guests serve themselves.


LINKAGES

- <https://youtu.be/8jVoMYMoVfs>
- <https://youtu.be/KoU1XiQJ1vo>
- <https://youtu.be/SpK1owmRemQ>
- <https://youtu.be/8jVoMYMoVfs>
- <https://youtu.be/3BUxB4rGf3M>
- https://youtu.be/4odDMLulw_8

STUDENT ACTIVITY

- Role play as a waiter and do the service procedures
- Set up a mock restaurant and lay the cover
- Find out the modern restaurant services
- Collect pictures of tableware and prepare a chart

TEACHER ACTIVITY

- Make the students identify the type of cutlery (Knives, spoons and forks)
- Take students to a nearby restaurant to know the cover laying procedure.


QUESTIONS

I. Choose the Correct answer: (1 Mark)

1. _____ is a table setting for one person in a restaurant.
 - a) Cover
 - b) Linen
 - c) Placemats
 - d) Cutlery
2. The dimension of round table for four covers is _____ feet in diameter.

- a) 2
 - b) 4
 - c) 8
 - d) 5
3. _____ is laid on top of an already placed table linen to reduce the number of linens used.
 - a) Frills
 - b) Slip cloth

- c) Runner
d) Cruet set
4. _____ refers to knives and other cutting implements.
a) Holloware
b) Chinaware
c) Cutlery
d) Glassware
5. Tall and thin glass used for serving drinks is called _____.
a) Red wine glass
b) Coffee glass
c) Beer mug
d) Tom collins
6. Fork with extra tines is used for eating _____.
a) Spaghetti
b) Cakes
c) Salad
d) Fish
7. Serviettes are otherwise called as _____.
a) Table runners
b) Cutleries
c) Napkins
d) Cruet set
8. _____ spoon is used to eat semi liquid fruit like ice cream toppings, floats and jelly.
a) Fruit
b) Table
c) Sundae
d) Dessert
9. _____ is used for rinsing fingers after a meal.
a) Cruet set
b) Finger bowls
c) Nut cracker
d) Ice tongs
10. The cover for serving eggs is _____.
a) Half plate knife and fork
b) Half plate fish knife and fork
c) Half plate small knife and fork
d) Half plate dessert spoon and fork
11. In industrial canteens _____ type of service is followed.
a) Room service
b) Buffet service
c) Robotic service
d) Cafeteria service
12. Expensive menu and skilled waiters are needed in _____ type of service.
a) Mobile pantries
b) Counter service
c) Gueridon service
d) Buffet service
13. _____ is referred as host / Butler service.
a) French
b) English
c) American
d) Chinese
14. _____ is a circular rotating tray placed at the centre of the dining table.
a) Service salvar

- b) Lazy Susan
c) Serviette
d) Chopsticks
15. Preplated service is common in _____ style of service.
a) American
b) French
c) Chinese
d) Japanese
16. _____ are used to keep different types of dishes in a Thali meal.
a) Soup bowls
b) Katories
c) Half plate
d) Tom collins
17. _____ is a central appointment in a cover.
a) Table cloth
b) Furniture
c) Cruet set
d) Table runner
18. _____ refers to the crockery made up of soda ash and clay.
a) Holloware
b) Chinaware
c) Cutlery
d) Knife
3. Write the points to be kept in mind while arranging the furniture in a restaurant.
4. What are the dimensions of different shapes of tables needed in a restaurant?
5. What do you know about table runners?
6. Write any five glasswares used on a cover.
7. List the different types of knives used in a table setting.
8. Mention any six spoons used on a cover and their uses.
9. When do you use a seafood fork on a cover? Why?
10. Bring out the importance of a cruet set used on a cover.
11. Write on the cover used for serving soups.
12. Noodles are served in the main course. Mention the cover and explain.
13. Why English service is referred as Butler service?
14. What is a 'Lazy Susan'?
15. Explain 'Thali Meal'.
16. What are the essential things needed for a simple A'la carte cover?

II. Write in 3 lines (3 Marks)

1. Define a restaurant cover.
2. For a start up restaurant, what are the essential requirements needed for table setting?

III. Write in a paragraph (5 Marks)

1. What are the accessories used other than table linens on a cover?
2. Write on Chinaware.
3. Discuss the different types of forks used in a restaurant.

4. List the special tablewares and their uses.
5. How do waiters take orders in a restaurant?
6. Enumerate the steps to be followed by a waiter in food and beverage service.
7. Write on Robotic service.
8. How mobile pantries are useful?
9. Bring out the salient features in a Chinese food service?
10. Which style of service is a preplated service and how is it done?
11. List the table setting requirements for a Table d'hôte menu.

IV. Write in one page (10 Marks)

1. Point out the requirements for table setting.
2. Discuss the tableware used on a cover.
3. Outline the step by step procedure of laying a cover in a restaurant.
4. As a waiter in a restaurant, what are the service procedures he must follow?
5. Explain the different types of table services followed in restaurants.
6. Illustrate a model A'la carte cover for an Indian restaurant.



Cakes, Beverages and Salads



LEARNING OBJECTIVES

- Gain knowledge about the functions of ingredients, principles involved in cake preparation, types of cake and quality of cake
- Identify the different types of beverages and their preparation
- Know the importance and health benefits of different types of salads
- Develop skills in carving vegetables, fruits, butter and ice.



4.1 Cake Making – Types, Procedure

Cake is the most common and important bakery product. This is served as snacks as well as dessert too. It is developed by modification of the ingredients used for the bread. Many varieties of cakes are available in the market. Cake can be made in simpler form or in rich form by including icings or chocolate decorations. Cake is also



Plate 4.1 Cake

served as a celebratory dish on ceremonial occasions, such as weddings, anniversaries, and birthdays. A good baker can prepare attractive and tasteful cakes based on the occasion and the customer's need.

4.1.1 Types of cake

There are different varieties of recipes developed globally. The main ingredients like maida, sugar, eggs, butter and leavening agent like baking powder remain the same whatever may be the variety of cake. The flavouring agents in cake preparations are vanilla essence, cocoa, nuts like badam, chestnut, dry fruits like raisins, fig and pulp of fresh or canned fruits. Pastry cream, butter cream, or other icings are used to decorate cake.

There are different types of cake. For example, plain cake, fruit cake, sponge cakes and cream cake. All these types of cake come under two basic categories namely, cream and sponge cake.



Plate 4.2 Cream Cake Plate



Plate 4.3 Sponge Cake

4.1.2 Equipment used in Baking

- i. Measuring Jug/Jar:** Used to measure all types of liquids in litre.



4.4 Baking Trays

- ii. Wire Whisker:** Used for whisking egg and cream and helps to aerate with air.



Plate 4.5 Wire Whisker

- iii. Turn Table:** Used while icing on the cakes and pastries.
- iv. Strainer:** Used for straining the liquids to remove impurities.
- v. Spatula:** Can be made of wood, plastic or rubber material and is used for removing batter or mixture from the bowl.



Plate 4.6 Spatula

- vi. Piping Bag:** Used while piping the batters, cookies mix, cream icing etc.



Plate 4.7 Piping Bag

- vii. Basin:** A large bowl used for making dough, batter or for storage of food.
- viii. Muffin Tray:** A kind of baking tray for baking the batter of muffins.
- ix. Fancy Mould:** Used for the baking of different fancy cakes.
- x. Cake Mould:** used for obtaining desired shape.
- xi. Pallet Knife:** A knife with parallel and without any sharp edges, used for the different products like cakes, icing etc.
- xii. Bread Knife:** A long knife with one edge with the grooved like saw used for cutting of cakes and breads.



Plate 4.8 Bread Knife

- xiii. Measuring Spoon:** Used for measuring the dry ingredients in small quantity.
- xiv. Baking Tray:** Used for baking breads, biscuits, pizza cakes.
- xv. Weighing Scale:** Used for weighing the raw materials in the unit of grams and kilograms
- xvi. Two Deck Ovens:** Used for baking two different products at different baking temperatures



Plate 4.9: Pallet Knife

- xvii. Single Deck Oven:** An oven with the single deck used for baking.
- xviii. Table Top Planetary Mixer:** An equipment with the three attachments - kneader, whisker and creamer for different methods of preparations in bakery and confectionery
- xix. Tray Rack:** A rack to place the baked products and baking trays.
- xx. Bread Slicing Machine:** A machine used for slicing bread and cake loaves



Plate 4.10 Bread Slicer

4.1.3 Ingredients used in cake preparation

The basic ingredients used for cake preparation are soft wheat flour (or the flour which is used for bread preparation), sugar, fat, and eggs.



Optional ingredients for cake preparation

The optional ingredients are salt, milk, water, leavening agents, flavouring agents and fruits.

(i) Basic ingredients

- **Flour** - Normally a mixture of soft and medium flour in a particular proportion is used for rich cakes like wedding cakes, Christmas cakes and special birthday cakes



Plate 4.11 Basic Ingredients

Functions

- Provide good structure
- Determine the shelf life of product.
- Improve nutritional merits
- Act as an absorbing and a binding agent
- Improve the adhering capacity of ingredients and distributes evenly in the mixture.

Sugar

Coarsely powdered sugar is more suitable for cake making. Liquid sugars like honey, molasses, invert sugar can also be used. These impart special flavour and improves colour of cake crust.

Functions

- Provides taste
- Acts as a tenderizer
- Holds moisture

- Helps in acquiring volume in cakes
- Gives a golden brown crust colour when caramelized.



Caramelization is the oxidation of sugar, a process used extensively in cooking for the resulting nutty flavour and brown colour

Fat

Fat is the main ingredient in cake preparation.

Functions

- Helps the product to be tender
- Improves shelf life by holding the moisture for a longer time
- Enhances the flavour and aroma
- Provides nutritional importance as well as softness.
- Holds the air during creaming.

Eggs

Fresh eggs are used for cake preparations. Eggs should be at room temperature (21-24°C) at the time of adding into the mixture. Eggs are beaten during creaming operation because once the eggs are beaten, the small air cells are incorporated and it will increase the number of air cells in the mixture.

Functions

- Provides structure, gives moisture and colour
- Improves the flavour, taste, volume

- Gives nutritional value
- Improves the grain and texture
- Gives softness
- Lecithin present in the yolk acts as an emulsifier
- Entraps air and becomes an aerating agent during beating egg

ii. Optional ingredients

a. Fruits and Nuts

Fruits should be washed and drained properly. The washed fruits should be spread on dry cloth to remove excess moisture. It should be finely chopped before adding into the mixture, the fruit size should be even, otherwise it will sink at the bottom of the cake. If the fruit contains moisture it will breakdown during mixing, discolour the batter and sink at the bottom. Nuts should be soaked in water until they become soft (for about half an hour) before use. Fruits and nuts are added at the last stage of mixing in batter.

b. Addition of Salt

- Gives the flavour and taste.
- Lowers the caramelization temperature of the sugar, and improves the crust colour of the cake
- Keeps the cake moist and improves quality of the texture
- Helps to improve the natural flavour of the ingredients
- Reduces the extra sweetness in the preparation of some special formula cakes where more sugar is needed.

c. Addition of Milk

- Builds the structure
- Helps to bind the flour proteins
- Keeps the cake tender
- Helps to retain the moisture
- Improves the nutritive value, taste and flavour
- Contains lactose which helps to give crust colour
- Improves the keeping quality.

d. Addition of Water

- Combines all the dry ingredients together.
- Builds structure of cakes and maintain the batter consistency
- Retains moisture in the cake.
- Improves the shelf life.
- It helps to release carbon dioxide gas from baking powder and formation of vapor pressure.

e. Addition of Leavening Agents

- Increases the volume of the products.
- Makes the product tender and soft
- Enhances the crumb colour, taste and smell (aroma)
- Improves the digestion quality.

Cake Faults

For the quality cake, it is essential to use quality raw materials and should follow correct measurements, methods, processing and baking. If there are any changes or mistakes it will affect the quality of cake. This is called as faults.



Plate 4.12 Sunken Cake



Plate 4.13 Dry Cake

Table 4.1 Common Faults in Selection of Ingredients for Preparation of Cakes

Possible causes	Effects
Flour a) Using too strong flour b) Too weak flour	Forms peak in center, tough and dry cakes May flatten out or sink, cause wet streak and may crumble.
Sugar a) Too large grain of sugar b) Too fine grain of sugar	Prevents entrapping of air cells and takes more time to dissolve. Dissolve quickly and leads to poor aeration.
Fat a) Granular fat b) Very hard fat c) Very soft fat	Has a poor creaming quality result in poor volume and coarse texture. Not cream up well Will not retain air while creaming
Eggs a) Too cold eggs b) Addition of too much egg at a time	Fat will breakdown and affects aeration Improper mixing

4.1.4 Methods used for the preparation of cakes

The following methods are involved in the cream/butter cake and sponge cakes making processes:

1. Sugar batter method
2. Flour batter method or two-sponge method

3. Blending method
4. Boiled method
5. All-in-process method
6. Foaming method or sponge method
7. Sugar water method

These methods differ from one another by way of mixing, quantity of ingredients used, baking temperature and baking time.

1. Sugar batter method

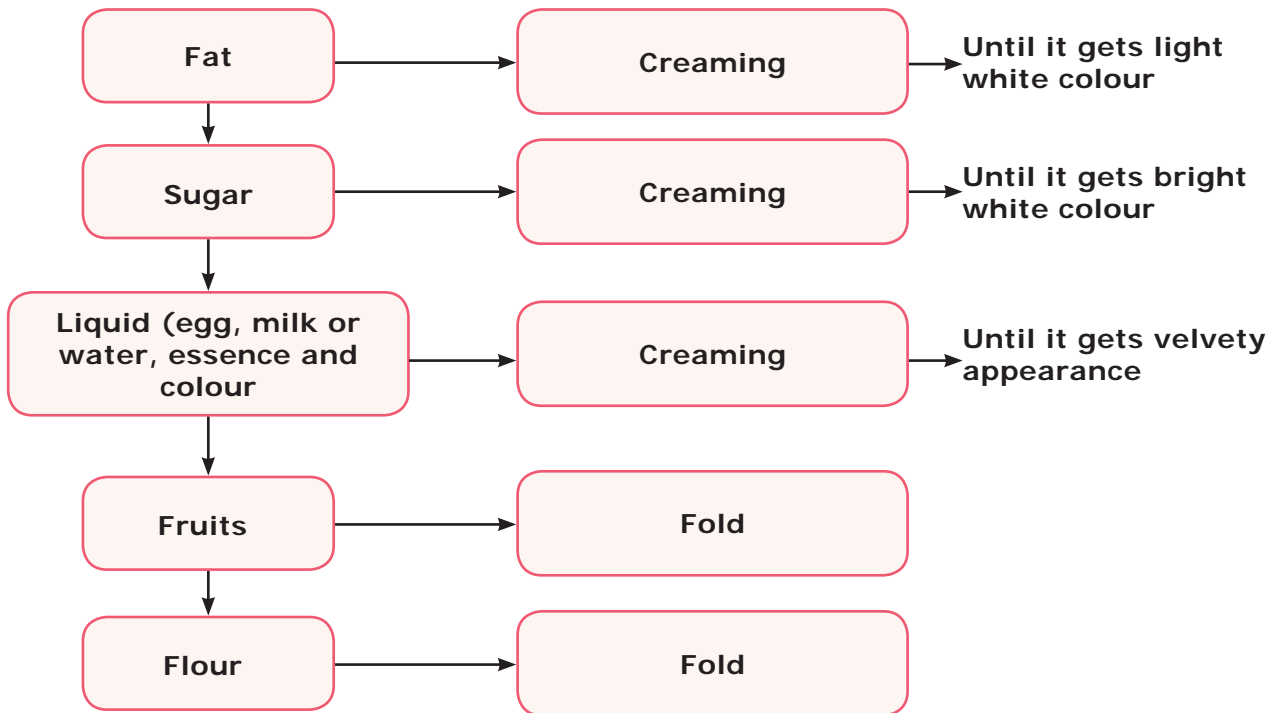


Figure 4.1 Sugar Batter Method

In sugar batter method, all the fat is creamed until it gets light white colour. Then sugar is added gradually continuing the creaming process. Do not add all the sugar at a time, it will affect the aeration process and will take more time to achieve the desired results. When

adequate aeration is achieved, the fat and sugar mixture will be light and brighter in appearance. Then add beaten eggs gradually into mixture. Adding more eggs at a time will break the fat and sugar and the mixture will be coated by eggs. At that time the mixture will be like “curdle”. It will affect the air incorporation.



How to solve Curdling?

1. Add sufficient quantity of formula flour into the mixture. It will absorb the excess moisture and the batter will again become smooth.
2. The curdled mixture should be slightly warmed over a pot of warm water. The bowl should not touch the water. If it touches, the fat will melt or egg may coagulate.

After adding the eggs the batter will have a smooth light and velvety appearance. Other liquids can be added at this stage. This is done in order to have sufficient moisture in the mix, to prevent toughening of gluten, while mixing flour.

After mixing evenly, add sieved flour into the mixture. It is an important stage in cake making and even slight mishandling of the mixture will spoil the cake. Flour should not be added in one time, but it should be divided into two or three portions and each portion should not be added at a time and mixed with

straight open fingers with just necessary movements of hand. Because excessive mixing may form the gluten and this toughness will spoil the cake quality.

After folding the flour, if the batter is very stiff, add some quantity of water or milk to adjust the batter consistency.

2. Flour batter method

In the flour batter method cream the fat and a quantity of flour not exceeding the weight of fat till it becomes light and fluffy. At the same time, in another machine, beat the egg and equal quantity of sugar till it comes stiff and frothy. Then add the egg and sugar mixture gradually in small quantity at a time into the first mixture. It should be mixed thoroughly and then only the next portion should be added. The remaining sugar is dissolved in milk or water and added to the mixture. Any colour or flavour is also added along

with this liquid. Lastly, the remaining flour is sifted and mixed.

The following points should be borne in mind while preparing the cakes in the flour batter method:

In the above case, milk or water, part of sugar, part of flour equal to that of milk are mixed into a smooth paste and added. The remaining flour should be sifted with baking powder and added at the last stage of mixing.

As in this method, it is possible to control the curdling and gluten formation. This method is suitable for lean cakes because lean cakes acquire most of the aeration due to baking powder and there is no risk of losing aeration achieved in fat.

3. Blending Method

In the blending method, fat, flour, baking powder and salt are whipped

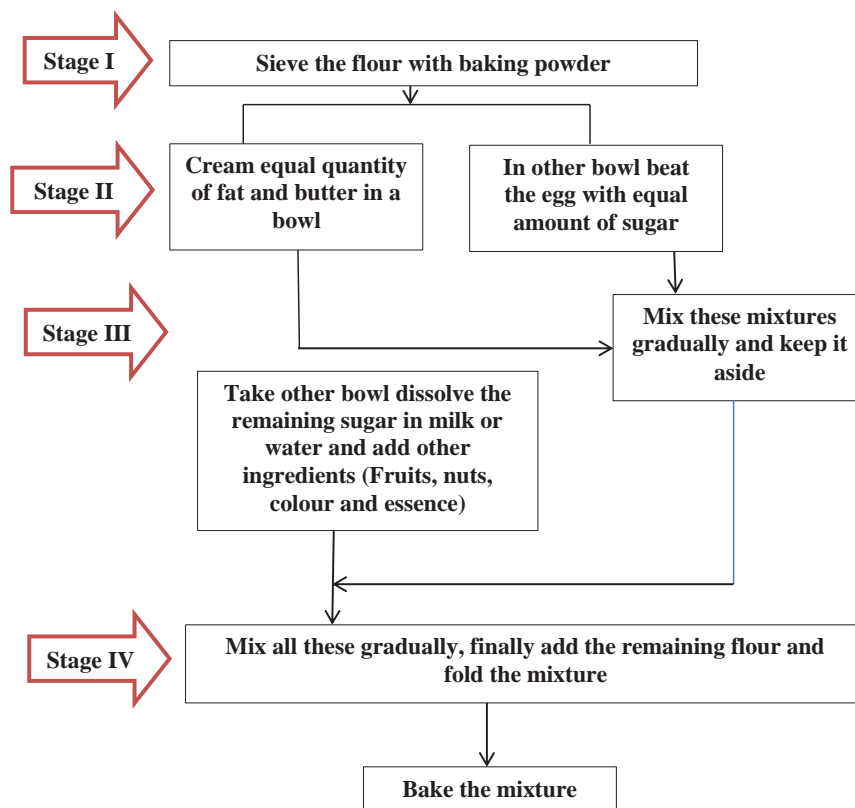


Figure 4.2 Flour Batter Method

together till the mixture comes to a very light and fluffy condition. Sugar, milk or any other liquids, colour and essence are mixed together added into the previous mixture. Eggs are added and the whole mass is mixed to a smooth batter. This method is suitable for high ratio cakes. High ratio cake means the quantity of sugar is more than the quantity of flour. Sometimes special cake flour and butter are used for such cakes.

4. Boiled method



Plate 4.14 Boiled Method

In the boiled method, butter or fat is heated with water till the boiling point is reached. After heating remove from the fire and add 2/3 of flour and mix it thoroughly. And beat the eggs and sugar until it becomes stiff and add colour and essence. Then this mixture is added into the previous mixture gradually. It is mixed thoroughly and the remaining flour can be added at this stage. This is used for making Madeira and Genoese sponge cakes.

5. All-in-process Method

In all- in-process method, all the ingredients are mixed together in the mixing bowl. Aeration of the mixture is

achieved by controlling the speed of the mixture as well as the mixing time. Wire whip is used for this method because it ensures a faster breakdown of ingredients and it helps to achieve good aeration.

After adding all the ingredients, mixing operation is conducted as follows:

- **Slow Speed:** In this speed, all the dry ingredients are moistened without flying off from the bowl.
- **Fast speed (two minutes):** Here the mixture gets even air incorporation.
- **Slow speed (one minute):** This is done in order to eliminate any possible large air pockets and still finer breaking down of air cells.



The **all- in-process method** is mainly used for gel sponge. If the formula contains oil, it should be added in the last stage.

Use emulsified type of shortening agents and cake flour for better cakes in all- in-process method.

6. Foaming method or Sponge method

In the foaming method, beat the eggs till it becomes fluffy and frothy. During beating, the small air cells are incorporated into the mixture. This air incorporation helps to increase the volume. Then add sugar gradually in continuous beating till it becomes thick and creamy. The essence and colour can be added at this stage. The flour should be sifted with baking powder and added with just necessary movements of hand without disturbing the foam. If it is rough folding

or uneven mixing, the incorporated air will evaporate. Then the finished product will be of very poor quality and flat one. So this folding stage is very important for baking.

7. Sugar water method

In sugar water method, all the sugar and half the quantity of water are agitated in a bowl till the sugar is dissolved completely. Then the remaining ingredients except egg are added and the mixture is well agitated to achieve aeration. Lastly, egg is added and the mixture is cleared. Due to more aeration and better emulsification, the cakes produced in this method have better texture and longer shelf life.

4.1.5 Characteristics/Quality of cake or scoring of cake

Following characteristics are considered for scoring a cake

1. External characteristics namely
 - i) Volume (ii) Colour of the crust (iii) Symmetry of form (iv) Crust character and (v) Bloom.
2. Internal characteristics such as
 - i) Grain ii) Crumb colour iii) Aroma iv) Taste v) Texture and vi) Shelf life.

I. External characteristics

i) Volume

Cake volume depends on the types of cake and weight of batter. A well-risen cake will have a pleasing appearance with slight convex top surface. A cake should not appear too small or too large for its weight. For example, a cake should be of

medium volume so that its interior wall has good appearance and construction.



Plate 4.15 Cake Volume

ii) Colour of crust

Colour of the crust differs in different types of cakes. So no one term is applicable to all kind of colour. There should be harmony between cake colour and crust colour. The crust should have a pleasing golden brown colour. Too dark or too light or dull colour is not desirable. Crust must have a uniform colour, free from dark streaks or sugar spots or grease spots.



Plate 4.16 Crust Colour

iii) Appearance

Cake should have a symmetrical appearance. Peaking, crack in top surface, low sides. Sunken or high center, burst,

caves in bottom or uneven top are undesirable characteristics of cake.

iv) Crust-character

The term crust character applies to the condition of the crust and will vary with the type of cake. A good cake should have a thin and tender crust. Thick, rubbery, sticky or over moist, too tender, tough or blistery crusts are indicative of poor quality cakes.

v) Bloom

The term bloom refers to sheen. A good live colour with brilliance is the sign of a good bloom.

II. Internal characteristics

i) Grain

Grain varies according to the type of cake. Uniform cell size and cell wall are desirable qualities. Coarseness, thick cell walls, uneven size of cells, large holes and tunnels indicate the poor qualities of the cake.

ii) Crumb colour

Colour of the crumb should be uniform. It should not have streaks or dark patches, grey, non-uniform dark, light or dull colour.

iii) Aroma

Aroma of the cake should be appetizing. The air in the cell structure carries the aroma. A good cake aroma should be pleasant, sweet and natural. Flat, musty, strong or sharp aromas are indicative of poor quality.

iv) Taste

Taste is a very important character. It depends on the types of raw materials used in the production of cake. Excess salt

and soda will affect the taste. It should be pleasant, sweet and satisfying.

v) Texture

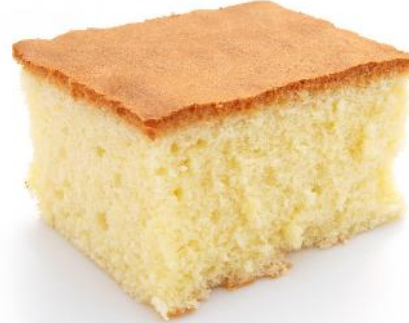


Plate 4.17 Cake Texture

Texture should be smooth and pliable as felt by the sense of touch. It depends on the physical condition of the crumb and the type of grain. A good texture should be soft, velvety, without weakness and it should not be crumbly. Rough, harsh, too compact, lumpy or too loose textures are not desirable.

vi) Shelf life

Keeping quality or shelf life is very important in cakes. It varies according to the type of cakes, richness, method and



How to keep the cake fresh?

Refrigerate cakes with frostings or fillings containing dairy products

Keep cakes with creamy frostings under cover

Cool completely the unfrosted butter cakes, wrap in heavy-duty foil, and freeze.

Freeze frosted cakes in a tightly covered container.

the ingredients. However, regardless of the type of cake it should have good keeping quality. It should stay fresh or in a moist condition for longer time.

4.1.6 Sponge Cakes



Plate 4.18 Sponge Cake

The term sponge cake denotes a light well aerated cake with small even size air bubbles throughout the cake. This cake is made out of eggs, sugar, flour and butter or fat. During beating the eggs with sugar, the small air cells are incorporated and they give volume and softness. This character can be adjusted by making small adjustment in the formula.

Examples of sponge cakes are fatless sponge, Genoise sponge, butter sponge and gel sponge.



4.2 Beverages=Coffee, Tea, Fruit Juice

Beverages are prepared with or without little cooking. Beverages are mainly used as drink for the purpose of relieving thirst, fulfilling fluid requirement, nourishing, refreshing the body and mind and also for stimulating or soothing the individual. Water is the

base for the preparation of beverages. Boiling water is the healthy method to kill all micro-organisms which are harmful to health and also to remove hardness of water. There is much commercially purified water which is available to satisfy an individual requirement. Beverages are of different varieties. They are hot drinks (coffee, tea, chocolate drink, milk, and malted cereals health drinks), alcoholic drinks (wine, beer, liquors) cold drinks (fruit juice, butter milk, tender coconut and lassi) and carbonated drinks (Fresh lime soda).

4.2.1 Classification

Beverages can be classified on the basis of their functions in the human body. Some beverages may have more than one function.

- a) **Refreshing beverages:** They are served in hot weather to relieve from the thirst and to warm up or cool down the body temperature (Eg: **Tender coconut water, butter milk, fruit juice**)



Plate 4.19 Sweet Lime Juice

- b) **Nourishing beverages:** These beverages are nutritious health drink help to nourish the body (Eg: Milk shake, fruit juices).



Plate 4.20 Milk Shake

- c) **Stimulating beverages:** They are consumed for their stimulating flavour, taste and refreshing effects (Eg: Tea, coffee and soups).



Plate 4.21 Coffee

- d) **Soothing beverages:** This type of beverages gives comfortable feeling to the consumer and also gives soothing effect to the person (Eg: Warm or cold milk to ulcer patients, hot tea in the early morning of the day).



Plate 4.22 Milk

- e) **Appetizing beverages:** Soups, small portion of the meal, served ahead of the meal to stimulate the appetite. Appetite increases a desire to consume more foods (Eg: Soups, fruit juices).



Plate 4.23 Soup

- f) **Fermented beverages:** They are obtained by fermentation of fruits and vegetables or cereals or milk (Eg: beer, wine, brandy, butter milk, lassi.)



Plate 4.24 Butter Milk

4.2.2 Coffee

Coffee is the most popular beverage in the world. Brazil is the source of 50 percent world's coffee production. In India, coffee is mainly cultivated in south, mainly in the state of Karnataka, Kerala and Tamil Nadu.

Coffee powder is made from ground, roasted beans (seeds) of *Coffee Arabica* and *Coffee Robusta* species. It is used for preparation of coffee.

Steps involved in making coffee beverage



Plate 4.25 Green Coffee Beans



Plate 4.26 Coffee Roasting Machine



Plate 4.27 Roasted Coffee Beans



Plate 4.28 Coffee Grinding Machine



Plate 4.29 Cup of Brewed Coffee

a) Steps in Processing Coffee

i). Roasting

It is the important step in the processing of coffee. Roasting is the most important process for the development of characteristic flavour and aroma of the coffee bean. Apart from these benefits, roasting also helps to reduce the moisture content and the amount of a tannin called chlorogenic acid (a non-volatile acid) and the fat content develops, a group of essential oils known as caffeol. The colour of the bean changes from green to brown due to caramelization of the sugar content of the bean. Roasting time depends upon the required variety of coffee.

ii). Grinding

The bulk of roasted beans is ground to powder and sold as ground coffee. Roasted beans are ground to three sizes, namely, fine, medium, and coarse powder. Coarse ground powder retains aroma and flavour better and longer than fine ground powder. Coarse ground powder is more suitable for preparing coffee decoction by percolation. On the other hand, fine ground coffee gives a decoction with good aroma. Combination of these two grades in the ratio of 90% of fine powder and 10% of coarse powder gives an excellent quality coffee.

iii). Blending

Two types of coffee powder are marketed, in the name of pure coffee, prepared from coffee beans only and other containing chicory. Strength, flavour, aroma and acidity are the major criteria considered to judge the quality of coffee.

iv). Packaging

The aroma and flavour in the ground coffee is highly unstable and it should be properly packed under vacuum or can also be fresh roasted and ground before brewing and is practiced even today by several taste experts in households.

v). Staleness

The green coffee bean once is ground and exposed to air the bean has limited storage life. This staling of coffee is accompanied by loss of carbon-di-oxide and oxidation of guaiacol and changes in unsaturated volatile compounds. The freshness of the ground coffee is maintained commercially by sealing in a container under vacuum. Storing in a cool place will delay staling. Once a can of coffee is opened, contact with atmosphere with moisture should be kept to a minimum.

b) Adulterants in Coffee

- If chicory is added and not mentioned on the label, it is considered as adulterant.
- Cherry husk is sometimes used as an adulterant.
- Burnt sugar, tamarind seed, used coffee powder and saw dust are also used as adulterants.



Caffeine

It is an alkaloid substance producing the stimulating property. Especially it stimulates the central nervous system. The longer the brewing time of coffee the more is caffeine extracted. It can be removed chemically from the bean to produce decaffeinated coffee.



c) Methods of preparation of coffee

Two level measuring table spoons are added to 3 /4th cup of water in making coffee. To prepare weaker brew hot water can be added after the full strength coffee preparation.

i) Filtration



Plate 4.30 Filtration

By this method, water filters through the coffee, into a lower compartment of a coffee maker. The drip part consists of an upper compartment which is perforated and a lower compartment which is a receiver for a filtered beverage.

ii) Vacuum Coffee Maker



Plate 4.31 Vacuum Coffee Maker

The upper compartment holding coffee has an open tube and is connected to lower compartment. Coffee is usually prevented from passing into the lower compartment using a piece of cloth covered dish placed over the tube opening. Water is placed in the lower compartment and the pot is heated until water raises into the upper compartment. When the pot is removed from the fire, a vacuum is created in a lower bowl drawing a clear infusion down into the bottom bowl.

iii) Percolation



Plate 4.32 Percolation

Here the heated water is moved upward through a tube onto the coffee compartment. The ground coffee powder kept in a perforated coffee basket. There is a dome at the lower end of the tube which extends from the top of the percolator, and then the tube supports the basket. Steam generates the pressure on the surface of the water under the dome, forces water up the tube onto the coffee. The percolation time depends upon the speed of circulation which is varied from 8-15 minutes.

iv) Steeping

Water is heated just before it reaches the boiling point, medium ground coffee powder is added. Steeping time is nearly 6-8 minutes. Then the coffee is passed through the strainer. During steeping the coffee part should be lightly covered to prevent losses of flavouring substances.



Plate 4.33 Steeping

d) Different Types of Coffee

The different types of coffee are espresso, soluble, decaffeinated and instant coffee.



Plate 4.34 Espresso Coffee

4.2.3 Tea



Plate 4.35 Tea

Tea is the most universally preferred beverage. Tea has been cultivated and consumed for more than 2000 years in China and South-East Asia. The main tea producing areas are India, China, Sri Lanka, Japan and Taiwan. In India, tea is cultivated mainly in Assam, West Bengal, Kerala, Tamil Nadu and Karnataka.

High quality tea comes from the bud and the first two leaves of the growing shoot. The quality of tea is mainly influenced by the condition of soil, altitude, climate, age of the leaves, season of plucking leaves and the processing methods adopted.

i) Types of Processed Tea

Different types of tea available in the market are green, black and oolong. Various steps involved in the processing of tea are withering, rolling, fermentation, drying, grading and packaging. The market forms of tea are tea leaves, tea dust or powder, instant tea, flavoured tea and tea bags.

ii) Types of Tea

■ Green Tea

In this green tea preparation withering and fermentation are completely



omitted. In the first step of processing, leaves are steamed to protect the leaves from changing the colour and to inactivate the enzymes. Steaming is then followed by rolling and drying. The leaves retain more original green colour when the leaves are tender. The older leaves have a blackish gray colour.



Plate 4.36 Green Tea

■ Oolong Tea

Oolong tea is partially fermented tea primarily manufactured in China and Taiwan. The fermentation period is too short to change the colour of the leaf completely and has some characteristic colour of both green and black.



Plate 4.37 Oolong Tea

■ Black Tea

Black tea is enzymatically fermented tea prepared by withering the plucked leaves to soften them, passing the withered leaves, under rollers to rupture cell walls and release the enzymes, fermenting the rolled leaves by exposing them to air at 27°C for 2-5 hours to bring about the desired colour and flavour changes.



Plate 4.38 Black Tea

4.2.4 Fruit Beverages

Natural fruit juices are valuable for its vitamins especially β -carotene and vitamin C and minerals like potassium. However they are not equal to whole fruits which provide dietary fibre.



Plate 4.39 Fruit Juice



- i) **Fruit Juice:** This is a natural juice extracted from fresh fruit. This is not basically changed in its composition during processing of extraction, preparation and preservation E.g. Fresh juice and canned or tinned natural fruit juice.



Plate 4.40 Fruit Drink

- ii) **Fruit Drink:** This is prepared by liquefying the whole fruit. Nearly 10 percent of the volume of undiluted drink must be whole fruit. E.g. grape fruit, pineapple juice and mango juice.



Plate 4.41 Fruit Squash

- iii) **Fruit squash:** This is prepared from strained fruit juice, sugar and preservative. This contains 25 percent fruit juice and 45-50 percent of sugar, E.g. Grape squash and pineapple squash.

- iv) **Fruit Punch:** Fruit punches are prepared by mixing the desired fruit juices. This contains 25 percent of fruit juice and 65-75 percent of sugar.



Plate 4.42 Fruit Punch

- v) **Fruit Syrup:** In this preparation, any one of the fruit is used and are concentration of fruit juices preserved with sugar. The fruit is coarsely crushed and kept it overnight for fermentation. This enhances the flavour and juice is separated from the solid particles of fruits. It is filtered. Then the juice is heated with sugar. Amount of sugar used in the preparation of fruit syrup is 500g to ½ pint of juice.



Plate 4.43 Fruit Syrup

- vi) Fruit juice concentrates:** In this preparation, water content is totally removed from fruit juice, either by heat, freezing or by reverse osmosis.
- vii) Carbonated Fruit Beverages:** Carbonation is the process of mixing sufficient carbon dioxide with water or beverage so that, the product gives off the gas in fine bubbles when served.

4.2.5 Milk Based Beverages

Milk is the perfect nutritious food suitable for all age groups. It can be served on its own, hot and cold milk and considered as the soothing and nourishing drink.

- i) Flavoured milk:** It is the pasteurized and homogenized milk, with addition of different colours / flavours (essences). It enhances the colour and aroma of milk E.g. Badam Milk.



Plate 4.44 Flavoured Milk

Fruit pulp like banana, mango etc can be added to milk to prepare banana/ mango milkshake.

- ii) Fermented Milk:** Fermented milk is suggested to lactose intolerance patients. Milk is fermented with

lactobacilli and curd is prepared. Curd can be diluted and combined with sugar syrups, fresh fruit, herbs and spices to make sweet or savory drinks.



Plate 4.45 Fermented Milk

Thus beverages are consumed for their nutritive value, antioxidant property, stimulating appetite and for refreshing and soothing. But excessive consumption of sugary beverage leads to have many health problems including obesity and dental caries.



4.3 Salad - Importance and Types of Salads



Plate 4.46 Salad

Salad is a dish prepared from different types of raw or cooked vegetables

or fruits itself or garnished with edible oils. Besides vegetables, salad can be prepared using non-vegetarian items like cooked meat, prawns, or any other fish.

Commonly the vegetables like beet root, carrot, cucumber, onion, radish, and tomato are used. Salads are dressed with leafy vegetables like cabbage both green and violet, capsicum, coriander leaves, celery leaves, curry leaves, mint leaves, lettuce, and spinach. Fruits such as apple, banana, grapes, guava, mango, papaya, pomegranate, pine apple and water melon, are the best choices of the fruit salad. Sprouted grams are also mixed with salads to enhance the flavour and nutritional values. In India, the vegetable salad made with curd is termed as Raita. There are different types of salad like Garden salad, Greek salad, Tuna salad, Japanese salad, Bean salad and are prepared for various occasions. Flavour of the salads can be changed by adding different types of salad dressings. These dressings are cream, olive oil, mayonnaise, vinegar, pepper and fermented milk product like curd.



Salad can be served as a starter of the meal or as a side dish to accompany any main dish. Salads served as a dessert is the sweet version of fruits with ice-cream, gelatin or whipped cream.

4.3.1 Importance of Salad

- Salad is considered as the Prince or King of the meal because it is nutrient rich food.

4. Cakes, Beverages and Salads

- Satisfies the appetite.
- It provides the feeling of fullness as most of the salads is good sources of fiber.
- It contains multivitamins which helps us to live a healthy life.
- Addition of sprouted gram improves the vitamin content and digestibility of protein.
- Different types of salad can be prepared by using same type of fruits or vegetables in a different proportion and breaks monotonous of the diet.
- Salads can be prepared easily and according to the preference of the person.
- There are no strict rules to prepare the salad, but based on the availability of ingredients salads can be prepared.
- Salads are made eye appealing and tasty.

4.3.2 Different types of salads

i) Green salad or Garden salad

Some people made salad by using common raw vegetables and greens. Most commonly used vegetables are onion, tomato, celery, carrot, mushrooms, parsley, garden beets, cucumber, pepper, olives, and berries. Nuts and oil seeds are also included to enhance the taste and appearance. Leaves like mint, coriander and lettuce are the commonly used herbs to improve the palatability.

ii) Bound salad

These are the salads mainly for barbecues. They are thick salad made up by assembling sauces like mayonnaise.

Because of the thickness it can hold its shape and it will be served as a round form by using ice-cream scooper. This can be used as sandwich filling. The food stuffs used for these preparations are mainly non-vegetarian items like tuna, chicken, egg and sometimes potatoes also used for this bound preparation.

iii) Main course salad

These are the salads made up of protein rich food stuffs like fish (tuna, oyster, crabs, shrimps), chicken, or other fleshy foods. These are served as the appetizer. This is commonly called as Dinner Salad. The food stuffs may be fried or grilled prior to the preparation. Sea foods are the main choice for this preparation. Many types of main course salads were prepared by changing the main ingredient of the salad to meet the preferences and needs.

iv) Fruit salad



4.47 Fruit Salad

These are the salads prepared by using canned or fresh fruits or dry fruits. The fresh fruits like apple, orange, mango, avocado, banana, and pine apple are used. The dry-fruits like fig, dates and

raisins are used to enhance the taste and appearance and nutrient content. The fruit salad will be served by adding ice-creams on the top or by adding custard milk to improve the palatability. This is served as a dessert after the main meal.



4.4 Vegetable and Fruit Carvings



4.48 Carving

Carving is the act of shaping an object from any material by scraping the substance with the removal of extra unwanted portions. The application of carving can be used on any soft material which can retain the shape. Generally carving is making of sculpture using clay and melted glass. It can be molded into different shapes while it is soft and pliable so that it attains a definite shape on hardening. Vegetables and fruits are also used for carving. The most commonly used fruits are water melon, apple, pine apple and vegetables like carrot, radish, cucumber, beet root, pumpkin and tomato.

Fruit and vegetable carving is a old tradition which has been passed through generation. It is an ancient art, used in making food offerings for gods, monks,



guests, weddings and even royal funerals. Before carving a fruit, it is important to collect all materials.

4.4.1 Equipment used for carving



4.49: Carving Equipment

Designs of flowers and birds are used in vegetable carving. The designs could be simple or complicated. They are mostly used as a decoration for garnish.

Pen: is used to outline the carving

Carving Knife: is used to intricate the design



4.50: Carving Knife

Peel Zester: is used to peel the pericarp of the fruits

Melon Baller: is used to scoop out various fruit balls. Normally melon and other soft fruits are scooped.



- **U shaped garnish tool:** is used to peel the skin of the fruit and to design intricate patterns and create a motif.

4.4.2 Types of Carving

There are two types of carvings

Skin Carving: In this type of carving the outer skin is removed to obtain the inner pulp which is of another colour. A unique carving can be made using both the skin colours.



4.51 Skin Carving

■ Three Dimensional Carving

In this carving, fruits are cut so that it reveals a three dimensional effect. Mostly flowers are created using this technique. Before carving the outline of the pattern has to be drawn on its surface. It requires more time and concentration. Selection of right fruits depend on the type and purpose of carving. Before displaying, it should be refrigerated to get firm textured materials.



4.52 Three Dimensional Carving

4.4.3 Things to remember before carving

- All the fruits and vegetables must be thoroughly cleaned before carving.
- Always use stainless steel knives for carving, iron knives cause discolouration.
- While carving, the fruits and vegetables should be delicately carved with minimum nutrient loss.
- The designs selected for carving should meet the theme of the occasion.
- All those vegetables which need to be dipped in chilled water or sauces should be finely chopped according to need.
- Right selection of vegetables according to the dish is needed.
- Extreme care should be taken, while carving to prevent spoilage to the fruits and vegetables.

4.4.4 Selection of Fruits and Vegetables for Carving

All fruits and vegetable have their own unique characteristics, so select them according to its nature.



4.53 Vegetable Carving

- **Carrot** should be firm in touch, straight, dark colour and any size.
- **Radish** should be fresh, firm, and round without any blemish. Always use medium size radish.
- **Cucumber** should always be green, as it is suitable for carving straight, firm, and medium sized.
- **Tomatoes** should be of firm uniform round size with no blemishes.
- **Pumpkin** must be thick, firm with rough surface
- **Cabbage and Chinese cabbage** should be fresh and heavy. Always use medium sized cabbages for carving.
- **Papaya** should be straight, pulpy. Always use semi ripe papaya as it is the best variety used for carving.
- **Watermelon** should be fresh round in shape with no bruises on its surface.
- **Apple** should be shiny red and fresh with no cuts.



4.5 Ice Carving and Butter Carving

4.5.1 Ice Carving

Ice carving is the processes of carving ice to make ice sculptures. Ice is



the raw material for ice sculpturing. These sculptures are, mainly used for decorative purpose and they are provided purely realistic effect to one event. The life time of ice sculpture is very little and last for few minutes or 6-8 hours or maximum of two days so they are commonly used in special events associated with extravagant celebrations. These are very sensitive to atmospheric temperature as well as the instrumental heat which possibly used in events including light settings.



Plate 4.54 Ice Carving

i) Uses of Ice carving



Plate 4.55 Ice Sculpture

- The beautiful ice sculptures like any food forms like fish or fruits ice swan or horse are used in large hotels and are used in restaurants

to enhance some special events and celebrations.

- Favorite subjects for ice sculptures at weddings are board which named the couples, hearts, doves, and swans.
- There are many bars and parlors which are made up of ices and are decorated with LED bulbs.
- Ice sculptures with the high surface area are used to cool people during heat flourish events instead of air conditioner.

ii) How to Create Ice-Sculpture

Raw materials

■ Cutting

Crystal clear, uncontaminated ice made from distilled water or double boiled water is needed. Consign a rubber mat under the ice. The specially prepared picture model is used to mount that design on the ice. Place the model on the ice block and sketch the design on it by using permanent marker or needle.

The carver must wear gloves to protect the skin from chilling. Thermal gloves with rubber top are mostly advised because it provides easiness of hand moving too to the work.

■ Refining

Start the refine process by using bigger chisel first and then come to the small one according to the sharpness of the sculpture. To sharpen the hard ice, initially light pressure is applied and gradually increases the pressure to sculpture the ice.





■ Smoothing

Smoothing is the process of finishing process of the ice sculpture. Smoothing is used in order to make clear and fastidious lines. Prepare hot water and keep it in a vessel. Dip a metal ruler in this hot water and gently pertain it to the ice by using this ruler to smooth it.

iii) How to Maintain Ice Sculpture

A temperature-controlled room will be the safest place for the ice sculpture. The temperature should not exceed more than 70 degrees Fahrenheit for a 136 Kg sculpture. Do not place the sculpture outdoors under the direct sunlight especially during warm and temperate climate.

An average lifespan of 136 Kg sculpture is six hours in a temperature controlled room. Make the sculpture bigger and thicker by using more ice to increase the total weight. An increase in the weight extends the life of the object.

iv) Equipment required for ice carving

- Bit Sharpening
- Chisel
- Ice Chipper



Plate 4.56 Bit Sharpening Tool

- Ice Carver Pick
- Miter Saw
- Four-Wheel Steer Cart
- Two-Wheel Dolly
- Lifts



4.57 Miter Saw



A gouge is one type of chisel serves to carve small pieces from the material, particularly in woodworking, woodturning, and ice sculpturing. Gouges most frequently produce curved in surfaces. A gouge typically has a 'U'-shaped cross-section in it.

4.5.2 Butter Carving

Butter carving is an art which represents nature at its best. It reflects the lifestyle of people and animals. They are popular in United States and are used as culinary decorations at buffet tables. It was originated in ancient time Tibet, Babylon, Roman and Britain. The first masterpiece was from Europe in the year 1536. The first display was created by Caroline Shawk Brooks, a farmer from Helena, Arkansas.



i) How to create Butter Carving?

Ingredients used:

- Butter
- A cold room
- Ice water
- Materials used for the framework
- Sculpting equipment
- Food colour



Plate 4.58 Butter Rose Carving

Method:

A suitable work place

To create a magnificent carving the temperature of the room should be kept at 32°F otherwise the butter will melt.

Selection of a subject

The subject for carving should be wisely chosen to depict the beauty of nature.

Dip the butter

To obtain a smooth and a finish texture, the butter should be dipped

in cold water so that the impurities are removed and can obtain a perfect creation.

Construct the frame

Before carving the frame has to be created so that the base is set for carving, initially bamboo were used, now frames are made out of wood and metal.

Hands to be dipped in ice water

The hands should be numb, in order to do so it should be dipped in chilled water to prevent the butter from melting during working due to the body temperature.

Knead the butter dough

Knead soft and smooth butter dough it should not contain air bubbles, as the final product will not have a finished appearance. Colouring matter or pigments can be added to enhance the appearance of carving.

Apply butter at the base

Apply butter at the base, before starting the carving as it would act as a strong foundation. The hands also should be numb and dipped in chilled water to make the work easier.

Intricate design

Intricate the design with tallow tools. Use a sculpting knife for even texture, outlining circumferences and intricate finish.

Preserve the carvings in a low temperature room

Once the work is completed, store the masterpiece, in a cold room temperature.

ii) Advantages of Butter Carving

- New sculptures can be designed depicting the life of a normal man.
- Innovative ideas can help to explore the imagination

iii) Disadvantages of Butter Carving

- Skilled personnel are required to carve the butter.
- Temperatures need to be maintained otherwise the butter will melt.
- Carving equipment are required to design the butter.
- It is a costly affair.

iv) Equipment / Utensils required for butter carving

- Wooden moulds or Stamps to shape the bricks.
- Refrigerated rooms.
- Wooden-and-wire armature

Ice carving and butter carving are the most attractive art work even though the life of these carvings is very short. These sculptures enhance the overall atmosphere of the event by providing ice cooling effect.



Factors to be considered for Butter Carving

- The room temperature should be maintained at 32°F
- The butter should be soaked in ice chilled cold water.
- The frame should be strong and rigid to form the base
- Attain expertise in carving before using it on sculptures.
- The temperature should be always maintained to prevent melting

A-Z GLOSSARY

Gel Sponge	:	Eggless sponge cake using cake improver gel.
Genoise Sponge	:	It is Italian origin named after the city Genoa. Instead of using chemical leavening, air is suspended in the batter during mixing to provide volume.
Meringue	:	Sweet made from a mixture of egg white and sugar baked until crisp
Decaffeinated	:	Removal of caffeine from coffee beans
Percolation	:	Process of liquid slowly passing through a filter
Barbecues	:	A meal (meat, fish) is cooked out of doors on a rack over and open fire

Scrape	:	To remove an unwanted covering or a top layer from something
Bruises	:	Discolouration / wound
Wire – armature	:	A framework to support the clay or other material used in modeling
Motif	:	A decorative image
French dressing	:	Creamy ketchup made by blending olive oil, vinegar, tomato paste, ketchup, brown sugar, paprika and salt
Pint	:	A unit measurement of liquids, equals to 0.473 litre.



LINKAGES

- <https://www.youtube.com/watch?v=Os76mQrQvQM> - hotel-front office/lobby equipment
- <https://www.youtube.com/watch?v=wVz0YZPVSvW> - Job Description of a chef and a cook
- https://www.youtube.com/watch?v=zG8BBpZX_7w - Food and Beverage service.

STUDENT ACTIVITY

- Collect different cake decoration pictures and create an album.
- Exhibit vegetable or fruit carvings
- Find out the different fruit drinks available in the market and find their pro's and con's.
- Tabulate different types of salads used in different countries.

TEACHER ACTIVITY

- Demo on preparation of traditional beverages.
- Take the students to the near bakery and show them different types of icing used in it.
- Demonstration of simple cake preparation using a pressure cooker.



QUESTIONS



Choose the Correct answer (1 Mark)

- The major ingredient used for cake preparation is _____.
 - Fat
 - Fruits
 - Flour
 - Flake
- The type of flour used for cake preparation is _____.
 - Strong flour
 - Weak flour
 - Medium flour
 - Mixture of soft and medium flour
- One of the following is not a liquid sugar _____.
 - Honey
 - Molasses
 - Powdered sugar
 - Invert sugar
- A knife with parallel and without sharp edges is called a _____.
 - Bread knife
 - Pallet knife
 - Cutting knife
 - Carving knife
- The golden brown – crust formation in cake preparation is due to _____.
 - Browning reaction
 - Caramalization
 - Dextrinisation
 - Gelatinisation
- The _____ acts as a emulsifier in cake preparation.
 - Sugar
 - Fat
 - Eggs
 - Salt
- Select one of the external characteristics of cake from the following _____.
 - Grain
 - Volume
 - Crumb colour
 - Taste
- Select one of the internal characteristics of cake from the following _____.
 - Texture
 - Colour of the crust
 - Bloom
 - Crust character
- _____ is the base for the preparation of beverages.
 - Sugar
 - Water
 - Milk
 - Fruits
- Fifty percent of world's coffee produced is in _____.
 - Brazil
 - Tamil Nadu
 - Karnataka
 - China

11. Identify the adulterant in Coffee
- Chicory
 - Cherry husk
 - Tamarind seed
 - Coffee beans
12. The edible portion of plant used for tea preparation is _____
- Seeds
 - Bud and the first two leaves
 - Matured leaves
 - Flowers
13. Fruit squash contains _____ percentage of fruit juice.
- 10
 - 15
 - 20
 - 25
14. Milk beverages are considered as _____ drink.
- Refreshing
 - Soothing and nourishing
 - Stimulating
 - Appetizing
15. Fermented milk is suggested for _____ patients.
- Lactose intolerance
 - Diabetes
 - Ulcer
 - Kidney failure
16. _____ is considered as a Prince or King of the meal.
- Salad
 - Sweets
 - Main food
 - Appetizer
17. Salads provide the feeling of fullness because of _____
- High fibre content
 - Water content
 - Rich in vitamins
 - Rich in minerals
18. The main purpose of fruit and vegetable carving is to make food _____ except
- More appealing and attractive
 - Enhance nutrient content
 - Way of honouring guests
 - To preserve
19. The first masterpiece of butter carving is from _____
- Roman
 - Tibet
 - Europe
 - Britain
20. To maintain the ice sculpture of 136 kg the room temperature should be _____
- 70°F
 - 80°F
 - 85°F
 - 90°F

II. Write in three lines (3 Marks)

- List the equipments used in Baking.
- Mention the ingredients used in cake preparation.
- What are the functions of salt in cake preparation?
- Point out the precautions to be followed while adding fruits in cake preparation?

5. What are the methods used for the cake preparation?
6. How will you avoid the curdling problem while mixing cake batter.
7. Write on blending method of cake preparation.
8. Write a note on sugar water method.
9. What is sponge cake? Give examples.
10. List the adulterants of coffee.
11. Write a note on caffeine.
12. List the types of tea and give short note on any one type.
13. Define flavoured milk and fermented milk.
14. What is salad and write the types.
15. Write on main course salad?
16. Define carving.
17. List the equipment used for fruits and vegetables carving.
18. Write any three uses of ice carving.
19. How will you maintain the ice sculpture?
20. What are the advantages and disadvantages of butter carving?

III. Write in a paragraph (5 Marks)

1. What are the functions of leavening agent and milk in cake preparation?
2. Explain the flour batter method.
3. Write a note on boiled method and all in process method of cake preparation.
4. Classify the beverages and give examples.

5. Explain the methods of coffee preparation.
6. Explain the types of Tea.
7. List the importance of salads.
8. How will you prepare a fruit salad for your lunch?
9. Write the types of carving and points to remember before carving.
10. Write a short note on creating ice sculpture.

IV. Answer in Detail (10 Marks)

1. Explain the equipments used in baking.
2. Write on the basic ingredients used in cake preparation and their functions?
3. Explain the sugar batter method in cake preparation.
4. Identify the external characteristics of the cake and explain.
5. Explain the internal characteristics of the cake.
6. Write down the steps in processing coffee.
7. Explain the fruit beverages.
8. Write a note on different types of salad.
9. What is carving? How will you select fruits and vegetables for carving.
10. How will you make butter carving?



5 Food Safety and Quality



LEARNING OBJECTIVES

- Gain knowledge about the importance of food safety.
- Obtain an in-depth understanding about food quality control.
- Acquire the skill of identifying the adulterants in foodstuffs.

Food safety is a method of handling, preparation, and storage of food in ways that prevent food-borne infections. Food can transmit pathogens which can result in the illness or death of a person consuming it. Bacteria, viruses, mold and fungi are the pathogens responsible for spoilage of food. Food safety is possible when food hygiene is practiced.

According to World Health Organization (WHO) the five key principles of food hygiene are:

- Prevent contamination of food with pathogens spreading from people, pets, and pests.
- Separate raw and cooked foods to prevent contaminating the cooked foods.
- Cook foods for the appropriate length of time and at the appropriate temperature to kill pathogens.
- Store food at the proper temperature.
- Use safe water and safe raw materials.

5. Food Safety and Quality



5.1 Factors Affecting Safety of Food

Factors affecting food safety can be classified broadly into two categories as shown in Fig. 5.1.

Microbial hazards

Human skin, untreated water, pests, raw foods, garbage, debris and dust are the sources of food spoilage by microorganisms

Physical hazards

1. Food premises and equipments:

- Improper and unhygienic handling.
- Improper working condition of the equipments.
- Improper sanitation of the premises.

2. Raw ingredients:

- Improper handling of the raw materials.

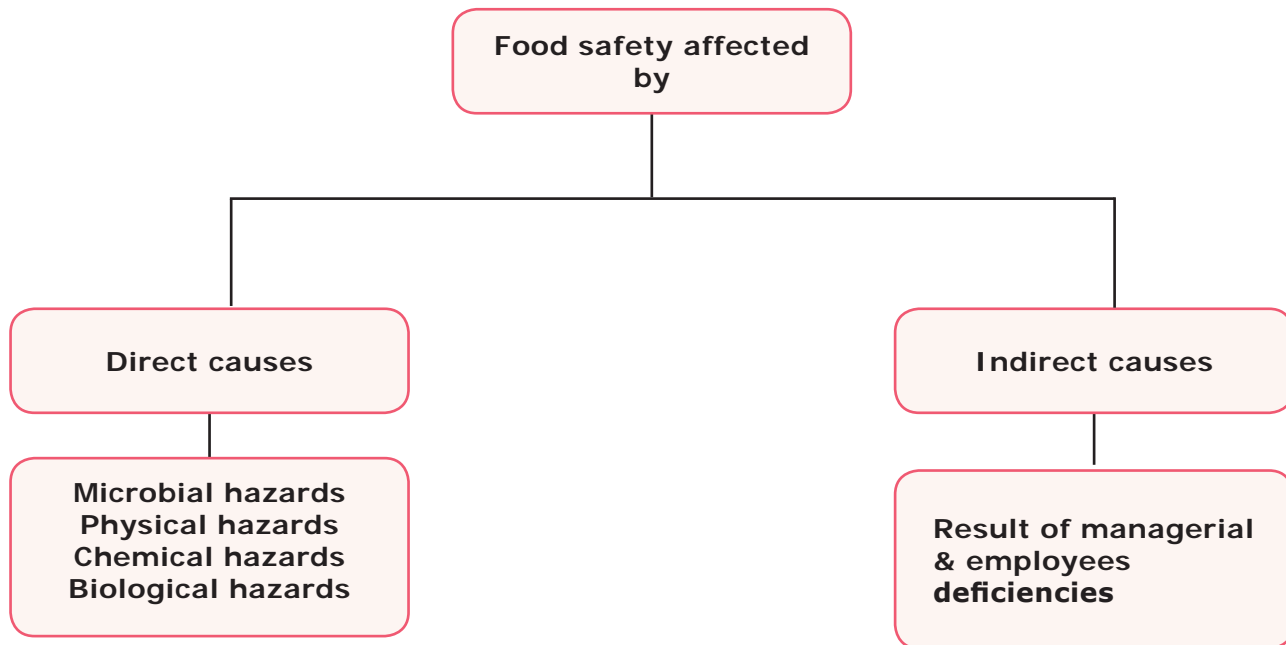


Figure 5.1 Factors Affecting Safety of Food

- Excess purchase of raw materials.
 - Usage of ingredients after its expiry.
- 3. Equipment, Maintenance and operations:**
- Improper working condition of the equipments.
 - Improper maintenance of the equipment.
 - Improper training given to the employees on the operation procedures.

Chemical hazards

- Pesticides /additives and fertilizers
- Store cleaning agents separately
- Do not practice cleaning and pest control activities in the presence of exposed foods
- Use of chemicals as per the manufacturer's instruction

Biological hazards

- The place where the foods are placed must be cleaned properly
- Elimination of the source of contamination is fundamental to the prevention and control of the biological hazards
- Gloves must be used as they protect the bends from containing blood, dropouts, body fluids and can avoid infection when touching the eyes, mouth or nose afterwards
- Gloves can also protect open wounds from contamination
- Sterilization process can be used to even eliminate microorganisms including the spores in bacteria
- Primary method for avoiding infection is to wash hands by using liquid soaps
- Wash bends before and after waste

Prevention of Food Safety Hazard

Temperature Control:

The primary rule of sanitation is food temperature control

- 1) Keep high - risk food at 5°C or below 60°C to avoid the temperature danger zone.
- 2) Should ensure the availability of thermometer to all food storage areas
- 3) Monitoring of temperature on regular basis
- 4) Thawing foods must be done in the refrigerator or under cold water

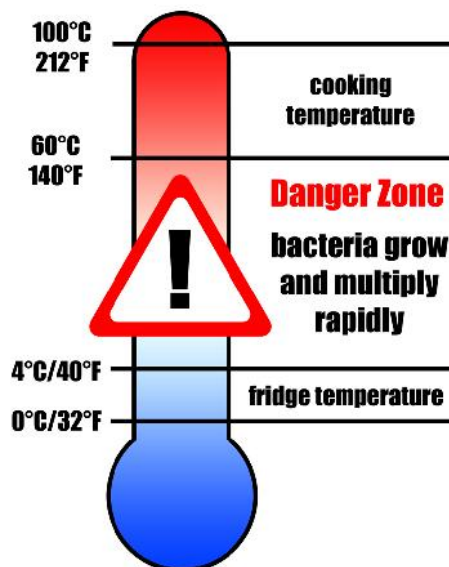


Plate 5.1 Temperature Control

Personal Hygiene Practices



Plate 5.2 Personal Hygiene

A good sanitation programme should need the hygiene of people working in food industry. Personal training must include appropriate sanitation principles of food hygiene practices.

Hygiene Practice

Personnel suffering from communicable disease is likely to be transmit infection through food. So they must be restricted from production and food handling areas. Persons who are with infected wound, skin infection or health problems must be restricted from the kitchen and serving areas.



Plate 5.3 Hygienic Practice

Hand Washing

All personnel involved in food handling must thoroughly wash hands with hand washes using warm water.

Food Handling Practices

- Food handling personnel should consume food in the place allocated for them
- Should not use tobacco in any form

- Should never use a tasting spoon twice
- Follow hygienic practices while transporting and storing
- Should use sanitary plastic disposable gloves while serving food
- Should clean equipment before and after use



5.2 Food Adulteration

Food Safety and Standard Authority of India (FSSAI) defines food adulteration as the addition or subtraction of any substance to or from the food, so that the natural composition and the quality of food substance is affected.

One form of adulteration is an addition of another substance to a food item in order to increase the quantity of the food item in raw form or prepared form which may result in the loss of actual quality of food item.

Reasons for food adulteration: Adulterants are added to increase the weight and get more profit.

Adulterants

An adulterant is any material which is or could be employed for making the food unsafe or sub-standard or mis-branded or containing extraneous matter (FSSAI, 2006).

Concept of Adulteration

Food is adulterated

- If the food contains any other substance which affects the quality or health of the consumer.
- If the food has been prepared, packed or kept under unsanitary conditions whereby it has become contaminated or injurious to health.
- If the food consists wholly or in part of any filthy, putrefied, rotten decomposed or diseased animal or vegetable substance or is insect infested or is otherwise unfit for human consumption.
- If any colouring matter other than that prescribed in respect thereof is present in the article or if the amounts of the prescribed colouring matter which is present in the article are not within the prescribed limits.

Types of Adulterants: Adulteration may be intentional or incidental.

Intentional adulterants:

Intentional adulterants are those substances that are added as a deliberate act on the part of the adulterer with the intention to increase the margin of profit. Some intentional adulterants are sand, marble chips, stones, mud, chalk powder, water, mineral oil and coal tar dyes. These adulterants cause harmful effects on the body.

Incidental Adulterants

Incidental adulterants are found in food substances due to ignorance, negligence or lack of proper facilities. It is not a wilful act on the part of the adulterer. E.g., Pesticides, droppings of rodents, larvae in food.

The common adulterants are

Milk is adulterated with water, chalk, urea, caustic soda and skimmed milk. Khoya is adulterated with paper, refined oil and skimmed milk powder.



Plate 5.4 Milk

Pure Honey is often adulterated with several types of standard sugar solution, glucose, fructose, sucrose and also with cheap syrups, corn, inverted sugar and cane sugar.



Plate 5.5 Honey

Turmeric powder is adulterated with 'metanil yellow'. 'Metanil yellow' is produced utilizing some raw materials like 'metanilic acid' and 'diphenylamine'. The risk of consuming turmeric powder mixed with 'metanil yellow' is that it is purely carcinogenic – means it is capable of causing cancer in living tissues.



Plate 5.6 Spices

In **black pepper**, the adulterant used is papaya seeds to add bulk. The harmful effect is that papaya seeds can cause serious liver problems, stomach disorders, severe glaucoma and epidemic dropsy.

Chilli powder is often adulterated with a similar looking substance like brick powder.

Ginger is used widely in culinary practice in India in the fresh or dry form. Dry ginger is often coated with blue coloured dye ultramarine blue to prevent insect infestation. It is an inorganic pigment used as laundry whitener.

In **Ice cream** the adulterant is pepper oil, ethyl acetate, butraldehyde and washing powder that are not less than poison. Pepper oil is used as a pesticide and ethyl acetate causes terrible diseases affecting lungs, kidneys and heart.



Plate 5.7 Ice cream

Food grains like rice and wheat are a part of staple food in India. Powdered rice and wheat is usually adulterated with starch. Rice is being adulterated with small ‘grains of stones’ to increase the overall weight per quintal by retailers.



Plate 5.8 Food Grains

Coffee powder is usually adulterated with tamarind seeds, chicory powder and also used to add bulk and



Plate 5.9 Coffee Powder

colour. This can cause diarrhea, stomach disorders, giddiness and severe joint pains.

Tomato sauces mostly used in local fast food centres are, artificially made from ‘pumpkin pulp’, ‘sugar’, ‘non-edible colours and flavours’ with less amount of tomato. These sauces with ‘artificial colours and flavours’ are highly carcinogenic.



Plate 5.10 Tomato Ketchup

Tea leaves are often adulterated with chemicals and additives to add its aroma or flavour. Ordinary substances for adulterating tea include, Prussian blue - a non soluble, blue pigment commonly used to colour blueprints, crayons, paintings, and paint; it is non-toxic to humans. Indigo - a blue dye derived from the Indigo feratinctoria plant; it is non-toxic to humans. Graphite (Plumbago) - a naturally occurring mineral that is a form of carbon; commonly used as the “lead” in pencils.



Plate 5.11 Tea Leaves



Gypsum — a soft, naturally occurring mineral is used to alter colour of tea.

Vegetable oils - Edible oils are adulterated with mineral oil, karanja oil or castor oil. This causes loss of eyesight, damage to liver, heart problems, stomach infections or cancer. Young children and senior citizens with poor immunity are more susceptible to this.



Plate 5.12 Vegetable Oils

Traditional sweets - Khoya and paneer are commonly used for the preparation of traditional sweets, and are often adulterated with starch. Silver coating (vark) used to decorate sweets is made from silver. According to Indian regulations, silver must be 99.9 per cent pure if it is used as a food ingredient. However, with silver becoming expensive many sweet shop owners use silver vark containing aluminium.



Plate 5.13 Traditional Sweets

Contamination of foods with harmful micro organisms

Some raw foods like meat, fish, milk and vegetables grown on sewage are likely to be contaminated with harmful microorganisms. These are generally destroyed during cooking or processing of food. Some of the micro organisms may survive due to inadequate heat processing. Even, low moisture foods when stored in humid atmosphere get infected with pathogenic fungus which causes serious illness.

Metallic contamination

Contamination of food with lead can cause toxic symptoms. Lead brings about pathological changes in the kidney, liver, and arteries. The common signs of lead poisoning are nausea, abdominal pain, anaemia, insomnia, muscular paralysis and brain damage. Fish caught from water contaminated with mercury salt contains large amount of mercury. The other elements which are toxic in small doses are cadmium, arsenic, antimony and cobalt.

Packaging hazards

Polyethylene, polyvinyl chloride and other allied compounds are used to produce flexible packaging material. While this method of packaging is very convenient, it must not contain any noxious thermal breakdown products which could be injurious to health. Further, temperatures used for sealing or sterilization should not result in formation of toxic residues. Therefore, it is essential to use food grade plastic packaging materials for packaging foods.



Plate 5.14 Low Quality Food Grade Plastic

Other adulterants

Pests such as rats, rodents and insects introduce into the food a high degree of filth in the form of excreta, bodily secretions and spoilage microorganisms. Chemicals like DDT are absorbed by the small intestine when ingested. The toxins usually pile up in the fatty tissues of such vital organs as the thyroid, heart, kidney, liver, mammary gland and damage these organs.

This incidental poisoning can be prevented by:

- Regular market surveys to warn people on the dangerous build-up of toxins in food.
- Stepping up the integrated pest management programme to teach farmers to use pesticides judiciously. No spraying should be done a week before harvest.
- Using safer pesticides
- Washing vegetables thoroughly before cooking.

Prevention of Food Adulteration Act (PFA 1954)

Keeping the large scale adulteration in view, legislation was passed called

Prevention of Food Adulteration Act in the year 1954 with the objectives to

- Ensure pure and wholesome food to the consumers and also to prevent fraud or deception.
- Protect the public from poisonous and harmful food.
- Prevent the sale of substandard foods.
- Protect the interests of the consumers by eliminating fraudulent practices.

Food additives

Food additives have been used for centuries to enhance the appearance and flavour of food and prolong shelf life. Food additives find their way into the foods to help ease processing, packaging, and storage. Some additives have been used for centuries; for example, preserving food by pickling as with vinegar, salting, as with bacon, preserving sweets or using sulphur dioxide as with wines.



Food Additive

A food additive is a substance added to food to enhance its flavour or appearance or to preserve it

Artificial Sweeteners

Aspartame is found in foods labelled “diet” or “sugar-free”. Aspartame is believed to be carcinogenic, neurotoxin and accounts for more reports of adverse reactions than all other foods and food additives combined.

It is found in diet or sugar-free sodas, diet coke, coke zero, desserts, sugar-free gum, drink mixes, baking goods, table top sweeteners, cereal, breath mints, ice tea, chewable vitamins and toothpaste.



Plate 5.15 Artificial Sweeteners

Monosodium Glutamate- (MSG / E621)

MSG commonly known as Aginomoto is an amino acid used as a flavour enhancer in soups, salad dressings, chips, frozen entrees, instant noodles, Chinese foods and many restaurant foods. Studies show that regular consumption of MSG may result in adverse side effects which include depression, disorientation, eye damage, fatigue, headaches, and obesity. MSG affects the neurological pathways of the brain.



Plate 5.16 Monosodium Glutamate

Trans Fat

Trans fat is found in deep-fried fast foods, chips and crackers, baked goods, and certain processed foods made with margarine or partially hydrogenated vegetable oils. Trans fats are formed by a process called hydrogenation. Numerous studies show that trans fat increase LDL cholesterol levels while decreasing HDL or good cholesterol, increases the risk of heart attacks, heart disease, and strokes, and contributes to increased inflammation, diabetes, and other health problems.



Plate 5.17 Trans Fat

Common Food Dyes

Artificial colourings which are found in soda, fruit juices, and salad dressings, may contribute to behavioural problems in children and lead to a significant reduction in IQ.



Plate 5.18 Artificial Colouring



Hygiene Rule Codes		Hygiene Rule Codes	
1	Keep vending premises clean and pest free	6	Wear clean clothes/uniform
2	Receive and store meat below 5°C and frozen products at below -18°C	7	Wash hands before & after handling food and after using toilets, coughing, sneezing, etc.
3	Receive meat in clean containers. Keep refrigerators and freezers clean	8	Use water proof bandage to cover cuts or burn wounds
4	Use clean and separate chopping board, knives, etc. for raw/cooked meat & different types of meats	9	Do not handle food when unwell
5	Keep dustbin covered & away from food preparation area. Dispose waste regularly.	10	Use clean and separate dusters to clean surfaces and wipe utensils

FSSAI Drafts the Food Safety and Standards (Packaging) Regulations, 2017

The FSSAI has issued a notice proposing new packaging regulations. In the regulations, the FSSAI has defined the terms related to packaging so that the terms like food grade, multilayer food packaging, overall migration limit, package or container, primary and secondary food packaging and specific migration limit are all clearly understood.

General Requirements

- Only food grade quality material must be used for packaging, preparation, storing, wrapping, transportation and sale or service of food shall be of food grade quality.
- The ink used for printing on food packages shall conform to IS: 15495

- Printed surface of packaging material must not come into direct contact with food products
- Newspaper or any such material shall not be used for storing and wrapping of food



The FSSAI has removed the following two additives from the list of additives that can be used

- Potassium Bromate
- Cyclamates

Potassium bromate is a cancer-causing substance used in bread and bakery products. Cyclamates is used in jams, jellies, marmalades, dairy based drinks, confectionary. Henceforth these two additives will no longer be allowed to be used in any food category.



IS:15495 – The Bureau of Indian Standards (BIS) has framed a standard code of practice of printing ink for food packing to be IS ; 15495. The ink under this guideline should not contain any hazardous chemicals that may get transferred to the food.

Hence avoid using printed paper to packing and serving foods.

- Tin containers once used, shall not be re-used for packaging of food
- Food products shall be packed in clean, hygienic and tamper proof bottles or containers.
- In case of multilayer packaging, the layer which comes in contact with

food shall meet the requirements of packaging materials.



5.3 FSSAI

FSSAI (Food Safety and Standards Authority of India) is a statutory body governing the food safety of the country. It is an autonomous body established under the Ministry of Health and Family Welfare, Government of India. The Chairperson and Chief Executive Officer (CEO) have been appointed by government of India and head quartered at New Delhi.

FSSAI has been established under Food Safety and Standards Act 2006 which consolidates various acts and orders that have hitherto handled food related issues in various ministries and departments.

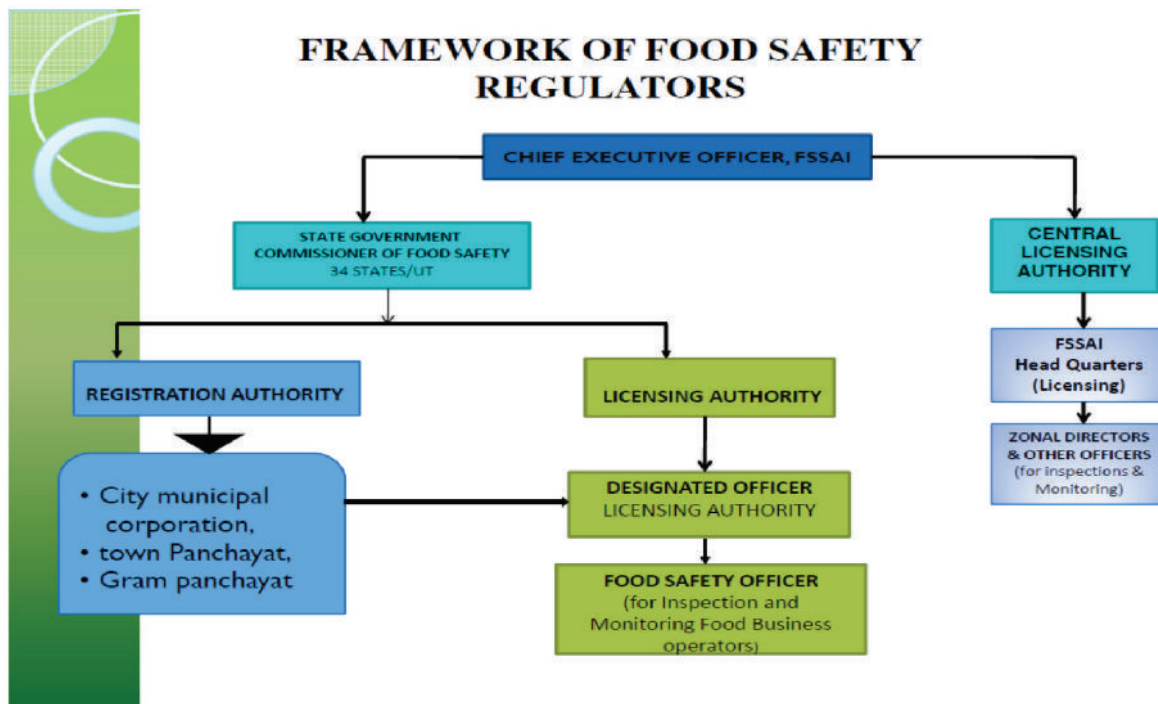


Figure 5.2 Framework of Food Safety Regulators

Laws relating to food before FSSAI 2006:

Various Central acts like,

- Prevention of Food Adulteration Act, 1954
- Fruit Products Order, 1955
- Meat Food Products Order, 1973
- Vegetable Oil Products (Control) Order, 1947
- Edible Oil Packing (Regulation) Order, 1988
- Solvent Extracted Oil, De-Oiled Meal and Edible Flour (Control) Order, 1967 and
- Milk and Milk Products Order, 1992

The Food Safety and Standard Act 2006 (FSS) is a bucket for all the older laws, rules and regulations for food safety.

The FSS Act brings all seven older acts into one umbrella.

How it integrates?

It is an Act of the parliament that received the assent of the President of India on 23rd August 2006. The act aims to establish

- A single reference point for all matters relating to food safety and standards, regulations and enforcements

Functions of FSSAI

Framing of Regulation

- To lay down the standards and guidelines in relation to articles of food and
- Specifying appropriate system of enforcing various standards thus notified.

- By moving from multi-level, multi-departmental control to a single line of command
- Integrated response to strategic issues like novel foods, health foods, nutraceuticals, organic foods, International trade and proprietary foods.
- Achieve high degree of consumer confidence in quality and safety of food.
- Create investor friendly regulatory mechanism with emphasis on self-regulations and capacity building.
- Every food business operator (FBO) needs to get a FSSAI license – from petty shop to high end manufacturers.

Objectives of FSSAI 2006

- To consolidate the laws relating to food
- To lay down science based standards for articles of food
- To regulate the manufacture, storage, distribution, sale and import of food products
- To ensure availability of safe and wholesome food for human consumption

Laying down mechanisms and guidelines

- For accreditation of certification bodies engaged in certification of food safety management system for food businesses.

Laying down procedure and guidelines

- For accreditation of laboratories and notification of the accredited laboratories
- To provide scientific advice and technical support to central Government and state Governments

In the matters of framing the policy and rule

- In areas which have a direct or indirect bearing of food safety and nutrition

Collect and collate data regarding

- Food consumption,
- Incidence and prevalence of biological risk,
- Contaminants in food,

- Residues of various contaminants in food products,
- Identification of emerging risks and
- Introduction of rapid alert system.

Creating an information network across the country so that

- The public, consumers, panchayats receive rapid, reliable and objective information about food safety and issues of concern
- Provide training programmes for persons who are involved or intend to get involved in food businesses.
- Contribute to the development of internal technical standards for food, sanitary and phyto-sanitary standards.
- Promote general awareness about food safety and food standards.

Safe and Nutritious Food

Safe and Nutritious Food (SNF) at work place is a nation-wide campaign to help people eat safe, eat healthy and eat right at their work place.

This initiative promotes safe and healthy diets through FSSAI trained Food Safety Supervisors (FSS) and Health and Wellness Co-ordinators (HWC) at every work place across India.



Figure 5.3 Safe and Nutritious Food

Orange Book

The Orange book is organised into three parts. The **first** part is meant for **HR/Administration**, to create a system and an enabling environment to ensure food safety and nutrition for everyone at the work place. The **second** part is for the **canteen or cafeteria** establishment to ensure that the food served in the work place, whether prepared in-house or catered from outside, is safe and wholesome. The **third** part is for **employees**, which indicates useful tips and suggestions to empower employees to eat and stay healthy at the workplace by making informed choices about the food they consume.

Pink Book

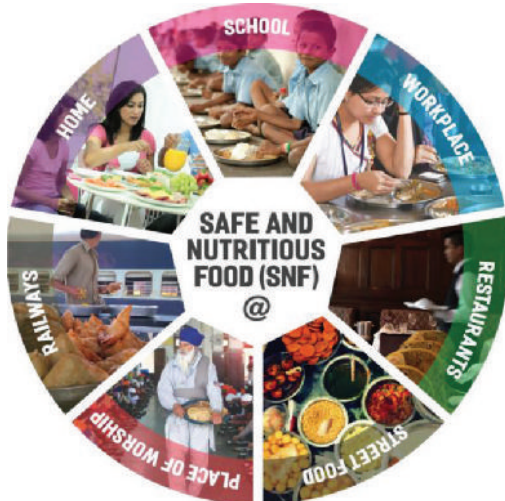


Figure 5.4 Safe and Nutritious Food

A guide for safe and nutritious food **at home**. The book covers sections namely,

- Selecting and purchasing food
- Serving food
- Preparing and cooking food
- Eating healthy
- Packing food and

- Maintaining hygienic and sanitation

It provides useful tips, do's and don'ts, methods and practices that should be followed in Indian Kitchens.

Yellow Book

The yellow book is an interactive and illustrative, easy to understand guide which becomes an important tool **for parents, teachers and students**. This book serves as a **ready reckoner** that includes material for classroom narrative lectures as well as laboratory exercises. It aids as a comprehensive tool kit in the form of training manual, power point presentations, activities, posters and handouts.

The “yellow book” is aimed at inculcating wholesome food habits at a young age, as habits formed in the early years stay throughout the life. The activities and guidelines have been designed to encourage adoption of safe and nutritious food practices at schools.

Licensing & Registration

Registering Authority

Food Safety Officer or any official in Panchayat, Municipal Corporation or any other local body in an area, notified as such by the State Food Safety Commissioner for the purpose of registration

State Licensing Authority

Designated Officers appointed under Section 36(1) of the Act by the Food Safety Commissioner of a State or UT-Union Territory for the purpose of licensing and monitoring.



How to display the FSSAI logo and licence on the label

The FSSAI logo and the license number of the brand owner shall be displayed on the label of a food package in the colour that is in contrast to the background.

The height of the letters and the numeral of license number shall be as prescribed as per Food Safety and Standards (Packaging & Labelling) regulation, 2011.



Figure 5.5 FSSAI Labels

Central Licensing Authority

Designated Officer appointed by the Chief Executive Officer of the FSSAI in his capacity of Food Safety Commissioner.

Thus FSSAI plays a very crucial role and has the major responsibility for protecting and promoting public health through the regulation and supervision of food safety.



5.4 HACCP

Hazard Analysis Critical Control Point (HACCP)

Hygiene and sanitation of food at all levels is an important and compulsory

process that needs serious and constant consideration. Food handling practices, personal hygiene and clean premises are to be maintained and clean procedures to be followed by the staff.

In 1971, Hazard Analysis Critical Control Point (HACCP) took form at the National conference of Food Production, where risk assessment was combined with the critical point concept. The United Nations Codex Alimentarius Commission Food Hygiene standard approved HACCP as an internationally accepted method for ensuring food safety by identifying hazards and monitoring the Critical Control Points (CCP) in the process.

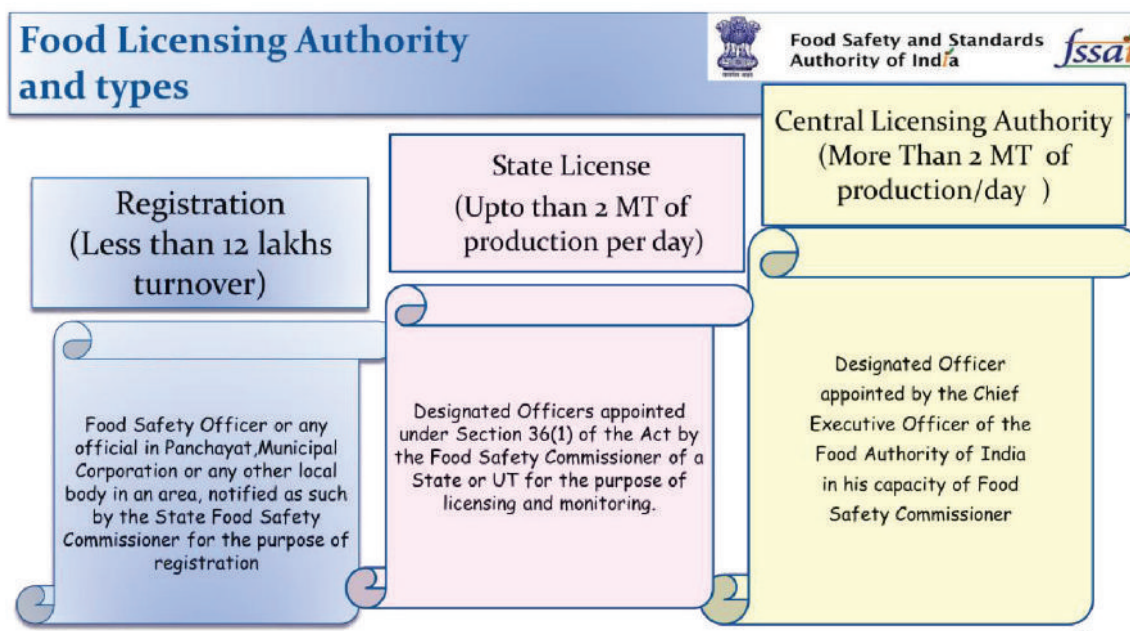


Figure 5.6 Food Licensing Authority and Types

Other Recent Initiatives By FSSAI

1. FSKAN Portal; Food Safety Knowledge Assimilation on Network: To Serve as a Consortium of research thesis, e-books, e-journals, leading papers and articles pertaining to food safety, hygiene and nutrition. <http://fssai.gov.in/fakan>
2. FOSTaC (Food Safety Training and certification); <http://fssai.gov.in/fakan>
3. FOSCoRIS (Food Safety Compliance through Regular Inspection & sampling); <http://foscoris.gov.in/fakan>
4. InFoLNet (Indian Food Laboratory Network: A digital Platform connecting all the labs across India) <http://infolnet.fssai.gov.in/fakan>
5. Food Safety on wheel (Mobile Testing Units Launched in few states);
6. Food Fortification Resource Centre: <http://ffrc.fssai.gov.in>
7. Food Safety Connect: An online Platform for consumer to voice their food Safety concern.



Food companies can't lie now! FSSAI to prohibit terms like pure, natural, authentic on packaged foods

The only exception to the rule is that the products so labelled can be washed, peeled, chilled, trimmed or put through other processing stages that could alter its basic characteristics.

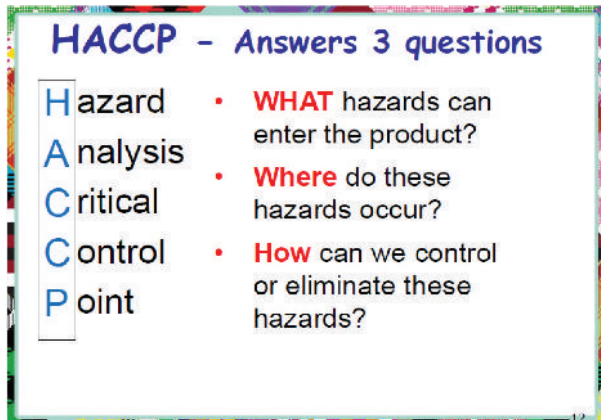


Figure 5.7 HACCP What? Where? How?

A **Hazard** is defined as a biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect. Hazards can be

- physical (metal contamination)
- chemical (a cleaning product could contaminate the product or there are toxins that could contaminate the product) and
- biological (bacteria or virus could contaminate the product).

HACCP is a procedure that examines each stage in the food production process. It helps to find the hazard that may appear at any stage of the food production process. It critically examines each stage of the food process until it reaches the customer. Once the potential hazard is found in the process, whether it is within the preparation, processing, storage or service, it should be either be eliminated or minimized.

Awareness of food-borne illness is on the rise and concern throughout the industry is driving the use of HACCP and HACCP based certification programmes.



Figure 5.8 Different types of Hazards

Principles of HACCP

■ Conduct Hazard Analysis

Identification of the hazard is done in two steps, first identify what the hazard is, then evaluate the risk of the hazard for the consumer. The hazard evaluation is a determination of the degree of risk to the consumer.

■ Identify Critical Control Points

A Critical Control Point (CCP) is a procedure in a food manufacturing process. It can be applied at the point at which a hazard is identified. This will prevent, eliminate, or reduce the hazard to an acceptable level. Thus, food safety can be achieved.

■ Establish critical limits for each Critical Control Point

A critical limit is the maximum or minimum value to which a physical, biological, or chemical hazard to the food must be controlled. The various methods that can be used to control the hazard should be identified.

■ Establish Critical Control Point monitoring requirements

The methods for control should be monitored. This is necessary to ensure

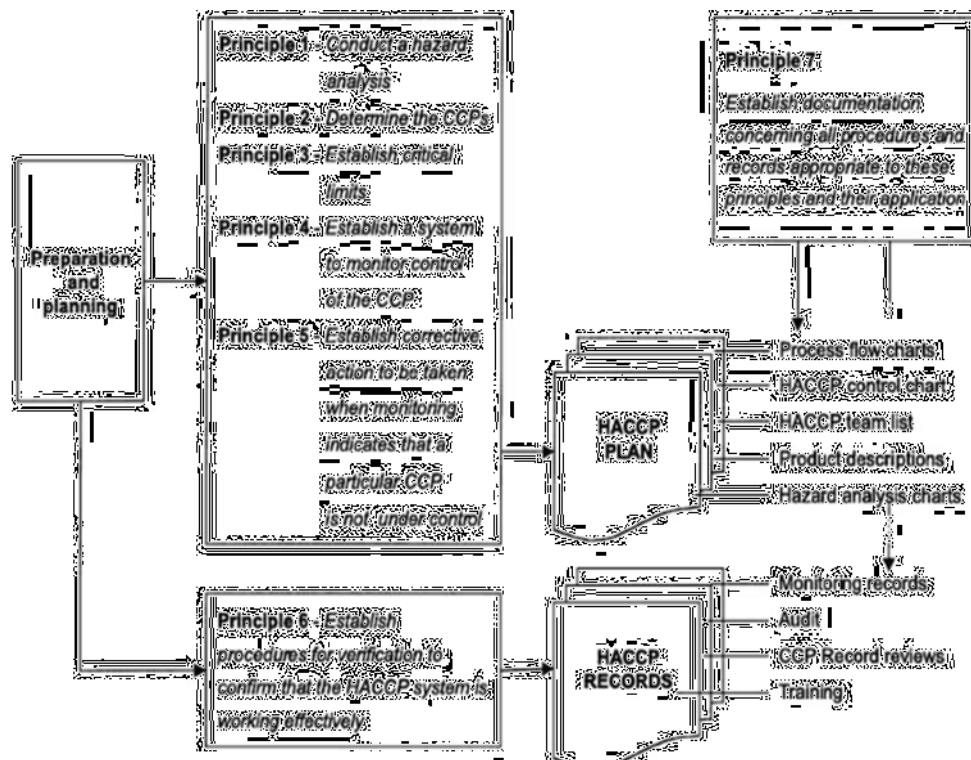


Figure 5.9 HACCP Principles

that the process is under control at each Critical Control Point. Each monitoring procedure and its frequency should be listed in the organization's HACCP plan.

■ **Establish corrective action**

The organization's HACCP plan is needed to identify the corrective action to be taken if a critical limit is not met. Corrective action are intended to ensure that no product is injurious to health when it enters the market.

■ **Establish procedures for ensuring the HACCP system is working as intended**

Validation ensures that there is production of a safe product scientifically. Verification ensures the HACCP plan is working as intended. Verification procedures also include a review of HACCP plans, CCP records, critical limits and microbial sampling and analysis.



Validation – It is the action of checking or proving the validity or accuracy of something, that can be legally or officially acceptable.

■ **Establish record keeping procedures**

The HACCP regulation requires that all organizations to maintain certain documents, such as hazard analysis and written HACCP plan, and records documenting the monitoring of Critical Control Points, critical limits, verification activities, and the handling of processing deviations. Implementation involves monitoring, verifying, and validating of the daily work that is compliant with regulatory requirements in all stages.

HACCP and the quality management system together form an organization's Total Quality Management system.

HACCP can be adopted by all sections of the food industry. A simplified version of HACCP has also been introduced called Assured Safe Catering.



Assured Safe Catering

Assured Safe Catering (ASC) is based on the HACCP approach but tends to look at the many steps or individual processes involved in getting all the supplies from the supplier to the customer. At each point where a risk is identified, a control measure needs to be designed, implemented and monitored.

Examples of Critical Control Points

- Inspection (including temperature checks) of goods on delivery and before use.
- Check for fresh and quality goods while receiving and delivery. Reject goods if spoilage is identified.
- Separate storage and holding of ingredients and finished products.
- Separate freezers should be provided for raw and cooked foods.
- Correct temperature ranges for refrigerated and frozen foods. Maintain refrigerator temperature between 34°F and 40°F. The freezer temperature should be -10 to -20°F.

- Prevent cross contamination with other menu items-Use gloves, tongs and different ladles while serving food.
- Personal hygiene and health standard-The food service personnel should be free from infections while preparing and serving.
- Proficiency in use and cleaning of equipment-Separate sinks and cutting boards should be used for vegetables and meat.



Everyone responsible for Food Safety

- Government - Food Legislation & Enforcement

Guidelines for Industry/ Trade
Information Gathering and
Research

Provision for Health related
services

Consumer Education

Industry - Follow GMP-GHP
requirements

Quality Assurance

Trained Managers and Food
Handlers

Appropriate Process and
Technology

Informative labelling

Consumer-Educated & Knowledgeable

Active Consumer Groups &
community participation

Academia - Introducing HACCP in
the curriculum

GMP – Good Manufacturing Practices

GHP – Good Hygienic Practices

How to establish HACCP?

- Choose a specific menu or group of items in a menu
- Draw up a flow diagram showing how the items are made
- Select the most relevant person who should
 - a) Modify the flow diagram if necessary
 - b) Inspect each stage and clearly find out where significant hazards could occur both under normal and occasional conditions
 - c) Make a note of all predictable causes of each hazard
 - d) Point out each CCP and how they can be controlled
- State the control procedures at each CCP and change working practices as necessary.

How to maintain HACCP?

- Monitor the information (E.g., Record temperature and maintain a chart) and take effective action when needed.
- Alter the HACCP system as necessary in the processes.
- Periodic checks should be carried out to ensure all instruments are safe.
- Periodic microbiological testing should be done in the lab of raw materials, equipment and product.
- Ensure adequate personnel monitoring, training and retraining.

Use of HACCP in food service operations

The most common aspects to be considered are:

- Handling and storage procedures from delivery to service of the menu items
- Handling items and temperatures
- Cooking time and
- Personnel training

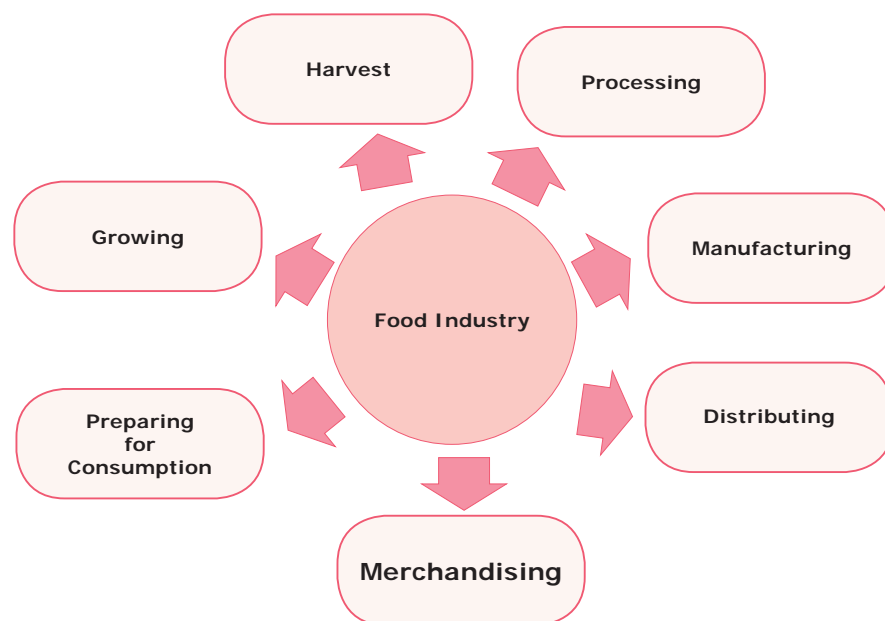


Figure 5.10 HACCP and its Uses

A-Z GLOSSARY

Pathogens	: A bacterium, virus, or other microorganism that can cause disease
Gravitate	: Move towards or be attracted to
Saliency	: The quality of being particularly noticeable or important; prominence
Monetary status	: Financial status
Glaucoma	: A condition of increased pressure within the eyeball, causing gradual loss of sight.
Migraine	A recurrent throbbing headache that typically affects one side of the head and is often accompanied by nausea and disturbed vision
Seizure	Uncontrolled electrical activity in the brain, which may produce a physical convulsion, minor physical signs, thought disturbances, or a combination of symptoms.
Nutraceuticals	Another term for functional food.

LINKAGES

- <https://www.bing.com/videos/search?q=factors+affecting+food+acceptability+sensory+evaluation&&view=detail&mid=A707E113835CE480FDD7A707E113835CE480FDD7&&FORM=VRDGAR>
- <https://www.bing.com/videos/search?q=adulteration+in+foods&&view=detail&mid=FAF97F0041A458165859FAF97F0041A458165859&&FORM=VRDGAR> <https://www.bing.com/videos/search?q=fssai&&view=detail&mid=EF8BC449DC1E9BFECF6AEF8BC449DC1E9BFECF6A&&FORM=VRDGAR>
- <https://www.bing.com/videos/search?q=haccp&&view=detail&mid=0FB45BDD78C28792639B0FB45BDD78C28792639B&&FORM=VRDGAR>
- <https://www.bing.com/videos/search?q=types+of+kitchen+layout&&view=detail&mid=3E2CE2AC5154C0BBDA3F3E2CE2AC5154C0BBDA3F&&FORM=VRDGAR>

STUDENT ACTIVITY

- Evaluate the foodstuffs in the school canteen.
- Use tests to identify adulterants in foodstuffs.
- Read a FSSAI label and report about it.
- Find the Critical Control Points in the preparations the student prepares.

TEACHER ACTIVITY

- Prepare a rating scale to find the acceptability of various foodstuffs in the school canteen.
- Prepare adulterated foodstuffs for identification.
- Arrange a visit to a food product factory and teach the students how to read a label.
- Plan a competition to find the critical control points while preparing the food products.



QUESTIONS



Choose the correct answer (1 Mark)

1. _____ is the microbial hazard that causes food spoilage.
 - a) Untreated water
 - b) Soda
 - c) Equipment
 - d) Sweetner
2. Identify the 'A' that is not under food security _____.
 - a) Acceptability
 - b) Availability
 - c) Accessibility
 - d) Analysis
3. _____ is an intentional adulterant.
 - a) Stone
 - b) Bird dropping
 - c) DDT
 - d) Pest droppings
4. Turmeric is adulterated with _____.
 - a) Brick powder
 - b) Metanil yellow

- c) Chalk powder
d) Saw dust
5. Mustard seeds are adulterated with _____
a) Papaya seeds
b) Tea leaves
c) coffee powder
d) Argemone seeds
6. _____ is found in foods labelled diet or sugar free.
a) MSG
b) Aspartame
c) Acesulfame-K
d) Saccharin
7. Trans fats are found in _____
a) Baked goods
b) Fruit juices
c) Spices
d) Coke
8. Pillsbury published the first comprehensive regulation on HACCP in _____
a) 1973
b) 1975
c) 1977
d) 1979
9. A _____ is the maximum or minimum value to which a physical, biological, or chemical hazard to the food must be controlled.
a) Critical point
b) Critical limit
c) Critical note
d) Critical side
10. _____ is a statutory body governing the food safety of the country.
a) FPO
b) FSSAI
c) ISI
d) HACCP
11. FSSAI was established on _____
a) 23rd August, 2000
b) 23rd August, 2004
c) 23rd August, 2005
d) 23rd August, 2006
12. The _____ book is a guide for safe and nutritious food **at home** has been specially crafted for kitchens in Indian homes.
a) Pink
b) Yellow
c) Orange
d) Green
13. The _____ book” is aimed at inculcating wholesome food habits at a young age, as habits formed in our early years stay with us for life.
a) Pink
b) Yellow
c) Orange
d) Green
14. _____ is used in Chinese food.
a) MSG
b) SNF
c) BSI
d) ISI

15. Maintain refrigerator temperature between _____
- 38°F and 46°F
 - 45°F and 50°F
 - 34°F and 40°F
 - 24°F and 30°F

II. Answer in 3 lines (3 Marks)

- Classify the factors affecting food safety.
- What are the types of adulterants?
- Enumerate how honey is adulterated?
- Point out how incidental poisoning can be prevented?
- Write a note on MSG.
- What kind of adulterants can you identify in cakes and samosas?
- What are the objectives of FSSAI?
- Write a note on the pink book?
- What is Assured Safe Catering?
- Identify the causes for incidental adulterants.

III. Answer in a paragraph (5 Marks)

- What are the key principles of food hygiene according to WHO?
- Write a note on artificial sweeteners.
- State the aims of FSSAI?
- Define 'Hazard.'
- Give examples of Critical Control Points.

IV. Answer in Detail (10 Marks)

- Discuss on food safety hazards and its prevention
- Explain any 10 foods that are adulterated.
- What are the functions of FSSAI?
- Write in detail the principles of HACCP.
- If you want to start a food service operation how will you maintain hygiene and sanitation using the principles of HACCP?



Management



LEARNING OBJECTIVES

- Obtain thorough knowledge of principles of management
- Understand the basic functions to be performed by a food service manager
- Focus attention on the utility of each resources available for food service manager.

Food service managers need to be proactive and stay ahead instead of being reactive. Proactive managers continuously analyze the business environment and work for the improvement. The managers should have concern for employees and customers besides dealing with food service operations. They need to adopt management principles, managerial roles and managerial functions for efficient outcome. Management experts have developed a set of principles of management to guide managers to take managerial decisions. Hence it is necessary to understand and comprehend the principles and functions of management.

Harold Koontz defines management as “the art of getting things done through and with people in formally organized groups. It is the art of creating an environment in which people can perform as individuals and co-operate towards the attainment of groups goals”.



6.1 Principles and Functions of Management

6.1.1 Principles of Management

Henry Fayol puts forward some basic principles to be followed by the catering manager.

Fayol's Principles of Management

1. Division of work
2. Authority and Responsibility
3. Discipline
4. Unity of Command
5. Unity of Direction
6. Individual Goals Subordinate to establishment goals
7. Payment or Remuneration
8. Scalar Chain
9. Orderliness
10. Loyalty and devotion

11. Work stability
12. Initiative
13. Control
14. *Espirit de corps* (Union is Strength)

The principles are discussed below:

1. Division of work

It refers to the division of work among various individuals in the organization. It brings about specialization in every activity. The idea of this principle will save the time and energy needed to complete a task and increase the speed, accuracy and efficiency of work. With the increase in size of establishment, the principle of division of work becomes more applicable.

2. Authority and Responsibility

“Authority is the right or power to give orders to the subordinates”. Responsibility means “the duty which the subordinate is expected to perform by merit of his position. “For E.g.: In the task of meal preparation, the production manager might delegate to the head chef in the kitchen. It is the responsibility of the chef to ensure the right menu, portion control, quality, and customer satisfaction.

3. Discipline

The principle of discipline covers punctuality, courtesy, obedience, respect, adherence to rules and regulations. All of these are essential for smooth running of food service establishments.

4. Unity of Command

Unity of command emphasizes that one subordinate should receive orders from

one superior only and he is answerable to him. This helps to avoid confusion regarding what has to be done, when it is to be done and how it is to be done. If orders are obtained from more than one superior then it leads to disorganized performance.

5. Unity of Direction

Without proper direction the unity of command cannot be achieved. This principle is essential to focus on efforts, the unity of action, and co-ordination of strength.

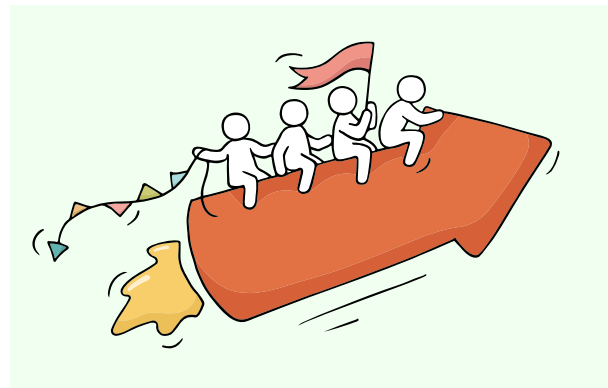


Plate 6.1 Unity of Direction

6. Subordination of individual goals to the general goal

This principle is important for the success of any establishment. Priority should be given to organization's benefits/objectives/interest over the personal benefits/objectives/interest. The manager directs the employees in such a manner that subordinates work for their objective and ultimately the organizational objective is achieved.

7. Payment or Remuneration

Fair wages must be provided to all employees/staff so as to motivate them to do their best.

8. Scalar Chain

This refers to the chain formed by staff placed at different levels in an organization like – lower level, middle level and top level. This hierarchical line will enable to have proper authority and effective communication.

9. Orderliness

“A place for everything and everything in its place” is most suitable for food service establishment that is constantly handling materials, heavy equipment and working with fuels. With regard to human resource, orderliness is “the right man is in the right place at the right time.”

10. Loyalty and Devotion

The principle of loyalty and devotion ensures a conducive atmosphere to work so that there is harmonious relations at work place.

11. Work stability

This principle deals with minimized labour turnover. It ensures that time must be given to each employees in order to learn each job, if they are frequently subjected to job rotation.

12. Initiative

When staff are given an opportunity to suggest some plans they feel highly motivated. For E.g.: if a recipe idea offered by an assistant cook is accepted and prepared by the head cook, it increases the morale and also the work efficiency of employees.

13. Control

It is also referred as “span of control.” Greater efficiency can be brought when there is good control of a supervisor or higher authority to cover the work.

14. Esprit de corps (union is strength)

This principle indicates the spirit of loyalty and devotion which unites the members of group. Harmonious human relations in the food service establishments will bring loyalty among employees which is a source of strength for the establishments



Plate 6.2: Unity is Strength

In order to bring better understanding between staffs and to reach the set goals the appropriate principles must be followed for the successful food service operation by the managers and subordinates.

6.1.2 Functions of Management

A manager in the food service establishments has to perform various functions for the achievement of pre determined objectives during the process

of managing man, money, material and other resources.

Luther Gulick (1937) coined the word 'POSDCORB' to describe the functions of management.

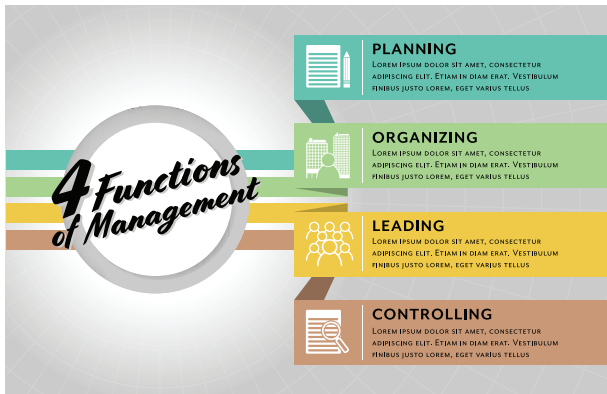


Figure 6.3 Functions of Management

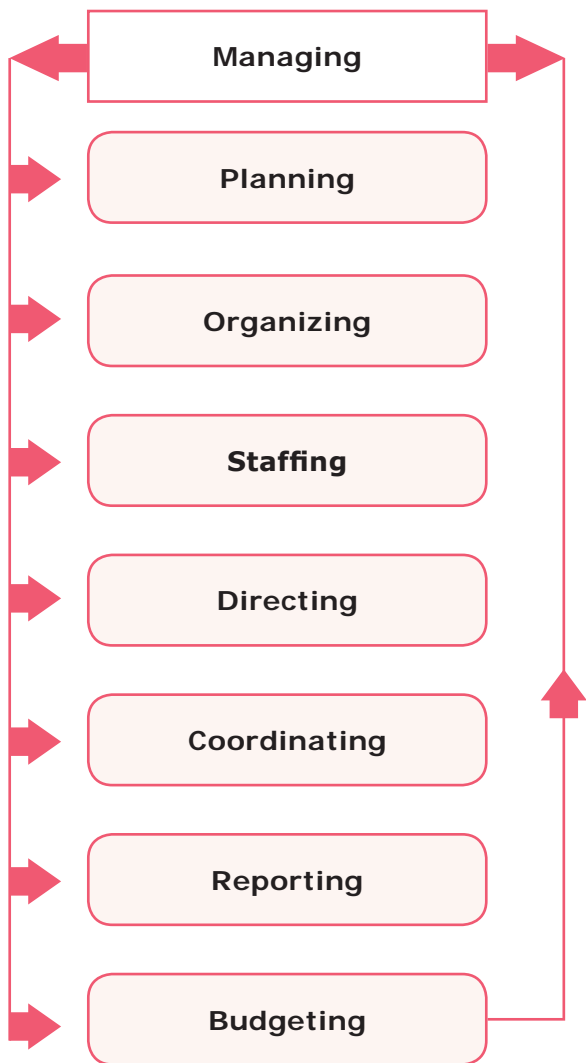


Figure 6.1 Functions of Management

1. Planning

Planning is one of the important functions of management. Planning is defined as a 'function of the management that helps in developing a course of action for meeting the desired objectives, designed to fulfill overall organizational goals'.



Plate 6.4: Planning

Planning is necessary to ensure proper utilization of human and non-human resources. It is an intellectual activity that helps in avoiding confusion, uncertainties, risks and wastages. Planning is deciding in advance - what to do, when to do and how to do. It bridges the gap from where we are and where we want to be”.

E.g.: Within a food service operation planning is essential in setting menu, forecasting production, scheduling employees, stating policies, procedures, methods, standards and budgets.

2. Organizing

Organizing is the function of management which deals with the arrangement, distribution and conduction of responsibilities in order to accomplish

the common goals. Organizing process involves

- Identification of activities.
- Classification of grouping of activities.
- Assignment of duties.
- Delegation of authority and creation of responsibility.
- Coordinating authority and responsibility relationships.

3. Staffing

Staffing is the personnel function of employing and training human resources and maintaining favourable work conditions. Staffing involves:

- Manpower Planning-Recruitment, Selection and Placement
- Training and Development
- Remuneration
- Performance Appraisal
- Promotions and Transfer

4. Directing

Directing needs continuous process of decision making, communication in order to ensure appropriate action from subordinates. Incomplete directions from managers will lead to friction among employees. The four primary components of direction are supervision, communication, leadership and motivation.

5. Controlling

Controlling is the process of checking whether or not proper progress is being made towards the objectives and goals and acting if necessary, to correct

any deviation. Controlling has following steps:

- a. Establishment of standard performance.
- b. Measurement of actual performance.
- c. Comparison of actual performance with the standards and finding out deviation if any.
- d. Corrective action.

6. Reporting

In this function, the managers, supervisor and subordinates keep informed the progression of work or task accomplished through records, reports and inspection.

7. Budgeting

This includes financial planning, accounting and controlling. Through control, standards of acceptability and accountability are set for performance.



6.2 Time, Money and Energy Management

A food service establishment has to utilize the required resources – time, money and energy to survive in its ever changing and competitive environment.

6.2.1 Time Management

Equal distribution of time to human resources is important for the best performance within a scheduled time.

For E.g.: Food has to be served in time in the food service operations. This needs immense plans and schedules.



Plate 6.5 Time Management

Due to peaks and troughs of activity in food service operations, a lot of valuable resources get wasted, at different points of production and service cycle. Hence analyzing each employees work and their utilization of time becomes essential.

Factors for poor management of time in kitchens and service areas are:

- Reaching late to work spot.
- Absence of production plans in advance.
- Failure of requisition of ingredients in time to start the work.
- Improper maintenance of equipment and work centers.
- Laziness, fear towards superiors, excessive supervision, and ignorance.
- Family problems or medical or social or psychological problem.

Constructive, planned action, proper management style, focused attention and maintenance of adequate records have to be set in the food service establishments to effectively manage and save the time

6.2.2 Money Management

The main aim to food service establishments is to make profits. To

achieve that, money has to be invested and spent in order to acquire the other resources necessary for the production and service of food. Money flow in the establishment will occur when food is available for the customers. Following ways will ensure good investment decisions of money for food service establishment.

- Area of the space should be adequate in order to cope with the expected number of customers and the range of services to be offered both for short and long term.
- Ergonomic suitability design of equipment, furniture, structure, surfaces, fittings for use by staff and customers.
- Control of operating and maintenance costs.
- Flexibility, durability and continuity and safety of areas, equipment and materials.

Moreover a constant review or evaluation on money spent is necessary to ensure success of catering operations.

6.2.3 Energy Management

The important energy resources in food service establishments are fuel sources and human efforts. With prevailing high prices, shortages and non-availability these resources, people had never thought of conserving until recently.

The fuel energy is wasted in food service establishment, especially in kitchen. E.g.: the ways of fuel energy wasted are listed:

- Keeping switches on much before it is required especially on ovens, stoves or grills.

- Equipment is lighted for full heat irrespective of the size of the container.
- Following improper methods of cooking.
- Cooking food without thawing, when necessary.
- Preparation of food, long before the time of service requires food to be held hot for longer periods.
- Use of high wattage bulbs.
- Keeping exhaust fans running when kitchen and service areas are not in use.
- Use of colors on walls and ceilings and materials which absorb light instead of reflecting it back for visibility. This lead to use of artificial lighting.

Similarly the human energy may be wasted due to following factors.

- Improper planned layouts involving extra movement while working.
- Uncomfortable working conditions leading to slow movements and fatigue.
- Poorly scheduled work and time of staff.
- Poor health of employees – frequent sickness and accidents.
- Aggressive behaviour as a personality trait drains a lot of energy.
- Lack of supervision, leading to wrong methods of working.
- Leadership style which generates fear, anxiety and lack of confidence in people at work.

Time and energy need to be conserved for efficient use. Time wasted never returns and energy wasted can be

6. Management

regenerated incurring high cost. It is therefore necessary to find possible ways to save time and energy in food service establishments, few ways are listed below:

- Invest on automatic equipment designed to switch off fuel supply immediately after cooking.
- Use of thermostats to control temperatures.
- Use of right size of pans.
- Proper arrangements of work centers to avoid extra movements.
- Utilise renewable source of energy ie., solar energy.



Plate 6.6 Solar Energy on Top of the Hotel



Renewable energy sources are energy sources that are always being replenished. Some examples of renewable energy sources are solar energy, wind energy, hydropower, geothermal energy, and biomass energy. These types of energy sources are different from fossil fuels, such as coal, oil, and natural gas.

- Placing of refrigerators away from kitchens to conserve electricity

and maintenance of equipment for efficient usage.

- Efforts to recycle heat given off from kitchens for purposes of raising temperature of washing water would conserve lot of fuel.

Resources are limited and the correct utilization of resources especially energy is important and should be realized by everyone and the best way to utilize is to discover economic uses by the food service establishments.

A-Z GLOSSARY

Managerial	:	Relating to the work of a manager
Remuneration	:	Money paid for the work done
Hierarchical	:	A system in which people or things are arranged according to their importance
Adherence	:	The fact of someone behaving exactly to the rules, beliefs
Ergonomic	:	The scientific study of people and their working conditions in order to improve the effectiveness.
Ignorance	:	Lack of knowledge, information or education

LINKAGES

- <https://www.youtube.com/watch?v=Cl4GhjSALsI> Five functions of management.
- <https://www.youtube.com/watch?v=eSXP7VgGcz0> Management Basic Concepts: The Four Functions of Management.
- <https://www.youtube.com/watch?v=JFPVgyT8ePw> Definition and functions of management
- https://www.youtube.com/watch?v=sJa0co_3R7c Hotel Energy Management System
- https://www.youtube.com/watch?v=b-_B7Bz0a-YGreen Practices Guide a focus on water conservation practices in hotels

STUDENT ACTIVITY

- Visit to a hotel industry or bakery to observe the functions of management.
- Debate on ways of conservation of energy in hotel industry.

TEACHER ACTIVITY

- Film show on proper utilization of time / energy / money in hotel industry.



QUESTIONS



Choose the correct answer (1 Mark)

- Concept of specialization forms the basis for _____
 - Principles of division of work
 - Principles of unitary command
 - Principles of unitary direction
 - Principles of hierarchy
- Punctuality, courtesy and adherence to rules fall under _____
 - Principles of orderliness
 - Principle of loyalty
 - Principle of discipline
 - Principle of unitary direction
- Which principle removes chances of confusion and improves communication?
 - Unitary direction
 - Unitary command
 - Orderliness
 - Initiative
- Continuous process takes place at all levels of management in _____
 - Planning
 - Controlling
 - Evaluating
 - Directing
- The function that initiates actual performance of tasks and requires greater interaction between people is _____
 - Organizing
 - Coordinating
 - Directing
 - Evaluating
- The binding together, unifying and harmonizing of all activities and efforts is considered as _____
 - Unification
 - Coordination
 - Diversification
 - Consideration
- Authority and responsibility passing on from above downward is _____
 - Line relationship
 - Line-staff relationship
 - Staff- line relationship
 - Group relationship
- Clear cut goals and work schedules will _____
 - Minimize utility of time
 - Maximize utility of time
 - Balance utility of time
 - Fair utility of time

9. The type of co-ordination between department on the same level in the managerial hierarchy is _____
- Vertical
 - Horizontal
 - Internal
 - External
10. Placing refrigerator away from kitchen will
- Reduce space in kitchen
 - Allow more movements of personnel
 - Conserve electricity
 - Easy ergonomics
11. This behaviour will drain lots of energy _____
- Aggressive
 - Submissive
 - Autocratic
 - Bureaucratic
12. One of the poor management in kitchen area is _____
- Absence of advance production plans
 - Allowing the expert in preparation
 - Maintaining smooth work flow
 - Proper ventilation and lighting
13. Keeping informed the progress of work is _____
- Directing
 - Controlling
 - Reporting
 - Budgeting
14. POSDCORB was coined by _____
- Luther Gullick
 - Frank Gilberth
 - Robert Owen
 - F.W.Taylor
15. POSDCORB denotes _____
- The goals of management
 - The role of management
 - The functions of management
 - The principles of management
- II. Write in three lines (3 Marks)**
- Define management.
 - Give the meaning of division of work?
 - List the principles covered in discipline.
 - Write the difference between unity of direction and unity of command.
 - What is Scalar chain of principle of management.
 - What is meant by Espirit de corps?
 - Expand POSDCORB.
 - List the process of organizing.
 - Give the steps involved in controlling.
 - Mention the points leading to poor management in kitchen area.
- III. Write in paragraph (5 Marks)**
- Write on the components of direction.

2. Explain the function of organizing as a tool in the management process.
3. Why planning is an important function of management
4. Write a note on time and money management
5. How is human energy wasted in hotel industry?

IV. Answer in detail (10 Marks)

1. Elaborate on the principles of management
2. Discuss the various functions that the food service managers have to perform.
3. How will you effectively manage the time, energy and money in the hotel industry.



Human Resource Management



LEARNING OBJECTIVES

- Gain knowledge on recruitment process
- Understand the process of training new employees in food service operations
- Know the need for motivation
- Learn the leadership qualities
- Comprehend different methods of performance appraisal and wages.

Human Resource Management or Personnel management is highly important in a food service. One of the foremost functions of a food service manager is managing the workers who come from various backgrounds. Extraordinary skills and good human

relations are needed for this. The aim of human resource management is to manage human resources effectively. Efficient contribution and work ethics as a professional of a working group leads to success of the food service operation.

The best human resource has to be selected wisely, placed in the suitable position following proper procedures and monitor the performance with adequate supervision. The steps involved in human resource management include:

1. Recruitment
2. Selection
3. Training and Motivation



Who is the father of personnel management?

Robert Owen, a father of personnel management had contributed the dimension of welfare for employees in 1800's. His contribution in Factories Act 1819 helped to stop the employment of children less than 12 years of age, and also provided free schooling, housing, recreational facilities and limited working hours.



7.1 Recruitment

Recruitment is defined as “a process of searching for prospective employees and stimulating and encouraging them to apply for jobs in an organization”. In a

food service organization, the process of recruitment for filling any position may be carried out through two sources. They are internal and external sources.



Recruitment Interview

Plate 7.1 Recruitment

Internal Source - The internal source of recruitment is within the working employees and is suitable for all positions in food service operations. Transfers from one unit or another within the same organization or promotion of existing staff, for E.g.: from assistant cook to chief cook is carried out. This method of recruitment is economical

as it saves the advertising costs and the management knows about the employee. The employee in turn is well familiar with the organization.

External source - Advertisement as a source of external recruitment is a common method. Advertisements in newspapers, TV, local radio and business magazines, regarding specific vacancies and their eligibility are done, to reach a large group of potential applicants. Sometimes the food service organization maintains close liaison with colleges, in order to seek appropriate applicants.

7.1.1 Selection

After recruitment, the next step is selection of the qualified and competent candidates for the organization. Selection is defined as the process of choosing the best from among the prospective candidates applied for the particular job. Recruitment and selection are often used as synonymous and used interchangeably, as they are the two sides of same coin.

Table 7.1 Differences between recruitment and selection

S.no	Recruitment	Selection
1	Recruitment technically precedes selection	Selection follows recruitment
2.	It refers to the process of identifying and encouraging potential candidates to apply for jobs in the organization	It involves choosing the best out of those recruited.
3.	It is positive as it invites as much as applicants for wider choice and increasing the selection ratio	It is negative as it rejects a large number of qualified applicants to select the most suitable for the jobs.
4.	Recruitment involves searching and identifying human resources	Selection involves comparing the identified human resources for right position.

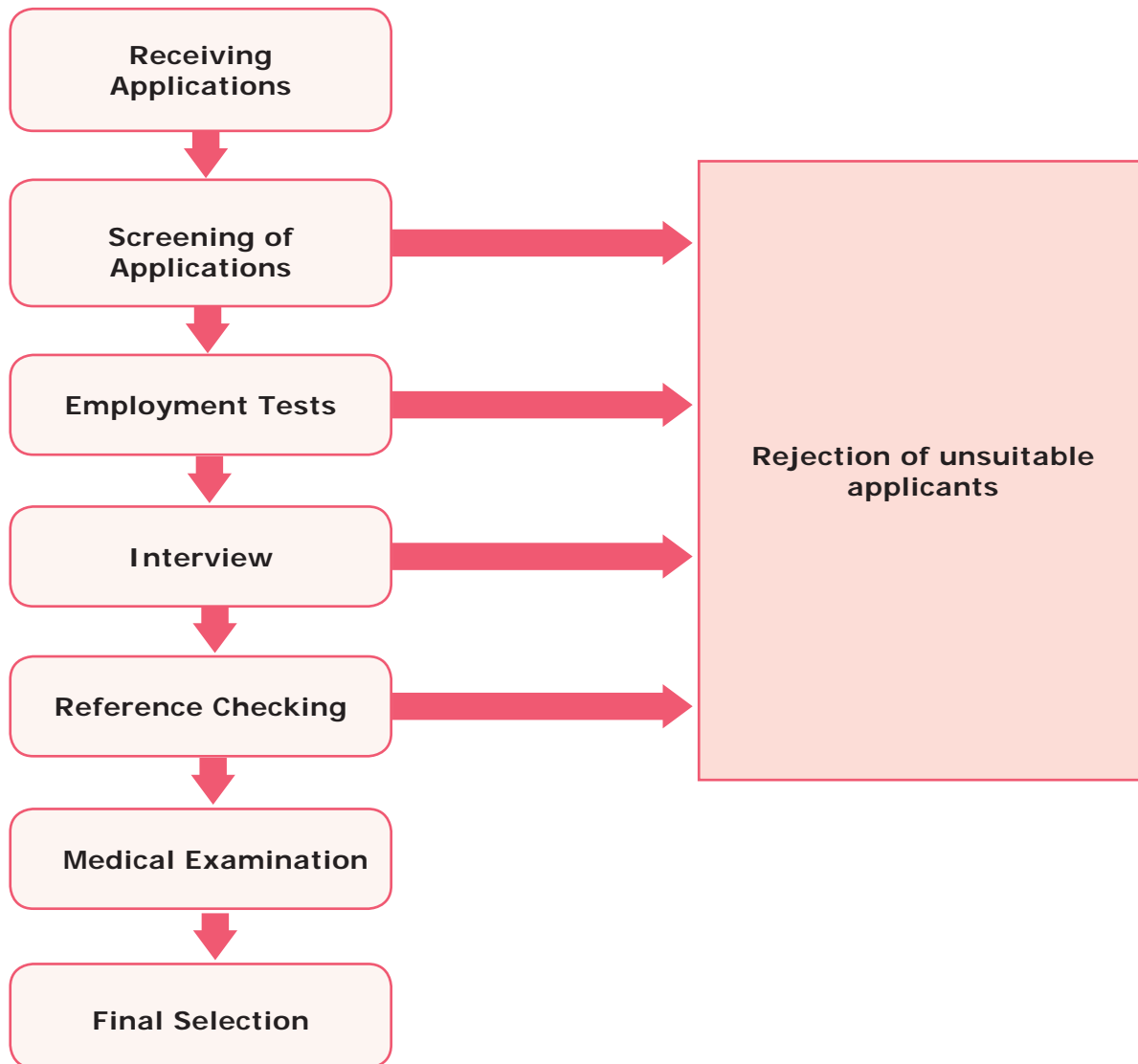


Figure 7.1 Stages in Selection Process

Selection - It is a critical process because it requires heavy investment of money to get the right person for the right job. Each step in the selection procedure will help in getting more and more information about the applicant so that it facilitates decision making.

Placement - Placement is the act of placing the right person for the right job. Proper selection and placement of personnel in food service establishments will help to build up a stable efficient work force and productivity. Thus it

is possible to function smoothly and achieve the objectives of the organization effectively.

Induction - When appropriate human resources are placed for a suitable position after the process of selection, the next step is to induct the new employees and to provide them training. Induction is the process of introducing and orienting the newly placed employees to the institution's objective and culture and to get familiarized with the food service operation.



7.2 Training and Motivation

7.2.1 Training

Training is the act of increasing the knowledge and skills of an employee for doing a particular job.



Plate 7.2 Training

Training the new employee is an investment. Employees need to be thoroughly trained so that a maximum benefit is derived on a long term basis. When the employee has a familiarity on the established operational policies and procedures, it gives encouragement for the new worker and they will gain self-confidence.

The first step in establishing a training programme is to decide when training is needed, what needs to be taught and who should receive the training. Always goals should be established for the programme and an outline should be framed in order to meet the goals.

The **advantages of a good training** are multiple and will benefit the organization and the employees.

Advantages to the management

- Increase production
- Decrease breakage and spoilage
- Reduce number of accidents
- Fewer complaints
- Increase job satisfaction
- Low labour- turnover rate
- Reduce absenteeism
- High quality of performance
- Less supervision and economical operation
- Higher morale
- Facilitate to prepare future managers
- Better management

Advantages to the employee

- Self-respect
- Confidence
- Motivation
- New skills, techniques and knowledge
- Promotion
- Higher earnings
- Adaptability
- Increased safety

a) Types of training

1. Induction or Orientation training

In this type, the new employee will be oriented about the history of the food service establishment, type of menu and service, organization structure, location of departments and employees services, personnel policies and practices, rules and

regulations, standing orders, grievance procedure and safety measures.

This induction training familiarizes the location of locker rooms, cafeteria, break time, leave rules and other facilities. Through this the employees gain self confidence, develop belongingness and loyalty.

2. Internship Training

Internship training is usually offered in educational or a vocational institute to provide experiential knowledge to the students to back up practical experience on the jobs. For E.g.: Catering students gain practical knowledge by getting trained in reputed food service institution for six months to two years.

b. Methods of training

The common two methods of training are on the job and off the job training.

Description of On the job training and Simulation method, Knowledge based method and Experimental method under Off the job training are explained below.

1. On the Job Training (OJT)

This method is also known as 'observing and copying' or 'learning by doing'. In food service industry, the new employee is placed on the job and taught the skills necessary to perform it. Thus, this type of training for a new staff has been proved successful.

Table 7.2 On the Job Training Programme for a Cook

Day 1
Understanding the various sections in the kitchen
Familiarization of available equipment
Menu of the day
Preparation of requisition slip to storage
Cleaning the work table
Day 2
Checking for the required ingredients
Understanding standard technique of the recipe following HACCP
Prepreparation and preparation of recipe
Portion sizing
Holding of foods
Quality check
Cleaning of work tables and equipments

2. Off the Job Training

i. Simulation method

Simulation is a technique which duplicates, as nearly as possible, the actual conditions encountered on a job. Table 7.3 gives a typical training programme for cooks.

ii. Knowledge based method

In this method, the knowledge is imparted to the employees through lectures, film show, conferences and seminar.

Table 7.3 Off- the-Job-Training Programme for Cooks

Time	Subject matter	Method of instruction
9.00 am to 9.45 am	Hotel's history Present organization Objectives Personnel policies	Lecture Discussion Film show
9.45 am to 10.30 am	Kitchen equipment Cleanliness Safety and maintenance	Demonstration Discussion
10.30 am to 11.00 am	Hygiene	Films Discussions
11.00 am to 11.15 am	Tea break	
11.15 am to 12 noon	Principles of cookery Grilling	Demonstration Discussion
12 noon to 1.00 pm	Portioning Preparation Presentation	Demonstration Practical
1.00 pm to 2.00 pm	Lunch break	
2.00 pm to 4.00 pm	Practical cookery	Practical presentation
4.00 pm to 4.15 pm	Coffee break	
4.15 pm to 5.00 pm	Costing Portion control	Talk Discussion
5.00 pm to 6.00 pm	Cleaning up	

iii. Experimental methods

The objective of this method is to help an individual understand oneself and the dynamics of human relationship in a work situation including his managerial style. The two methods under this are sensitivity training and transactional analysis.

According to the purpose of training and level of participants the most desired method can be chosen to train the employees.

7.2.2 Motivation

A good management will always try to motivate employees and provide a suitable work atmosphere. The productivity of food service operation is directly related to the motivation of the employees.

Motivation is derived from the word 'motive'. Motive is defined as an inner state of individuals' mind that activates and directs the behaviour. Motivation refers to

the way in which drive, aspirations, and strivings are aimed to accomplish some goals (Figure 7.2).



Figure 7.2 Motivation Process

a) Motivational theories

From the time human organizations were established, various thinkers have tried to find out the answer to what motivates people to work. Different

approaches applied have resulted in number of theories. But here only two theories namely Maslow's Theory and Douglas McGregor X and Y theory are explained.

1. Maslow's Theory

There are five levels of needs which need to be fulfilled and motivated for a successful operation. Abraham Maslow proposed five different kinds of human needs, beginning with the most basic physiological needs, such as food and shelter, and followed by needs related to safety, social needs and higher order needs self esteem and self actualization.

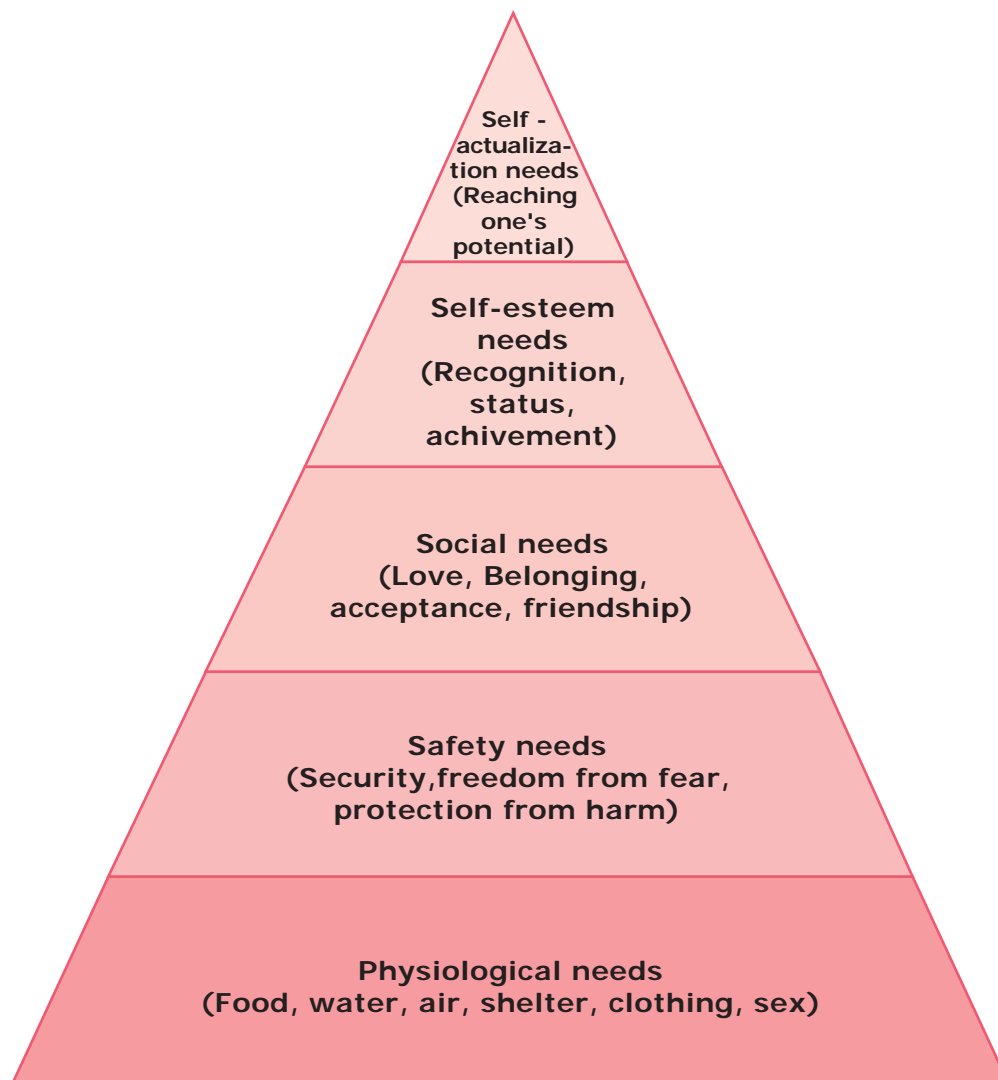


Figure 7.3 Maslow's Hierarchy of Needs

2. Douglas McGregor – X and Y theory

This theory of motivation is based on assumptions about basic human nature. He termed his theories as X theory (Negative/ Pessimistic) and Y theory (Positive / Optimistic). X theory assumes people dislike work, avoid responsibility, have no ambition and excessively secure. Accordingly they must be motivated, controlled and threatened with punishment to make them work. According to Y theory, workers are positive, optimistic, willingly accept responsibility and display creativity and imagination in the work performance. They are self motivated, exercise self direction and self control and are committed to the objectives of the organization.

b. Types of Motivation

If a food service manager wants to get work done from his employees, he may either hold them by promising a reward or may constrain them, by installing fear.

Motivation can be classified as

Positive
(Incentives)
Negative (Fear)

Extrinsic (External-
money, fame) Intrinsic
(Internal- praise and
recognition)

Positive or incentive motivation – is generally based on reward. People work for incentives in the form of the four ‘P’s of motivation: praise, prestige, promotion and pay

Positive motivation includes:

- Praise and credit for work done
- A sincere interest in subordinates as individuals.
- Competition

- Participation
- Pride
- Delegation of responsibility
- Appreciation
- Pay

The receipt of awards, due recognition and praise for work well done definitely leads to good team spirit, co-operation and feeling of happiness.

Negative or fear motivation – is based on force or fear.

Negative motivation has certain limitations and imposition of punishment frequently results in frustration, and leads to negative behaviour.

This includes:

- Wage-cuts
- Warnings
- Criticism
- Reduction in paid holidays
- Transfer to inconvenient places
- Dismissal

These kinds of motivation may result in lower productivity as it tends to dissipate human assets such as loyalty, co-operation and unity.

Extrinsic motivation is concerned with external factors, which employees enjoy. This includes promotion, status, fringe benefits, retirement plans, health insurance schemes, holidays and vacations.

Intrinsic motivation is concerned with the feeling of having accomplished something worthwhile. This includes praise, responsibility, recognition, esteem, power, status, competition, and participation.

Employees may feel satisfied when they are motivated in the correct way.



7.3 Leadership Qualities

Leadership is a process of influence on a group. The food service manager has the task to empower employees by clearly establishing and communicating the mission, accepting the responsibility of leading the group, and earning employees trust by showing a high regard for self and others. Always an empowered team is required to create an effective, smoothly operating work unit.

7.3.1 Styles of Leadership

To form a team, the food service manager has to follow any one of the following leadership styles. Styles are tailor made to different situations. Based on the types of leader – behaviour, they are classified as:

- a. Autocratic leadership
- b. Democratic leadership
- c. Laissez Faire or Free Rein leadership
- d. Bureaucratic leadership

a. Autocratic Leadership

An autocratic leader is centered around the boss or head of the institution. He is supreme in delegating duties to his subordinates. The style is efficient and needs little or no time to consult others during decision making. This style might be used during emergencies like breakdown when one leader's instructions have to be followed.



Plate 7.3 Autocratic Leadership

The two different styles under this are **tough autocrat** and **benevolent autocrat**.

Tough autocrat or Hard boiled autocrat is a negative influence and uses the force of fear and punishment. Views leadership as a matter of using orders. His followers must obey him unquestioningly. The motto in this leadership is 'pay for performance' and praise sparingly.

The **Benevolent autocrat** is often referred to as paternalistic leader. He looks upon himself as a parent figure. Benevolent autocrat is a positive influence and uses the reward and incentives in directing his subordinates towards the organizational goals.

b. Democratic leadership

Democratic leadership, also known as participative leadership or shared leadership, is a type of leadership style in which members of the group take a more participative role in the decision-making process. It allows flexibility and adaptation.

This leadership seeks to evolve a self-disciplinary mechanism, if any member of the group does anything which is in any manner opposed to the interests of the group. He is promptly checked and

controlled by other members. Democratic style is very time consuming and requires a great deal of energy.

c. Laissez faire or Free Rein leader

This type of leader permits his/her followers to do whatever they want to do. He/She does not formulate any policies or procedures. It is often described as 'no leadership at all', as there is absence of direct leadership. This leadership can be successful only when the followers have a high degree of maturity.



Plate 7.4 Free Rein Leader

d. Bureaucratic leadership

In this type the leader's behaviour relies on rules, regulation and procedures. There will be no participation or initiative by the sub-ordinates. As a result, the process of administration is reduced to series of routine actions.

7.3.2 Traits / Qualities of effective leadership

To be able to provide effective leadership to his subordinates, a leader

needs to have certain qualities. Some important qualities that a leader must possess are summarized as follows:



Plates 7.5 Qualities of a Leader

i. Physical and mental vigour

In order to work for sufficiently long hours a leader requires tremendous stamina and vigour.

ii. Emotional stability

Leaders should be rationale and logical to analyse the various problems and should not be moved by emotion or sentiments and should take appropriate decisions. A good sense of judgment is also a requisite of a leader.

iii. Empathy

A leader should discern the followers strength, weaknesses, ambitions as well as his own and should be able to look at things objectively and from others view point.

iv. Motivation

A leader should create enthusiasm within him to motivate his subordinate

If a job is done under fear of punishment then the behaviour of the person might not remain as leader.

v. Communicating Skill

A leader should have good communication ability to persuade, inform, stimulate, and direct his subordinates.

vi. Ability to guide

The leader should have the ability to guide his subordinates how to accomplish a particular task, to correct errors, prepare them for achievement and offer suggestions.

vii. Sociability

A leader should be friendly, helpful, sympathetic and easily approachable and should win confidence and loyalty of the subordinates.

viii. Technical competence

A leader needs to have a thorough knowledge on the theory and practice of his job with regard to principles, procedures and operations of a job.

ix. Other personal abilities

A leader should be morally sound and essentially possess conceptual skill, moral courage, flexibility of mind and should have the ability to establish proper priorities. Along with leading the team of employees it is also necessary for a manager to appraise them in an appropriate method.



7.4 Performance Appraisal, Wages

A good manager in a food service establishment keeps his eye on his staff performance and appraises continuously using good word, or a reprimand. Performance appraisal is the process of assessing the performance and progress of an employee, in a systematic way.

How would you rate your manager in each of the following areas? Please assign a rating on a scale from 1 to 5, where 1 represents "Poor" and 5 represents "Excellent".

	Poor	Average	Good	Very Good	Excellent
Communication	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Planning and organizing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Directing and coordinating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Job/Technical knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Interpersonal relationship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Plate 7.6 Performance Appraisal

Advantages of performance appraisal

Appraisal helps the supervisors to chalk out the promotion programme, decide compensation packages for employees help them to frame training policies and programmes, understand the validity and importance of the selection procedure ensure effective communication and also serves as a motivation tool.

7.4.1 Methods of Appraisal

1. Straight Ranking Method

It is the oldest and simplest method of performance appraisal. Here the ranking of man in a work group is done against that of another. Persons are tested in order of merit and placed in a simple grouping.

2. Paired comparison Method

Here, each employee is compared with all the other persons in group one at a time. The number of times each individual is compared with another is tailed on a piece of paper. These numbers yield to rank order of the entire group. For E.g.: if there are five persons to be compared, then A's performance is compared to B's and a decision is arrived at as to whose is better. Then A compared to B, C, D and E with each other. Thus, one arrives at the decisions, determined by the formulas:

$$N(N-1)/2$$

Where N represents the number of persons to be compared. The results are tabulated and a rank is assigned to each individual. The method is not suitable when a group is large, as a number of judgments become excessively large.

3. Grading

The rater considers certain features and marks them according to scale. The selected features may be analytical ability, cooperativeness, dependability, self expression, job knowledge and leadership. They may be:

- Outstanding
- Very good
- Good / average
- Fair
- Poor

The actual performance of an employee is compared with these grades and he is finally allotted one grade.



Modern method of rating the performance of employee

The Behaviourally Anchored Rating Scale (BARS)

It identifies the major dimensions of a job and then ranks and assesses specific behaviour on each dimension. Behaviour is always activity – oriented and not result oriented. Hence there is a chance for conflict between the employee and the manager since the former who does the activity may not accomplish the desired result or come up to the expectation of the latter. BARS do not emphasize outcome or result.



Plate 7.7 Grading

7.4.2 Wages

The basic purpose of wage is to establish and maintain an equitable structure for personnel working in an organization. From the worker's view it is take home pay received for the labour performed. Wages in the widest sense mean any economic compensation paid

by the employer to his workers for the services rendered by them.

They are composed of two parts - the basic wage and other allowances. The *basic wage* is the remuneration, by way of basic salary and allowances, which is paid or payable to an employee in terms of his contract of employment for the work done by him. The allowances on the other hand are paid in addition to the basic wage to maintain the value of basic wages over a period of time. Such allowances include holiday pay, overtime pay, and bonus and social security benefits.

In this past, food service like other service organizations, have tended to offer an annual wage rate below the necessary for fair standard of living. This situation has improved as policies on wages have been adopted.

a. Types of Wages

The three types of wages are

i. Time rate

This is the oldest and the most common method of fixing wages. Under this system, workers are paid according to the work done during a certain period of time, at the rate of so much per hour, per day, per week, per fortnight or per month or any fixed period of time.

ii. Piece rate

Under this system, workers are paid according to the amount of work done or the number of units completed, the rate of each unit being settled in advance, irrespective of the time taken to do task.

iii. Balance or Debt Method

This is a combination of time and piece rates. The worker is guaranteed an hourly or day-rate with an alternative piece rate. If the earnings of a worker calculated at the piece rate exceed the amount which he/she would have earned if paid on time basis, he/she gets credit for the balance, i.e., the excess piece rate earnings over the time rate earnings.

If his/her piece rate earnings are less than time rate earnings, the question of excess payment does not arise. Where piece rate earnings are less than time rate earnings, he/she is paid on this basis of the time rate, but the excess which he / she paid is carried forward as a debt against him/her to be recovered from any future balance of piece work earnings or over time work earnings. This system presupposes the fixation of time and piece rates on a scientific basis.

b. Determination of wages and salary

The five factors such as Cost of living, Productivity, Prevailing wages rates, Ability to pay and Attraction and Retention of employees have to be noted on the formulation of wages/salary levels.

No food service organization can function without human resources. Getting the right employee for the right job, providing the required training and consistently motivating him/her with provision of standard remunerations is a requisite for an effective management.

A-Z GLOSSARY

Morale	:	The mental and emotional condition as of confidence, or loyalty of an individual or group with regard to the function or tasks at hand
Grievance	:	A complaint or a strong feeling of an employee that they have been treated unfairly
Delegation	:	Assigning tasks or duties to subordinates
Dismissal	:	The act of terminating the employment of an employee
Requisite	:	Something which is necessary for a particular purpose
Ambitious	:	The desire to achieve success
Persuade	:	To make someone agree to do something giving those reasons
Sociability	:	The quality of liking to meet and spend time with other people

LINKAGES

- <https://www.youtube.com/watch?v=9ZLbSk1Te68> Human Resource management.
- <https://www.youtube.com/watch?v=Z3lOca6YVSc> Learn the recruitment and selection process of an organization
- <https://www.youtube.com/watch?v=PvK7XnEoy9U> Recruitment and its importance, process and sources
- <https://www.youtube.com/watch?v=S0hVtfp8HZk> Importance of employee training in hotel industry
- <https://www.youtube.com/watch?v=jnIuBktpwaM> Motivating Your Team Using Herzberg's Motivators and Hygiene Factors
- <https://www.youtube.com/watch?v=2DbSfuBeOnE> Nine Leadership Traits For Success In The Hospitality Industry
- <https://www.youtube.com/watch?v=B25itQMVcgo> 5-Star Luxury Hotel HR Manager on "Leadership"
- <https://www.youtube.com/watch?v=Pjlyz6y5QYI> Qualities and responsibilities of an excellent hotel manager
- <https://www.youtube.com/watch?v=jhoKHgCF11w> Motivation and Team Building (Supervisory Skill Builders DVD)
- <https://www.youtube.com/watch?v=Q6rfDAgGFIg> Methods of performance appraisal in simple explanation

STUDENT ACTIVITY

- Role play on leadership qualities
- Preparing a journal book with different advertisements on any job position in a hotel industry

TEACHER ACTIVITY

- Aid student in preparing a curriculum vitae for a suitable job in a hotel industry.
- Role play of facing an interview for various levels of management / position in hotel industry.



QUESTIONS



I. Choose the Correct answer (1 Mark)

1. The father of personnel management is _____
 - a) Henry L. Grantt
 - b) Frank Gilberth
 - c) Robert Owen
 - d) F.W. Taylor
2. The process of attracting qualified candidates to fill vacancy is _____
 - a) Recruitment
 - b) Selection
 - c) Induction
 - d) Training
3. The common external source of recruitment is _____
 - a) Word of mouth
 - b) Campus placement
 - c) Advertisement
 - d) Referral of employees
4. Comparison of identified human resources is in the process of _____
 - a) Recruitment
 - b) Selection
 - c) Placement
 - d) Induction
5. Introduction of new employees is _____
 - a) Placement
 - b) Induction
 - c) Recruitment
 - d) Training
6. Advantage of training to management is _____
 - a) Promotion
 - b) Higher earnings

- c) Motivation
d) Reduce Absenteeism
7. OJT is _____
a) On Just Time
b) On the Job Training
c) On Just Training
d) On Time to Job
8. Observing and copying is the term used in _____
a) On the Job Training
b) Off the Job Training
c) Induction Training
d) Internship Training
9. Film show is used in _____ method of training
a) Simulation
b) Knowledge based
c) Experiment
d) Induction
10. Different human needs are considered in _____ theory of motivation
a) Maslow
b) Herzberg
c) X and Y
d) BARS
11. Sense of achievement denote _____ need
a) Social
b) Self esteem
c) Safety
d) Physiological
12. _____ theory deals with assumption of human nature
a) Douglas McGregor- X and Y theory
b) Maslow
c) BARS
d) Hygiene
13. According to Y theory _____
a) People avoid responsibility
b) People are positive
c) People accept responsibility
d) Display creativity
14. Four 'P's of motivation are _____
a) Participation, Prestige, Promotion, Pay
b) Praise, Prestige, Promotion and Pay
c) Praise, Prestige, Promotion and Performance
d) Participation, Promotion, Pay and Performance
15. Wage-cut is a _____
a) Positive motivation
b) Negative motivation
c) Intrinsic motivation
d) Extrinsic motivation
16. Health insurance schemes is a _____
a) Positive motivation
b) Negative motivation
c) Intrinsic motivation
d) Extrinsic motivation
17. The motto of this leadership is Pay for performance _____
a) Tough autocrat
b) Benevolent autocrat

- c) Democratic
d) Free Rein
18. Participative leadership is also known as _____
- a) Tough autocrat
b) Benevolent autocrat
c) Democratic
d) Free Rein
19. The leadership which becomes successful when followers have a high degree of maturity is _____
- a) Autocratic leadership
b) Democratic leadership
c) Laissez Faire leadership
d) Bureaucratic leadership
20. Appraisal of work does not determine _____
- a) Training Policy
b) Promotion Policy
c) Selection Policy
d) Wages Policy

II. Write in 3 lines (3 Marks)

1. Define recruitment.
2. Identify the sources of recruitment.
3. What is meant by induction.
4. List the advantages of training to the management.
5. Mention the advantages of good training for an employee.
6. Write on internship training?
7. What is OJT?

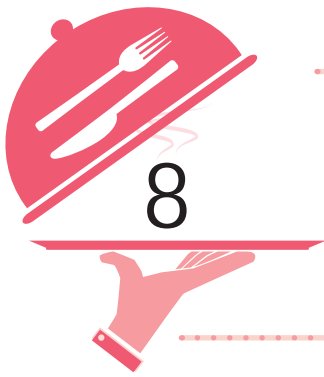
8. List the methods of training?
9. Brief on the various hierarchy of needs.
10. What is incentive motivation?
11. Who is a laissez faire or free rein leader?
12. List the traits of a good leader?
13. Given an account on piece rate.
14. Brief on time rate wage.
15. What is basic wage?

III. Write in Paragraph (5 Marks)

1. Analyse the difference between recruitment and selection.
2. Give a one day programme of cook in off the job training
3. Illustrate Maslow's theory of motivation.
4. Write a note on Douglas McGregor X and Y theory.
5. Point out the different methods of performance appraisal.

IV. Answer in detail (10 Marks)

1. Describe the process of recruitment
2. Elaborate on types and methods of training with suitable example.
3. How will you develop leadership qualities to handle different people in food service establishments?
4. Detail on the various methods of performance appraisal followed in a food service unit for their employees.
5. Write a note on wages.



Marketing



LEARNING OBJECTIVES

- Understand the marketing concept
- Aware of the tools of marketing mix
- Understand the concept to launch a product in the market
- Know the sales promotion to increase the sale of product
- Learn the components of marketing environment



Introduction

Marketing simply means selling or sale of a product or a service. Marketing is a societal process wherein products and services are exchanged for a value. In food business good quality food and excellent service has to be marketed in order to get profitable business. The success of a food service institution irrespective of whether large or small, global or national lies in its sound marketing skills. Marketing is practiced by star hotels and international food chains.

Definition

Marketing is an organizational function and a set of processes for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders. – *American Marketing Association, July 2013.*

Importance of marketing

The baseline of marketing is to attract new customers every day by offering superior attributes so that customer satisfaction is maintained and the food service will have a good customer turnover. Repeat customers are possible if good marketing trends are followed in a food service. For E.g.: A hotel might offer complimentary foods on special occasions like festivals or national days that attract customers.



Plate 8.1 Marketing



8.1 Marketing Concept

The marketing concept is used by a company to analyze and implement ideas to satisfy customers' needs, increase sales, maximize returns and sustain among the competitors. There are many marketing concepts, which are interrelated and rely on each other.



Penetration Pricing

Lowering price of product to stimulate demand and increase the customer turnover.

The five major marketing concepts are:

- 1) **Production concept** - Consumers will favour products that are available and highly affordable. For E.g.: availability of simple snacks like popcorn, fried groundnuts and soups near schools, colleges, supermarkets and theatres are good marketable production concepts ideal for children and adolescents.
- 2) **Selling concept** - Consumers buy products when there is large scale selling and promotion. For E.g.: if a new food is marketed, an offer in price or a gift given along with the product free of cost is a selling concept.
- 3) **Product concept** - Consumers will welcome a product that has durability and multiple usages. For E.g.. Modular or custom made equipments which perform a variety of tasks are ideal for a food service organization.
- 4) **Marketing concept** - In this concept customer first approach is followed. A customer first approach means that a product to be marketed is produced or manufactured keeping the needs and wants of a target customer in mind. For E.g.: many food products are specifically prepared for a target age group that is, foods like pastries are very popular among the younger age group and such products are marketed in kiosks, cafeteria and small shops.
- 5) **Social marketing concept** - Marketing strategy should deliver value to the customers. The social marketing concept gives importance to human welfare more priority than profits and keeps customer satisfaction as the prime objective. One example can be environmental responsible marketing like avoiding plastics in food packaging and service.



8.2 Marketing Mix

A number of variables will be used by a food service to achieve its sales target and the mixture of variables is



Plate 8.2 Marketing Mix

called as marketing mix. The marketing tools that are generally accepted as the tools of the marketing mix are the 7P's which are product, price, promotion, place, process, physical evidence and participants. They may be applied to food and beverage operations in the following way:

- 1) **Product:** The product basically consists of tangible and intangible features. The tangible or physical characteristics include all those which the customer sees, eats and enjoys. Examples like the restaurant décor, table arrangements, menu design, portion size, lifecycle, and quality of foods and beverages produced and served. The intangible features of the product are those that satisfy the 'feelings' of the customer like the overall ambience of the restaurant and the attitude of the service staff.
- 2) **Price:** The price charged by the catering operation is based on its need to achieve profitable sales. The price will vary based on the availability, pricing variables and market segments. Depending on the menu offered whether 'a la carte' or 'table d'hôte' menus, government and service taxes are to be inclusive or exclusive, or discounts can be given to group bookings, or reductions of price for meals if ordered before certain hours can be taken into account.
- 3) **Promotion:** Promotion is informing the prospective customers about the products in an innovative way either by advertising, or using the different channels of communication like, media, newspapers, display boards or coupons. Discounts in price for more than 10 members visiting restaurant or discount given on showing school or college identity card may be promotional techniques.
- 4) **Place:** This aspect of marketing mix is concerned with the location of the catering outlet, performance of the food service outlet, acceptability of a particular food in a locality and so on. For E.g.: economical restaurants near industries and colleges and small outlets near busy areas.
- 5) **Process:** The actual procedures, mechanism and flow of activities by which the service or food is delivered is the process. For E.g.: Seating the guest, taking of food orders, dealing with questions and complaints and getting the customers feedback.
- 6) **Physical evidence:** Exterior/interior appearance of the building, restaurant floor plan, décor, lighting, table layout, staff uniform, menu card and menu displays are the physical evidences in the marketing mix.
- 7) **Participants:** The individual-staff and other personnel with whom the customer interacts with for E.g.: Hostess, restaurant manager, waiter and other customers, are the people involved in the marketing. A waiter is the first person a customer comes in contact with and therefore he is the marketing person in a food service.



8.3 Sales Promotion

Sales promotion is one of the elements of the promotional mix used to increase the sales of the products. Sales promotion can be done either through media or non-media marketing. It can be for a predetermined period of time to increase consumer demand, stimulate market demand or improve product availability. Sales promotion increases the sales by attracting new customers or by retaining the old customers by various promotional techniques.

8.3.1 Definition

Sales promotion is the process of persuading a potential customer to buy a product. It is done to boost sales and build up customer loyalty.

8.3.2 Sales promotion techniques

Sales promotions can provide added value or incentives to consumers, wholesalers, retailers, or other organizational customers to stimulate immediate sales.



Prize contests

As technique of sales promotion, contests may be organized through radio or TV or newspapers. They might be asked to write a slogan for popularizing the product – the best selected slogan being awarded by offering one day free stay in hotel.

Sales Promotion Strategies

Some of the most common methods used in sales promotion strategies include:

- Coupons
- Price discounting
- Gift with purchase offers
- Sweepstakes
- Free samples
- Offers and rebates
- Refund and premium offers
- Group promotions
- Frequent user/loyalty incentives
- Point-of-sale displays



Off-Season Sales

Some products might be offered for reduction sales, during off-seasons. Sale of rooms at lower rate during winter season in hilly station.

8.3.3 Sales team structure

The structure of the sales team to a great extent depends on the number of people in the sales force.

The key members of a sales team structure include:

- The sales manager
- The assistant sales manager
- A team leader
- The sales personnel

Sales manager

The sales manager sits atop of the sales team structure. He/she is the driving

force behind this department and is the main person responsible for the success or failure of the team. He/she assigns the various job responsibilities of the sales force and when need be, can also restructure the sales team to function more efficiently. The sales manager is the head of the department and everyone reports to him/her.

Assistant sales manager

The assistant sales manager assists the manager. The assistant sales manager has a number of responsibilities and is second in command. Though his/her responsibilities vary from organization to organization some main duties includes: designating tasks to the team leaders, handling the manager's affairs, hiring and firing employees, and ensuring that the tasks assigned are all completed on time and are properly done.

Team leaders

Team leaders are in charge of the sales personnel and fall directly under the management of the assistant sales manager. These team leaders are usually assigned specified team tasks which they have to complete within a stipulated period of time. They head a sales team of 4 to 5 sales people and are responsible for getting the task assigned to them completed.

Sales personnel

The sales personnel are directly answerable to the team leader. They are usually involved in the day to day sales

activities of the organization and are assessed on the sales that they can finalize.



8.4 Product Life Cycle

When a product is introduced in a market it passes through a series of stages and the concept from launching of product till it is withdrawn is called as product life cycle. There are four stages in the product life cycle which is introduction, growth, maturity and decline. Each stage has a particular level of sales, profit and competition.

- 1) **Introduction:** When the new product is launched costs are high due to sales promotion, research and product development. The customers are first time buyers and the success or failure depends on the promotional techniques adopted by the food service institutions.
- 2) **Growth:** As the market expands the first time customers become repeat customers and therefore sales and profit can be high.
- 3) **Maturity:** In the maturity stage costs may increase as there is competition in the market and the growth of the organization may slow down if it is not managed properly.
- 4) **Decline:** The market becomes saturated with products and demand falls but the supply release in abundance. Therefore every food service organizations should try to be in the market by launching new foods or recipes according to the needs of the customers which will be constantly changing.



8.5 Marketing Environment

Marketing environment means the internal and external environment which affects a business operation. The internal problems which may arise in the catering operation may be in the Food and Beverage departments, employees and control of cash and pricing. External environment can be, Political, Economic, Demographic/ Social and Technical factors.



Plate 8.3 Marketing Environment

8.5.1 Internal Factors

a. Food and Beverage Department

In the food and beverage department perishability of food can be an important factor which can influence the final product. The perishability of food has to be checked while food purchasing, storing and while issuing. Wastage of foods may lead to poor portioning control and poor production planning. Pilferage from kitchen, restaurants, bars and store can be directly influencing the final cost of the product.

a. Employees

Employee shortages often coincide with peaks of sale activity and surplus can

coincide with troughs of sales activity. Absenteeism, illness and use of part-time/casual employees in food service operations can be possible causes for an internal problem. Poor supervisions can also lead to poor employee output.

a. Control of Cash and Pricing

Most transactions are conducted on a cash basis in food and beverage sales outlets and hence good control is needed. Correct pricing of menus and beverages lists are important when food prices fluctuate. Tighter financial and management controls are required in stores.

If any problems arises outside the organization and that cannot be solved internally are known as external environment factors.

8.5.2 External factors

a. Political: It is Government legislation and change in the location structure.

b. Economic: Rising costs such as food and beverages, labour, fuel, rates and insurance, sales instability, for E.g.: peaks and troughs of activity that occur on a daily, weekly and seasonal basis, changes in expenditure patterns and people's disposable incomes, expansion and retraction of credit facilities and high interest rates on borrowed capital.

c. Demographic/social environment: It can be changes in population distribution. For E.g.: population drifting away from certain areas, changes in the socio-economic groupings of the area, growth in ethnic minorities leading to a demand for more variety of foods and changes

in food fashion. For example, current popularity of take away foods, healthy eating and diets.

d. Technical environment: It can influence a product can be mechanization, for E.g.: in food production and food service where labour saving devices or custom made equipments can change the cost of a product. Product development and food processes, for eg: vacuum packaging for products. Digital economy, increasing advertisement cost due to advances in media for eg: satellite, TV and high percentage of TV and video ownership.

Marketing is an essential element in food service institutions and many food service operations have a

marketing manager who looks after the sales promotion, marketing techniques and customer satisfaction. Hence it is important that to sell a product marketing and entrepreneurial skills are important.



Plate 8.4 Factors Affecting Marketing Environment

GLOSSARY

Pilferage	:	The act of stealing things of small value.
Sweepstakes	:	A lottery in which winning tickets are selected at random

LINKAGES

- <https://www.agmanager.info/marketing-concepts>
- <https://www.youtube.com/watch?v=UTWvTNZpKDM>- Sales Promotion
- <https://www.youtube.com/watch?v=nOhd9SeWBfs> -Sales Promotion
- <https://www.youtube.com/watch?v=ys7zx1Vc9po>- marketing mix 7 P's

STUDENT ACTIVITY

- Prepare an advertisement to market the product.
- Prepare any food item in your laboratory and sell in your school campus.
- Perform role play to attract customers for selling their products.

TEACHER ACTIVITY

- Identify the difficulties faced while marketing a product.
- Plan an advertisement programme to popularise the product.



QUESTIONS

I. Choose the Correct answer (1 Mark)

1. The _____ concept is the aim used by a company to analyse and implement ideas to satisfy the customer needs.
 - a) Marketing
 - b) Selling
 - c) Profit making
 - d) Production
2. Marketing is an organizational function and a set of process for creating, communicating and delivering value to customers is defined by _____.
 - a) American Marketing Association
 - b) Philip Kotler
 - c) Robert, C.
 - d) Scott
3. The baseline of marketing is to _____.
 - a) Produce variety
 - b) Increase turnover
 - c) Stabilize sales
 - d) Attract new customers
4. Sales promotion is used to _____.
 - a) Increase the sales
 - b) Increase production
 - c) Increase customers
 - d) Increase prize
5. One of the following is not a Sales promotion techniques _____.
 - a) Advertisements
 - b) Free sampling campaign
 - c) Free gift campaign
 - d) Increasing production
6. The person sits in a top of sales team structure is _____.
 - a) Team leader
 - b) Consumer
 - c) Sales Manager
 - d) Sales Personnel
7. The product lifecycle passes through _____ stages.
 - a) Three
 - b) Four
 - c) Five
 - d) Six

8. The tangible features of the product includes _____
- Ambience of the restaurants
 - Table arrangements
 - Portion sizes
 - Quality of foods
9. In the introduction stage of a product life cycle _____ is high.
- Profit and competition
 - Cost
 - Sales
 - Marketing
10. Profit and sales can be high in one of the product life cycle _____
- Maturity
 - Growth
 - Decline
 - Introduction
11. Internal problem of wastage and poor portioning control in a catering operation comes under _____
- Control
 - Economic
 - Technical
 - Food and beverage
12. Rising costs is an example for _____ factor.
- Environment
 - Economic
 - Labour
 - Food and beverage
13. Successful institution meet the customer needs by providing _____
- People
 - Product
 - Price
 - Place
14. The first marketing person in food service industry _____
- A waiter
 - Sales manager
 - Team leader
 - Assistant manager
15. In which stage the market becomes saturated with product _____
- Maturity
 - Growth
 - Decline
 - Introduction

II. Write in three lines (3 Marks)

- Define Marketing.
- Define Marketing concept.
- List the major marketing concepts
- Explain the selling concept of marketing.
- List the tools of marketing mix.
- Define sales promotion.
- List out the sales promotion techniques used by a seller.
- What is product lifecycle? List the stages.

9. What are the internal problems that arise in food and beverage catering operation.
10. List out the economic problems faced by a catering operation.

III. Write in a paragraph (5 Marks)

1. Explain the major marketing concepts.
2. Write on the sales promotion strategies used to boost the sales of the product?
3. Explain the sales team structure.
4. Briefly write on the stages of product life cycle.

5. Short note on Product and Price.

IV. Answer in Detail (10 Marks)

1. Explain the tools of marketing mix.
2. List out the internal problems faced by the marketing environment in catering operation.
3. Identify and explain the external problems faced by the marketing environment.
4. Write on the sales promotion methods with examples to promote the sale of the product
5. How will you popularise your product to the customer?



9

Entrepreneurship Skills



LEARNING OBJECTIVES

- Acquire skill to become a successful entrepreneur
- Obtain knowledge about different kind of Licenses and Registration for starting a food service organization
- Know the various acts governing food establishments
- Recognize several sources of finances for starting a new business



9.1 Entrepreneur skills and qualities of entrepreneur

Entrepreneurship is the process of designing, launching and running a new business, which is often initially a small business. The people who create these businesses are called entrepreneurs.

Definition

Entrepreneurial skills are the basic skills necessary to enable the people to start, develop, finance and succeed towards their goal. It is an individual's ability to turn ideas into action and make a living.

Importance of Entrepreneurial Skills

Entrepreneurial skills are important for the following reasons:

- To promote employment and economic growth of the nation.
- To build leadership quality.
- To perceive profitable business opportunities.
- To ensure rapid development.
- To promote self-reliance and economic sustainability.
- To satisfy status and social needs.
- To develop self-satisfaction.
- To develop creative and innovative thinking and exposure to technological innovation.
- To create new knowledge based social enterprises.
- To create job as well as wealth.

Qualities of an Entrepreneur



Skills required for a successful entrepreneur

A successful entrepreneur should have the following:

- (i) manage and raise money
- (ii) identify strengths and weakness and be productive
- (iii) hire effective people
- (iv) train new staff
- (v) manage staff
- (vi) make entrepreneur friends
- (vii) connect via social networking
- (viii) focus on customers and spot new trends
- (ix) close a sale
- (x) deal with failure



9.2 How to Obtain License and Registration for Starting a Food Service Organization?

A food business/food service organization involves multiple activities, for instance, from manufacturing till sales. Food business also includes storing, retailing, distributing and transporting food and food products.

The following categories come under food service organization / food business.

1.	Hotel	A place where customer is provided boarding and lodging
2.	Motel	A hotel situated on a highway along with services of garage and station
3.	Boatel	A houseboat hotel
4.	Floatel	A luxury hotel on a luxury liner
5.	Lotel	A hotel with helipad facility
6.	Rotel	A hotel on wheels
7.	Kiosk	A stall on the roadside for snacks, open on all sides
8.	Soda fountains	An outlet selling aerated drinks
9.	Milk bar	A restaurant dispensing milk and milk products
10.	Restaurants	A place where one can eat, pay for the same and go.

Before starting a restaurant, it requires prior approval from the local authority where the building is to be constructed.

Local approval by

- Municipal Authority
- Concerned Police Authority
- Any other local authority as may be applicable / required (Pollution Control Board / Ministry of Environment and Forests)
- Approval / NOC from Airports Authority of India for projects located near Airport

How to register to start a restaurant?

- Application to be sent to Public Health Inspector for registration within 30 days from the commencement of work
- The inspector will look into following before approval
 - Location
 - Building

- Welfare of employees
- Previous experience of employer
- Financial resources
- Whether employer himself has applied.

a) Location Permit

For getting planning permission, the location must fulfil the following requirements:

- It should not be built within archaeological sites
- It should be built 30 metres away from the water canal.
- There should be a distance of 15 metres from the well.
- It should not be built within an agriculture land.
- If it is multi-storey restaurant, soil test must be done.
- Nine metre road facility is desirable

The restaurateur must provide the following mandatory documents with planning application for approval.

- Location Plan: shows the site area and its surrounding context.
- Site plan: shows the proposed development in detail
- An ownership certificate
- Agricultural holdings certificate (If it is required)

b) Building Permit

To run a successful restaurant, the building must be safe accessible and efficient.

Building Regulations

Building regulations has set standards for the design and construction of buildings to ensure the safety and health of people.

It covers the requirements with respect to

- i) **Structural safety:** The building should be planned, designed and constructed under right supervision for quality and safe construction depending on the location of the building vulnerable to lightening, earthquake, landslide, cyclone and flooding risks.
- ii) **Fire safety:** Covers all precautionary measures necessary to provide safety from fires for building occupants, persons in the vicinity of buildings and fire fighters. Requirements and guidance indicates emergency exit in cases of fire, fire detection and warning systems, the fire resistance of structure elements, fire separation, protection, compartmentation and isolation to prevent fire spread, control of flammable materials and access and facilities for fire fighting.
- iii) **Site preparation and resistance to contaminants and moisture:** Includes the weather-tightness and water-tightness of buildings, subsoil drainage, site preparation and measures to deal with contaminated land, radon, methane and other site related hazardous and dangerous substances.
- iv) **Toxic substances:** This controls hazards from the toxic chemicals used in cavity fill insulation systems.
- v) **Resistance to the passage of sound:** Sound can travel through the walls, ceilings, stairs and floors of a dwelling. So they need to be constructed in a way which resists the transmission of airborne sound waves (radio, television) and any impact sound (Climbing stairs)
- vi) **Ventilation:** Proper ventilation should be provided by installing heat exhaust hoods, grease exhaust hoods, exhaust fan, makeup air systems and fire suppression systems for the welfare of employees and customers.
- vii) **Sanitation, hot water safety and water efficiency**
 - Lays down standards for the provision of sanitation of physical facilities, washing facilities, rainwater harvesting and hot water.
 - It also covers safety requirements in respect to unvented hot water systems.
- viii) **Drainage and waste disposal**
 - Requires adequate drainage provision, sewage infrastructure,

pollution prevention and maintenance.

- Technical design standards cover sanitary pipework, foul drainage, rainwater drainage and disposal, waste water treatment and discharges and cesspools.

ix) Heat producing appliances and fuel storage system: Covers the construction, installation and insulation of building elements; use of heat efficiency boilers, hot water storage, chimneys, flues, hearths and fuel storage; and also requirements to control fire sources, electric shocks and carbon footprints.

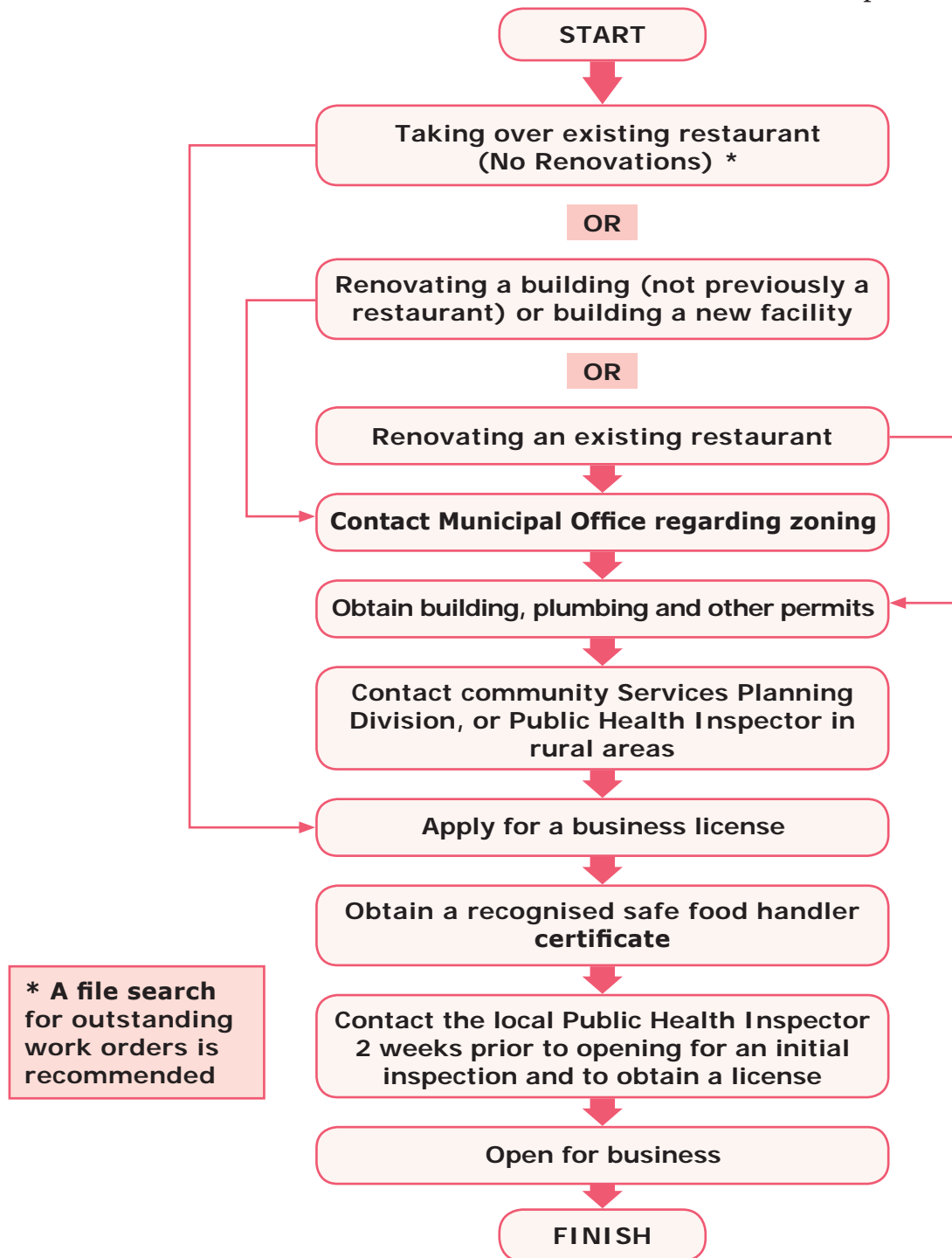


Figure 9.1 Flow Chart for Start Up - Food Business

- x) **Protection from falling:** Set standards for the safety of stairways, ramps and ladders together with requirements for windows and vehicle barriers to prevent falling. Also included are requirements for guarding against and warning of hazards from the use and position of doors and windows.
- xi) **Access to and use of building:** Requires the inclusive provision of ease of access to and circulation within all buildings, together with requirements for facilities for disabled persons.
- xii) **Glazing safety:** Lays down the requirements for the use of safety glazing to avoid impact hazard and for the suitable awareness of glazed areas. Also included are safety requirements relating to the use and cleaning of windows.
- xiii) **Electrical safety:** Covers the design, installation, insulation, inspection and testing of electrical installations in order to prevent injuries from electrical shocks, burns and fires due to electrical components overheating.
- xiv) **Materials and workmanship:** Building work must be carried out with proper materials and efficient and skilled workers.

When the building work meets the standards, the applying person will receive a completion certificate to run a restaurant

Welfare of employees

Most importantly, the employer has to create healthier, safer working

environments through training, outreach, education and assistance to the employees.

- Provide a hazard communication programme for employees
- Train employees properly to prevent accidents
- Provide necessary protective equipment
- Have access to a first aid kit
- Display posters from the Department of Labour that inform employees of the protections and rights.

Similar to location and building approval of restaurants, hotels need to get consent for their ratings. The ratings of hotels are important because they give prospective customers a rough idea of what they can expect from a hotel. Hotel ratings are often used to classify hotels according to their standards of facility and services.

Procedure for getting approval for 5 star categories

The Hotel and Restaurant Approval and Classification Committee (HRACC) inspects and assesses the hotels based on the facilities and services offered.

- All application for classification must be complete in all respects – application form, application fee, prescribed clearances, NOC's and other certificates.
- Upon receipt of application complete in all respects, the hotels will be inspected by a classification committee.
- A committee comprising Ministry officials and representatives from the hospitality and tourism industries.

- The recommendations will be sent to HRACC Division (Ministry of Tourism, Government of India) within 5 working days.
- The recommendation of the HRACC inspection committee will be approved by the Chairperson (HRACC) / Additional Director General (Tourism) expeditiously.

To start a food business / food service organization, a lot of rules and regulations need to be followed. This is because any kind of negligence in a food business can be fatal for the consumer. So food business has to undergo a lot of compliance. Therefore a food business needs a whole host of licenses and permits to run smoothly without any intervention.

Licenses and Registrations for a Food Service Organization

What are the licenses required to start a food service organization?

- (i) FSSAI (Food Safety and Standards Authority License)
- (ii) Liquor License
- (iii) Health / Trade License
- (iv) Goods Service Tax (GST) Registration
- (v) Fire Department
- (vi) Lift Clearance
- (vii) Music License
- (viii) Certificate of Environmental Clearance
- (ix) Signage License

(i) FSSAI (Food Safety and Standards Authority License)

The Food Safety and Standards Act, 2006 has brought in tremendous changes to the food industry with an effort to make available to consumers, safe and standardized foods.

The food safety and standards Act, 2006 has made FSSAI registration mandatory for food business operators and food products.

Types of FSSAI Registration

FSSAI registration for food business can be obtained through the FSSAI Food Licensing and Registration System. FSSAI registration for food business falls under one of three categories.

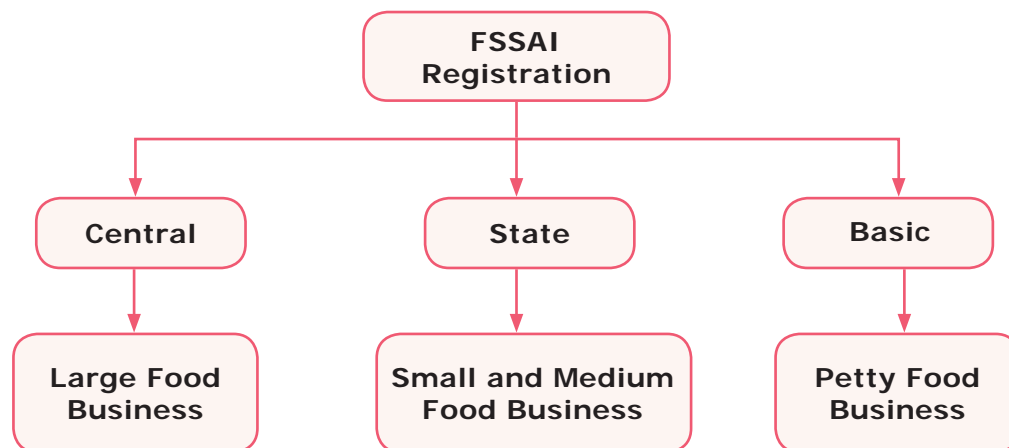


Figure 9.2 FSSAI Registration

- Central License
- State License
- Basic License

FSSAI Registration – Central License

Food business operators like cent percent Export oriented units, large manufactures, importers, food business operators in Central Government Agencies, airport, seaport need to obtain FSSAI registration from Central Government.

FSSAI Registration – State License

Food business operators like small to medium sized manufacturing units, storage, transporter, retailers, marketers, distributors, need to take FSSAI registration from State Government.

FSSAI Registration - Basic License

Food business operators who are petty food manufacturers can obtain registration from the state government by submitting minimal documents.

Documents Required for the FSSAI License

The lists of documents that are needed to apply for the FSSAI License are following:

- Id proof and address proof
- Valid Email Id
- Phone number
- Affidavit
- Declaration of Food Safety Management Plan
- Kitchen layout plan
- List of food category
- Water testing report from ISI approved facility
- No Objection Certificate (NOC) from the owner or the partner
- Medical certificates of employees.

How to obtain the FSSAI License?

Submit the printout of the filled up online application form to the Regional / State Authority with all the supportive documents within 15 days from the date of making the online submission for the application to be considered.

(ii) Liquor License

If the food service organization serves liquor, then procuring the liquor license is a must. This can be obtained from the Local Excise Commissioner and the forms are available at the respective State Government websites.

Documents required for the Liquor License

- Documentary proof regarding the legal status of the restaurant or the hotel, that is, whether it is a company, partnership firm or any other type of set up.
- Whether the restaurant or the hotel is in legal possession of the plot.
- A certificate that validates the completion of the restaurant or the hotel building
- Trade license from the local authority

- Certificate of registration of eating house license issued by the DCP
- Documentary proof regarding applicant being an Income Tax Assessee and Sales Tax Assessee.
- A complete layout plan of the establishment, site plan of the license outlets and the liquor stores.
- NOC from the State Fire Service

How to obtain the Liquor License?

Once the documents are served, the concerned Excise Officer inspects the restaurant or the hotel premises and he then submits a report to the liquor granting authority.

After the approval, the applicant has to submit the fees as per the guidelines and then the license is issued.

(iii) Health / Trade License

This license is generated by the Local Civil authorities like the State's Municipal Corporation or the Health Department.

Documents required for the Health / Trade License

- Sanction and completion (Includes ownership proof, Rent Agreement or NOC from landlord)
- Three copies of site plan and layout.
- Indemnity bond for Rs.100/-
- Structural stability certificate signed by structural designer
- Power and water paid bill
- Sewer connection proof

- Water testing reports
- Plan of the premises
- Medical certificate of employees
- Proof of property tax
- Medical fitness certificate of workers

How to obtain the Health / Trade License for restaurant?

A restaurateur can apply for Health / Trade License either at Citizen's Service Bureaus or online.

The forms are available at the State's Municipal Corporation website or at Zonal Citizen's Service Bureaus.

The license is generally issued within 60 days of submitting the application form.

(iv) GST Registration

GST that came into force since 1st of July, 2017 has kept everyone hitched to it with this frequent changes. Registering the GST is one of the major things that the restaurants must do. This will ensure that the restaurant runs seamlessly.

Documents required for the GST Registration

- Proof of ownership / Tenancy rights of the business premises (Rent Agreement and Electricity bill)
- Copy of Pan card of proprietor / partnership firm
- Copy of Partnership deed
- Copy of Aadhar card of Proprietor / all partners
- One passport size photo of proprietor / all partners

- Mail ID and mobile number to receive OTP and verification links of all partners.
- Latest bank statement containing name, address and IFSC code.
- List of items to be traded.
- Digital signatures of authorized partners.
- Authority letter in favour of dealing partner.

How to get the GST Registration?

An individual, partnership firm or registered company can obtain GST Registration by filling basic documents online at www.gst.gov.in.

(v) Fire Department

The restaurant's main motive must be to protect their customers from all things injurious, be it food products or hazards such as fire.

A No Objection Certificate (NOC) from the fire department is also required to run a restaurant.

How to get NOC from the Fire Department?

- A restaurant needs to register for NOC from the State Fire Department before the building construction starts.
- Application can be found online on the State Government website.
- After having all the safety equipment in place, must invite the Chief Fire Officer for inspection and get the NOC.

(vi) Lift Clearance

- If the multi-storey restaurant want to install lifts, need to get clearance from an inspector from the electricity department as well as the Labour Commissioner of that specific city.
- This license is issued by the Electrical Inspector from the office of the Labour Commissioner after verifying installation of life, layout and safety gears.

(vii) Music License

Music license need to obtain to play music in the restaurant. Under the Copyright Act of 1957, those who play pre recorded music in any non-private, commercial or non-commercial establishments must obtain a music license issued by Phonographic Performance Limited (PPL).

(viii) Certificate of Environmental Clearance

The restaurant is not only responsible for ensuring the health of the customers, they are also legally and morally bound to ensure that its operations must not negatively harm the nature of mother earth.

Hence, restaurants are also expected to apply for certificate of environmental clearance.

Documents required

- The Environmental Impact Assessment Report / Environment Management Plan

- Details of Public hearing
- NOC granted by State regulators.

The restaurateur should submit the above documents with the application to obtain certificate of Environmental clearance.

How to get the certificate of Environmental clearance

- Acquiring the certificate also involves screening, scoping and evaluation of the project to examine its impact on the environment.

(ix) Signage License

Marketing of the products through word of mouth, logos, posters, pictures and symbols, required to obtain a legal permit which is the signage license.

This license can obtain from local civil authorities like the Municipal corporations.



9.3 Various Acts Governing Food Establishments

9.3.1 The Factories Act (1948)

In India the first Factories Act was passed in 1881. This Act was basically designed to protect children and to provide few measures for health and safety of the workers.

This law was applicable to only those factories, which employed 100 or more workers.

The Recommended committee was accepted by GOI in 1948 and Present Act (ie) the Factories Act 1948 was enacted.

Objectives

- To ensure adequate safety measures
- To promote the health and welfare of the workers
- To prevent haphazard growth of factories
- To regulate the working conditions
- To relieve workers from industrial fatigue
- To improve the image, growth and development of industries
- To reduce wastage and increase efficiency in an organization
- To maintain industrial peace and stability

Main provisions of the Factories Act

- Health
- Safety
- Welfare
- Working hours of adults
- Annual leave with wages

a) Provisions regarding health

The occupier of factory is obligated to undertake the following measures for ensuring good health and physical fitness.

- Cleanliness
- Disposal of wastes and effluents
- Ventilation and temperature
- Artificial humidification

- Lighting
- Latrines and urinals
- Drinking water

b) Provisions regarding safety

Every factory must take appropriate safety measures as provided under the act.

- Fencing of all dangerous and moving parts of the machinery while in motion or use.
- Young persons (between 15 and 18) are not supposed to work on any dangerous machine without adequate training and supervision.
- Keeping floors, stairs and steps from obstructions and slippery substances and providing with substantial handrails.
- Taking necessary measures to prevent accumulation of explosive or in flammable dust, fumes, gases or vapours.

c) Provisions regarding welfare of workers

All the factories shall provide adequate and suitable facilities for

- Washing and drying of wet clothes and storing of clothes
- Sitting arrangements during rest
- First aid box
- Ambulance room if workers are more than 500.
- Canteen should be provided with sufficient light and ventilation
- Should provide drinking water in rest rooms, shelters and lunch room

- Crèches should be provided when more than 30 women workers are employed in the factories.

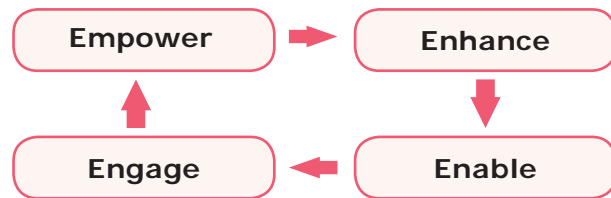


Figure 9.3 Employee Welfare Clip Art

d) Working Hours of Adults

- A worker cannot be employed for more than 48 hours in a week.
- Every worker should have one day holiday in a week.
- If worker is deprived of any of weekly holiday, he shall be given compensatory holiday.
- A worker cannot be employed for more than 9 hours in a day.
- Every worker should be allowed at least half an hour rest interval after a maximum working of 5 hours at a stretch.
- Prohibition of overlapping shift.
- No double employment
- If an employee does more work at the usual time, he should receive the wages double the ordinary rate of wages.
- Women worker cannot be employed before 6.00 a.m. and after 7.00 p.m.
- Children below 14 are not to be employed in the factory

e) Annual leave with wages

The Factories Act has provided annual / earned leave of 12 working days for all the workers who have worked at least 240 days in a year.

Minimum Wages Act 1948

The Minimum Wages Act 1948 is an Act of Parliament concerning Indian labour law that sets the minimum wages that must be paid to skilled and unskilled labours.



The minimum wages Act came into force on 15th March 1948.

India introduced the minimum wages Act in 1948, giving both the Central Government and State Government jurisdiction in fixing wages.

Concept of minimum wage

The wage which must be paid whether the company earns profit or not.

9.3.2 Definition of minimum wage

Minimum wage has been defined as “the minimum amount of remuneration that an employer is required to pay wage earners for the work performed during a given period, which cannot be reduced by collective agreement or an individual contract.

Objectives:

- To provide minimum wages to the workers working in organized sector.
- To stop exploitation of the workers
- To empower the government to take steps for fixing minimum wages and to revise it in a timely manner.

- To safeguard the interests of the workers engaged in the unorganized sector.
- To provide for the appointment of Advisory Committees and Boards having equal number of representatives of both employers as well as workers.

Components of wage

The statutory minimum wage is based on the gross wage payable for a normal working week (i.e.) before overtime payments.

Gross wage can consist of:

- The basic wage agreed in the contract
- Performance related payments and allowances for shift work, irregular hours.
- Weekly or monthly fixed payments for the turnover generated
- Work-related payments by third parties, (E.g.) tips or payments agreed between the employee and the employer.

Income not included in the minimum wage

Some income components are not included in the calculation of the minimum wage.

- Overtime pay
- Leave allowance
- Profit shares
- Special payments, (e.g.) incidental payments received for reaching sales targets
- Future payments (e.g. Pension and saving schemes)
- Expense allowances
- End-of-year allowances

Fixation of minimum wages

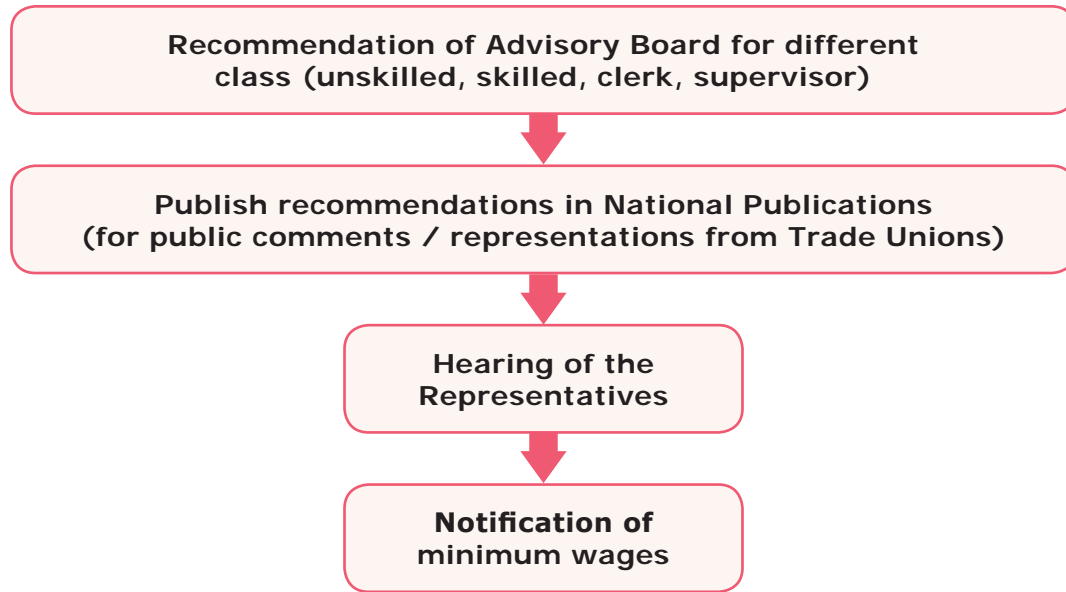


Figure 9.4 Fixation of Minimum Wages

Revision of minimum wages

The minimum rates of wages will be revised, every five years, by the government.

Advantages

- Helps in reducing tax burden on communities
- Helps in setting small business budgets
- Serves as an employment incentive
- It is a common reference when hiring
- Protects workers from exploitation by unscrupulous employers
- Motivates employees to improve their skills
- Improves the economy
- Provides social stability within communities

9.3.3 Tamil Nadu Catering Establishment Act 1958

It is an act to provide for the regulation of conditions of work in catering establishments and for certain other purposes in the state of Tamil Nadu.

Meaning of Catering Establishment

It means a restaurant or residential hotel and includes a restaurant or canteen attached to, or run or managed by, any society registered under any law for the time being in force but does not include a restaurant or canteen attached to, or run or managed by any educational institution.

How to register a Catering Establishment?

- Application to be sent to public health inspector for registration within 30 days from the commencement of work.

- The inspector will look into the following before approval:
 - Location of catering establishment
 - Previous experience of employer
 - Financial resources
 - Welfare of labour
 - Whether the employer himself has applied
- Validity of registration: One year

Suspension or cancellation of registration certificate

- If the registration has been obtained by misinterpretation or fraud, inspector may give an opportunity for employer for explanation before license cancellation
- Appeal against an inspector regarding the cancellation of grant or renewal of license should be made within 30 days in writing to the state government (can be extended to another 30 days if employer has a valid reason for delay in appeal).
- If there is no communication from the inspector regarding grant or renewal of registration certificate within 3 months, then it is deemed to have been granted or renewed.

Welfare of Employees

- Employee is entitled for twice the wages if he/she works for more than 9 hours per day or more than 48 hours/week.
- Half-an-hour of interval for 5 hours of continuous work (maximum 2 intervals per day)
- One whole day holiday / week

9. Entrepreneurship Skills

Daily Hours of Work		
	Young Person	Adult
Normal	5 hours/day	9 hours/day 48 hours/week
Over-time	Not applicable	10 hours/day (or) 54 hours/3 consecutive months

- In a year the employer should declare holidays on national days with pay.
- If the employee works on a holiday, either he shall be paid twice the wages or one day wage with a compensatory off in any of the following three days with full wage.
- Notice of periods of work should be displayed clearly in a prescribed form for everyday.
- Register for holidays to be maintained.

9.3.4 Shop and Establishment Act

A Restaurateur must register the restaurant under the Shop and Establishment Act to run a food business. He needs to register the restaurant within 30 days of the commencement of the business.

Documents required for the Shop and Establishment Act

- Pan card
- Identity proof
- Address proof of the proprietor / partner of the company
- Details of the employees

How to obtain the Shop and Establishment Act License?

- The restaurateur must submit the above documents with the application form mentioning the name of the shop, the postal address of the establishment and the proof of ownership such as the Rent Agreement or shop lease papers to the Local Chief Inspector of the shop or other Inspectors.
- Once the Government officials verify all the documents, he registers the restaurant in the Register of Establishment and issues a registration certificate.



9.4 Sources of Finance Available from Government Sector – Microfinance Loan, SHG, Government Schemes

The Government of India has undertaken several initiatives and instituted policy measures to foster a culture of innovation and entrepreneurship in the country.

Job creation is the foremost challenge with a significant and unique demographic advantage. India, however, has immense potential to innovate, raise entrepreneurs and create jobs for the benefit of the nation and the world.

9.4.1 Microfinance Loan: What is Microfinance Loan?

Microfinance is a term used to describe financial services, such as loans,

savings, insurance and fund transfers to entrepreneurs, small business and individuals who lack access to traditional banking services.

Why microfinance is important?

- The idea is to provide extremely poor people with small loans so they can start and operate a business.
- The borrowers are able to save money and pay back the loan overtime.
- Microfinance helps support financial security because it is not just a donation.



What is working capital loan?

Working capital loan is the money that needs to meet day-to-day business expenses like monthly electricity bills.

Objectives:

- To promote economic development
- To create employment
- To promote self-sufficiency and self confidence
- To lift poor people out of poverty and it is a way to manage the finances more effectively
- To create the possibility of future investments.

Microfinance Institutions

The organizations that lend financial help to the under-banked

section of the society are the microfinance Institutions.

Microfinance institutions not only give financial help to the poor section of the society but also educate them on how to utilise the offered fund in a better way.

Salient features of Microfinance Institutions (MFI)

- These institutions offer loans to individuals who belong to the low income group.
- The loans that are offered by these institutions are of small amount and are known as microloans
- MFI provide loans to the borrowers for a short period. Once they repay the loan they again opt for another one.
- MFI give loans to people who want to start up a business of their own without any security or collateral.
- The repayment frequency of the microloans offered by MFIs is high and the borrower needs to repay the amount at quick intervals.

What are the types of MFIs in India?

MFIs operate in a number of forms and shapes in India. Though each of them have different formation and work nature, they all provide financial help to the needy section of the society in the form of loans

and other financial products. Here are the details of the various types of MFIs in India.

- (i) Joint Liability Group (JLG)
- (ii) Rural cooperatives
- (iii) Self Help Group (SHG)

(i) **Joint Liability Group (JLG):** Joint Liability Group is a concept established in India in 2014 by the Rural Development Agency, The National Bank for Agriculture and Rural Development (NABARD) to provide institutional credit to small farmers.

Features of JLG

- It is a group of 4-10 people of same village / locality of homogenous nature and of same socio-economic background.
- Only one member of a family can become a member of JLGs
- Member should not be a defaulter of bank loan
- Member should hold regular meetings.

Purpose of JLG

- Providing collateral free loans to groups
- Building confidence between groups and banks
- Providing self-employment and increase production of agricultural products.

Who can promote JLGs?

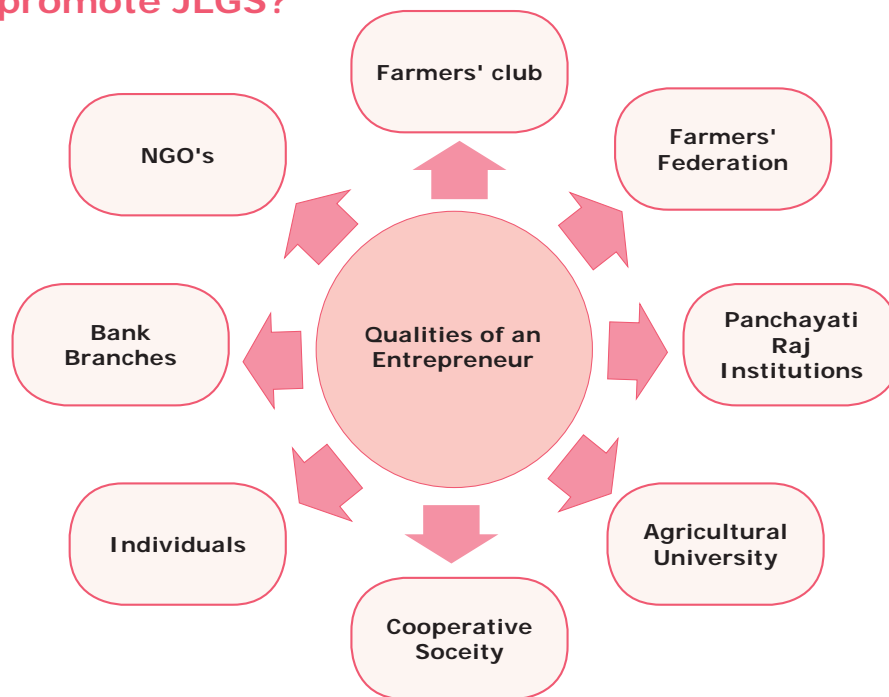


Figure 9.5 Promoters of JLG's

(ii) Rural Cooperatives

Cooperative societies play a vital role in ensuring that the nation's economic progress conforms to the requirements of democratic planning. The institution of a cooperative society provides support and sustainability to rural economic activities.

The financial support to the rural sector is provided through National Bank for Agriculture and Rural Development (NABARD).

Financial support

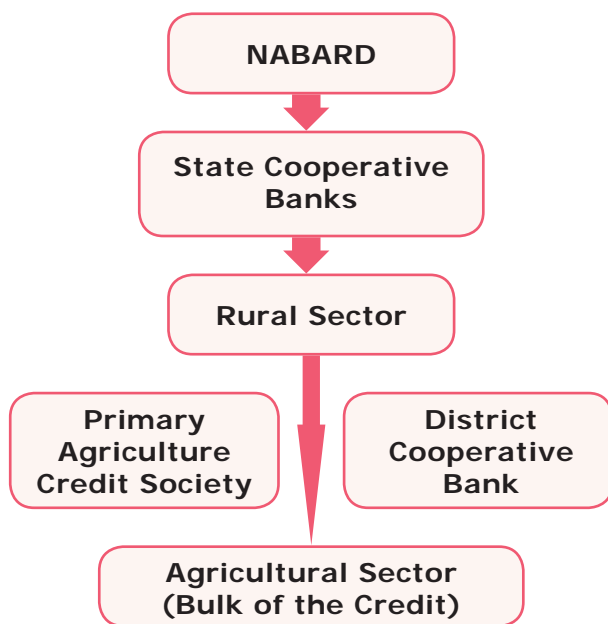


Figure 9.6 Financial Support

Functions of Rural Co-operative Banks

- It mainly finances agricultural based activities.

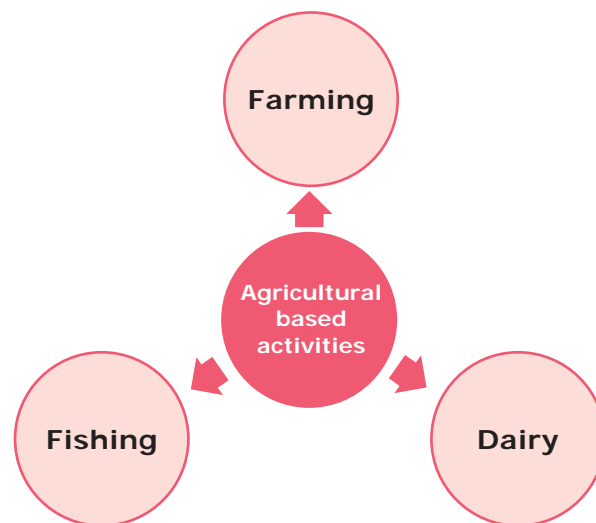


Figure 9.7 Functions of Rural Co-operative Banks



Although, all the Rural Co-operative Banks in India are registered under the Co-operative Societies Act, they are regulated by Reserve Bank of India.

- They also provide finance to the self employed individuals and small scale industries of rural India.

(iii) Self Help Group (SHG)

In India NABARD initiated Self Help Group in 1986-87. SHG are formed under the Swarna Jayanthi Swarojgar Yojana (SGSY) Programme.

The absence of institutional credits available in the rural area has led to the establishment of SHGs.

What is a Self Help Group?

A Self Help Group (SHG) is a voluntary association of men or women in similar economic conditions.



Swarna Jayanthi Grama Swarojgar Yojana Programme was launched on 1st April, 1999 at 75:25 costs sharing between Central and State Government.

They come together for the purpose of solving the common problems through self help and mutual help. The SHG promotes small savings among its members. The savings are kept with a bank.

Features of SHG

- The group should be formed by 15-20 number of members.

9. Entrepreneurship Skills

- The group should not consist of more than one member from the same family.
- A person should not be a member of more than one group.
- The group should devise a code of conduct (Group management norms) to bind itself.
- This should be in the form of regular meetings (weekly or fortnightly) functioning in a democratic manner allowing free exchange of views, participation by the members in the decision making process.
- The group should be able to draw up an agenda for each meeting and take up discussions as per the agenda.
- The group should be able to collect the minimum voluntary saving amount from all the members regularly in the group meetings. This is called as corpus fund.
- This fund should be used to advance loans to the members.
- The group should develop financial management norms covering the loan sanction procedure, repayment schedule and interest rates.
- The group should operate a group account preferably in their service area bank branch, so as to deposit the balance amount after disbursing loans.

Government of India and the Reserve Bank, realizing the importance of microcredit in the development programmes, have taken up many steps for the linkage of SHGs with formal financial institutions. The basic purpose of linkage is to strengthen the financial health of SHGs by ensuring adequate flow of bank credit to them.

There are three main credit needs of the SHG members.

- **Social Needs:** Food, marriage, birth and death, festivals, family events, education and housing.
- **Production Needs:** Agriculture and Microentrepreneurship etc.
- **Emergency Needs:** Medical, fire, theft, flood, earth quake, cyclone and drought

Objectives of SHG

- To inculcate the savings and banking habits among members.
- To secure them from financial, technical and moral strengths.
- To enable availing of loan for productive process.
- To gain economic prosperity through loan / credit
- To gain collective wisdom in organising and managing their own finance and distributing the benefits among themselves.

- To provide space and support to each other.

9.4.2 Women Empowerment through Self Help Group

In Tamil Nadu Women's Empowerment Project, an IFAD supported project implemented through the Tamil Nadu Women's Development Corporation was the first project in the country, around 1990, to incorporate the SHG concept into a State Sponsored Programme. Since then, SHGs have been associated with women.

Why do they need empowerment?

Women have always been given a secondary status-be it at home or in society. Women still remain poorest of the poor and can never break free from this cycle. Above all, a poor woman is vulnerable, insecure and lacks knowledge

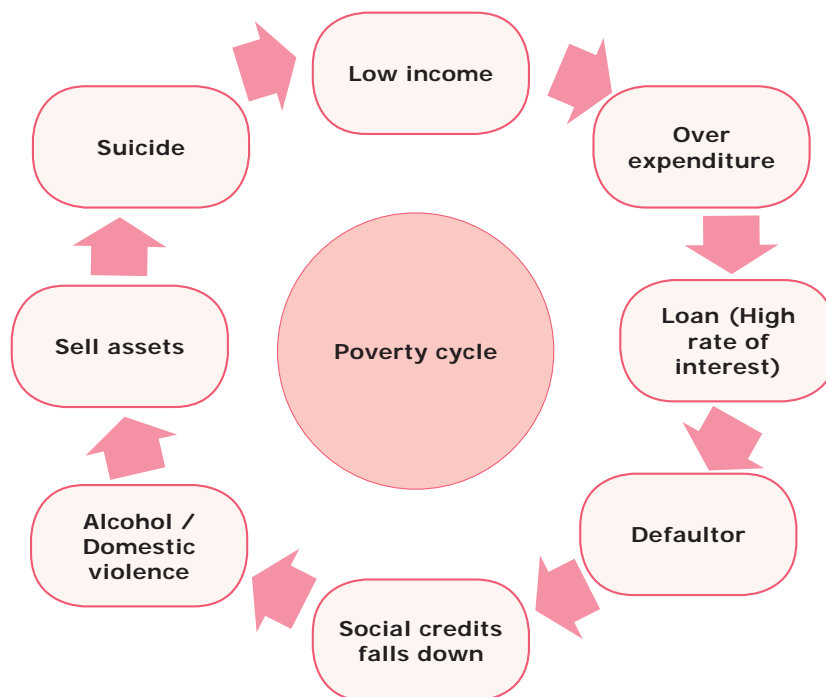


Figure 9.8 Poverty Cycle

Why are women not empowered?

They lack four basic things:

- (i) Knowledge
- (ii) Finance
- (iii) Power
- (iv) Opportunity

Role of Self Help Groups in Empowerment of Rural Women

Women in India are victims of a multiple socio-economic and cultural factors. They are an integral part of every economy. All round development and harmonious growth of a nation would be possible only when women are considered as equal partners in progress with men.

Rapid progress in SHG formation has now turned into an empowerment movement among women across the country.

Six ways through which women SHGs empower rural women

- Make rural women aware of their basic rights
- Help rural women in getting employment
- Raise self-confidence and enhance social status
- Increase community participation of the rural women
- Spread awareness about start ups-food processing units.
- Motivate taking up social responsibilities related to women development.

9. Entrepreneurship Skills



STEP: Support to Training and Employment Programme for women (1986-87)

STEP was launched by the Government of India's Ministry of Women and Child Development to train women with no access to formal skill training facilities especially in rural India (Agriculture, horticulture, food processing, handlooms, embroidery etc.)

9.4.3 Government Schemes

Monetary funds are one of the foremost requirements for any business setup and operation. Government schemes help the Micro Small and Medium Enterprises (MSME) to finance their day-to-day expenses, growth and expansion. All public sector banks work with the government organizations / institutes to provide sponsored loans for small business. They are:

1. The Credit Guarantee Fund Scheme for Micro and Small Enterprises (CGS)
2. Small Industries Development Bank of India Loan for Small Enterprises (SMILE)
3. Credit Link Capital Subsidy Scheme for Technology upgradation
4. National Bank for Agriculture and Rural Development (NABARD)
5. National Small Industries Corporation Limited (NSIC)
6. Mini Tools Rooms and Training Centre Scheme

7. Market Development Assistance Scheme for MSMEs
8. Technology and Quality upgradation support to MSMEs
9. Micro Units Development and Refinance Agency Limited (MUDRA) Loan scheme
10. Stand-up India Scheme

A-Z GLOSSARY

Archaeological Site	:	It is a place in which evidence of past activity is preserved
Conservation	:	Prevention of wasteful use of a resource
Outreach	:	An activity of providing services to employees who might not have access to those services
Affidavit	:	A written statement confirmed by oath or affirmation, for use as evidence in court
Haphazard	:	Lacking any obvious principle of organization
Effluent	:	Liquid waste or sewage discharged into a river or sea
Empower	:	Give the authority or power to do something
Remuneration	:	Money paid for work or a service
Proprietor	:	The owner of a business, or a holder of property
Agenda	:	Ordered sequence of items to be discussed at a formal meeting
Vulnerable	:	It is the quality of being easily hurt or attacked

TEACHER ACTIVITY

- Motivate the students to develop entrepreneurial skills by sharing the experiences of any successful entrepreneur.
- Inculcate the habit of small savings among students.
- Visit to nearby bank to create awareness on the procedure for getting microloan.
- Create awareness on the financial services from government to start up a new business

STUDENT ACTIVITY

- Exhibition cum sale of products developed by the students within the campus
- Visit to nearby self help group.



LINKAGES

- <https://www.quora.com/on-what-basis-is-the-star-rating-given-to-the-hotels-in-India>.
- <https://www.entrepreneur.com/article/242327>
- <https://www.under30ceo.com/10-qualities-of-a-successful-entrepreneur/>
- <https://www.scribd.com/doc/40529390/Tamil-Nadu-catering-Establishment-Act-1958>
- <https://www.eiiff.com/banks/rural/cooperative-banking.html>.
- <https://www.yourarticlelibrary.com/india-2/self-help-group/self-help-group-shg-of-india-meaning-need-and-objectives/66718>.
- <https://www.loanbaba.com/blog/top-10-government-business-loans-for-small-and-medium-enterprises/>
- <https://www.instamojo.com/blog/best-small-business-loans-offered-government-India>
- <https://www.posist.com/restaurant-times/resources/licenses-required-to-open-a-restaurant.html>.
- <https://www.manmaik.blogspot.com/2010/12/describe-objective-scope-and-coverage.html?m=1>.
- <https://youtu.be/pZn8nU-0q5U>.
- <https://youtu.be/IpiZhN2Roks>.
- https://youtu.be/NizF_bjkhsK



QUESTIONS



I. Choose the correct answer (1 Mark)

- _____ is an individual's ability to turn ideas into action.
 - Entrepreneurial skills
 - Competitive skills
 - Career skills
 - Communication skills
- _____ is a hotel situated on a highway along with services of garage.
 - Boatel
 - Motel
 - Hotel
 - Rotel
- Plan shows the site area and its surrounding context. _____.
 - Site
 - Building
 - Location
 - Kitchen
- Marketing of the products through word of mouth, logos, posters, pictures and symbols are required to obtain _____ license.
 - Music
 - Liquor
 - Trade
 - Signage
- _____ inspects and assesses the hotels based on the facilities and services offered.
 - HRACC
 - HFACC
 - HBACC
 - HDACC
- FSSAI registration for food business does not falls under one of four categories _____.
 - Central License
 - International License
 - State License
 - Registration
- GST came into force since _____.
 - 3rd of July 2017
 - 2nd of July 2017
 - 1st of July 2017
 - 4th of July 2017
- According to the Factories Act, a employee cannot be made to work continuously for more than _____ hours in a week.

a) 24	b) 36
c) 42	d) 48
- India introduced the Minimum Wages act in _____

- a) 1948 b) 1947
c) 1938 d) 1937
10. Under the Shop and Establishment Act, a restaurateur needs to register within _____ days of the commencement of the business.
a) 28 b) 30
c) 40 d) 20
11. _____ lend financial help to those who lack access to traditional banking services
a) Macro finance Institution
b) Corporate
c) Microfinance Institution
d) NGO
12. _____ is a concept established in India in 2014 by NABARD.
a) SHG
b) Rural cooperatives
c) SGSY
d) JLG
13. Identify the one comes under emergency needs _____
a) Medical
b) Food
c) Marriage
d) Agriculture
14. _____ loan is the money that needs to meet day-to-day business.
a) Personal
b) Working capital
c) Education
d) Property
15. _____ is a voluntary association of men or women in similar economic conditions.

- a) SGSY
b) JLG
c) SHG
d) Rural cooperatives

II. Write in three lines (3 Marks)

- Define Entrepreneurship skills.
- Mention the qualities of an Entrepreneur.
- Identify the local authorities who will give approval for starting a restaurant.
- How will you create healthier and safer working environment?
- What are the licenses required to start a food service organization?
- List the mandatory documents have to be submitted with location permit application.
- State the procedure to get NOC from the fire department when you start a new restaurant.
- Point out the objectives of the Factories Act.
- What are the main provisions of the Factories Act?
- Write the objectives of minimum wage.
- Outline the importance of microfinance.
- Give the functions of Rural Co-operative Banks.
- What is Self Help Group?
- Enumerate the objectives of SHG.
- Short note on STEP programme.

III. Write in a paragraph (5 Marks)

1. Point out the importance of entrepreneurial skills.
2. Tabulate the different categories of food service organization.
3. Describe the procedure for getting approval for 5 star hotels.
4. Give a brief account on FSSAI License.
5. How will you get environmental clearance certificate when you start a new restaurant?
6. What are the facilities to be provided for employee welfare according to factories Act?
7. Bring out the salient features of Microfinance Institutions.
8. List out the different Government schemes.

IV. Answer in Detail (10 Marks)

1. Elaborate the various skills needed to become a successful entrepreneur.
2. What are the permits should be obtained before starting a new restaurant?
3. Licenses and Registrations for a food service organization – Explain in detail.
4. Discuss about the types of Microfinance Institution in India.
5. Women empowerment is possible through Self Help Group – Justify.
6. Write about Tamil Nadu Catering Establishment Act 1958.



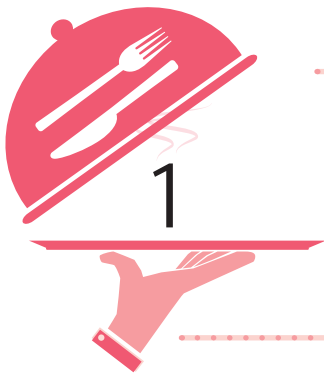
FOOD SERVICE MANAGEMENT PRACTICAL



Content

Food Service Management – Practical

Exercise No.	Chapter Title	Page No.	Month
1	Organization	200-	June
	1.1 Visit to a Hotel		
	1.2 Layout of the Departments in Food Service Operation		
2	Standardization of Recipes and Leftover Utilisation	202	June
	2.1 Standardize a Recipe for Quality and Quantity		
	2.2 Enlargement of Regional Recipes		
3	Service Procedures	208	July
	3.1 Table Setting		
	3.2 Napkin Folding		
4	Production and Carving Skills	217	July
	4.1 Preparation of Cakes		
	4.2 Preparation of Common Beverages		
	4.3 Recipes for Salad		
5	Food Safety and Adulteration	227	August
	5.1 Preparation of a Label with Food Standards		
6	Management of Resources	231	September
	6.1 Analyse Methods of Conserving Time, Money and Energy		
7	Recruitment	233	October
	7.1 Planning an Advertisement for a Job Title in Food Service Operation		
8	Marketing Skills	234	November
	8.1 Sales Promotion Techniques		
9	Entrepreneurial Skills	237	December
	9.1 Interview with a Small Scale Entrepreneur		
	9.2 Team Building Games		



Organization



1.1 Visit to a Hotel

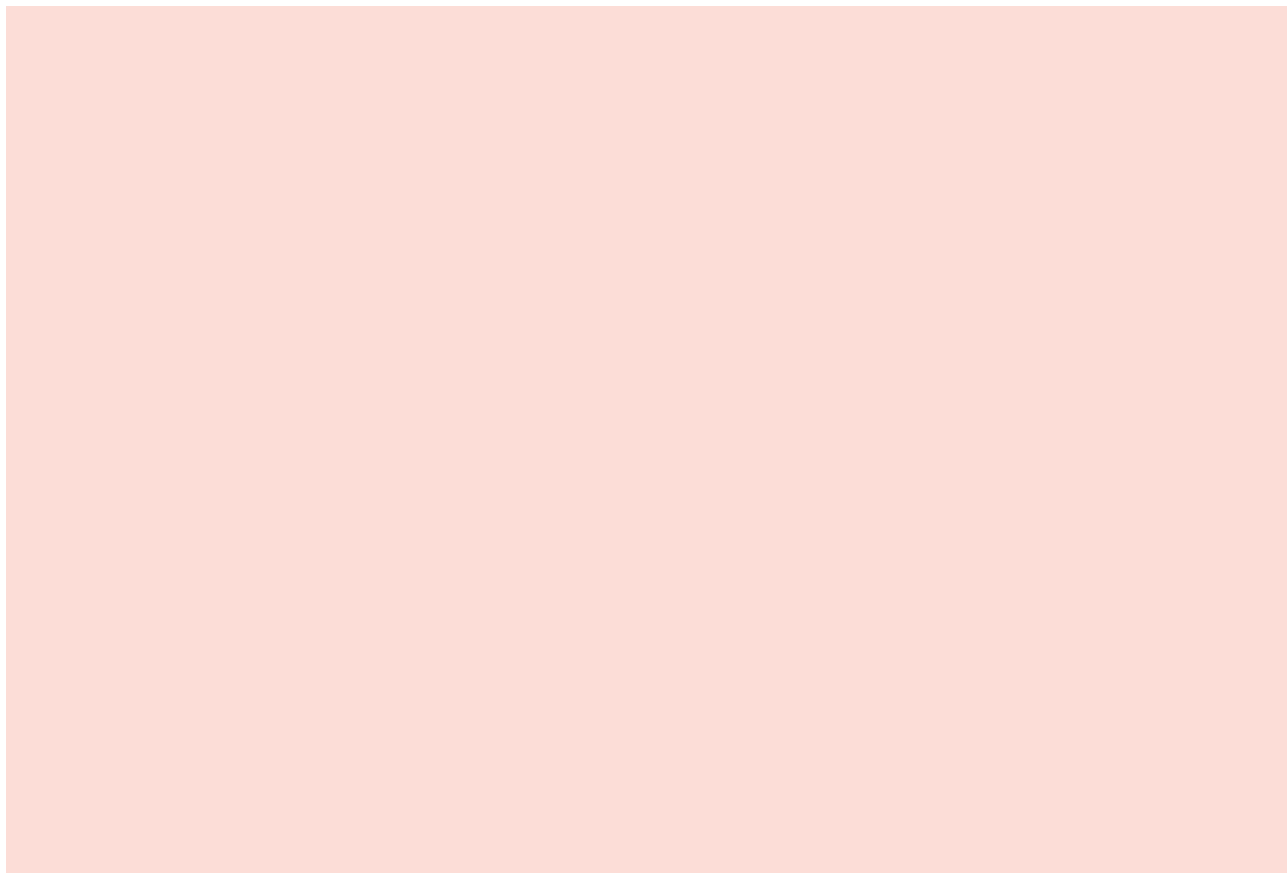
Aim:

To learn practically the organization of various departments in a hotel.

- Develop an organization structure and draw a flow chart for any two of the departments in a food service.
- Plan a work schedule for a Chef and Waiter.

- Give the job description of the house-keeping manager.
- Role-play of a restaurant waiter:
 1. Setting classrooms of the restaurant
 2. Create the scenario
 3. Script the dialogue for running a food service
 4. Action
 5. Interpretation.

Results and Discussion:





1.2 Layout of the Departments in Food Service Operation

Aim:

To acquire the skill in drawing a layout of the Departments in a Restaurant.

Apparatus:

Paper, ruler, eraser and pencil

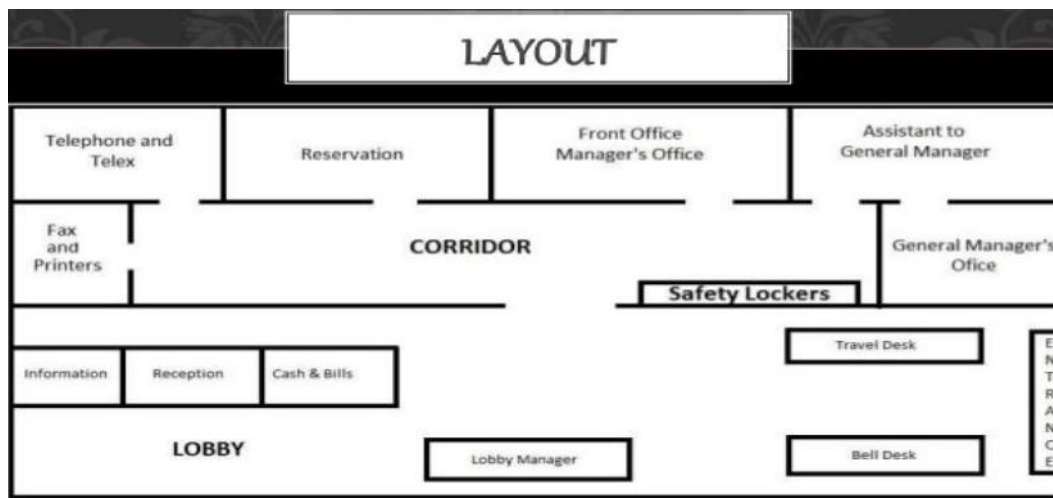
Procedure:

Every department in the food service operation has its own function to carry out. To simplify work, the layout of each department is done in a systematic way.

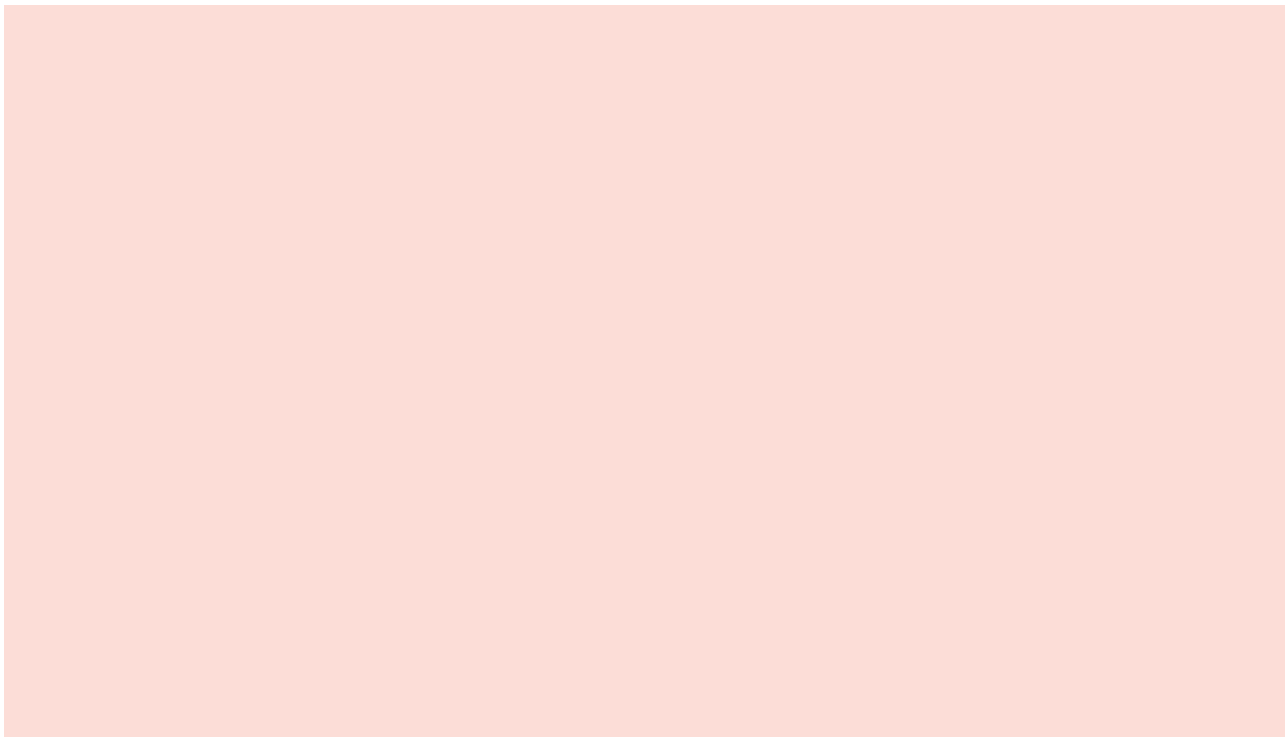
For example:

The following is a layout of the front office

Note: Layout of any other department can be chosen.



Results and Discussion:





Standardization of Recipes and Leftover Utilisation



2.1 Standardize a Recipe for Quality and Quantity

Aim:

To standardize a recipe for quality and quantity.

Apparatus:

Stove, tava, bowl and kitchen utensils

Procedure:

Standardization involves the careful adjustment and readjustment of ingredients and their proportions to produce the most acceptable quality. There is a need for subjective as well as objective evaluation. Tests for achieving the best taste should be done for producing quality products.

- The original recipe- Source of the recipe can be from cook books, magazines, family recipe files and commercial food companies.
- Recipe has to be prepared for a minimum serving of 5 portions.
- The finished product has to be evaluated based on preparation method, ingredient proportion, availability of ingredients, cost, yield and equipment.

- The preparation should be repeated until the desired quantity and quality is achieved.

Note: The following recipe can be used. Students can also bring in innovative recipes and learn to standardize them.



Plate 2.1 Vegetable Omelette

Vegetable Omelette (1 serving)

Ingredients	Quantity
Egg	1
Finely chopped onion	10 g
Finely chopped tomato	10 g
Grated carrot	10 g
Finely chopped coriander leaves	2 g
Pepper powder	2 g
Salt	To taste
Cooking oil (for frying)	10 g

Method:

- Beat the egg in a bowl and add all the chopped ingredients, pepper and salt.

- Heat oil in a tava and pour the mixture into it.
- When one side is cooked flip to the other side and cook.
- Serve hot with ketchup.

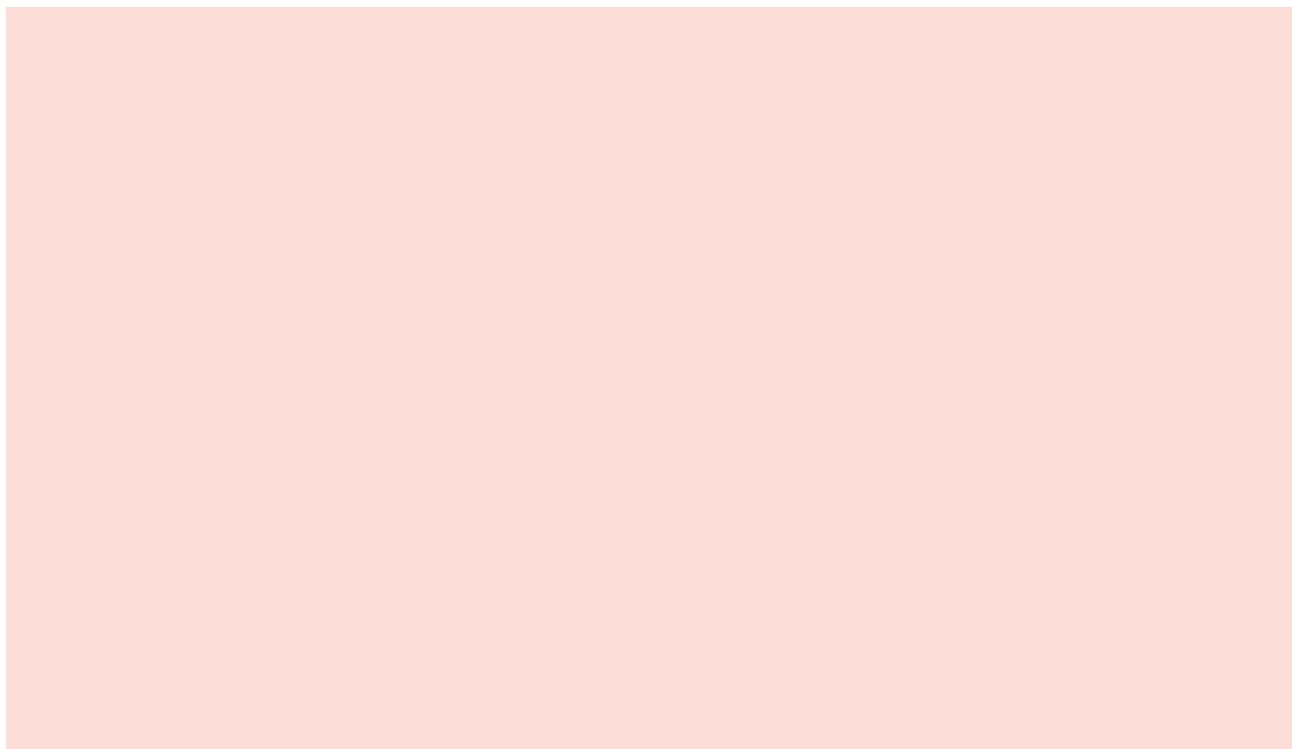
Q factor - A satchet of tomato ketchup.
Converting the recipe to get 5 servings – stepping up

Ingredients	Quantity for 5 servings	Cost (Rs.)
Egg	1 x 5 = 5 Nos.	25.00
Finely chopped onion	10 g x 5 = 50 g	01.00
Finely chopped tomato	10 g x 5 = 50 g	01.00
Grated carrot	10 g x 5 = 50 g	05.00
Finely chopped coriander leaves	2 g x 5 = 10 g	01.00

Ingredients	Quantity for 5 servings	Cost (Rs.)
Pepper powder	2 g x 5 = 10 g	05.00
Salt	To taste	
Cooking oil (for frying)	10 g x 5 = 50 g	10.00
	Total cost	Rs. 48

Q factor- Tomato Ketchup = Rs. 2 x 5 =
Rs. 10
Cost of 5 servings = Rs. 58
Cost per serving (40%) = Rs. 11.60
Overhead charges (20%) = Rs. 5.80
(Fuel, Disposable plate, Tissue, Labour)
Profit (40%) = Rs. 11.60
= Rs. 29
Cost of the product for sale = Rs. 30
(Rounded off)
Per cent of profit may be varied

Result and Discussion:





2.2 Enlargement of Regional Recipes

Aim:

To enlarge regional recipes using factor method and to conduct a food mela.

Apparatus:

Stove and cooking utensils

Procedure:

The two general methods followed while enlarging the recipes are

- Trial and error method
- Factor method

Trial and error method: In this method, the original recipe is multiplied twice and the yield with other characteristics are evaluated. If the quality and quantity are acceptable it is further multiplied. If not, adjustments are made and retested before multiplying. This method is time consuming and tedious, since the adjustments may be difficult.

- It is used in simple recipes where there are limited number of ingredients.
- Special attention should be given in processes such as cooking temperatures and speed of the mixers.

Factor method: In this method, a factor is used to calculate and multiply the ingredients carefully. The conversion factor is derived as follows:

$$\text{Conversion factor} = \frac{\text{Desired yield from enlarged recipe}}{\text{Yield from original recipe}}$$

First, all the ingredients with their measures are listed from the original recipe. The equivalent measure should be multiplied by the factor. The amount got will be used and tested in the enlarged recipe.

It should be noted that when recipes are increased the factor will be greater than 1 and when the recipes are decreased the factor will be less than 1.

Vegetable Pulao (5 servings)

Ingredients	Quantity
Basmati Rice	300 g
Carrot (cut into 1 cm cubes) blanched	100 g
Beans (cut into 1 cm pieces) blanched	100 g
Green Peas blanched	100 g
Cashew roughly chopped	50 g
Salt	To taste
Black Pepper Powder	5 g
Green Chili slit (optional)	3
Oil	15 g
Whole Garam Masala:	
Cinnamon Sticks	2
Cardamom Pods	5
Cloves	5
Bay Leaf	2

Method:

- Cook the rice till the grains are separated but not softened.
- Heat 15 grams of oil in a frying pan.
- Saute whole garam masala with cashews.
- Now add all blanched vegetables and sauté them for a minute.

- Add rice, salt and freshly ground black pepper.
- Mix gently to avoid breaking the rice grains.
- Close the pan with a lid, lower the flame and let the rice cook for 4-5 minutes.
- Stir it after every 1-2 minute.
- Serve hot with some spicy gravy dish or onion raitha.



Plate 2.2 Vegetable Pulao

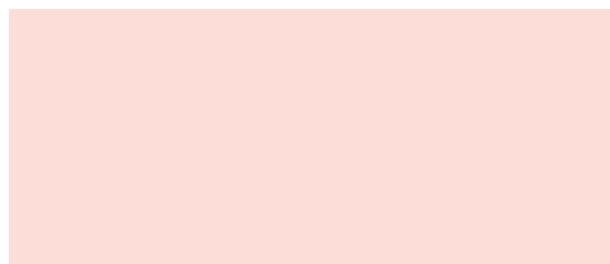
Using the factor method multiply and enlarge the recipe. If we need 50 servings according to the formula $50/5 = 10$. The conversion factor is 10.

Ingredients	Quantity g	Total using conversion factor	
		g	kg
Basmati Rice	300	$300 \times 10 = 3000$	3
Carrot (cut into 1 cm cubes) blanched	100	$100 \times 10 = 1000$	1
Beans (cut into 1 cm pieces) blanched	100	$100 \times 10 = 1000$	1
Green Peas blanched	100	$100 \times 10 = 1000$	1
Cashew roughly chopped	50	$50 \times 10 = 500$	$\frac{1}{2}$
Salt	To taste	To taste	
Black Pepper Powder	5	$5 \times 10 = 50$	
Green Chili slit (optional)	3 No	$3 \times 10 = 30$ Nos.	
Oil or Ghee	15	$15 \times 10 = 150$	
Whole Garam Masala:			
Cinnamon Sticks	2	$2 \times 10 = 20$ Nos.	
Cardamom Pods	5	$5 \times 10 = 50$ Nos.	
Cloves	5	$5 \times 10 = 50$ Nos.	
Bay Leaf	2	$2 \times 10 = 20$ Nos.	

Now the recipe is for 50 servings. Calculate the cost per serving using the method given in standardization of recipe. Sell the product in a food mela and calculate the total profit.

Note: Students can use different recipes and prepare for the food mela.

Result and Discussion:





2.3 Utilization of Leftover Food

Aim:

To learn how to use leftover foods

Apparatus:

Stove and kitchen utensils

Procedure

1. Raw food

Raw foods are perishable and semi-perishable that supplied to the kitchens for preparation. The fresh forms of foods are also considered as leftovers when the quantities are not enough for large scale production of a single item for service.

2. Partly cooked or prepared food



Plate 2.3 Juice

These include marinated meats, paneer, unserved salads in refrigeration, juices, boiled eggs, fermented mixtures as doughs and batters. These can be creatively used as barbecued meats with vegetables added on before cooking. Small amounts of juices can be used as toppings

for fruit pies, custards, shakes, puddings and cakes.

3. Cooked Foods

When cooked food remains in large quantities it usually gets pilfered, or wasted though mishandling and spoilage. Unless it is reused in some way and presented to customers again soon after.

Since cooked food cannot be stored for too long without its quality deteriorating, it is important to devise ways of incorporating it as soon as possible into new dishes or into dishes in which the food is unrecognisable.

Examples

Raw food



Plate 2.4 Chutney

Leftover raw chopped onion and tomatoes can be made into Onion chutney.

Partly prepared food

Leftover fruit juices can be made into a fruit punch.





Cooked food

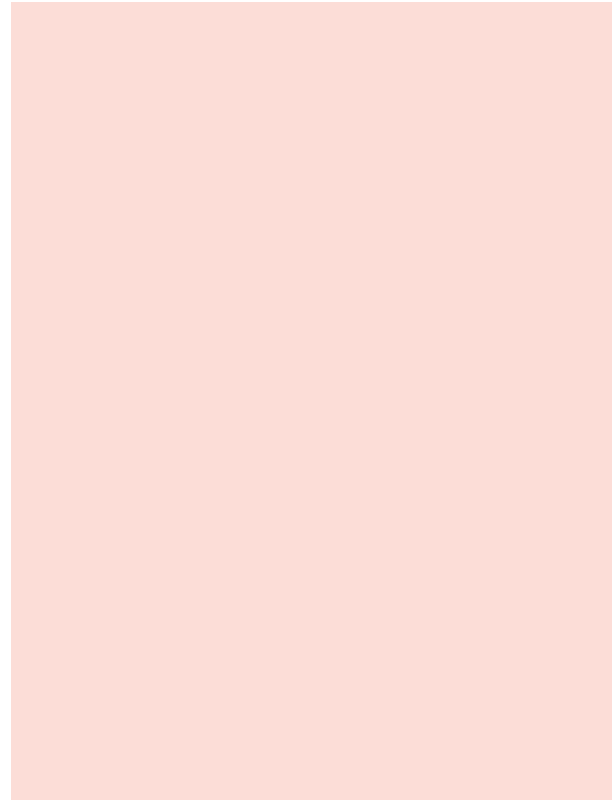
Leftover idli can be made into idli uppuma.



Plate 2.2 Vegetable Omelette

Note: Recipes should be written according to the quantity of leftover foods. Students can prepare different novel recipes.

Result and Discussion





Service Procedures



3.1 Table Setting

Aim:

To learn the skill of setting a table in a restaurant and know the service procedures.

Equipment needed:

Table, chairs, table cloth/linen, cutlery, napkins, cooking utensils.

Table Setting

In a food service industry setting a table or cover laying procedure considers to be an important one. Food service staff should ensure that the tables are set with proper cutlery and crockery. It varies with the type of food establishment. The types of cover also vary with the type of food establishment. The following types of table setting are popular in a restaurant: A'la carte and Table d'hôte.

Method:

Instruction: Students are instructed to prepare a menu (lunch or dinner) and lay a cover either for A'la carte or Table d'hôte. Cover laying procedure for A'la carte and Table d'hôte are given.

1 A'la carte cover Requirements

- Side plate with side knife
- Fish plate (centre of cover)

3. Service Procedures

- Fish fork
- Napkin
- Cruet set
- Sauce and oil pot
- Water glass
- Wine glass



Plate 3.1 A'la carte cover

Setting a cover for an A'la Carte Service

- Keep the side plate down to mark the cover position.
- Lay the fish knife and fork.
- Wine glass can be placed above the tip of the knife
- A simple A'la carte cover will be set with a soup spoon, knife and fork and others may be elaborate.
- Place the water glass slightly to the right and behind the wine glass.
- Keep the side plate to the left.

Table 3.1 A Model A'la Carte Cover (Lunch)

Course	Description	Cover
Soup	Vegetarian/Non-vegetarian	Soup bowl on an under plate with soup spoon Cruet set (Salt and pepper shakers)
Starter	Vegetarian Non-vegetarian	Half plate with small knife and fork Half plate, fish knife and fork
Entrée/Main course	Naan varieties Rice, vegetarian / non-vegetarian curries Eggs	Full plate, large knife and fork Full plate, All purpose spoon Half plate with small knife and fork
Salads	Vegetable/Fruit salad	Salad fork
Desserts	Fresh fruits and nuts	Half plate, fruit knife and fork
Savoury/Sweets	All kinds of sweets	Half plate, dessert spoon and fork
Beverages	Coffee/Tea	Coffee mug/Tea cup
		Water glass, napkins

- Place side knife on the side plate (1/3 of the right of the plate)
- Place the napkins.
- The cruet set / condiments (salt and pepper) must be placed on every table.

2 Table d'hôte cover requirements

- Side plate with a side knife
- Water goblet
- Fish fork and knife
- Soup spoon
- All purpose spoon and fork
- Dinner knife and fork
- Dessert spoon and fork
- Cruet set
- Sauce and oil pots

The step by step procedure of setting a cover for Table d'hôte service is given below:

- Centre the place setting using a main plate or napkin.

- Side plates to be placed to the left side of fish fork.
- Side knife should be placed on the right side of the plate.
- Soup spoon to the right of the cover and one cm from the edge of the table.
- Place the fish knife on right and fork on left, one cm from the edge of the table.

**Plate 3.2** Table d'hôte cover

- All purpose knife to the right and all purpose fork on left, 1cm from the edge of the table.
- Water goblet are placed directly above the all purpose knife.
- Dessert fork and spoon should be placed on the top of the cover parallel to the plate with fork pointing towards right and spoon pointing toward the left.
- Napkin folds should be placed in the centre of the cover.
- Cutting edge of the knives should be facing towards the left edge of the table.
- All cutlery and crockery to be placed one cm from the edge of the table.

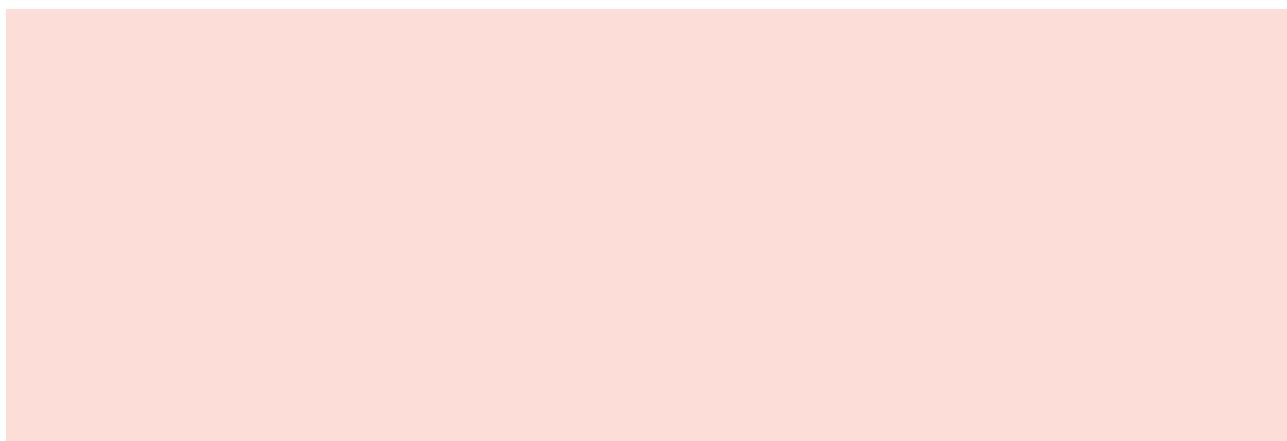
Linkages:

- <http://youtube.be/Db5039vOwko>
- <http://youtube.be/KSZTRLtJDFw>
- <http://youtube.be/8JLTwcIEZns>
- <http://youtube.be/MrcqO1uL92M>

Table 3.2 A Model Table d'hôte Cover (Lunch)

Course	Description	Cover
Soup	Tomato soup	Soup bowls on an under plate with soup spoon
Starter	Chilli gobi	Half plate with small knife and fork
Main course	Mushroom biriyani, raita, Paratha, Paneer butter masala	Full plate, large knife and fork All purpose spoon with fork
Dessert	Rice pudding / Fruit salad	Dessert spoon Fruit knife and fork
Beverages	Tea/Coffee	Coffee mug, Tea cup Cruet set
		Water goblet, Napkins

Result and Discussion:





3.2 Napkin Folding



Aim:

To learn the skill of napkin folding for a cover.

Materials needed:

Clean, starched and pressed napkins.

Napkin folding:

It is a type of decorative folding done with a napkin. It can be done as an art. Napkins should be neatly folded and kept on tables either in glasses, on side plates or in the centre of the cover, which adds attractive appearance to the table setting.

The following points should be kept in mind while folding the napkins.

- Use square napkins which are clean and starched.
- Make simple folds that do not require too much of handling.
- Crease well at every stage of folding.

Many types of napkin foldings are followed in the restaurants. Some simple napkin folding techniques are given below.

Types of napkin folding:

a Bishops Hat

1. Press napkin cloth.
2. Fold the napkin in half diagonally.

3. Fold bottom right and left corners upto the top corner.
4. Fold the bottom corner $\frac{3}{4}$ of the way upto the top corner.
5. Fold the front top cover down, flush with the bottom.
6. Fold the two top flaps down and tuck the edges under the front fold.
7. Turn the napkin over and fold the left hand side over one third of the way.
8. Fold the right hand side over and tuck napkin underneath in left hand fold.
9. Flip the napkin over.

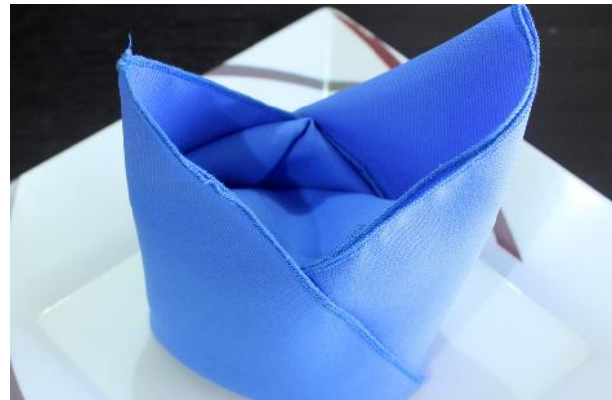


Plate 3.3 Bishop's Hat

b Rose Napkin Fold

- 1 Press the square napkin.
- 2 Fold all the ends of the napkin into the centre.
- 3 Turn the napkin over.
- 4 Fold the outer corners, to meet at the centre.
- 5 Once all the ends are folded, a square about $\frac{1}{4}$ th size of the unfolded napkin fold left.
- 6 Place something sturdy at the centre.

- 7 While maintaining downward pressure in the centre of the napkin, reach underneath, each corner and pull out the flaps to centre petals.
- 8 Pull out the flaps on all four corners of the napkin.
- 9 Remove the centre weight and the rose fold is done.



Plate 3.4 Rose Fold

c Simple Pocket Napkin Fold

- 1 Press the napkin cloth.
- 2 Fold the napkin in half.
- 3 Fold into quarters.
- 4 Orient the napkin so the open corner is facing away and to the left. Fold the top most layer of napkin in half diagonally and press it down.
- 5 Turn the napkin over so that the open corner is now facing away and to the right. Fold the right side back about 1/3rd of the way and press it down.
- 6 Fold the left side back about 1/3rd of the way and press.



Plate 3.5 Pocket Fold

- 7 Flip the napkin over and insert the cutlery.
- d Fan Fold**
- 1 Press the napkin cloth
 - 2 Fold the bottom edge of the napkin up by one inch. Then fold back the napkin one inch.
 - 3 Continue this back and forth folding motion until the entire napkin is complete.
 - 4 Holding on finger into the centre, fold the pleated napkin in half.
 - 5 Slide a napkin ring up the pleats
 - 6 Fan out the top of the napkin.



Plate 3.6 Fan Fold



e Knot Fold



Plate 3.7 Knot Fold

- 1 Press the napkin neatly.
- 2 Fold the napkin in half diagonally.
- 3 Starting from the long edge, fold the napkin edge up one inch.
- 4 Fold the napkin over until it makes one long strip
- 5 Finish by folding the right edge over the left and loop to create a knot.

f Cone Napkin Fold



Plate 3.8 Cone Fold

- 1 Press the napkin flat
- 2 Fold the napkins in half and orient the open end away from you.
- 3 Fold the napkin into quarters
- 4 Orient the napkins so that the open end is facing away from you.

Fold the topmost layer all the way forward and press it down flat.

- 5 Turn the napkin over and fold the left hand side of the napkin over two thirds of the way
- 6 Fold the right hand side of the napkin to match the left hand side.
- 7 Tuck the corners of the napkin into the left hand side flap.

g Envelope Fold

- 1 Press the napkin flat
- 2 Fold the napkin in half so that the open end is facing away from you
- 3 On the right hand side of the napkin, fold both corner edges towards the centre to form two triangles.
- 4 Fold the left side of the napkin over in half to meet the right.
- 5 Take both triangle layers and fold both over to create the napkin envelope fold.



Plate 3.9 Envelope Fold

h Tulip Fold

- 1 Press the napkin flat.
- 2 Fold the napkin in half diagonally.
- 3 Fold both layers of the top of the triangle down to the bottom edge.

- 4 Take the right edge of the triangle and fold up at an angle. Repeat on the left side.
- 5 Turn the napkin over and finish by taking the lower flaps and folding them up and at an angle.



Plate 3.10 Tulip Fold

i Pinwheel Fold

- 1 Press the napkin flat.
- 2 Fold all the tips of the napkins into the centre.
- 3 Fold two opposite edges towards the centre, creating a rectangle.
- 4 Fold the two short edges of the rectangle towards the centre.
- 5 Now take one flap and pull out one of the edges to make a part.
- 6 Repeat with the second flap.
- 7 With the right flap, pull it down towards you.

- 8 Turn the napkin around and repeat steps 5-6 to finish up the pinwheel napkin fold.



Plate 3.11 Pinwheel Fold

Note: Students can practice the above types of napkin folding. The step by step procedure can also be seen in using the following link.

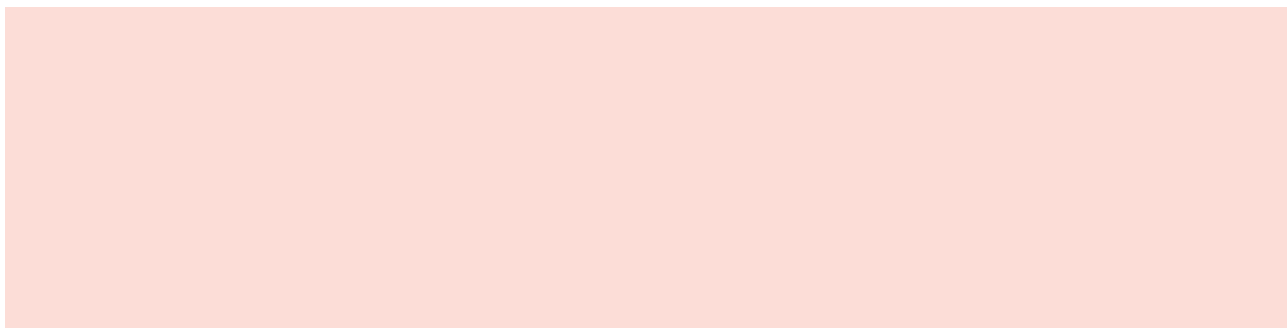
Source: <https://bumblebeelinens.com/napkinFolding.php>.

Students can be instructed to try other types of napkin folding with the help of the following links also.

Linkage

- <https://www.youtube.com/watch?v=LG3KOpk59FA>
- https://www.youtube.com/watch?v=zD3od_5QR-U
- <https://www.napkinfoldingguide.com>

Result and Discussion:





3.3 Flower Arrangement in Restaurants

Aim:

To learn the skill of flower arrangement in a restaurant.

Materials needed:

Vases, fresh flowers, scissors, tapes, pins and brick.

Flower arrangement in a restaurant

Flower arrangement gives attractive atmosphere inside the restaurant. But the flower arrangement on a cover should be simple and the highly scented flowers must be avoided. The prepared vase must be kept at the centre of each table. Some of the flower arrangement used in the centre of the room and the buffet table are given below:

1. Mass arrangement



Plate 3.12 Mass Arrangement

- More flowers and foliage are used to create a closed shape with little or no open space.

Use of colour is important for successful mass arrangements because they should harmonize or complement each other. These arrangements are round or triangle in shape.

- Flowers and foliage are arranged based on elements and principles of design.
- Mass arrangement is usually seen in the centre of the buffet arrangement or in a dining hall.

2. Floating Arrangement



Plate 3.13 Floating Arrangement

Floating arrangements are easy to make for a centre place inside the restaurant.

- Select flowers and cut away the stems.
- Select a wide bowl made up of glass, brass or metal. It should have sufficient space to fit the number of flowers selected.





- Arrange the flowers according to your taste or harmony.

3. Ikebana – Japanese style flower arrangement

Ikebana is the art of flower arrangement followed by Japanese.

- Fill water 1/3rd of height in a shallow vessel.
- A floral brick can be placed to hold the flowers.
- Plant material should be of atleast three different lengths.
- The stems with flower should be arranged according to their heights.

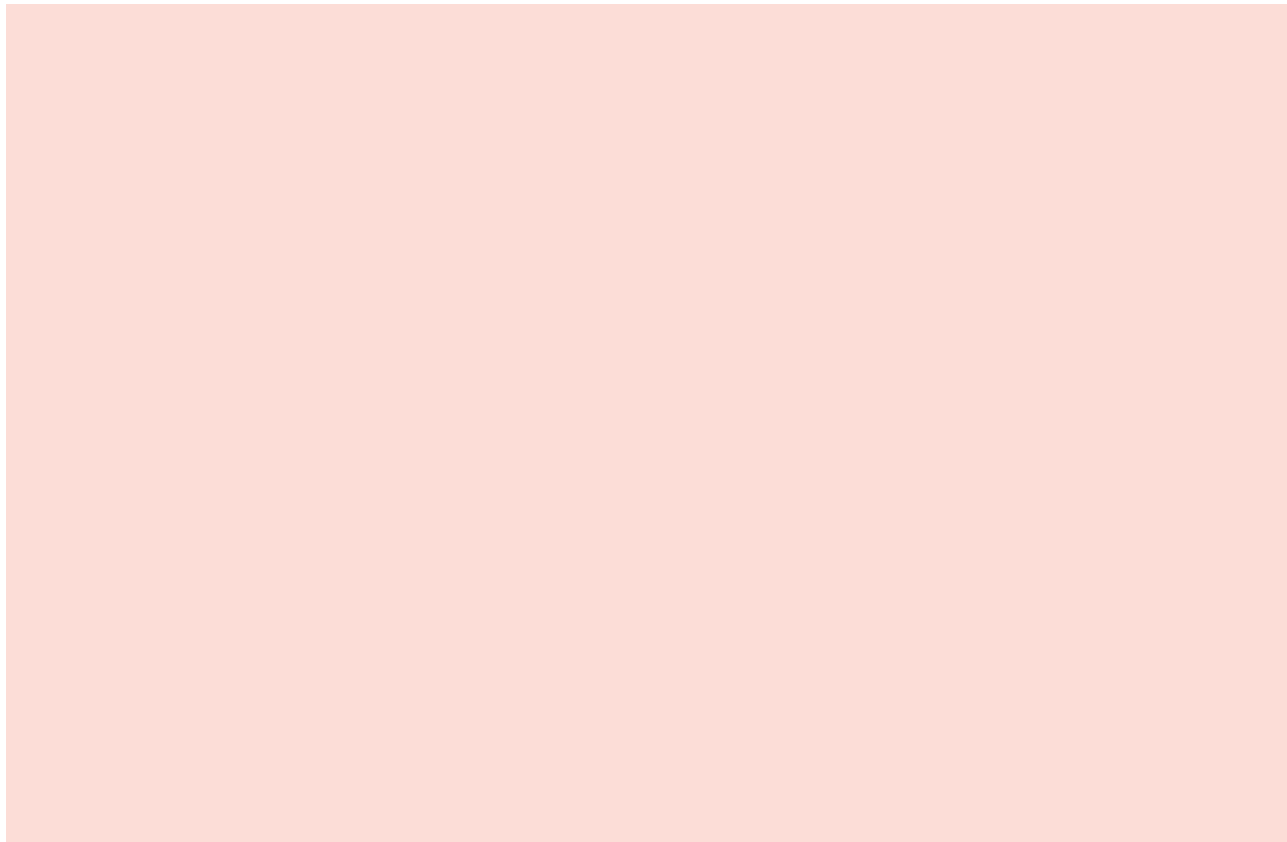


Plate 3.14 Ikebana Arrangement

Instruction

Students can do any one flower arrangement. A simple arrangement can be done to place on a cover.

Result and Discussion:





Production and Carving Skills



4.1 Preparation of Cakes

Aim:

To learn the skill of baking cakes.

Equipment Needed:

Oven, mixing bowls, ladles, pan, spatula, whisks, measuring cups.

Procedure:

Cake is typically a sweet, baked dessert. Most of the cakes are done using eggs to create that fluffy, cloud like texture. It is possible to replicate the spongy texture without the use of eggs by replacing eggs with mashed bananas, apple sauce, vinegar with baking soda and yogurt depending on the recipe.



Plate 4.1 Eggless Cake

(a) Preparation of Eggless Cake

Ingredients	Quantity
Maida	1½ cup
Baking powder	1½ tsp.
Sodium bi-carbonate	½ tsp.
Condensed milk	¾ cup
Melted butter	4 tbsp.
Vanilla essence	1 tsp.

Method:

1. Sieve the maida, baking powder and sodium bi-carbonate together, keep aside.
2. Pre heat the oven to 180°C.
3. Grease the pan with melted butter, dust it with plain flour, shake and remove the excess flour.
4. Take a deep bowl, add condensed milk, melted butter and vanilla essence. Mix well using a spatula.
5. Add the sieved flour mixture into the bowl and add 5 tbsp. of water and mix gently.
6. Pour the batter into a greased pan.
7. Bake at 180°C for 30-35 minutes.
8. Unmould the cake and keep aside to cool.

(b) Sponge Cake

Principles involved in sponge cake preparation

The following precaution should be considered while preparing sponge cake.

1. Measure the quality ingredients accurately.
2. Remove water and oil grease from the beating bowl.

3. Carefully separate egg white and yolk.
4. Use the moderately granulated sugar for better quality
5. Sieve the ingredients prior to the preparation to avoid the impurity.
6. Beat the egg in the same direction and a fixed speed from beginning to end to minimise the air from escaping.
7. Flour folding should be very careful to avoid the air disturbance
8. Fat should be cooled after melting for Genoese sponge.
9. Carefully mix the oil (or) when adding oil care must be taken.
10. After adding the oil, batter should never get beat.
12. Tray or mould should be in correct size and proportion
12. Dusted with flour or greased or butter paper lined the mould for the shaping of the sponge
13. Do not keep the preparation out for more time, without baking.
14. Baking should be carried out in a closed oven.



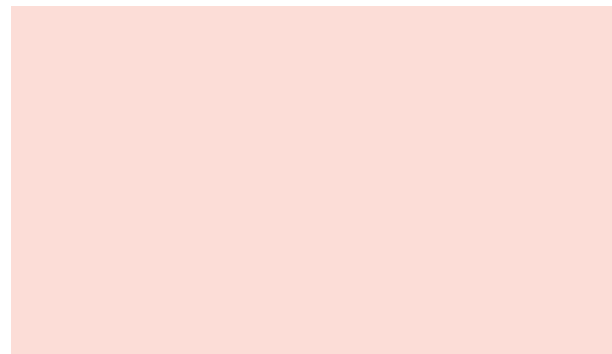
Plate 4.2 Sponge Cake

Ingredients	Quantity
Maida	1½ cup
Sugar	1½ cup
Butter	4 tbsp.
Egg	6 Nos.
Baking powder	½ tbsp.
Vanilla Essence	1 tbsp.

Method:

1. Sieve the flour and baking powder and keep aside.
2. Pre heat the oven at 180°C.
3. Line the pan with butter paper and grease the paper with butter, and then sprinkle flour all over it.
4. Melt the butter using double boiler
5. Separate the egg yolk and whisk.
6. Dissolve the sugar using simmering water for about 3-4 minutes.
7. Mix the whisked yolk and dissolved sugar until it lightens the colour.
8. Add vanilla essence to this mixture.
9. Beat the egg white till it becomes soft.
10. Fold the beaten egg white into the yolk.
11. Add the sieved flour mixture and mix gently.
12. Pour the melted butter to this mixture and fold until smooth.
13. Spread the batter in pans and bake at 180°C.
14. Cool on a wire rack before serving.

Result and Discussion:





4.2 Preparation of Common Beverages

Aim:

To obtain the skill of preparing common beverages.

Equipment Needed:

Mixie, Strainer, Gas stove, Cups, Knife, Utensils

Beverages:

Beverages are liquids made for consumption. They may be in the form of stimulants like tea, coffee, milk or as refreshers like soft drinks, juices and water.

In hospitality industries the non-alcoholic beverages are essentially provided and served as a breakfast, lunch, dinner with or without meal to the consumer.

They stimulate palate and act as an appetizer. Beverages not only give taste but also enhance colour, flavour and eye appeal.

1. Espresso Coffee

Ingredients	Quantity
Milk	3 cup
Coffee powder	2 tsp.
Water	½ cup
Sugar	As required
Chocolate powder	As required



Plate 4.3 Espresso Coffee

Method:

1. Add milk to a bowl and boil it on a medium flame.
2. Add water, coffee powder and sugar to the blender jar and grind until it forms a foamy liquid.
3. Add the coffee water mix to it when the milk starts boiling and rising upwards.
4. Simmer it for a minute. When it starts boiling, remove from the flame.
5. Pour into the coffee mug and sprinkle some chocolate powder.

2. Tea - Masala Chai

Ingredients	Quantity
Milk	2 cups
Ginger grated	½ inch
Cardamom	1 No
Clove	1 No
Cinnamon stick	2 tsp.
Tea powder	2 tsp.
Water	¼ cup
Sugar	3 tsp.



Plate 4.4 Masal chai

Method:

1. Crush the cardamom, clove, cinnamon make a coarse masala powder.
2. Boil water then add grated ginger, masala powder and sugar.
3. Heat in a medium flame for 3-4 minutes.
4. Then add milk and boil for 5-6 minutes.
5. Switch off the flame if there is a change in colour of the tea from milky shade to brown shade.
6. Serve hot using cups.

3. Coconut Cucumber Cooler

Ingredients	Quantity
Coconut water	4 cups
Cucumber sliced	2 Nos.
Lime juice	½ cup
Sugar	¼ cup
Chopped mint leaves	¼ cup



Plate 4.5 Coconut Cucumber Cooler

Method:

1. Combine coconut water, cucumber, lime juice, sugar and mint leaves.
2. Chill for 1 to 2 hours.
3. Serve in glasses.
4. **Soups - Sweet corn soup**



Plate 4.6 Sweet Corn Soup

Ingredients	Quantity
Sweet corn	1 medium
Ground black pepper	½ tsp.
Celery	1 tsp. (optional)
Spring onion (chopped)	1 tbsp.
Oil	1 tbsp.
Water	1½ cups
Corn starch	½ tbsp.
Salt	As required

Method:**Making sweet corn paste**

1. Boil the corn cobs, scrap the corn kernels from the cobs.
2. Keep aside 2 tbsp. of kernels.
3. Blend the remaining corn kernels with some water to a smooth paste.

Making corn soup

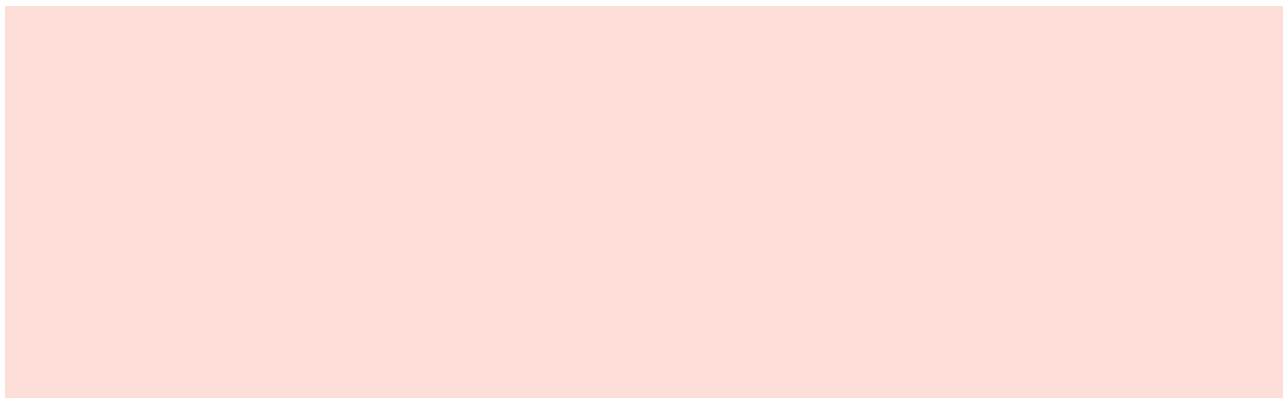
1. Heat the oil in a pan, sauté the spring onions.
2. Add celery and sauté for a minute then add corn paste.
3. Add vegetable stock or water stir well and allow to boil.
4. Add pepper powder, corn kernels and salt. Stir and simmer for 2-3 minutes.
5. Add corn flour paste, stir and keep it in simmer for 2-3 minutes till the soup thickens.
6. Garnish the soup and serve

5. Banana Milk Shake

Ingredients	Quantity
Banana	1 No.
Milk	1 cup
Sugar	3½ tsp.
Nuts (any)	If desired

**Plate 4.7 Banana Milk Shake****Method:**

1. Peel the banana.
2. Blend the banana with milk and sugar. Pour this into serving glasses with couple of ice cubes.
3. Garnish with some chopped dry fruits if desired.

Result and Discussion:



4.3 Recipes for Salad

i). Carrot and Cabbage Salad

Ingredients	Quantity
Carrot	1 (Medium size)
Cabbage	2 Cups (Sliced)
Peanut	½ Cup (Roasted)
French Dressing	As required



4.8 Carrot and Cabbage Salad

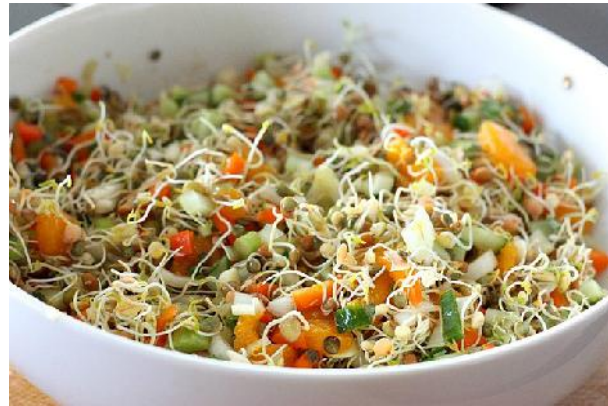
Method:

Scrape the cleaned carrot. Mix the chopped cabbage, carrot, and peanut along with French dressing. More seasoning can be added.

ii). Mixed Sprout Salad

Ingredients	Quantity
Mixed sprouts	¾ Cup (Boiled), (Channa, Green gram, Rajma and Moong bean)
Coriander	2 tbsp (Chopped Leaves)
Radish	¼ cup (Chopped)
Tomatoes	¼ cup (Chopped)

Ingredients	Quantity
Fenugreek leaves	¼ cup (Chopped Leaves)
Oil	1 tsp
Green chilli	1
Salt	To taste



4.9 Mixed Sprout Salad

Methods:

1. Combine the mixed sprout with cut vegetables along with chopped leaves and salt in a bowl and mix it well.
2. Heat the oil in a pan, add green chilli and slightly sauté on a medium flame.
3. Pour this on the top of the salad and mix. Serve it immediately.

iii). Fruit Salad

Ingredients	Quantity No
Banana	4-5
Apple	2
Green grapes	¼ kg
Mango	1
Sweet lime	2
Sappotta	4-5
Cashew nut	8
Raisins	10
Dates	5

Ingredients	Quantity No
Milk	500 ml
Sugar	1¼ cup
Saffron strands	4
Custard powder	1 tbsp

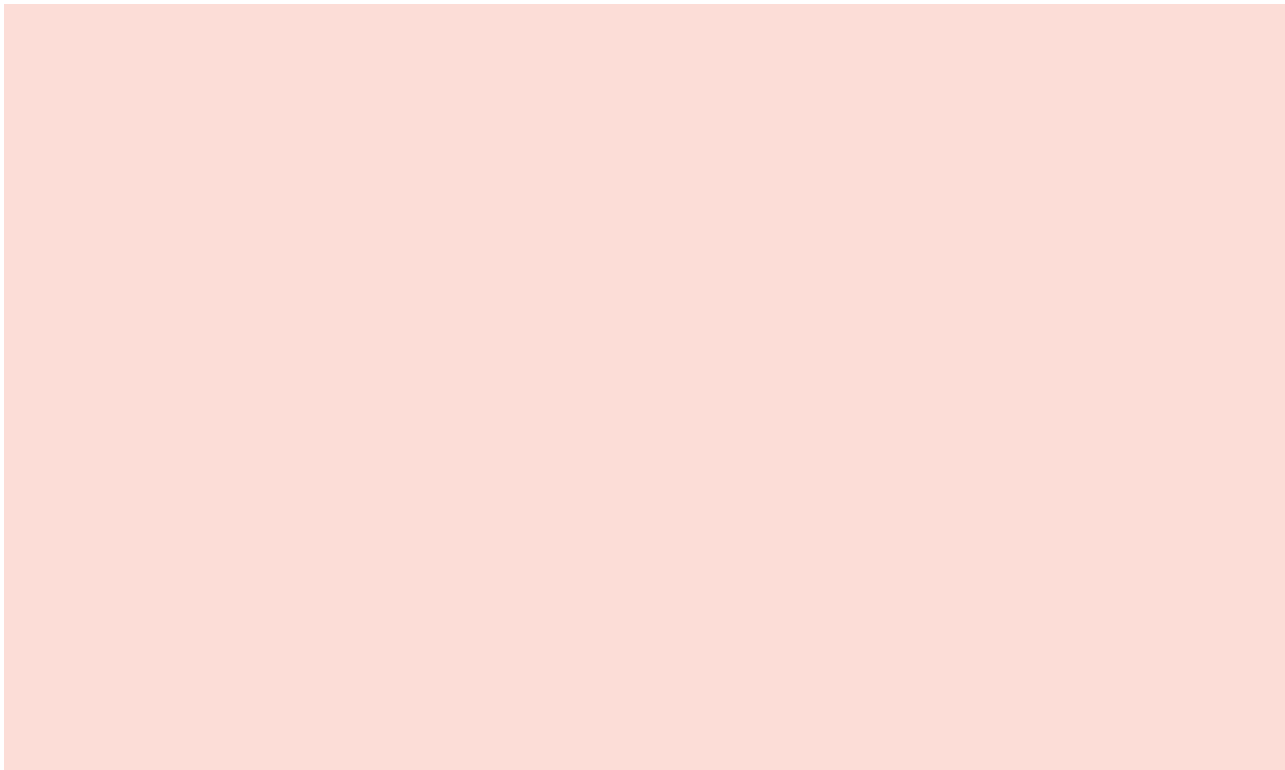


4.10 Fruit salad

Met Plate 4.15 Watermelon Bowl hods

1. Cut all the fruits uniformly in small size and add some sugar in between to reduce the chances of browning and keep aside or keep it in refrigerator.
2. Take custard powder in a small bowl and mix it well with little amount of milk and keep it separately. Boil the remaining milk and at the end point add the early prepared custard mix and sugar into this and let it to boil, stir it well in between. Let it to cool.
3. Take the cut fruits and mix it with this custard milk and stir gently.
4. It can serve itself or serve with ice-cream on the top.

Result and Discussion:





4.4 Vegetable and Fruit Carving



Aim:

To gain skill in vegetable and fruit carving.

Tool Needed:

Carving knives, sharp knife, fruits, vegetables.

Carving

- Carving is the art of shaping vegetables and fruits to form beautiful figures, such as flowers or birds.
- Vegetable and fruit carving originates in Thailand.
- The products of vegetable carving are generally flowers or birds; the only limit is one's imagination.
- The techniques of vegetable carving vary from person to person.
- Vegetable carving is generally used as a garnish, but it can also be used for flower arrangement.

1. Vegetable Carving

a. Carrot Carving (Leaf shape)

1. Wash the carrot thoroughly and cut into 3 inch length.
2. Cut each one lengthwise into slices $\frac{1}{4}$ inch thick and trim each slice to the shape of leaf.
3. With the tip of the knife, cut two shallow grooves down the center of the slice to form the mid ribs of the leaf.

4. Along the edge, cut wide spaced notches to form the teeth.
5. Then cut shallow grooves to form the ribs of the leaf, working from the base to the top.

(www.templeofthai.com/fruit_carving/vegetable-carving.php).



Plate 4.11 Carrot Leaf Carving

b. Beetroot Carving (Rose shape)



Plate 4.12 Beetroot Rose Carving

1. Select a fresh beet root
2. Peel the beet root.
3. Cut the beet root into small round
4. Arrange the pieces from smaller size to bigger size.
5. Make a slit in each piece.
6. Take a small cube from the remaining beet root and insert this in a tooth pick to make a bud.



7. Curve the slices and insert one by one in the tooth pick to make a rose.

(<http://www.asion.recipe.com/methods/fruit-vegetablecarving.html>.)

c. Cucumber Carving (Flower shape)



Plate 4.13 Cucumber White Lotus Carving

1. Wash the cucumber, cut off a section of a cucumber, should include both an end and cut surface.
2. Divide the circumference of each into 8 equal parts and then make cuts about 3mm deep between each part down the length of the section.
3. Slice beneath each part down the length almost to the base to separate it from the flesh, thus forming the 8 outer petals.
4. Trim the flesh to remove ridges and then divide into 8 parts as before to make the inner ring of petals.
5. These should be centered between those of the outer ring.
6. Remove the core of the cucumber, trim each petal so it tapers to a point and then insert the center of the flower.
7. For the center, use ¼” thick disk cut from a small carrot. Cut small grooves in a crisscross pattern on one face and place up in the lotus flower.

(<http://www.asion.recipe.com/methods/fruit-vegetablecarving.html>.)

d. Cucumber Carving (Leaf shape)



Plate 4.14 Cucumber Leaf Shape Carving

1. Take two small cucumbers or one long cucumber.
2. Cut the cucumber length wise into fairly thick slices, cut the slices diagonally to obtain diamond shaped pieces.
3. Trim each piece to shape like a leaf.
4. On the green side, cut a green to represent the mid-rib and then cut diagonal grooves to represent the veins.
5. These should be spaced to give an attractive alternating green and white pattern. Finally cut notches around the edges of the leaf.

(www.templeofthai.com/fruit_carving/vegetable-carving.php.)

2. Fruit Carving

a. Watermelon Bowl

1. Select the melon little hard
2. Slice the small of the base of the melon.

3. Draw a pattern on the melon, position the pattern so it covers most of the top surface of the melon, which is typically removed to create a bowl shape.
4. Cut along the pattern.
5. Remove the remaining rind
6. Hollow out the melon, remove all the flesh from the melon, and scrap inside surfaces so only the rind remains.
7. Fill the bowl with fruits and serve.
(<https://youtu.be/obtL3YLF0g>)



Plate 4.15 Watermelon Bowl

b. Apple Carving (Leaf shape)



Plate 4.16 Apple Carving

4. Production and Carving Skills

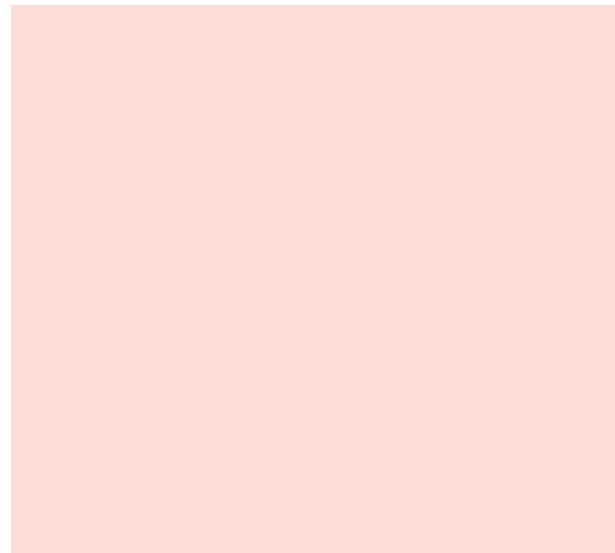
1. Wash the apple.
2. Cut a wedged shape slice as in the picture.
3. Trim away any of the core, leaving the flesh and skin.
4. With this carving knife, cut the slice to the shape of a leaf.
5. With the tip of the knife, make curving grooves in the skin to represent the veins of the leaf. Work from the base of the leaf to the tip.
6. Cut notches along the edges of the leaf.

(<http://www.asion.recipe.com/methods/fruit-vegetablecarving.html>.)



Plate 4.17 Apple Leaf Carving

Result and Discussion:





Food Safety And Adulteration



5.1 Preparation of a Label with Food Standards

Aim:

To prepare a food label based on the food standard.

Table 5.1 FSSAI LABEL

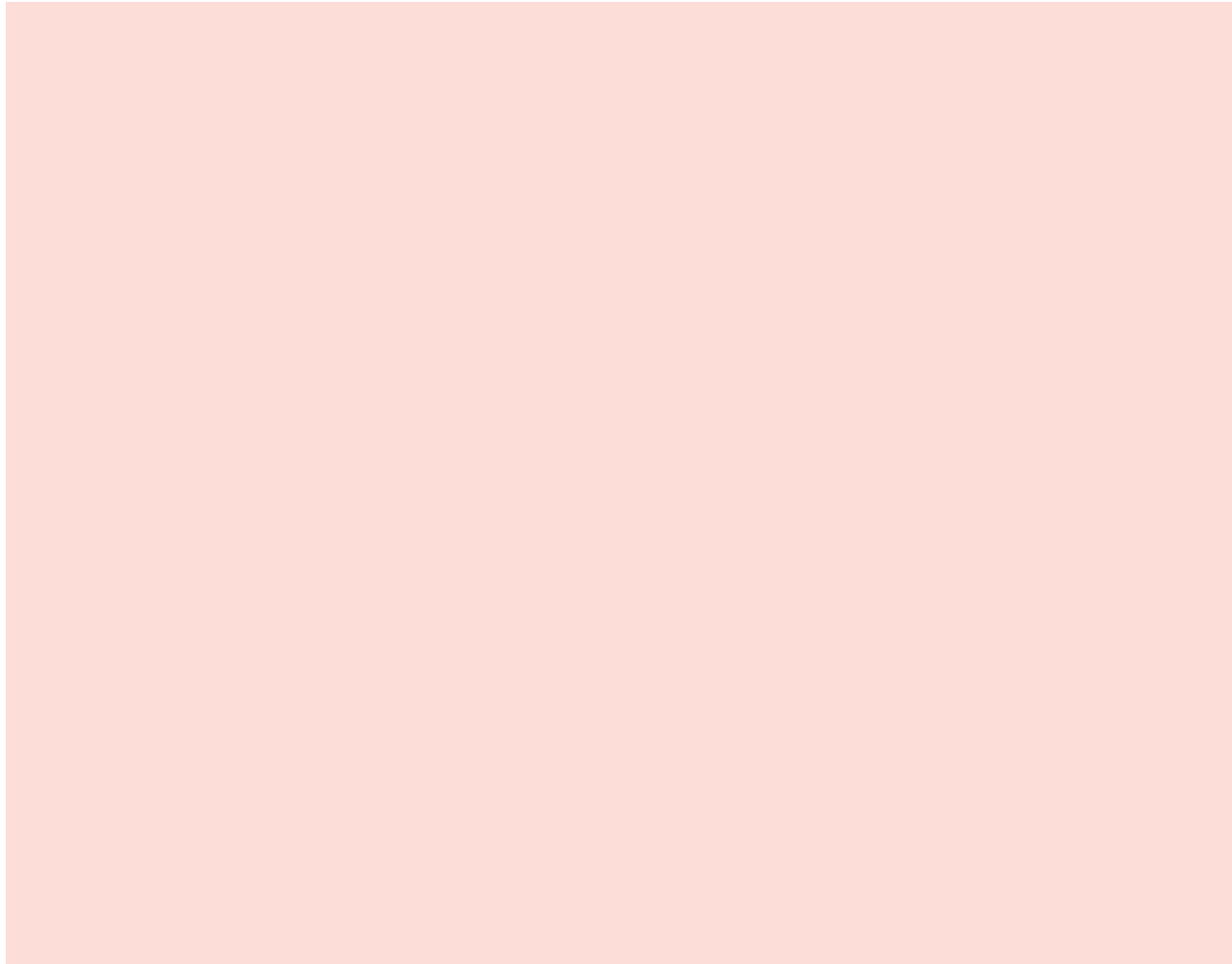
Requisites of the label	Mark Yes or No	Details
Name of the product		
Brand Logo/Symbol		
MRP		
Net Weight		
Display of FSSAI label		
FSSAI License number		
Batch number		
Consumer care Number		
Website		
Bar Code		
Vegetarian/Non-vegetarian		
Pre-packed food		
Packaging material used		
Date of Manufacture		
Date of Packing		
Date of Expiry		
List of Ingredients		
Nutrition Information		
Food Additives		
Permitted colours -Natural/ Synthetic		
Country of origin		



<https://foodsafetyhelpline.com/2018/04/fssai-drafts-new-labelling-and-display-regulations-2018/>

Prepare a label for your own product using FSSAI standards.

Result and Discussion:





5.2 Identification of Common Adulterants

Aim:

To identify the adulterant in the foods

Apparatus:

Adulterated foods and test tubes.

Procedure:

Definition:

Adulteration is defined as the process by which the quality or the nature of a given substance is reduced through the addition of a foreign or an inferior substance and the removal of a vital element.

Types of adulterants

1. Intentional
2. Incidental

Intentional: Intentional adulterants are those substances that are added as a deliberate act on the part of the adulterer with the intention to increase the margin of profit. E.g. sand, marble chips, stones, mud, chalk powder, water and dyes. These adulterants cause harmful effects on the body.

Incidental: These adulterants are found in food substances due to ignorance, negligence or lack of proper facilities. It is not a willful act on the part of the adulterer. E.g. Pesticides, droppings of rodents, larvae in food.

Table 5.3 Intentional Adulterants and Methods of Detection

S. No	Name of the food	Adulterant	Simple method for detection of adulterant
1	Ghee or butter	Vanaspathi	Take about one teaspoonful of melted ghee or butter with equal quantity of concentrated hydrochloric acid in a test tube and add to it a pinch of cane sugar. Shake well for one minute and test it after 5 minutes. Appearance of crimson colour in lower layer shows the presence of vanaspathi
2.	Vegetable oil	Argemone oil	Add 5ml of concentrated nitric acid to 5ml of sample. Shake carefully, allow to separate. Yellow, orange yellow, crimson colour in the lower acid layer indicates adulteration.
3.	Honey	Molasses (sugar and water)	A cotton wick dipped in pure honey when lighted with a match stick burns. If adulterated the presence of water will not allow the honey to burn. If it is adulterated, it will produce a crackling sound
4.	Rava	Iron particles	By moving a magnet through rava iron particles can be separated.

S. No	Name of the food	Adulterant	Simple method for detection of adulterant
5.	Rice	Marble or other stones	A simple test for adulteration is to place a small quantity of rice on the palm of the hand and gradually immerse the same in water. The stone or marble chips will sink.
6.	Spices (ground)	Powdered bran or saw dust	Sprinkle spices on water surface. Bran powder and saw dust float on the surface of water.
7.	Black pepper	Dried seeds of papaya fruit	Papaya seeds are shrunken, oval in shape and greenish brown or brownish black in colour.
8.	Turmeric powder	Metanil yellow	Take a teaspoonful of turmeric powder in a test tube. Add a few drops of concentrated hydrochloric acid. Instant appearance of violet colour which disappears on dilution with water. If the colour persists, presence of metanil yellow is indicated.
9.	Chilli powder	Brick powder, sand, soap stone	Any grittiness that may be felt on tapping the sediment at the bottom of glass confirms the presence of brick powder or sand. Smooth white residue at the bottom indicates the presence of soap stone.
10.	Milk	Water	The presence of water can be detected by pouring a drop of milk in a polished surface. The drop of pure milk either stops or flows slowly leaving a white trail behind it. Whereas milk adulterated with water will flow immediately without leaving a mark.

Result and Discussion:



Management Of Resources



6.1 Analyse Methods of Conserving Time, Money and Energy

Aim:

To analyse methods of conserving time, money and energy.

Equipment Needed:

Kitchen equipment.

Procedure:

Labour saving devices help to save energy, time and money. Commercial and non-commercial food service outlets use labour saving devices to save energy, time and money. Some of the equipment are pressure cookers, chappathi maker, grinder, mixers, egg beater, vegetable cutter and so on.

Chappathi maker: The dough is prepared in the dough maker and it is transferred into the chappathi maker. It portions out the dough, rolls out and prepares the chappathis in hundreds in a short time. Here time, energy and money are saved by the food service outlet.

Energy: The process of portioning, rolling and preparing is completed without using the energy of manpower.

Time: The time taken for all these processes is minimum compared to manual process.

Money: Number of labours is less and fuel is saved. Hence money used for all this is also saved.

Note: Students can use any one labour saving device and prepare a recipe. They should mention how they have saved energy, time and money using the labour saving devices (E.g: Labour saving devices: Vegetable cutter, Egg beater, mixie, grinder, pressure cooker and any other available labour saving devices).

Labour saving equipment - Pressure Cooker & Vegetable Cutter

Preparation of vegetable biriyani

- Divide the class into two groups
- First group can use knife for cutting and boiling method for preparation.
- Second group can use vegetable cutter and pressure cooker for preparation.



Comparison of both methods

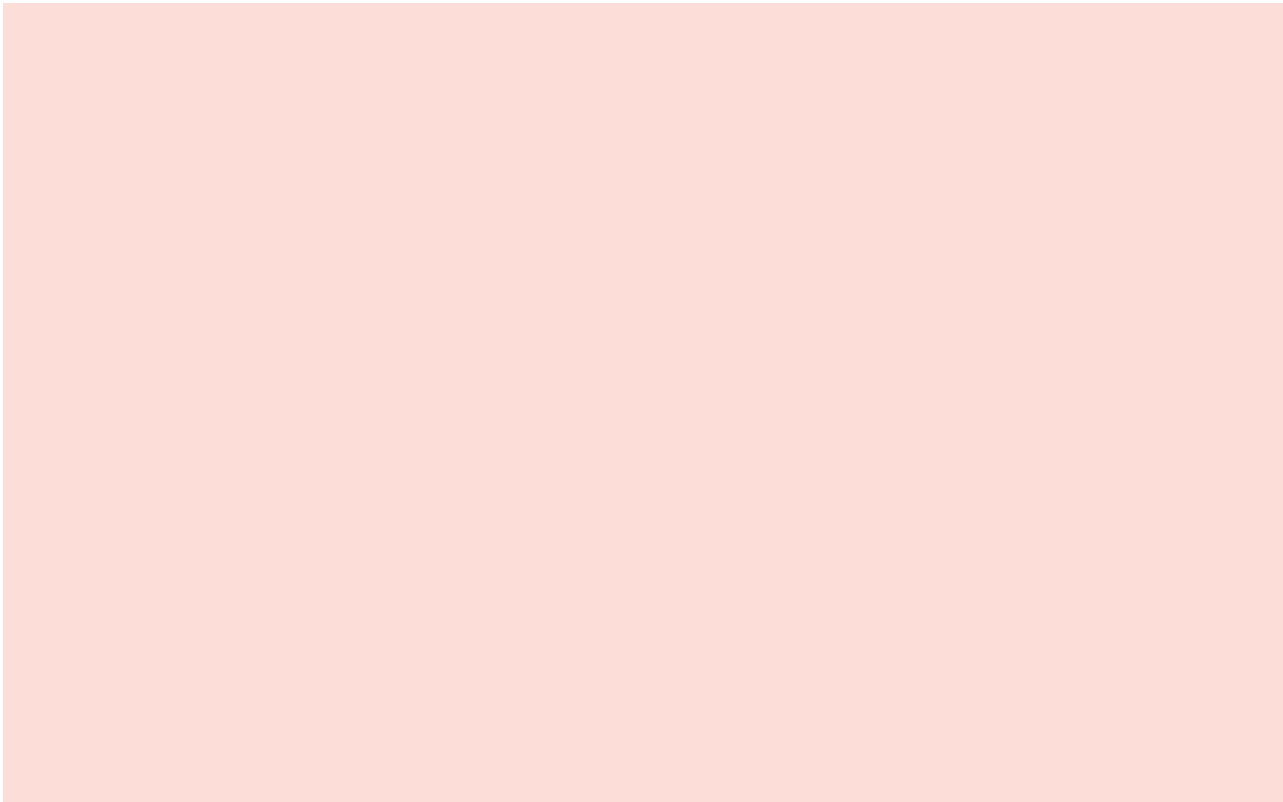
Time saved: Pressure cooking method saves time because it is faster

Energy saved: Vegetable cutter saves energy while cutting vegetables. The students need not supervise the preparation.

Money saved: Time taken for pressure cooking is less thereby saving fuel to the cost also less. Initial cost of labour saving device and maintenance cost may be high.

Note: Students can use any labour saving device and compare like the above example.

Result and Discussion:





Recruitment



7.1 Planning an Advertisement for a Job Title in Food Service Operation

Aim:

To acquire the skill of planning an advertisement for a job in food service operation.

Apparatus :

Chart, pen, pencil, colour pencil

Procedure :

Study the advertisement collected as a part of the student activity. Plan an advertisement for a job in food service operation using the job specification for the title. Some job titles that can be advertised are cook, floor supervisor, steward, waitress, executive housekeeper, purchase manager.

Advertisement for an Executive Chef

Applications are invited from dynamic, energetic and responsible professionals who have hands on experience in all aspects of Food and Beverage, Kitchen Management and controls, for the post of **Executive Chef**.



Plate 7.1 Chef

Candidates with following qualification and experience are eligible to apply:

- Graduation in catering with at least 15 years experience.
- Should be capable of managing and organizing Food and Beverage Department with specialty of Indian/ Continental/Chinese and Italian foods. Should be a team leader and be capable of managing and training the junior staff.
- Should be able to plan and promote menus for different restaurants.

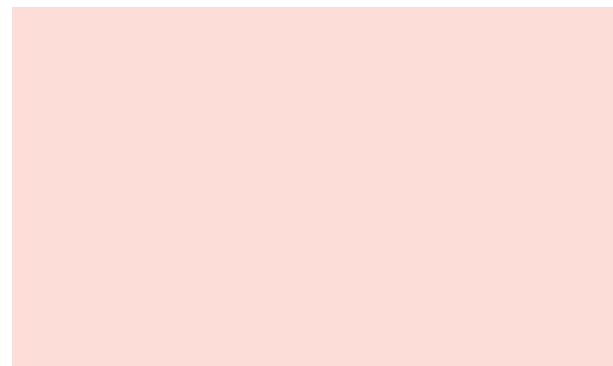
Attractive salary package and other benefits will be offered.

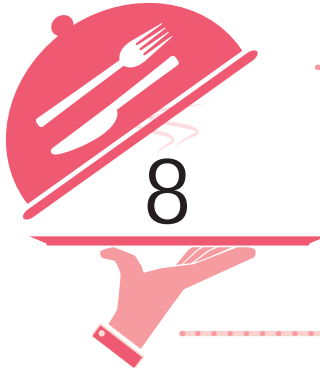
Application can be sent through email to the following address hrd2907@gmail.com or contact 044-24354929.

Apply on or before date: month: year

Note: Students can be asked to prepare advertisements for any job title

Result and Discussion





Marketing Skills



8.1 Sales Promotion Techniques

Aim:

To understand and gain practice on sales promotion techniques.

Procedure:

Plan a new food product for sales:
Keeping in mind

- Type of customers
- Purchasing power of the customer
- Feasibility of production and sales possibilities.

Plan suitable marketing techniques:

- Providing free samples
- Free trials
- Free gifts
- Special pricing
- Digital marketing
- Customer contests
- Attractive packaging

Free Samples

Providing free samples is a technique used to introduce new products to the market place. Samples give the consumer a chance to see how well they like a product or try something

they otherwise would not normally buy. Local bakeries can hand out their new creations at a super market or in a local sale area.

Free Trial

A free trial is a way for a consumer to try a new product while eliminating risk. It may be used when a product is new to the market. This technique is commonly used in television where the customer has 30 days to try the product, during which time the customer can return it for a full refund if he is not satisfied.

Free Gifts

Free gifts tempt consumers to make a purchase because it includes a bonus along with the product. The gift may be included in the outer part of the product packaging to serve as a visual attraction. It may also take the form of a prize or coupons inside the package. For example- soap inside the soap dish.

Special Pricing

Special pricing is used to offer consumers a lower price for a period of time or to purchase in multiple quantities. Examples for this are Buy one get one free, Discounted price and Buy 3 for the price of 2.



Plate 8.1 Buy one Get one Free

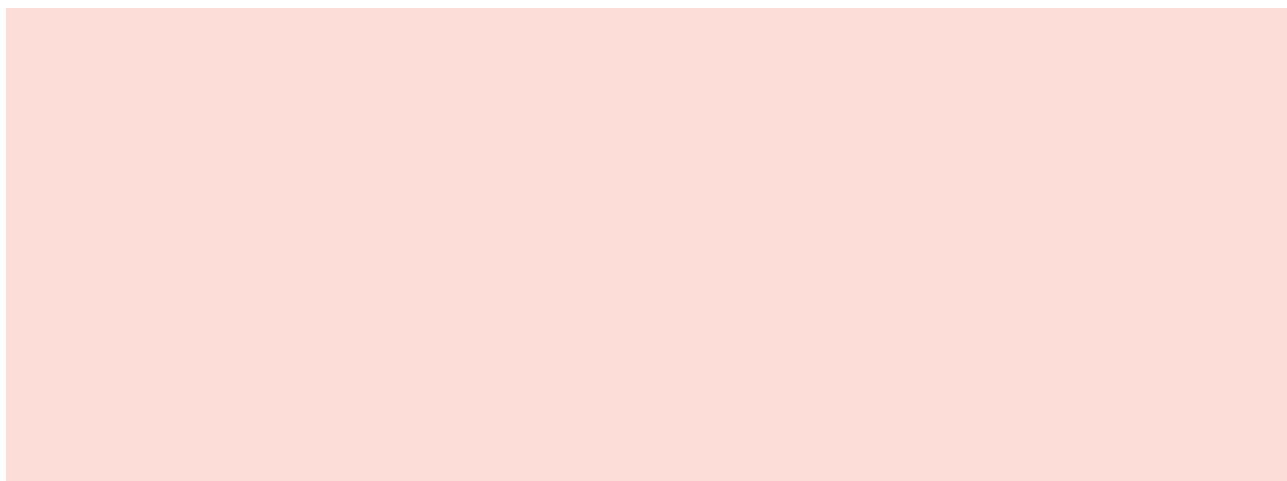


Plate 8.2 Discounted Price

Digital Marketing

Digital marketing does promotional strategies by providing online display ads or direct marketing, to advertise other

Result and Discussion



consumer-centric efforts. A business offering a free gift with purchase can use Facebook ads to promote the event or offer a coupon code to subscribers of an email list.

Customer Contests

Contests offer the customer a chance to win prizes like cash or store products. For example, an electronics retailer could hold a karaoke contest at its store, while using local celebrities as judges.

Attractive packaging

The packaging of products is one of the most important aspects of marketing. An attractive packaging design must make both a psychological and physical connection. So the product should look good and easy to identify for consumer convenience.

Students can prepare any two appropriate sales promotion techniques to sell a food product.



8.2 Marketing and Technology

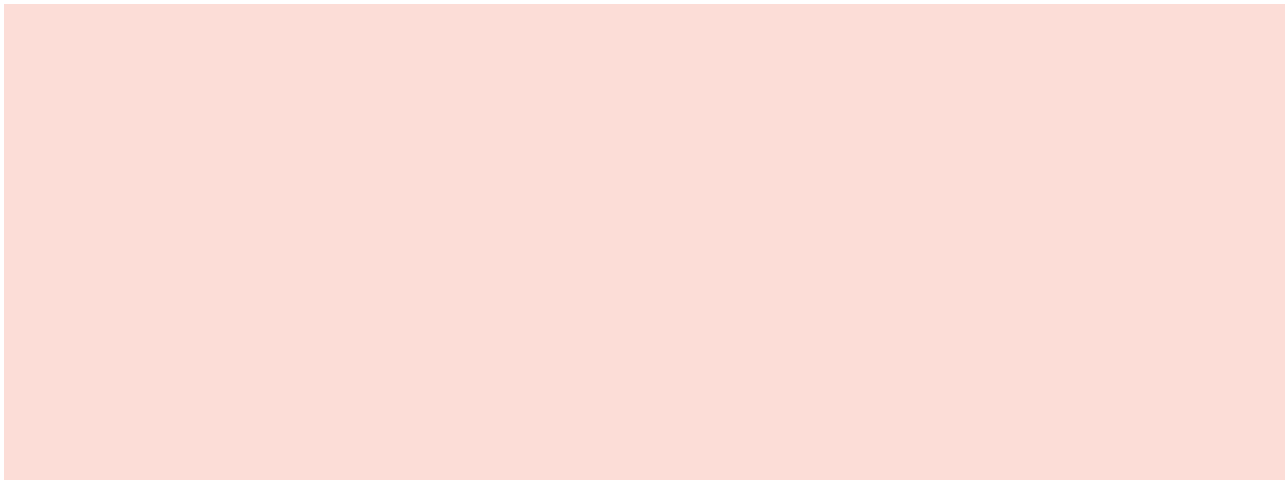
Aim:

To get to know marketing techniques which can be done through technology.

Procedure:

Select a new product.

Result and Discussion



- Make advertisements suitable for promotion in televisions, radios, display boards, social media, telephone marketing and learn and understand the do's and don'ts
- Produce commercials
- Stage or enact

Note: Watch commercials in the television and analyse the suitability of the commercial. Each student can be given a single product.





Entrepreneurial Skills



9.1 Interview with a Small Scale Entrepreneur

Aim:

To collect information of a successful small industry entrepreneur using a questionnaire

Tool: Questionnaire

Method:

Name :

1. Age:
2. Educational Qualification:
3. Type of business:
4. Location of the shop:
5. Date of Registration:
6. Type of organization:
7. Source of investment:
8. Number of partners involved:
9. Profit/Yield:
10. Turnover of the customers/products:

11. Period of running the business:
12. Number of employees:
13. Wages paid Weekly/Monthly:

Manager	Supervisor	Utility Workers
Rs.	Rs.	Rs.

14. Type of Insurance:
15. Source of procurement of raw materials:
16. Frequency of purchasing raw materials:
17. Employee cost in percentage:
18. Overhead cost in percentage:
19. Sales promotion techniques used:
20. Customer feed back:
21. Business satisfaction: Yes No
23. How do you deliver the products?
24. How do you clear your stocks?
25. Do you have franchise for your business? Yes No

Instruction: Prepare a report and submit

Results and Discussion:



9.2 Team Building Games

1. Blind Drawing

Time: 10 – 15 minutes

Number of participants: Two or more people

Tool Needed: A picture, pen and paper

How to Play / Rules:

- Divide everyone into groups of two
- Have the two individuals sitting back to back
- Give one person the pen and paper and the other person the picture.
- The person with the picture describes the picture to their team mate without actually saying what it is.
- The person with the pen and paper draws what they think the picture depicts, based on the verbal description.
- Set a time limit for 10-15 minutes.

Objectives:

- Focus on interpretation and communication
- Can invoke creativity among students

2. Game of Possibilities:

Time: 5 - 6 minutes

Number of participants: One or multiple small groups

Tool Needed: Any random objects

Rules:

- Give an object to one person in each group.

- One at a time, someone has to go up in front of the group and demonstrate a use for that object.
- The rest of the team must guess what the player is demonstrating.
- The demonstrations must be original.

Objectives:

- This team building exercise inspires creativity and individual innovation.

3. Card Pieces

Time: 10 – 15 minutes

Number of participants: Atleast 3 teams (3 or 4 people each group)

Tool Needed: Card pieces

Rules:

- Each team will receive an envelope of mixed cut up cards.
- The teams then have a set amount of time to barter and trade in order to complete their cards.
- The team with the most completed cards wins.

Objectives:

- It builds negotiation skills which will help the people navigate to the most successful outcomes.
- It develops empathy which helps people to see things from another's perspective.

4. Four at a Time

Rules:

- In a room of sitting people, only four can be standing at a time.

- The four can only stand for 10 seconds before they must sit down and be immediately replaced by someone else.
- The trick is that there is no speaking during the game.
- The goal is to keep the game going as long as possible.

Objective:

- Four at a time is great for teaching non-verbal communication and team work.
- It is essential for safer environment.
- This game works best in large groups.
- They can function more cohesively.

MODEL QUESTIONS

Part – A

Answer the following question (Any one) (1x10=10)

1. Explain and prepare any one napkin folding.
2. Prepare an advertisement for any post in the food service.
3. Draw a layout for any one department in food service outlet.
4. Explain and prepare a flower arrangement.

Part – B

Notes: 20

Skill: 20

1. Prepare a standardized recipe. Calculate the cost per serving.
 - a) Standardization - 5
 - b) Recipe - 5
 - c) Cost calculation - 10
2. Enlarge any one standardized recipe and calculate cost per serving for a food mela.
 - a) Methods of enlargement of recipes - 5
 - b) Recipe enlargement - 5
 - c) Cost calculation - 10
3. How will you reuse left over food? Prepare any one recipe using left over food.
 - a) How to use left over food - 10
 - b) Recipe - 10
4. Prepare a recipe and display it using A'la carte cover requirement.
 - a) Setting a table for A'la carte - 10
 - b) Menu & Recipe - 10
5. Prepare a recipe and display it using Table d'hôte cover.
 - a) Setting a table for Table d'hôte - 10
 - b) Menu & Recipe - 10
6. Prepare an eggless cake and prepare a score card.
 - a) List ingredients for cake preparation - 5
 - b) Methods of cake preparation - 5
 - c) Recipe for eggless cake - 10
7. Prepare any two types of common beverages and serve using any one type of cover.

- a) Classification of beverages - 10
b) Recipes - 10
8. Prepare one fruit and one vegetable carving and set using any one type of cover.
- a) Define carving. List the equipments needed for carving - 10
b) Method of carving - 10
9. Read the label given and identify the details. Prepare a label for your product using FSSAI regulation.
- a) What is FSSAI? Mention its objectives - 5
b) Identify the label given - 15

Note: Skill - preparing the label for their product.

10. Identify the adulterants in foods (Any 10 foods can be given).
- a) Define adulteration. What are the types of adulterants - 5
b) Write on any ten food steps that are adulterated and how it should be identified - 15

11. Write a note on any one Labour saving device and prepare a recipe using it. Write how you saved time, energy and money?
- a) Write a note on any one labour saving device - 5
b) Explain how you will save time, energy and money using it - 5
c) Recipe - 10
12. What are the sales promotion techniques? Prepare any two and display.
- a) Define sales promotion - 5
b) Methods of sales promotion techniques - 15

Note: Still - preparing any two advertisements.

MARK ALLOTMENT

Externals:

Part A	:	10 Marks
Part B	:	40 Marks
Notes	:	20 Marks
Skill	:	20 Marks

50 Marks

Internals:

Record	:	20 Marks
Handling	:	5 Marks
Test	:	10 Marks
Field trip	:	5 Marks
Co-curricular Activities	:	5 Marks
Attendance	:	5 Marks

50 Marks

Total (External + Internal) : 100 Marks

PROJECTS

1. Manage and organize a Small Scale and Food Outlet

Aim:

Manage and organize a small scale and food outlet.

Procedure:

- Choose the type of food outlet
- Plan and formulate an Organisational Structure of a food outlet, depicting the various departments
- Give the job description for all the jobs
- Frame a work schedule in terms of staff and time
- Sources of finance for starting the outlet and framing the budget
- Mode of advertising and content development
- Proposal submission.

2. Visit to a Food Service Establishment and Study the Management Functions

Aim:

To study the effective management of time, energy and money in a food service establishment.

Method: Observation

Procedure: To observe and record:

Time Management

- Type of food service outlet
- Timings and customer turnover
- Organizational flow chart (Hierarchy)
- Planning involved
- Record maintenance
- Number of staff
- Work and time schedule
- Back-up preparedness

Energy Management

- Number and type of equipment's
- Type of fuel energy used
- Methods of cooking
- Colours used on walls and ceilings
- Labour saving devices
- Layout of the work area
- Leadership style
- Health record of employees

Money Management

- Cost control
- Budgeting
- Proper accounting
- Auditing
- Investment and expenditure statement
- Evaluation / review on expenditure

3. Visit a Food Service Institution and observe the Quantity Food Production and Equipment used

Aim:

To understand the quantity food preparation techniques and the details of equipment.

Method:

Visit to an institutional food service establishment.

Points to be considered:

- Different recipes
- Quantity produced
- Pre preparation methods
- Equipments used for the quantity
- Holding and service procedure



Std XII Model Question Paper

Marks: 90

Time: 2.30 hrs

PART A

Note: 1. Answer all the questions.

2. Each answer carries 1 mark.

(15 x 1 = 15)

Choose the correct answer:

- The tool that indicates activity and authority relationships which exists in the establishment is _____
 - Job Analysis
 - Work Schedule
 - Organization Chart
 - Organizing Ability
- The main goal of the work triangle is _____
 - Competency
 - Cooking
 - Proximity
 - Efficiency
- Identify which is a Q- factor.

a) Fried rice	b) Steak
c) Cutlet	d) Ketch-up
- Fork with extra tines is used for eating _____

a) Spaghetti	b) Cakes
c) Salad	d) Fish
- Preplated service is common in _____ style of service.
 - American
 - French
 - Chinese
 - Japanese

Fill in the blanks:

- Fifty per cent of world's coffee produced in _____
- Salads provide the feeling of fullness because of _____
- A _____ is the maximum or minimum value to which a physical, biological, or chemical hazard to the food must be controlled.
- _____ is used in Chinese food.
- _____ theory deals with assumption of human nature

Choose the correct sentence:

- | |
|--------------------------------------|
| a) Wage cut is a Negative motivation |
| b) Wage cut is a Positive motivation |

Match the following:

- | | |
|-----------------------------|---|
| 12. Voluntarily Association | — |
| Sales Manager | |
| 13. Rising cause | — |
| Fear and Punishment | |
| 14. Autocratic Leadership | — |
| SHG | |
| 15. First Marketing person | — |
| Economic Factor | |

PART B

Note: 1. Answer any 10 of the following. (10 x 3 = 30)

2. Question no.28 is compulsory.
3. Each answer carries 3 marks.

16. Differentiate centralised and decentralised authority.
17. List the objectives of Laundry services.
18. Explain work triangle.
19. Mention the ways of using left over tomato onion salad.
20. Define a restaurant cover.
21. What is a 'Lazy Susan'?
22. Point out the precautions to be followed while adding fruits in cake preparation?
23. Write any three uses of ice carving.
24. What is Assured Safe Catering?
25. What is meant by Espirit de corps?
26. Identify the sources of recruitment.
27. List the components of marketing mix.
28. Outline the importance of microfinance.

PART C

Note: 1. Answer any 5 of the following. (5 x 5 = 25)

2. Question no.35 is compulsory.
3. Each answer carries 5 marks.

29. What are the functions of a Store-Keeper?
30. Enumerate the benefits of standardization?
31. Bring out the salient features in a Chinese food service?
32. List the importance of salads.
33. State the aims of FSSAI?
34. Write a note on time and money management.
35. Give a note on different methods of performance appraisal.

PART D

Note: 1. Answer all the questions. (2 X 10 = 20)

2. Each answer carries 10 marks.

36. Briefly explain the tools of management Illustrate a model A'la carte cover for an Indian restaurant.

or

Elaborate the various skills needed to become a successful entrepreneur.

37. Write in detail the principles of HACCP.

or

Internal Assessment: 10



Case Study - 1

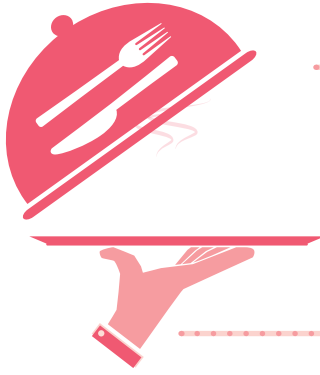


I am Venkata Vaishnavi doing my final year B.Sc. in Interior Decoration in Chennai. After completing my 10th grade, I joined C.S.I. Bain Matriculation Higher Secondary School, Ormes Road, Chennai to study Food Management and Child Care at The Higher Secondary level. From grade 7, I have been interested in getting into the Food Industry. Hence, I chose this group to help me achieve my goal.

During the course of higher secondary school education The Food Management chapters in the vocational course facilitated to understand the basics of food industry, how to plan menus for food service outlets, run a school canteen, prepare food for the kinder garden run by the management of school and organize food mela. The subjects studied at higher secondary level helped to apply theory in practice.

Personally it is felt that, this course found to be very valuable, because of the practical exposure in the preparation of nutritious meals in large scale cooking. Thus it provoked the journey to start a food industry. After the completion of 12th standard, like any other school student joined college to pursue degree. But, six months later I started to live my dream by taking party orders from home. Then later on opened a Kiosk and successfully ran for 3 months with the support of parents' help. Three months down the line closed the kiosk and started a 100 square feet food service outlet which ran successfully for 9 months. Then I took a break for 4 months. The confidence I gained has helped me start my own restaurant at Anna Nagar and named it as DITE N BITE. I go to college in the morning and run the restaurant in the evening. My restaurant serves food from pizzas to milkshakes prepared in a nutritious healthy version.

As a student of the Food Management course at the Higher Secondary level, I really wish that students who seek a future in the food industry will choose this group and benefit from it. It is one of the most interesting and valuable groups in the vocational stream. So, as a young entrepreneur I wish many more students will benefit doing this course like me.



Case Study - 2

Going through a day can be hard without a motivation. As students, when you have big dreams, we have set our goals and review our routines at school. I Husna Mariyam, a former student of Bain Higher Secondary School, Kilpauk, Chennai, took up the vocational stream with Food Management and Child Care to fulfill my dreams. This stream offers multiple options at the undergraduate level and chose Interior Designing.

At school our teachers did their best to achieve our goals. This course helped me to experiment on the different methods of cooking, plan for menus, manage time, keep the work space clean, multi tasking, maintain hygiene, learn serving etiquettes and become a confident entrepreneur.



I am a home baker by profession, an entrepreneur with my own site named OCD- Obsessive Cupcake Disorder which I started after my under graduation. This passion for baking started from school where we had our first baking lessons. We were trained to cook and serve within 40 minutes at school and also to keep our place clean and tidy. This helped me to bake and present my cakes and cookies in creative way. The sales promotion techniques taught in this group has helped me to advertise my products and earn many customers.

Being a happy student then, and an entrepreneur in baking now, I owe it to the school, teachers, parents and the Food Service Management course. So, I recommend students who want to become entrepreneurs in the Food Industry to choose this group and achieve their dreams and become a self earner and job provider.



Glossary

S.No.	Word	Meaning
1.	Adherence	விதிகள், நம்பிக்கைகளை ஒருவர் சரியான முறையில் கடைபிடித்தல்
2.	Aesthetics	இது அழகு அல்லது நல்ல சுவையைப் பாராட்டுதல் தொடர்புடையது ஆகும்.
3.	Affidavit	நீதிமன்றத்தில் ஆதாரமாகப் பயன்படுத்தப்படும் உறுதி செய்யப்பட்ட எழுத்துப்பூர்வமான அறிக்கை
4.	Agenda	ஒரு முறையான கூட்டத்தில் வரிசைக்கிரமமாக விவாதிக்கப்பட வேண்டிய விஷயங்களைப் பற்றிய அறிக்கை
5.	Ambitious	வெற்றியை அடைய விரும்புதல்
6.	Archaeological Site	கடந்த கால நடவடிக்கைகளின் ஆதாரங்கள் பாதுகாக்கப்படுகின்ற இடமாகும்
7.	Back of the house	விருந்தினர்களுடன் குறைந்த அளவு தொடர்பில் இருக்கும் உணவக விடுதியின் துறை / பிரிவு
8.	Banquet	அதிக அளவு மக்கள் கலந்து கொள்ளும் முறையான பெருவிருந்து
9.	Banquet	அதிக எண்ணிக்கையிலான நபர்களுக்கு அளிக்கப்படும் பெருவிருந்து
10.	Banquet houseman	பாண்கெட் அறைகள், பெரிய கூடங்கள், சேமிப்பு மற்றும் சேவை வழங்கப்படும் இடங்களின் தூய்மையைப் பராமரிக்கும் பணியாளர்கள்
11.	Barbecues	திறந்த வெளியில் அடுக்குகளில் வைத்து நெருப்பில் சுட்டு தயாரிக்கப்படும் அசைவ உணவு
12.	Blemishes	கோளாறுகள் / கறைகள்
13.	Bone China	களிமண்ணுடன் போன் சாம்பல் கலந்து தயாரிக்கப்படும் போர்சலின்
14.	Bruises	காயம் / நசங்கியது
15.	Buffet	பல உணவு வகைகளுடன் உள்ள விருந்து, விருந்தினர்கள் தாங்களே பரிமாறிக் கொள்வர்
16.	Cabinetry	சமையலறைகளிலுள்ள அடுக்குப் பெட்டிகள் கொண்ட அலமாரிகள் முழுவதும் சேர்த்து அழைக்கப்படுவதாகும்.
17.	Candied fruit	படிக்காக்கப்பட்ட பழம் / பனியால் உலர்ந்த பழங்கள் (Glace fruit) / சிறிய துண்டுகளாக்கப்பட்டு வெப்பப்படுத்திய சர்க்கரை சிரப்பில் இருக்கும்
18.	Carving	ஒரு பொருளின் மேற்பரப்பில் உள்ள தேவையற்ற பொருட்களை நீக்குதல்
19.	Chauffeur	வாகன ஓட்டி
20.	Conservation	வளங்களை வீணாகுமாறு உபயோகிக்காமல் தடுத்தல்

21.	Coupe	கண்ணாடி வடிவ பாத்திரம் கைப்பிடியுடன் இருக்கும், இனிப்பு வகைகளைப் பரிமாறப் பயன்படும்
22.	Cruet set	மேசையின் மேல் பயன்படுத்தும் உப்பு, மிளகு தூள் மற்றும் எண்ணெய் இருக்கக் கூடிய கொள்கலன்கள்
23.	Crustaceans	ஆர்த்ரோபோட் வகை கடல் உணவு. இவ்வகையில் நண்டு, இறால், ஷிரிம்ப் மற்றும் கிரே மீன் (Cray fish) ஆகியவை அடங்கும்
24.	Delegation	பணிகளை அல்லது கடமைகளை பணியாளர்களுக்கு ஒதுக்குதல்
25.	Dessert	உணவிற்குப் பின் சாப்பிடும் இனிப்பு பண்டம்
26.	Dismissal	ஊழியரின் வேலையை முடிவுறச் செய்யும் செயல்.
27.	Doily	அழகாக வடிவமைக்கப்பட்ட சிறிய மேட் (Mat) அல்லது லேஸ் வடிவத்தில் உள்ள காசிதம்
28.	Effluent	கடல் அல்லது ஆற்றில் கலக்கப்படும் திரவ கழிவு அல்லது கழிவுநீர்
29.	Empower	ஒரு செயலைச் செய்வதற்கு அதிகாரம் அல்லது சக்தியை அளித்தல்
30.	Ergonomic	செயல்திறனை மேம்படுத்துவதற்காக மக்களைப் பற்றியும் மற்றும் அவர்களது பணி நிலைமைகள் குறித்த அறிவியல் ஆய்வு
31.	French dressing	ஆலிவ் எண்ணெய் மற்றும் வினிகர் கலந்த சாலட் அலங்காரம். தக்காளி கூழ், கெட்ச்சப், ப்ரௌன் சர்க்கரை, மிளகு மற்றும் உப்பு கலவை
32.	Front of the house	விருந்தினர்களுடன் அதிக தொடர்புடைய உணவக விடுதியின் துறை / பிரிவு
33.	Full plate	25 செமீ விட்ட அளவுள்ள தட்டு
34.	Glaucoma	கருவிழியைச் சுற்றி அழுத்தம் அதிகரிக்கும் பொழுது படிப்படியாக கண்பார்வை இழக்க நேரிடும்
35.	Gravitate	நகர்த்தவோ அல்லது ஈர்க்கவோ வேண்டும்
36.	Grievance	ஒரு புகார் அல்லது ஒரு ஊழியரின் வலுவான உணர்வை அவர்கள் நியாயமற்ற முறையில் நடத்தினர் என்பது தான்.
37.	Gross profit	ஒரு நிறுவனத்திற்கு, அதன் பொருட்களை தயாரித்தல் மற்றும் விற்பனை செய்வதற்கான செலவைக் கழித்து கிடைக்கும் இலாபமே மொத்த இலாபம் எனப்படும்,
38.	Half plate	20 செமீ விட்ட அளவுள்ள தட்டு
39.	Haphazard	ஒரு நிறுவனத்தின் ஏதேனும் ஒரு முக்கியமான கொள்கை பின்பற்றப்படாமல் இருத்தல்
40.	Hierarchical	மக்களை அல்லது பொருட்களை அவற்றின் முக்கியத்துவத்திற்கு ஏற்ப முறைப்படுத்துவது
41.	Hierarchy	ஒரு நிறுவனத்தின் உறுப்பினர்கள், அவர்களுடைய அதிகாரத்தின் அடிப்படையில் தரவரிசைப்படுத்தப்பட்டிருக்கும் கட்டமைவு
42.	Ice tongs	இரண்டு பிடியுடன் இடுக்கி போன்று பெரிய ஐஸ்கட்டி துண்டுகளை எடுக்க உதவுவது
43.	Ignorance	போதுமான அறிவு, தகவல், கல்வி இல்லாமை
44.	Luncheon plate	இரவு உணவிற்கான தட்டு மற்றும் சாலட் தட்டிற்கு இடையில் உள்ள அளவுடன் இருக்கக் கூடிய தட்டு
45.	Maître d'	உணவகத்தின் தலைமை உணவு பரிமாறும் பணியாளர்
46.	Managerial	ஒரு மேலாளரின் பணி தொடர்பானது

47.	Marmalade	சிட்ரஸ் பழங்களிலிருந்து சற்றே கசப்பு சுவையுடன் பிழியப்பட்ட பதப்படுத்தப்பட்ட பொருள்
48.	Meringue	முட்டையின் வெள்ளைக் கருவையும், சர்க்கரையும் சேர்த்து மொறுமொறுப்பாகும் வரை அவனில் சுட்டு தயாரிக்கப்படும் இனிப்பு
49.	Migraine	பொதுவாக தலையின் ஒரு பக்கத்தில் மீண்டும் மீண்டும் துடிக்க வைக்கும் தலைவலியுடன் இணைந்து குமட்டல் மற்றும் பார்வைத் தொந்தரவு இருக்கும்
50.	Molleton	ஓசை எழுப்பாமல் இருக்க மேசை விரிப்பின் கீழ் பயன்படுத்தப்படும் கம்பளித் துணி
51.	Monetary status	பொருளாதார நிலை
52.	Morale	மனநிலை மற்றும் உணர்ச்சி நிலையில் நம்பிக்கை அல்லது தனிநபரின் விசுவாசம் அல்லது குழு சம்பந்தமான செயல்பாடு அல்லது கையிலுள்ள பணிகள்
53.	Motif	கலையின் முக்கிய கருத்து
54.	Net profit	இது ஒரு நிறுவனத்தின் மொத்த வருவாயிலிருந்து மொத்த செலவைக் கழித்து பெறப்படுவதாகும். இது ஒரு குறிப்பிட்ட காலத்திற்குள் (வழக்கமாக ஒரு வருடம்) ஒரு நிறுவனம் ஈட்டிய வருவாய் அல்லது நஷ்டத்தைக் காட்டுகிறது. இது நிகர வருவாய் என்றும் அழைக்கப்படுகிறது.
55.	Nut cracker	கொட்டைகளின் ஓடுகளை உடைத்து, அவற்றை வெளியே எடுக்கும் வகையில் வடிவமைக்கப்பட்ட கருவி
56.	Nutraceuticals	செயல்பாட்டு உணவுக்கான மற்றொரு சொற்றொடர்
57.	On-Call Servers	விருந்தினரின் தேவைக்காக எந்த நேரமும் அழைக்கக் கூடிய பணியாளர்
58.	Optimum	சாதகமான பலனைப் பெறுவதற்கு உகந்த சூழலாகும்.
59.	Outreach	மற்ற ஊழியர்களுக்கு கிடைத்து, ஒரு சில ஊழியர்களுக்கு கிடைக்காத பயிற்சியை அவர்களுக்கு கிடைக்குமாறு செய்தல்
60.	Oyster fork	மூன்று குட்டையான அகன்ற வளைந்த டைன்ஸூடன் உள்ள முள்கரண்டி. இவை மீன் தட்டின் வடிவிலேயே அமைந்திருக்கும்
61.	Palatability	சுவைக்கினியது
62.	Pastries	அடுமனைப் பொருள். க்ரீம் அல்லது ஜாம் அல்லது பழங்களினால் நிரப்பப்பட்டு (filling) சுடப்பட்ட இனிப்புப் பொருள்
63.	Pathogens	பாக்டீரியா, வைரஸ் மற்றும் பிற நுண்ணுயிரிகள் நோயை உண்டாக்க கூடியது
64.	Persuade	ஒரு சில காரணங்களுக்காக ஏதோ ஒன்றை செய்ய ஒப்புக் கொள்ளுதல்
65.	Pilferage	சமையலறை மற்றும் சேமிக்கும் இடங்களில் உணவின் சிறிய பகுதி காணாமல் போவது
66.	Pint	இது திரவத்தை அளக்க உதவும் ஒரு அளவீடு 1 பின்ட் என்பது அரை லிட்டர் திரவத்திற்கு சமமாகும்.
67.	Platters	வெள்ளியினாலான ட்ரே அல்லது ஒரு பெரிய தட்டு விழாக்களில் உணவு பரிமாறுவதற்காக பயன்படுத்தப்படும்
68.	Pliable	வளைந்து கொடுக்கும்

69.	Prep cook	உணவு தயாரித்தலில் பணிபுரியும் ஊழியர், உணவு சமைத்தல், சமைக்கும் பகுதியை பராமரித்தல், பணியாளர் சுத்தம் மற்றும் பாதுகாப்பு ஆகியவற்றிற்கு தலைமை சமையற்காரருக்கு உதவியாக இருப்பார்,
70.	Proprietor	ஒரு வணிகத்தின் உரிமையாளர் அல்லது சொத்துக்கு சொந்தக்காரர்
71.	Quarter plate	15 செமீ விட்ட அளவுள்ள தட்டு
72.	Remuneration	வேலை அல்லது சேவைக்கான ஊதியத்தை அளித்தல்
73.	Remuneration	வேலை முடிந்த பின் அதற்கான பணம் (ஊதியம்) செலுத்துதல்
74.	Requisite	ஒரு குறிப்பிட்ட நோக்கத்திற்காக அவசியமான ஒன்று.
75.	Salience	குறிப்பிடத்தக்க அல்லது முக்கியத்துவம் வாய்ந்த தரம், மேம்பாடு
76.	Scrape	வேண்டாதவற்றை நீக்குதல்
77.	Seizure	மூளையில் கட்டுப்பாடற்ற மின் செயல்பாடு, உடல் வலிப்புடன் சிறுய உடல் அறிகுறிகள், சிந்தனை, தொந்தரவுகள் அல்லது அறிகுறிகளின் கலவையை உருவாக்கும்.
78.	Sheen	மிளிர்ந்திருத்தல்
79.	Sift	சலித்தல்
80.	Sociability	மற்றவர்களுடன் நேரத்தை சந்திக்கவும் நேரத்தை செலவழிக்கவும் விரும்பும் ஒரு தரம்.
81.	Soup tureens	டூரீன் என்பது சூப் மற்றும் ஸ்டூ (stew) வை பரிமாறப் பயன்படும் அகன்ற, குழியான இரண்டு பக்கமும் பிடியுடன் கூடிய பாத்திரம்
82.	Spaghetti	திடமான பட்டைகள் போன்று இருக்கும் பாஸ்தா, மாக்ரோனிக்வும், சேமியாவிற்கும் இடைப்பட்ட தடிமனாக இருக்கும்.
83.	Steward	ஒரு உணவக விடுதியின் பணியாளர் விருந்தினர்களுக்கு உணவினை வழங்குபவர் அல்லது உணவக விடுதி, சங்கம் (Club) அல்லது மற்ற நிறுவனங்களில் பணிபுரியும் உணவு வழங்கும் பணியாளர்.
84.	Sundae glass	ஐஸ்கிரீமின் மேல் சிரப் ஊற்றப்பட்டு பரிமாறப்படும் கோப்பை
85.	Sunken	சப்பையாதல்
86.	Sweepstakes	குலுக்கலில் வெற்றி பெற்றவருக்கு பரிசு வழங்கும் ஒரு போட்டி
87.	Tines	முள்கரண்டியில் உள்ள முட்கள்
88.	Utility workers	பல்வேறு பணி சூழலில் வழக்கமான பராமரிப்பு பணிகள் செய்யும் பணியாளர்கள்
89.	Vicinity	சமீபத்திலுள்ள
90.	Vulnerable	எளிதாக தாக்கப்படும் அல்லது பாதிக்கப்படும் தன்மை
91.	Water Goblet	தண்ணீர் குடிக்கப் பயன்படும் குவளை / கூம்பு வடிவத்தில் கைப்பிடியுடன் இருக்கும்.



- Agile, F., Food Carving: Your Definitive Guide to Decorative Fruit & Vegetable Carving for All Occasions! Paperback – Create space Independent Pub (18 July 2017)
- Amendola, J., Ice Carving, 2nd Edition, John Wiley and sons Inc., Canada, 1994, ISBN-13: 978-0471285700, ISBN-10: 9780471285700.
- Andrews, S. Text book of Front Office Management and Operations, Tata McGraw Hill Publishing Company Limited, New Delhi, 2008, ISBN: 978-0-07-065576-8, Pp.148-172.
- Anoop.P, Chef Mathew, and Chef Gopan, A Study on Vegetable and Fruit Sculpture, International Journal of Interdisciplinary Research and Innovations ISSN 2348-1226 (online) Vol. 4, Issue 1, pp: (18-19), Month: January - March 2016.
- Armstrong, G., Kotler, P., Harker, M. and Brennan, R., Marketing: An Introduction, Pearson Publisher, 2015.
- Axler, B.H. and Litrides, C.A. Food and Beverage Service, Wiley Professional Restaurateur Guides Report, 2013, ISBN 978-81-265-4265-9, Pp.129-140.
- Bhatnagar, S.K. Front Office Management, Frank Bros. & Co. (Publishers) Ltd., Noida Revised Edition, 2003.
- Buapan B. and Kornsinisit, N. Fruit and vegetable carving art [in Thai]. Bangkok: Settasin, 2009.
- Chhabra, T. N. Principles and Practice of Management , 9th Edition, Dhanapat Rai & Co. (P) Ltd., India, Reprint 2006., ISBN 81-7700-032-2
- Dains, B. and Lockwood, A. Store, Food and Beverage Management, Elsevier Publication, 3rd Edition, 2005, P.252.
- Dalal, T. Fruit and Vegetable Carvings (English): Published by Sanjay and Company; 1st edition (1 October 2008).
- Dibb, Sally, Simkin, Lyndon; Pride, William M. and Ferrell, O.C. (2005). Marketing: Concepts and Strategies. 5th Edition. Abingdon, UK: Houghton Mifflin, p. 850. ISBN:0-618-53203-X, 978-0-618-53203-2.
- Duy, R.L, The Academy of Nutrition and Dietetics Complete Food & Nutrition Academy of Nutrition and Dietetics 2017.
- Foskett, D., Paskins, P. and Pennington, A., The Theory of Hospitality and Caering, Hodder Education. An Hachette UK, Ca., Dynamic Learning, 13th Edition, 2016, Pp.293-330.
- Gisslen, W. Professional Baking 6th Edition John Wiley & Sons, Inc., Hoboken, New Jersey, 2013.

- Gupta, C.B. and Khanka, S.S., Entrepreneurship and Small Business Management, Published by Sultan Chand and Sons, 2017, ISBN: 978-93-5161-094-6 (TC176).
- Hongwiwat, N., Complete Step by Step Vegetable and Fruit Carving Hardcover – Richard Goldrick (Translator) Sangdad Publishing Co., Ltd.; 5th edition (2007)
- Hui, Y.H., Handbook of Fruit and Vegetable Flavours A John Wiley & Sons, inc., Publication 2010.
- Ismail, A. Front Office Operations and Management Library of Congress Cataloging-in-Publication Data, 2004, ISBN: 0-7668-2343-1, Pp.95-105.
- Katie, E., Salads: 365 Days of Salad Recipes (Salads, Salads Recipes, Salads to Go, 16th November 2016).
- Lillicrap, D.R., Food and Beverage Service, Published by Edward Arnold Publishers, ISBN: 0-7131-1664-1.2014
- Lonnie, T. and Lynch, Easy Watermelon Carvings Paperback – by Create space Independent Pub (10 January 2012).
- Mahmood A. Khan, Food Service Operations, AVI Publishing Company INC., 1990, ISBN 0-442-24740-0.
- McKinnon, H., Community: Salad Recipes from Arthur Street Kitchen Book, 2013
- Nagashima, H. and Miura, K., The Decorative Art of Japanese Food Carving: Elegant Garnishes for All Occasions Hardcover – Kodansha International; 1 edition (21 September 2012).
- Negi, J. Food and Beverage Management and Cost Control, Kanishka Publishers, Distributors, New Delhi, 1990, ISBN:81-7391-254-8.
- Negi, J., Human Resource Development & Management in the Hotel Industry , Published by Frank Bros. & Co.(Publishers) Ltd, New Delhi, First Edition , 2000., ISBN 81-7170-453-0
- Neumayer, A. Table Decoration: with Fruits and Vegetables Hardcover, Schiffer Publishing Ltd (29 April 2010)
- Pagare, D. Business Management, Sultan Chand and Sons, New Delhi, Revised Edition, 2007, ISBN: 81-7014-152-4, Pp.168-175.
- Pagare, D. Business Organisation and Management ., Sultan Chand & Sons Educational Publishers, New Delhi,2002, ISBN 81-70414-675-5.
- Pamela H. Simpson, Brooks, C.S., The “Centennial Butter Sculptress”, Woman’s Art Journal, Vol. 28, No. 1 (Spring - Summer, 2007), pp. 29-36 Old City Publishing, Inc.
- Pamela, H. Simpson, Butter Cows and Butter Buildings: A History of an Unconventional Sculptural Medium, Winterthur Portfolio, Vol. 41, No. 1 (Spring 2007), pp. 1-20 The University of Chicago Press on behalf of the Henry Francis du Pont Winterthur Museum, Inc.
- Payne, J., Palacio and Monica Theis, Introduction to Food Service, Pearson Prentice Hall Upper Saddle River, New Jersey 07458, 10th Edition, 2005,
- Pinder, A. and Twigden, N., Lunchbox Salads: More Than 100 Fast, Fresh, Filling Salads for Every Weekday, 2017.

Sethi, M. and Malhan, S., Catering Management :An Integrated Approach. Third Edition , New Age International Publishers, 2018.

Sethi, M., Institutional Food Management, New Age International Publishers, New Delhi, 2nd Edition, 2018, ISBN: 978-81-224-3961-8, Pp.48-55.

Sethi, M., Institutional Food Management. New Age International Publishers, Reprint, 2011, ISBN: 978-81-224-1525-4.

Wood, W., Introduction to Food Service, Library of Congress Cataloging – in – Publication Data, USA, 8th Edition, ISBN: 0-13-495425-4, Pp.378-389.

Web Reference

<https://www.npr.org/sections/thesalt/2015/06/25/413706612/a-toast-to-butter-sculpture-the-art-that-melts-the-hearts-of-the-masses>

<http://www.bbc.com/travel/story/20130116-the-origins-of-ice-sculpting>

<http://www.icesculptingtools.com/History%20of%20ice%20carving.pdf>

<https://daily.jstor.org/the-decadent-art-of-butter-sculpture/>

<https://www.npr.org/sections/thesalt/2015/06/25/413706612/a-toast-to-butter-sculpture-the-art-that-melts-the-hearts-of-the-masses>

<http://journals.sagepub.com/doi/abs/10.1177/001088047101200208?journalCode=cqxa>

https://www.templeofthai.com/fruit_carving/carving.php

<http://3hungrytummies.blogspot.com/2009/10/khao-klub-gapi-rice-with-shrimp-paste.html>

<http://www.shutterstock.com/pic-2476133/stock-photo-a-bowl-of-prawn-mushroom-and-egg-stir-fried-rice-garnish-with-chives.html>

<http://www.waltercarl.neu.edu/PDFs/flowpaper.pdf>

<http://www.thehouseoffojah.com/audiobooks/ccp0-prodshow/flow-mihaly-csikszentmihalyi-audio-book.html>

<http://www2.chemistry.msu.edu/faculty/reusch/VirtTxtJml/Spectrpy/UV-Vis/spectrum.htm>

<http://laserpointerforums.com/f54/pink-magenta-wavelength-54293.html>

<http://www.how-to-cook-gourmet.com/foodpresentationtips.html>

<http://prettytastesbetter.com/garnishing101/>

http://www.psywww.com/intropsych/ch01_psychology_and_science/constructs_and_reification.html

<http://www.positive-thinking-principles.com/definition-of-perception.html>

<http://www.percepp.com/perceptn.htm>

<http://www.kidport.com/Reflib/Science/HumanBody/MuscularSystem/MuscleNervousSystem.htm>

http://en.wikipedia.org/wiki/Color_vision

www.business.azcentral.com/restaurant-service-procedures-6568.html

www.hbirbals.com/servicetypes.com

www.kullabs.com/classes/subjects/units/lessons/notes/note-detail/6676



Oer.nios.ac.in/wiki/index.php/Laying_a_cover

<http://www.google.co.in/search/client=opensof=laying+cover>

mrskrishhospitality.blogspot.com/p/tables_setting.html.

www.enquettescholar.com/dining_etiquette/table_setting.html.

https://www.google.com/search?safe=active2source_hp&ei=HyZ-W-alcT6VATADYW&qs.

www.rancelab.com/blog/different_types-cutlery-restaurant.

www.slideshare.net/restaurants_supply/different_types-of-cutlery-used-in-restaurants.

Setupmy_hotel.com/training-hotel-staff/how-to-define-sop-in-hotels/f-and-b-service-sop/bletouts-set-table-lines.html.

www.hospitality-school.com/food-beverage-service-types-restaurant.

En.wikipedia.org/wiki/Indian-cuisine

Setupmyhotel.com/train-my-hotel-staff/f-and-b/591-types-of-f-b-service.html.

www.fcijammu.org/food/food/orders/F&B%20service-unit-2.pdf.

www.Japan-talk.com/jt/new/service-in-japan

En.wikipedia.org/wiki/Japanese_ten_ceremony

www.Japan-guide.com/e/e2040.html.

en.wikipedia.org/wiki/Thali

en.wikipedia.org/wiki/Banana_leaf_rice

World-food-and-wine.com/Italian-table

www.gamberoosso.it/en/food-news/1024808-eat-like-an-italian-customs-and-inclinations-of-italians-at-the-table.



Higher Secondary – Class XII – Food Service Management Theory & Practical List of Authors and Reviewers

Academic Advisor & Expert

Dr. P. Kumar,
Joint Director (Syllabus),
State Council of Educational Research and Training,
Chennai.

Domain Expert

Dr. V. Saradha Ramadas,
Professor and Head,
Department of Food Service Management and Dietetics,
Avinashilingam Institute for Home Science and
Higher Education for Women,
Coimbatore.

Content Experts

Dr. S. Uma Mageshwari,
Professor,
Dept. of Food Service Management and Dietetics,
Avinashilingam Institute for Home Science and
Higher Education for Women,
Coimbatore.

Dr. S. Alamelu Mangai,
Assistant Professor,
PG and Research, Department of Home Science,
Bharathidasan Govt. College for Women, (Autonomous)
Pudhucherry.

Authors

Dr. A. Thirumani Devi
Professor and Head
Dept. of Food Science and Nutrition, Avinashilingam,
Institute for Home Science and Higher Education for Women,
Coimbatore.

Dr. P. Savitha
Assistant Professor
School of Food Science,
MOP Vaishnav College for Women,
Chennai.

Tmt. K. Raheema Begum,
PG Asst., Home Science,
Govt. Girls Hr. Sec. School,
Sulur, Coimbatore.

Tmt. Ratna Williams,
PG Asst., Home Science,
CSI Bain Mat. Hr. Sec. School,
Kilpauk, Chennai.

Tmt. A. Vincy,
PG Asst., Home Science,
Jaivabai Municipal Girls Hr. Sec. School,
Tirupur.

Academic Coordinator

G. Angeline Ruby,
Assistant Professor,
State Council of Educational Research and Training,
Chennai.

QR Code Management Team

S. Albert Valavan Babu
B.T. Asst.,
G.H.S., Perumal Kovil,
Paramakudi, Ramanathapuram.

M. Saravanan
B.T. Asst.,
G.G.H.S.S., Puthupalayam,
Vazhapadi, Salem.

V. Padmavathi, B.t,
G.H.S., Vetriyur,
Ariyalur.

Layout Designing and Illustration)

Udhaya Info, Chromepet,
Chennai.

Wrapper Design

Kathir Arumugam

QC

Manohar Radhakrishnan
Arun Kamaraj Palanisamy

Coordination

Ramesh Munisamy

Typist

Tmt.R.Santhiya Shanmugam

This book has been printed on 80 G.S.M.
Elegant Maplitho paper.

Printed by offset at: