

IVC Course Code : 411

HOTEL OPERATIONS

SECOND YEAR

(w.e.f.2019 – 20)

Intermediate Vocational Course

Paper I : Food Production II

Paper II : Food and Beverage Service II

Paper III : Accommodation Operation II



STATE INSTITUTE OF VOCATIONAL EDUCATION

BOARD OF INTERMEDIATE EDUCATION, A.P.

Text Book Development Committee

Paper I Food Production II

AUTHOR

M.Pavan Kumar

Asst. Professor

K.L University

Vaddeswaram-Guntur(Dt.)

Paper II Food & Beverage Service II

AUTHOR

Sk.Kalisha Vali

Asst. Professor

K.L University

Vaddeswaram-Guntur(Dt.)

Paper III Accommodation Operation II

AUTHOR

D.Gopi Nath

Junior Lecturer in HO.

Govt. Junior College

RAJAMAHENDRAVARAM

EDITOR

M.Pavan Kumar

Asst. Professor

K.L University

Vaddeswaram-Guntur(Dt.)

HOTEL OPERATIONS

TEXT BOOK DEVELOPMENT COMMITTEE

S.No	Name	Designation	Signature
1	M.Pavan Kumar Asst. Professor K.L University Vaddeswaram-Guntur(Dt.)	Editor	
2	M.Pavan Kumar Asst. Professor K.L University Vaddeswaram-Guntur(Dt.)	Author	
3	Sk.Kalisha Vali Asst. Professor K.L University Vaddeswaram-Guntur(Dt.)	Author	
4.	D.Gopi Nath Junior Lecturer in HO. Govt. Junior College RAJAMAHENDRAVARAM	Author	



Smt. B.UDAYA LAKSHMI, I.A.S.
Commissioner & Secretary
Intermediate Education
ANDHRA PRADESH
GUNTUR

S.I.V.E Co – Ordinating Committee

Sri. Podili Yerraiah, M.Sc., B.Ed.

Professor

State Institute of Vocational Education
Commissioner of Intermediate Education, Guntur

Sri. B. Nageswara B.Com, B.L.,

Joint Secretary (Vocational)

Board of Intermediate Education, Vijayawada

Sri. Dr.G.V.S.R. Murthy, M.SC., Ph.D.

Lecturer

State Institute of Vocational Education
Commissioner of Intermediate Education, Guntur

DTP

Thuraka Ravi Kumar BA,B.Ed., PGDCA

HOTEL OPERATIONS

Paper – I

Food Production II

INDEX

Unit-1	INDIAN CUISINE	1
Unit-2	INTERNATIONAL CUISINES	133
Unit-3	KITCHEN HYGIENE AND SANITATION	167
Unit-4	INTRODUCTION TO BAKERY & CONFECTIONERY	188
Unit -5	ADVANCED BAKERY	218

UNIT

1

INDIAN CUISINE

1.1 INTRODUCTION TO INDIAN FOOD

Indian cooking consists of a wide variety of regional and traditional cooking's native to the Indian regions. The factors that influence the Indian cooking is soil type, climate, culture, ethnic groups, and occupations, these cooking's very different from each other and use locally available spices, herbs, vegetables, and fruits. Indian food is also heavily influenced by religion, in particular Hindu, cultural choices and traditions. The cooking is also influenced by centuries of Islamic rule, particularly the Mughal rule. Samosas and pulao can be regarded as examples.



Historical events such as foreign invasions, trade relations have played a role in introducing certain foods to India. For example, potato, a main diet in some regions of India, was brought to India by the Portuguese, who also introduced chillies and breadfruit. Indian cooking has influenced other cuisines across the world, especially those from Europe, the Middle East, North Africa, sub-Saharan Africa, Southeast Asia, Fiji, and the Caribbean.

Early diet in India mainly consisted of leafy vegetables, vegetables, fruits, grains, dairy products, and honey. Main foods eaten today include a variety of lentils (dal), whole-wheat flour (aṭṭa), rice, and pearl millet (bājra), which has been cultivated in the India since 6200 BCE. A food classification system that categorised any item as saatvic, raajasic, or taamsic developed in Yoga tradition. The Bhagavad Gita explain about certain dietary practices. Consumption of beef is banned, due to cows being considered as god in Hinduism. Beef is generally not eaten by Hindus in India except for Kerala, parts of southern Tamil Nadu and the north east.



During the Middle Ages, several Indian dynasties were ruled, including the Gupta dynasty. Travel to India during this time introduced new cooking methods and products to the

region, including tea. India was later ruled by tribes from Central Asian cultures, which makes huge changes in Mughlai cooking, a mix of Indian and Central Asian Cooking.

Food in north india might be very different and could vary from one state to another state and very from south India. The food of Kashmir has little similarity with the food of Punjab or Himachal Pradesh. The south of India has the same changes, where the food of Andhra Pradesh is lightly different from Tamil Nadu or even Kerala.

The most important and frequently used spices and flavourings in Indian cuisine are whole or powdered chilli pepper, black mustard seed, cardamom (elachi), cumin (jeera), turmeric, asafoetida (hing), ginger, coriander (dhania), and garlic. One popular spice mix is garam



masala, a powder that typically includes seven dried spices in a particular ratio, including black cardamom, cinnamon (dalchini), clove (laung), cumin (jeera), black peppercorns, coriander seeds and anise star. Each culinary region has their own garam masala blend—individual chefs may also have their own. Goda masala is a comparable, though sweet, spice mix popular in Maharashtra. Some leaves commonly used for flavouring include bay leaves (tejpat), coriander leaves, fenugreek leaves, and mint leaves. Sweet dishes are often seasoned with cardamom, saffron, nutmeg, and rose petal essences.

1.2 SPICES USED IN INDIAN COOKING

A spice is a seed, fruit, root, bark, or other plant substance primarily used for flavouring, colouring or preserving food. Spices are distinguished from herbs, which are the leaves, flowers, or stems of plants used for flavouring or as a garnish. Indian spices include a variety of spices grown across the Indian regions. With different climates in different parts of the country, India produces a variety of spices, many of which are native to the region of India, while others were imported from similar climates and have since been cultivated locally for centuries. Spices are used in different forms: whole, chopped, ground, roasted, sautéed, fried, and as topping.



Spices can be classified depending on the parts of the plant that are to be used. Different plant parts like leaf, root, bulb, fruit, seed, etc. are used as spice.

PART OF PLANT	EXAMPLES OF SPICES
1. Bracket or the aril covering the seed	1. Mace
2. Barks	2. Cinnamon
3. Berries	3. Black Pepper, Allspice
4. Buds	4. Cloves
5. Bulbs	5. Garlic
6. Floral Parts	6. Saffron
7. Fruits	7. Cardamom, chillies
8. Kernels	8. Nutmeg
9. Leaves	9. Bay leaf, curry leaves
10. Underground stems	10. Ginger, turmeric
11. Latex or Resins	11. Asafoetida
12. Seeds	12. Cumin, Mustard

There are many ways in which spices can be classified. One of the ways is to classify them on the basis of parts are like bark, spices, leafy spices, etc; but in kitchens, chefs usually classify spices into fresh spice or dried spice. The dried spices are again divided into whole spices or ground spices. There could be another classification of spices whereby they are divided on the role they play in the food. They are:

- **HOT SPICES:** Chilli, Pepper etc.
- **MILD SPICES:** Paprika (is a ground spice made from dried red fruits of the larger and sweeter varieties of the plants.)
- **COLOURING SPICES:** Saffron, turmeric etc.
- **AROMATIC SPICES:** Cardamom, Cloves etc.

SPICES OF INDIAN COOKING: - Dried Herbs & Spices

ASAFOETIDA (Asafoetida)

In normal terms it refers as **hing**. Hing came to India from Afghanistan. It is used to flavour foods that do not have any onion and garlic. It is available in solid form or in powder form. Used as a digestive aid in Indian cooking, asafoetida has a strong odor.



Usage in Indian Cooking

There are two types of hing available and both have different procedures of usage. They are: Kabuli hing or safed hing and another one is lal hing.

As it pairs up well with leafy vegetables and curd-based gravies and is extensively used in Kashmiri, Rajasthani, and in west and south Indian cooking.

ALLSPICE

This spice is native to West Indies and is widely used in European Cooking. It is not very commonly used in India, except in certain Mughlai food. Similar to cloves, but are more acidic in nature and deeply flavoured. Best used in spice mixes.



Usage in Indian Cooking

It is used for flavouring lamb dishes (A sheep in its first year is called a **lamb**, and its meat is also called lamb). Due to its sweet smell, this spice is also used in some pickles and chutneys.

AJOWAN

This spice is widely used in Indian cooking for flavouring curries, pickles. It is greyish in colour and it is always sold whole.

**Usage in Indian Cooking**

This is a famous Indian spice particularly used in parathas, an Indian bread made on a frying pan. It goes very well with beans and pulses. Cooking reduces its bitter and strong flavour.

BAY LEAF

Ancient Greek emperors use to wear this leaves on their forehead which shows their courage and what they had achieved. It is an aromatic leaf; the leaves are bright green. Adds a note to soups and sauces.

**Usage in Indian Cooking**

This is a famous Indian spice and is not cultivated in India for commercial purposes. In Indian cooking, it is used for flavouring stocks, rice pulao, and meat dishes. In India is always available in dried form.

GREEN CARDAMOM

This aromatic spice is widely used in Indian cuisine. It is obtained from an aromatic plant from the Malabar region of south western India. These contains seeds which are dried and used as spice. As the name says, it is green in colour and it is one of the main ingredients in garam masala. India contributes 80 percent of the total cardamom grown the world over.

**Usage in Indian Cooking**

It is used in curries, desserts and most commonly in flavouring tea. It is also used as a mouth freshener and coloured silver to be given after meals. It is mostly used in Mughlai dishes such as curries, biryanis.

BLACK CARDAMOM

It is dark brown in colour, it has an entirely different flavour from the green cardamom and it is highly used in meat-based dishes.



India is the largest producer of this spice especially in Darjeeling, Sikkim and West Bengal. It has a folded skin.

Usage in Indian Cooking

This spice is usually crushed and softens in oil. It is also an important ingredient in garam masala.

CINNAMON

Found in almost every world cuisine, cinnamon used as spice in both sweet and savoury dishes. It is also known as Dalchini, the real cinnamon is a muddy orange to dark coloured bark of wood that is rolled up like a pipe. In India we do not always get the real cinnamon. The cinnamon that used in Indian cooking is cassia bark. Cassia bark is less expensive as compared to real cinnamon. It is available in whole or in powdered form.



Usage in Indian Cooking

It is another ingredient in garam masala. It is also used in rice dishes and in curries. It is usually softened in oil. In Bengal, the cinnamon is made into paste before being used.

CLOVES

The name cloves come from the Latin word **clavus** means a nail. It is believed that people in China used it as a mouth freshener prior to having a meeting with emperor. Cloves are picked when the flower buds are small and they dried in the sun to get brown colour.



Usage in Indian Cooking

This spice is usually crushed and softens in oil. It is used for smoking or heat meat for curries. It is used whole or it can be used in powder form.

CORIANDER SEEDS

Coriander is used as a spice, the seeds look like tiny, pale, creamy-brown corns where it is used for garnishing a dish. Earthy, lemony flavour. Used in a lot of Mexican and Indian dishes.



Usage in Indian Cooking

The plant's seeds and leaves used in Indian cooking as a spice and also a garnish. It is “nutty” and “fruity,” in nature, coriander seed plays a major role in garam masala. It's good for digestion, too.

CUMIN

Cumin is used around the world for various purposes. It is a spice that is widely used for softening and in curries. In normal terms it refers as JEERA, there are two varieties—black and brown. The black variety is known as Shahi Jeera in India and is more powerful than brown cumin.

**Usage in Indian Cooking**

It is of great use in Indian cooking and is used for softening dals and curries and for making rice preparations such as pulao. It is an important ingredient in garam masala. It is also softening in oil or ghee and mixed with boiled vegetables.

**CHILLI**

Chillies were brought to India in the year 1498 from Chile and it became an essential part of Indian cooking. There are various types of chillies. India is famous for its chillies. There are sweet chillies to hot chillies and they are available in several different forms all over the world. The birth place of chilli is Mexico.

**Usage in Indian Cooking**

Chillies are also used for softening several south Indian dishes. The red chillies are also boiled and made into paste for various curries and many other dishes. Chillies are mixed with curd and dried in sun and it is known as curd chilli, where it is fried and served with meals.

Fenugreek

It is a spice that was given to Indians by the Greeks. It looks like a small yellow stone. They are in various types of shapes. These are widely used in curry powders. They have a very good digestion property, so that's the reason fenugreek seeds are used in any dal dishes.



Usage in Indian Cooking

This spice is usually softening in oil. It will have high bitterness in taste. The dried fenugreek leaves are popularly known as **kasoori methi**. This kasoori methi is lightly heat it and make it into powder before adding into curries.

Garlic Powder

Garlic powder is made from dried garlic and can be used to give dishes a sweeter, softer garlic taste.



MACE AND NUTMEG

Both of the spices are from same tree but are different from each other in taste and aroma. Mace is the outside part which covered nutmeg. Mace has a sweet flavour whereas nutmeg has a flavour like camphor. This spice is always sold in dried form, because if the mace dries up it loses its deep red colour but the flavour will increase.



Usage in Indian Cooking

It is highly used in Mughlai food like biryanis and curries. Since it has nuts flavour, it pairs up very well with meats. Mace is stronger than nutmeg and hence nutmeg is used in less quantity



MUSTARD SEEDS

It is a pure spice. Mustard seeds are used for softening in oil and are also used to produce mustard oil. There are three types of mustard seeds. They are---black, brown, white. It is also one of the main ingredients in salad garnishing. Mustard oil is used for cooking and in mixing up of various ingredients.



Usage of Indian Cooking

Indian cooking use mustard seeds for softening or tempering, especially in East and South India. The leaves of mustard are used for making a famous dish called sarson ka saag in Punjab. In the east mustard seeds are used as paste. Bengali cooking is highly depending on mustard paste

.NIGELLA

The word nigella is derived from the Latin word nigellus, which means black. Nigella seeds are small and black in colour and are shaped in triangle. People will get confused by seeing nigella and black sesame seeds.

**Usage in Indian Cooking**

Nigella is used in Indian parathas, pulkas and curries. Normally it refers as **kalonji** and it is mostly used for tempering or softening. It is usually used in PAANCH PHORAN MASALA, which is the famous masala of Bengali cooking and it says as it made up of five types of masalas, and nigella is the key ingredients. It should not be consumed in large quantities, because it is not good for health and it can cause paralysis.

PEPPER

Pepper or Pepper corns has been started growing in India from hundreds of years back, in India during 19th century these pepper spices is equal to money. This spice is popularly known as ‘king of spices’ and it is grown around the south India. There are three types of pepper corns—black, white, green. The pepper corn is a dried not grown berry. It is round and folded and it looks like papaya seeds, where sometimes in the place of pepper corns the outsiders sold papaya seeds as a pepper in normal terms it is known as ADULTERATION.

**Usage in Indian Cooking**

In Indian coking it is used to get good taste to curries and for biryanis and it is also powdered and used in masalas. It is used regularly in spice mixes of south India.

POPPY SEEDS

It is also known as KHUS KHUS in Hindi, and it is highly used in Mughlai dishes. These poppy seeds are used as a mixed juice rather than directly adding to the food. These are available in two types—black and white. White poppy seeds are used in Indian cooking, where black are used in international cooking or western cooking.



Usage in Indian Cooking

In India, this spice is used in east of India (Bengal, Bihar, Jharkhand etc.,) and in Mughlai dishes. It is usually used in Indian dishes to get that thickness in the curries and gravies. Poppy seeds are highly hard to mix, the easy method is just soak or dip it in water and mix it.

SAFFRON

The word saffron comes from the Arabic word zafran which means yellow. Saffron is famous all over the world, but Spanish saffron and Kashmiri saffron are famous in India. The pampore region in Kashmir produces the greatest saffron in the world after Spain. It is a costly spice among all the spices, because it takes 75,000 flowers to get half kg of saffron. It is used in Indian cooking because it gives a rich flavour to the food and it provides yellow colour to the food.

**Usage in Indian Cooking**

Saffron is used mainly in Indian desserts and Mughlai dishes to get rich colour in the food. Most of the Kashmiri dishes use saffron because it provides good feel and it is correct for winter climates. Since, it is an expensive spice; a pinch is more than enough. It is used to just spray or pour on the desserts.

STAR ANISE

The name says that it is in star shape it is highly grown in china and it is the main ingredient in the Chinese five spice powder. After china it grows in Vietnam and Arunachal Pradesh in India. In the star shape it contains small brown to orange seeds. It has a sweet and nut flavour and hence it is used mainly in fruits and meats.

**Usage in Indian Cooking**

The complete star anise is used to add good taste to curries, rice and vegetables. Broil the star anise before using it. It is also used in various masalas.

TAMARIND

The name tamarind comes from the Arabic word 'tamare' means fruit of India. It is in the shape of a curved brown coloured



bean shell from the tamarind tree. In the shell there is a black seed which is in square shape. The tamarind is available in dried beans or in pastes etc. It can be either sold with seeds or seedless. Tamarind having a high acidic in nature that's the reason it is used to clean copper utensils in Indian kitchens.

Usage in Indian Cooking

Tamarind is used as a thickening agent and also used as a souring agent in Indian cooking. It is mostly used in South Indian dishes. After removing the shells of tamarind then the tamarind makes in to pure juice and then used to make curries or dals and for gravies and chutneys.

TURMERIC

Turmeric is used to add in food dishes to give colour, especially in Indian cooking. It is anti-septic in nature and it is used in all spiced dishes, to prevent the ill effect of spices on the stomach. Turmeric is highly popular in India. It is also used in prayers and to worship gods.



Usage in Indian Cooking

While cooking, turmeric should be put directly on the hot oil, but care must be taken because it will burn quickly. It is good to make turmeric paste while cooking. If turmeric add directly to the food gives a raw or nature flavour.

CURRY LEAF

It is the leaf of the curry tree and is used as flavour in curries. This leaf spice is one of the ingredients of madras curry powder and is used in all parts of India. It is available fresh and sometimes it is also used in dry form.



Usage in Indian Cooking

This spice is usually used as a softening or tempering in most of the south Indian curries. It is also made into a paste and serves as chutney to accompany or give along with snacks. It is also used to make pickles.

OREGANO

Oregano is the flowering plant of mint family. These flowers are purple in colour and are available between June and



August. It is very special herb for Italians. It is available on the mountain regions of India from Kashmir to Sikkim.

Usage in Indian Cooking

In India it is used in chutneys and also in meat preparations.

POMEGRANATE SEEDS

It is widely consumed in Iran and Afghanistan. It is used as a souring agent and it is available in dried form. It refers as the pomegranate is a fruit, where inside the fruits there will be a seed where the seeds are got dried in sun and it is used for cooking purposes in India.



Usage in Indian Cooking

It is only used in dried form and it is in black colour. The darkness shows the flavour of the spice or seed. It is used to add in curries to get little bitter taste. It is difficult to grind the seeds in mixer or grinder so it is advice to crush the seeds in cement pot.

STONE FLOWER

As the name suggests, this spice grows on stones and trees. In this flower an alga is surrounded by fungus and fungus protects the alga and on other hand it prepares its food by photosynthesis. It is available in dried form.



Usage in Indian Cooking

It is widely used in Hyderabad and other South Indian states. It can use in powdered form.

BASIL SEEDS

In normal words, it popularly known as *subza*, and it is used as a spice only in India. The seeds do not use in any cooking or cuisines. In India, these seeds are found in Maharashtra.



Usage in Indian Cooking

These seeds are usually soaked in water and they swell up into jelly structure with a black dot in the centre which looks like a human eye. These are served with Indian frozen desserts like kulfi as a garnish or decorative.



BLACK SALT

This spice is a type of volcanic salt and it is extracted from the volcanic regions of India and Pakistan. Black salt smells like sulphur and is available in rock form or in powdered form.



Usage in Indian Cooking

It is mainly used in aperitif (the drink which serves before meal) based drinks and it is used in many Indian snacks like chats and curd-based products like raitas.

1.2.1 STORAGE AND USAGE OF SPICES

- Store the spices in airtight jars in a cool, dark place away from sunlight. Humidity, light and heat cause the unstable oils to evaporate, there by spices lose their flavour quickly.
- Spices will be there for many years if they store properly.
- Spices which are make into powder should not be stored for more than six months as they lose their flavour more quickly.
- Toasting (making it brown) the spices over low heat make them easier to grind.
- For a dark coloured spice powder, roast or keep it too brown the spices for long duration of time, taking care not to burn them.

THICKENING AGENT: - A substance which gives much more thickness to the food like cream, flour etc., is known as thickening agent.

BROILING: -Broiling cooking means exposing food to direct heat, either on a grill over live coals or below a gas burner or electric coil

TEMPERING: - in which spices are heated in hot oil or ghee and the mixture is added to a dish. Hot fat has an amazing ability to extract and absorb the essence, aroma and flavour of spices and then carry this essence with it when it is added to a dish.

Garnishing: -to decorate food with a small amount of different food like coriander, carrot grated.

1.3 INDIAN MASALAS

1.3.1 VARIOUS MASALA MIXES OF INDIA:

The dry masalas (powdered spice mixes or curry powders) are used to flavour, vegetables, seafood, and meat. The ingredients are roasted over low heat until they release a faint aroma. A fine powder is made and they are stored in an airtight container. The masalas are divided into two types. They are:

- DRY MASALAS
- WET MASALAS

1.3.1.1 DRY MASALAS:

Dry masalas are those which are in their dry form and no additional liquid component is added to them. These masalas may be whole or broiled and powdered. They might also include those ingredients which are specifically dried. Some ingredients might also be specifically dried in order to be blended with other dry spices. For example, mint is dried and powdered to be used as an ingredient in kebab masala. Masala means 'spices', and masalas are a blend of different spices mixed together in dissimilar proportions. These spices are got from plants and they are a good source of vitamins and minerals. They are beneficial to health and are used in Indian cuisine as well as in medicines, perfumes and as preservatives. The blended masalas have been used in India since ancient times. A number of spices are produced in Kerala. Every region has its own blend of masalas, different for different recipes, with a distinct flavor like garam masala in North India and curry powder in South India. Different blended masalas are used every day in all Indian homes. To make the masala, all ingredients are dry roasted before grinding them to a powder. This is stored in a cool, dry place in airtight containers.

1) BIRYANI MASALA

It is used for spiciness, colourful and flavourful rice. The ingredients used in this Masala are Fennel Seeds, Black Cardamoms, Poppy Seeds, Star Anise, Cumin Seeds, Caraway Seeds, Cinnamon Powder, Bay Leaves, Whole Cloves, Mace, Green Cardamoms, Nutmeg Powder.

2) AAM CHOORI MASALA

This is the regional masala of Punjab. It adds a sour flavour to the dish as it uses amchoor, which is the powder of raw mangoes. The ingredients used in this are Amchoor, Red chilli, Aniseed, Pink Salt, Cumin, Ajowan, Ginger powder, Coriander.

3) POTLI MASALA

This can be classified as Indian sachet d'epices. In Hindi it literally means a pouch of spices. Where the spices tied up in a muslin bag and left in a curry or liquid to let the flavours extract the gravy or water. The ingredients are: - Cubeb pepper, Clove, Pepper corns, Allspice, Cinnamon, Mace, Green cardamom and Betel root.

4) KHADA MASALA

Khada means whole spices. There can be various types of whole spices that are tempered into hot oil, to allow the flavours to infuse with the oil. The purpose of this could also be to remove the unwanted flavours from the fat such as from ghee.

The ingredients used to make khada masala are: Cloves, Cinnamon, Black cardamom, Green cardamom, Cumin.

5) GARAM MASALA

Garam masala is a blend of various spices, which is used to give flavour to the dish. This Masala is usually sprinkled on top of the dish before being served, because to get back all the aromas. It is the one of the popular masalas in India. The ingredients of garam masala are:

Cumin, Black cardamom, Black peppercorns, Coriander seeds, Cloves, Cinnamon stick, Mace, Bay leaf and Green cardamom.

6) CHAAT MASALA

As the name suggests this masala is used with the Indian street food called chaat. Chaats will be sour, piquant, and spicy tidbits that are eaten as snacks. The piquancy in chaats is created by adding chaat masala. Chaat masala is rarely made in hotels or homes, as it is readily available in the market as a condiment. Chaat masala can be added to various other spices to create more masala blends such as kebab masala etc. The ingredients that used in garam masala are: Cumin, Peppercorns, Black salt, Dry mint leaves, Kasoori methi, Green cardamom, Cloves, Cinnamon, Asafoetida, Tartaric acid, Mace and Dried mango powder.

7) CHANA MASALA

This is the regional masala of Punjab. It is easy to prepare in homes, but it is also available in market highly and it is also famous masala all over the world. The ingredients that used to make chana masala is: Coriander, Cumin, Red Chillies, Ginger Powder, Dried Mango Powder, Cinnamon, Black Pepper, Black Cardamom, Garlic, Cubeb pepper, Nutmeg, Clove, Mace and Dried Pomegranate seeds.

8) PUDINA MASALA

This masala is a mix of dried pudina powder and various other spices. It is mainly used to prepare pudina parathas which is famous in India. The ingredients that used to make Pudina masala are: Dried Mint, Chilli Powder, Dried Pomegranate Seeds, Chaat Masala, Garam Masala and Black Salt

9) PAANCH PHORAN MASALA

This spice is famous in Bengali cooking and it is used to soften the vegetables and fish. As the name of the masala says paanch means five spices. It is always softened in hot oil. The ingredients that used to make Paanch phoran masala are: Anise, Mustard, Cumin Fenugreek and Nigella

10) DUM KA MASALA

It is mix of various flavoured spices and is suitable for to prepare Dum cooking. The slow heat in dum cooking helps to extract the flavours out of the masala. This masala is usually used for Mughlai foods. The ingredients that used to make Dum ka masala is: Anise Black Cardamom, Ginger Powder and Green Cardamom

11) GUN POWDER MASALA

The name says that this Masala is very hot and spicy. This is the regional spice of Tamil Nadu. The powder is used to mix with boiled rice along with ghee, and then it is served as a meal. In normal terms it is known as KARAM PODI. It is usually served with idlis in the breakfast. The ingredients that used to make gun powder masala are: Dried curry leaves, Chana dal, Red Chillies, Urad dal, Sesame seeds and Black Pepper

12) GODA MASALA

It is the regional masala from Maharashtra. It is used in many Maharashtrian cooking and also in Konkani cooking. In case of cobra saffron, we can also use turmeric. The preparation method of this masala is, first heat a very little amount of oil and fry the spices in oil one by one. Try to remove the oil from the ingredients in napkin paper. Now grind the spices and make it into powder and store it in a jar which is air tight in a cool dry place.

The ingredients that used to make Goda masala are: Coriander seeds , Sesame seeds, Dry grated coconut, Dried red chillies, Cumin, Cinnamon, Asafoetida, Star anise, Bay leaf , Pepper corn and Cobra saffron

13) KOLHAPURI MASALA

The name says that Kolhapur, it is one of the places in Maharashtra. It is red in colour because using of high number of red chillies. The preparation method of this masala is, first heat a very little amount of oil and fry the spices in oil one by one. Try to remove the oil from the ingredients in napkin paper. Now grind the spices and make it into powder and store it in a jar which is air tight in a cool dry place. The ingredients that used to make Kolhapuri Masala are: Red chilli, Coriander, Sesame, Cumin, Mace, Cinnamon, Dry ginger, Green Cardamom, Black Cardamom, Mustard, Cloves, Bay leaf, Dry Coconut, Garlic, Poppy seeds, Peppercorns, Asafoetida, Turmeric, Fenugreek, Star Anise, Nutmeg Oil

14) RASAM MASALA

It is the famous masala powder in South India and it is used as a flavour for hot soup.

The ingredients that used to make Rasam masala are: Red Chillies, Coriander, Cumin, Pepper Corns, Turmeric

15) ACHARI MASALA

It is also known as Indian pickle spice. This masala is highly used to make pickles. The ingredients that used to make Achari masala is: Anise, Mustard, Cumin, Fenugreek and Nigella seeds

1.3.1.2 WET MASALAS

Wet masalas are the masalas where the spices are soaked in liquid and grind into them paste.

1) MALABAR MASALA

This is the regional masala from South India. It is mainly used in fish curries. The spices are first soak in water and then it makes into paste. It is also used as a thickening agent in various curries. The ingredients that used to make Malabar masala is: Coriander, Nutmeg, Anise, Star anise, Fenugreek, Clove and Cinnamon

2) SAMBAR MASALA

This is the regional masala from South India. It is used to give flavour the vegetable curry called sambar. Sambar is usually served with various south Indian meals and breakfast items like idly, dosa, and Vada. Chana dal and urad dal is get sautéed in little quantity of oil and the other ingredients are mix along with fresh curry leaves to make a paste. The ingredients that

used to make sambar masala are: Coriander, Cumin, Chana dal ,Urad dal, Asafoetida Dry red chillies, Pepper corns, Grated Coconut, Fenugreek, Curry leaves and Turmeric.

3) CHETTINAD MASALA

The business people of the particular community are known as Chettiars live in the region of Tamil Nadu. These people use to travel to south – East Asia and they brought many new ingredients and spices that can be seen in their cooking is called chettinad cooking. Except grated coconut all the ingredients of these masala are get heated one by one. Then lightly fry the grated coconut in oil and leave and fry until it gets brown. Then mix the masala and make into paste. The famous dish from these masalas is chettinad chicken. The ingredients that used to make chettinad masala are: Red chilli, Black Cardamom, Green Cardamom Cinnamon, Fenugreek, Anise, Cumin, Coriander Seeds, Star Anise, Poppy seeds, Pepper corns, Cloves, Stone flower, Nutmeg, Capers , Curry leaves, Mace and Grated Coconut

4) GOAN MASALA

As the name says that, this masala belongs to Goa. This masala used in fish and seafood. All the ingredients used in these spices made into paste along with vinegar. The ingredients that used to make Goanmasalaare:Redchilli, Garlic, Coriander, Cinnamon, Clove Green Cardamom, Vinegar and Sugar

5) XACUTTI MASALA

This is regional masala from Goa and it is used highly in chicken dishes. These spices are heated separately and then made into a paste with sliced onion. The ingredients that used to make Xacuti masala is: Sliced onions , Grated Coconut, Coriander Seeds, Cumin, Clove Black cardamom, Green Cardamom and Cinnamon

6) RECHADO MASALA

This is a regional masala from Goa and it is used in fish preparations and sea food like shrimps and prawns. All the ingredients are made into paste and vinegar. The ingredients that used to make Rechado masala is: Red chilli, Garlic, Pepper corn, Coriander, Cumin Turmeric, Star anise and Sugar

7) TANDOORI MASALA

This is the regional masala of Punjab, and it is around India and it is used in chicken and fish dishes. The red chillies are made into paste and all the ingredients are mixed together to form a masala. The meats or vegetables are mixed with these masalas for at least 6 to 8 hours and

then inserted into tandoori skewers/sticks and then cooked. The ingredients that used to make tandoori masala are: Hung Yoghurt, Red chilli, Turmeric, Garam Masala, Ginger-garlic paste, Vinegar and Salt

8) SALAN MASALA

This is the regional masala from Hyderabad and it is used to make gravy in the dishes. The spices are got heated one by one and made into paste. Salan is a vegetable preparation that is used to serve along with biryani. The ingredients that used to make salan masala are: Sesame seeds, Pepper corn, Cashew nuts, Red Chilli, Peanuts, Turmeric and Coconut

9) BALCHAO MASALA

This is the regional masala from Goa and it is used in preparation of seafoods like shrimps, prawns. The spices used in this masala are getting grinded into paste along with ginger and garlic. The ingredients that used to make Balchao masala is: Red Chilli, Green Cardamom, Cinnamon, Pepper corn, and Fresh ginger and garlic.

1.4 BASIC INDIAN GRAVIES

The word gravy means a mixture of thickened, coloured, flavoured and soured (little bitter) agents used as a base in Indian cooking process or Indian stew (means slow cooking process). Gravy in western known as the juice that which comes out from meat while cooking it and that juice is considered as gravy for any meat dishes in western cooking. As region also plays an important role for chefs in hotels to start dividing the gravies into different groups.

In Indian cooking, there are only four basic gravies from that only many dishes will get prepared. The four important gravies are White gravy, Hariyali gravy, Makhni gravy, and Brown onion gravy.

1.4.1.1 BROWN ONION GRAVY

This is also known as onion tomato gravy. This gravy is also known as Lababdar gravy.

Equipment --- Only kadhai should be used while preparing brown onion gravy and have to use tinned brass utensil as if we use untinned brass it will easily react to tomatoes.



Oil / fat ---- Any vegetable oil is used.

Thickening Agent --- Onions are the good base to make gravy or onions are important for

Flavouring Agent --- Khada masala is softened in oil and garam masala is used at the finishing of the dish.



Spicing Agent --- Red chilli powder makes into paste and then it should be added.

Colouring Agent --- Red chillies give much more redness to the gravy.

Souring Agent --- Chopped tomatoes are the main souring agent in this gravy (acidic in nature).

MAKING OF BROWN ONION GRAVY:

- Heat the oil and soften it with khada masala and long chopped green chillies.
- Then add chopped onions and cook it until it gets into brown.
- Take care while cooking onions and don't burn otherwise it will be bitter in taste.
- Add red chilli powder made into paste with water and cook for 30 seconds on low flame.
- Add chopped tomatoes and cook, while cooking mash the tomatoes and onions to form gravy. After cooking at the time of finishing the gravy should be mix with green chillies and chopped ginger.
- The famous dishes in brown onion gravy is country hamburger steak and onion chicken.



1.4.1.2 MAKHNI GRAVY

This is very popular gravy from north India; it is also added along with onion tomato masala to produce many other curries.

Equipment --- The gravy does not stick to the base of thick-bottomed utensils. So tinned brass utensil is good for this gravy.

Oil / fat --- Home-made butter or salt butter.

Thickening Agent --- Cashew nut paste, khoya, tomato puree and cream are used.



Flavouring Agent --- Potli masala and Kasoori methi is used as a flavour agent and sugar is used to cut down the bitterness or sourness.

Spicing Agent --- Red chilli powder and long chopped green chillies.

Colouring Agent --- Red chillies give much more redness to the gravy.

Souring Agent --- Tomatoes puree forms a base to the gravy.

MAKING OF MAKHNI GRAVY:

- Chop the tomatoes on the head and take into a pot and a little amount of water, then add ginger garlic crushed and the tomatoes get cook slowly in their own juices.
- Stain the tomatoes and keep aside. Heat the butter and red chilli powder and cook for 30 seconds.
- Then cook the gravy with salt, chopped tomatoes, potli masala, green chillies, cashew nut paste, powdered kasoori methi and sugar and cook.
- Add more butter if require and then finish the gravy with cream.
- The famous dishes of makhni gravy is Paneer makhni, Butter Chicken Masala



1.4.1.3 WHITE GRAVY

This gravy is white in colour. Boiled onion paste is the main ingredient in this gravy and it is thickened by nut pastes. It is usually used in Mughlai dishes.

Equipment --- The gravy does not stick to the base of thick bottomed utensils. Use only tinned brass utensil. Use only wooden sticks to make the gravy if we use metals it will react to the food quickly and discolour the food.

Oil / fat --- Ghee is commonly used in Mughlai food dishes and oil also can use.

Thickening Agent --- Boiled onion paste, ginger, and garlic, cashew nut and pumpkin seeds provides thickness to the gravy.

Flavouring Agent --- Khada masala is soften in ghee.

Spicing Agent --- Green chilli paste is used and one can use long chopped green chillies and the chillies should be removed after cooking.

Colouring Agent --- Green chillies act a colouring agent to the gravy.



Souring Agent --- Fresh curd is used in this gravy after nut paste is added, as they will prevent curdling.

MAKING OF WHITE GRAVY:

- Heat ghee and soften it with Khada masala and long chopped green chillies. Add ginger-garlic paste and cook it for two minutes.
- Add boiled onion paste and cook until ghee comes out. Cook it on a slow flame.
- Add cashew nut paste and pumpkin seeds and cook for a minute.
- Now add curd and cook until the gravy comes to a boiling stage. It usually takes 45 minutes for this gravy to cook.
- The famous dish in white gravy is Malai Kofta gravy, Mughlai Paneer etc.



1.4.1.4 HARIYALI GRAVY

In Hindi Hariyali means green. In this gravy spinach juice will be added to get brown gravy.

Equipment --- Iron utensils should not be use because the gravy loses its colour.



Oil / fat --- Any vegetable oil or ghee can be used to make the gravy.

Thickening Agent --- Spinach, tomatoes and onions are the main and body for this gravy.

Flavouring Agent --- Khada masala is soften in oil and ginger-garlic paste is cooked along with onions and tomatoes.

Spicing Agent --- Green chilli paste is added to give green colour to the dish.



Colouring Agent --- Green chilli paste gives greenness to the dish.

Souring Agent --- Chopped tomatoes will also be the main for this gravy.

MAKING METHOD OF HARIYALI GRAVY:

- Heat the oil and soften it with Khada masala and long chopped green chillies.
- Then add chopped onions and cook it until it gets into brown.
- Take care while cooking onions and don't burn otherwise it will be bitter in taste.
- Add red chilli powder made into paste with water and cook for 30 seconds on low flame.
- Add chopped tomatoes and cook, while cooking mash the tomatoes and onions to form gravy. After cooking at the time of finishing the gravy should be mix with green chillies and chopped ginger.
- When the onion tomato masala gets completed, then add spinach paste to the masala and while cooking doesn't cover the dish until the oil comes to top and floats.



The famous dishes from Hariyali gravy is Chicken hariyali, Veg hariyali curry etc,

**1.5 SOURING AGENTS USED IN INDIAN CUISINE.**

Vinegar is the acid obtained by fermenting alcohol. The usage of vinegar has been probably handed over by the Portuguese travellers, which explains the amount of vinegar used in Goan and south Indian food. North India also utilizes vinegar for marinating kebabs. Vinegar is also used in Mangalore, Kerala, as well as in Anglo Indian and Parsee cooking.

Curd is very popular in India and has various uses. It is used as souring agent and also has many medicinal values attached to it. It is believed that drinking yoghurt with biryani does not allow the fats in biryani to assimilate in the body. Apart from being used as souring agent in curries, it is also used as a thickening agent for gravies.

Tamarind is a pod, which is deseeded and dried. It is soaked and the pulp is squeezed and used as souring ingredient in Indian cuisine. It is mainly used in south Indian cuisine. The juice of a citrus fruit, such as lemon and lime, is added to the dishes at the end to make them tangy. It is also used as a tenderizing agent. Lime is round in shape, whereas lemon is large

and oval-shaped Lemon is also known as gandharaj (king of perfume) in Bengal, due to its pleasing aroma.

This deep purple fruit with a large seed is grown in the western coast. This is mainly used in coastal regions of the west. It is also used in gravies, curries etc. in south India. Kokum is mainly used in fish preparations and aperitifs. Kokum also gives a pleasing pink colour to the dish and can also be used as a colouring agent. Mangoes are grown in almost all the parts of India and each mango has a special name and regional specialties attached to it. Mango is eaten like a fruit and used in dessert preparation just like it is done in the West, but many other forms of mangoes are used for souring purposes of gravies and curries and other applications. Dried pomegranate seeds are available whole or in crushed form to be used in Indian cooking.

1.6 FAMOUS CUSINIES OF INDIA

ABOUT INDIAN CUISINES AND HISTORY

Indian food is highly affected by religion, especially in Hindu, cultural and traditions. The cooking is also affected from centuries by Islamic rule, particularly the Mughal rule.

During ancient times India was ruled by various rulers and the business people during those times such as foreign invasions, trade relations, and colonialism have played an important role in inviting certain foods to India. For example, potato, a good diet in some regions of India, was brought to India by the Portuguese, who also introduced chillies and breadfruit. As India is ruled by various international rulers by that time India made good international relations like the spice trade between India and Europe was the first and most important for Europe's Age of Discovery. Spices were bought from India and traded around Europe and Asia. Indian cooking also shows some great effect on other cuisines across the world, especially those from Europe, the Middle East, North Africa, sub-Saharan Africa, Southeast Asia, the British Isles, Fiji, and the Caribbean.

Indian cuisine reflects an 8,000-year history of various groups and cultures interacting with the Indian subcontinent, leading to diversity of flavours and regional cuisines found in modern-day India. Later, trade with British and Portuguese influence added to the already different Indian cuisine.

Early diet in India mainly consisted of legumes, vegetables, fruits, grains, dairy products, and honey. Staple



foods eaten today include a variety of lentils (dal), whole-wheat flour (aṭṭa), rice, and pearl millet (bājra), which has been cultivated in the Indian subcontinent since 6200 BC.

A food classification system that categorised any item as saatvic, rajasic, or tamasic developed in Yoga tradition. The Bhagavad Gita proscribes certain dietary practices. Consumption of beef is banned, due to cows being considered sacred in Hinduism. Beef is generally not eaten by Hindus in India except for Kerala, parts of southern Tamil Nadu and the north east.

Middle Ages to the 16th centuries

During the middle ages, several Indian dynasties were predominant, including the Gupta dynasty. Travel to India during this time introduced new cooking methods and products to the region, including tea. India was later invaded by tribes from Central Asian cultures, which led to the emergence of Mughlai cuisine, a mix of Indian and Central Asian cuisine. Hallmarks include seasonings such as saffron.

Some of the famous cuisines of India are:

- KASHMIRI
- PUNJABI
- MUGHALAI & AWADHI
- RAJASTHANI
- TAMIL NADU
- MARATHI
- GOAN
- BENGALI
- ANDHRA
- HYDERABADI
- GUJARATI

1.6.1 KASHMIRI

One of the famous poets called Jahangir. While him working in the Mughlai dynasty, he says that ‘if there is a paradise on earth, it’s here, it’s here, and it’s here’. Kashmir is one of the parts of Jammu and Kashmir. This state has a special quality among all the three major regions, namely Jammu, Kashmir and Ladakh. These Kashmir have their own language, own culture and even though they have their own dressing style.

Jammu and Kashmir are the only state that has two capitals that change with the seasons. Where



Srinagar becomes the capital in summers and Jammu becomes the capital in winter for almost six months. The availability of food in Kashmir is also same like Punjab food and the language spoke in Kashmir is Dogri, which is similar to Punjab and Himachal Pradesh. Kashmir is also known as Land of Valleys and Lakes. The temperature of Kashmir will fall up to -10°C . A trip to Kashmir will always give a good experience in their life and peaceful.

Kashmir is also known for its temples, because in ancient times it is ruled by Hindu rulers. Many Hindus and Sikhs also live in Kashmir, but the majority population is that of Muslims. Kashmir valley is the best centre of attraction to the tourists. Ladakh is also called as Moon Land.

LOCATION

The state of Jammu and Kashmir is situated in North India. Jammu is located in northern plains, where the Kashmir is situated on the foot of the Himalayas. The Himalayan Mountains run from south-east to north-west of Kashmir. The Himalayas separate the Valley of Kashmir from the Zaskar range. The region in Jammu called Kargil (-50°C) is the second coldest place after Siberia. Kashmir is a popular destination for the tourists between May and October.



HISTORICAL BACK GROUND

Kashmir was ruled by local dynasties till 14th century. The arrival of Islam in these regions and occupied by the Mughal ruler Akbar brought a great change in the history of Kashmir. A historian says that Buddhism was the first religion of Kashmiri people, but by the 17th century it was changed and new religion form called Hinduism. According to the oldest book of Kashmir called Nilmat Puraan, this land was once a huge lake known as SATISAR. In 1819, Sikhs ruled Kashmir for 27 years.



The history of modern Kashmiri cooking says that back to the fifteenth century ruling of India by Timur, and the migration of 1700 skilled wood carpenters, weavers, architects, calligraphers or writers and cooks from Samarkand to the valley of Kashmir. The family members or children related to the particular family or descendants of these cooks, the Wazas, are the master chefs of Kashmir.








The main formal banquet food or meal in Kashmir is the Royal Wazwan. It consists of thirty-six food items, between fifteen and thirty are the dishes of meat, cooked overnight by the master chef, Vasta Waza, and his group of wazas. The guests have their seat in four groups and share the meal in a large metal plate called the trami.



The meal begins with washing of hands at a basin called the Tash-t-nari. Then the tramis arrive, start with rice, quartered by four seekh kababs and contains four pieces of methi korma, one tabak maaz, one safed murg, one zafrani murg, and the first few courses. Curd and chutney are served separately in small earthen pots. As each trami is completed, it is removed, and a new one brought in, until the dinner has run its course. Seven dishes are a must for these occasions-- Rista, Rogan Josh, Tabak Maaz, Daniwal Korma, Aab Gosh, Marchwangan Korma and Gushtaba. The meal ends with the Gushtaba.

SEASONAL AVAILABILITY

Kashmir valley is famous for its vegetables and fruits. The various ingredients that available seasonal are:

ITEM	SEASONAL ABAILABILITY/ USAGE	PHOTOGRAPH
Cherries, Peaches, Apricots	May, June, July	  
Pears Apples	August and September	 
Almonds Walnuts	Between October and November	 














Plum	Plums are found plenty in number and it is locally known as alubukhara.	
Dried grapes	These are used as raisins in many rice dishes like biryani, pulao etc.	
Rhubarb	It is cooked with honey and wild asparagus, especially in Kashmir.	
Water chestnuts	Commonly called as golus, it is eaten as a snack.	
Blood red pomegranate	In Kashmir it is known as Kabuli anar.	

Table 1.6.1(a)

Kashmir cuisine is helpful to rice eaters and breads, because in this cuisine both are eaten for breakfast along with tea and afternoon snacks. Tandoor is used by local bakers to produce breads for breakfast and snacks as well.

SPECIAL EQUIPMENT

Kashmir cuisine having a different style in cooking and some equipment's are also used in the preparation of meals. Kashmiri cooking use pots because that have a narrow neck and it will collect all the flavours in the pot itself. Since most of the dishes in Kashmir are Dum cooking, so it is important for utensils to be in narrow neck. Some of the equipment's are:

EQUIPMENT	DESCRIPTION	PHOTOGRAPH
Dan	In kashmir normal days both hindus and muslims cook food on a dan, which is an oblong clay oven about 3ft by 2ft in length and a foot and a half in height.	
Tarami	These are large brass plates used for serving food.	
Leji / degul / digcha	Among Kashmiri pandits, most vegetarian and non-vegetarian dishes are made in this pot. This pot is also called as Leji or Digcha. While cooking in these pots cheese or vegetables or meat gives good flavour and aroma.	
Tasht and Naar	These are hand-based wash basins these are provided in royal banquets or big banquets. These are easily move and handle.	
Goshpar and kaen	It is in a flat smooth stone and wooden mallet made of walnut wood which are used to beat meat hard and to make meat soft into a fine texture. It is made of walnut wood because while beating the meat it will not break.	
Krech	These are different types of wooden spoons and ladles. It is used to turn the food in the clay pot while cooking. Because of these wood sticks or spoons the base of pot does not get scraped.	
Khalur and dula	This is a stone mortar with a wooden stick where it is used to grind chutneys on the stone.	
Samovar	This is a jug-shaped metallic lid used for boiling tea such as kehwa and sheer chai. It has a long tube inside that it is filled with charcoal, where the coal helps to boil the tea every second.	

SPECIAL INGREDIENTS USED IN KASHMIR:

The climate of Kashmir is very helpful to grow a variety of fruits and vegetables, which are highly used in the day-to-day life of Kashmir people. The various special ingredients used in Kashmiri cooking are:

LOTUS STEM (Nadroo):

This is a very popular vegetable in Kashmir, which is grown in the empty waters of Dal and Wular lakes. It is usually used by Kashmiri pandits during festivals and in daily cooking also. They are eatable parts of the lotus flower which is found under water. It is usually crunchy and is sweet and has a flavour like water chestnut. It has a soft flavour. The stem is lime green in colour with a whitish flesh.



We can store it in the refrigerator; it has a capacity to store for about 1 week. Lotus stem is eaten directly without any cooking when it is added in salads. Lotus stem salad is eaten along with pork and prawns and it is delicious in many popular cultures. Lotus stem curry is prepared by boiling or stir-frying the stem. The curry is very good for rotis and rice.

SHALLOTS (Praan):

It is a type of onion, where it is different from any other onion. It is a cross breed onion where it is a cross of shallot and spring onions. It has a strong flavour like garlic. It will once it will touch to the tongue. Shallots are used to prepare pickles. These are finely-sliced and deep-fried then it is used as a spice in Asian cooking, then it is served with porridge (is a food commonly eaten as a breakfast cereal dish). Like onions, when it gets sliced, raw shallots release substances that irritate the human eye, which makes tears from eyes.

**DRIED VEGETABLES (Sheengri):**

Kashmiri people also use sun dried vegetables in autumn season because it is difficult to cultivate vegetables in winter seasons and stored for the winters. Because of this reason they use to buy the vegetables in high quantity then they dry it and use for future purposes. The taste of the dried



foods is rich in quality and it is less cost. It is available year around in all the regions. Mainly it reduces the waste content in the food and produce healthy food.

BAUHINIA FLOWERS (Kachnaar):

These are the eatable flowers from bauhinia tree; it is usually used in Kashmiri cooking. It helps to make raitas. Firstly, the flower is got boiled then the outer green stem is get removed and it is used for cooking. The five-petaled flowers are 7.5–12.5 cm diameter, generally in shades of red, pink, purple, orange, or yellow, and are often fragrant. The tree begins flowering in late winter and often continues to flower until early summer.



These flowers are used as a main ingredient in many Pakistani and Indian recipes. Traditional bauhinia flower curry is prepared using kachnar buds, yogurt, onions and native Pakistani and Indian spices. Kachnar buds are also eaten as a stir-fried vegetable and used to make pickle in many parts of the Indian regions. In Rawalpindi region of Pakistan, Pakistan Kachnar is cooked with minced beef.

COCK'S COMB FLOWER (Mowal):

The remained part of cock's comb flower is used as a colouring agent in place of saffron by Hindus of Kashmir. In local it is called as mowal. The colour comes by boiling the dried flower in water. Then the filtered water can be stored in a bottle for other purposes.

The plant is growing every year. Seed production in these species can be very high, 200–700 kg per hectare. One ounce (approximately 28 grams) of seed may contain up to 43,000 seeds. One thousand seeds can weigh 1.0-1.2 grams. Depending upon the location and fertility of the soil, buds can last 8–10 weeks. It grows across Mexico, where it is known as "Velvet flower",



northern South America, tropical Africa, the West Indies, South, East and Southeast Asia where it is grown as a native or naturalized wildflower, and is cultivated as a nutritious leafy green vegetable. It is traditional fare in the countries of Central and West Africa, and is one of the leading leafy green vegetables in Nigeria, where it is known as 'soko yokoto', meaning "make husbands fat and happy."

SAFFRON (Zafran):

Saffron is the dried stigma of the crocus flower. the world's best saffron comes from Marseilles in Spain. It is mainly used as a flavouring agent in desserts and gravies and gives the dish a golden colour to the dish. Saffron is also used in a samovar filled with tea when chosen.



Saffron gives yellow-orange colouring to foods. Saffron is widely used in Persian, Indian, European, and Arab cuisines. In liquors also saffron is used. Saffron is used in dishes ranging from rice and khoresh of Iran. Saffron has a long history of use in traditional medicine. Saffron has also been used as a fabric dye, particularly in China and India, and in perfumes. It is used for religious purposes in India. Nutritional levels of dried saffron are composed of 65% carbohydrates, 6% fat, 11% protein (table) and 12% water. In comparison to other spices or dried foods, the nutrient content of dried saffron shows richness in content of B vitamins and dietary minerals (table).

MORELS (Guchi):

These are one of the costliest mushrooms that are easily spoilable, and hence these are sold in dried form. These are mainly used in festive or special occasions. Due to difficulties in cultivation, commercial harvesting of wild morels has become a multimillion-dollar industry in the temperate Northern Hemisphere, in particular North America, Turkey, China, the Himalayas, India, and Pakistan, where these highly prized fungi are found in abundance.

**KOHLRABI (Moinja):**

It is also known as knol khol, this root vegetable is combined with its leaves to make applied heat dishes commonly known as moinja haaq. It also called as German turnip, it is a biennial vegetable, a low, stout cultivar of wild cabbage. It is the same species as cabbage, broccoli, cauliflower. It can be eaten raw or cooked. Eatable dishes are made with both the stem and the leaves.



GREEN LEAVES (Haaq):

There are various types of green leaves or haaq used in kashmir cuisine. Wasta haaq are small leaf leaves that same looks like a small leaf of the english letuce, often known as lamb lettuce. Nearly one thousand species of plants with edible leaves are available. Leaf vegetables most often come from short-lived herbaceous plants, such as lettuce and spinach. Woody plants of various species also provide edible leaves.



The leaves of many grain crops are also edible for humans, but usually only eaten under poor conditions. Leaf vegetables contain many typical plant nutrients, but since they are photosynthetic tissues, their vitamin K levels are particularly important. Phylloquinone, the most common form of the vitamin, is directly involved in photosynthesis. This causes leaf vegetables to be the primary food.

Leaf vegetables are typically low in calories and fat, and high in protein per calorie, dietary fiber, vitamin C, pro-vitamin A carotenoids, folate, manganese and vitamin K.

WILD SPINACH (Saunchal):

It is cooked along with lotus roots or combined with cottage cheese (like paneer) after completeing of cooking these leaves is very creamy and soft. The leaves and young shoots may be eaten as a leafy vegetable, either steamed it fully or cooked like spinach, but should be eat in less quantity due to high levels of oxalic acid. Each plant fproduces tens of thousands of black seeds. These are high in protein, vitamin A, calcium, phosphorus, and potassium.

**BLACK BEANS (Varmoth):**

These black beans are very closely looks like the brazilian black beans. They are braised (applying heat to the food) and eaten with rice. It is belived that these beans have many medicinal properties such as the lowering of cholesterol. They're three times cheaper than chicken, beef, or fish, and loaded with with fiber, folate, potassium, and protein. Black beans can fill you up without draining your wallet, and now they're trendier than ever. The United Nations even declared 2016 the International Year of Pulses, the dry, edible seed of beans, lentils, chickpeas, and peas.



ROUND RADISH- (Muzh):

The round white radish is again grown in dal and wular lakes and mostly combined with tourt fish. Radishes are grown and consumed throughout the world, being mostly eaten raw as a crunchy salad vegetable. They have numerous varieties, varying in size, flavour, color, and length of time they take to mature. Radish leaves are sometimes used in recipes, like potato soup or as a sauteed side dish. They are also found blended with fruit juices in some recipes. In Indian cuisine the seed pods are called "moongra" or "mogri" and can be used in many dishes.



KASHMIRI MASALA (Ver):

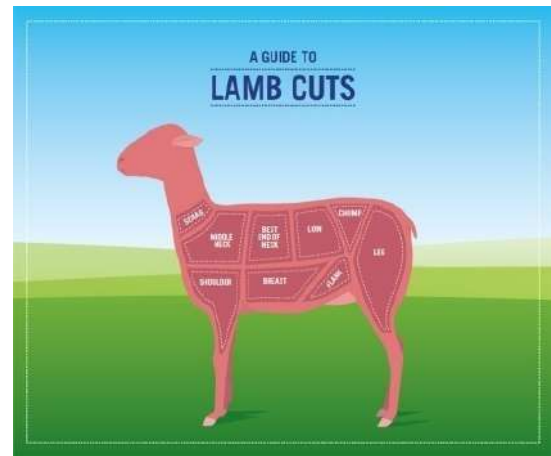
This is a paste of various ingredients including praan. this paste made into round circles flat and dried in the sun. These are then added to curries as and when required.

SPECIALITY COOKING FOR FESTIVALS AND OCCASIONS:







Kashmir cuisine is popularly known for wazwan and it is broadly classified into two types-

- the kashmir pandits cooking and
- the muslims cooking.

The wazwans of kashmiri muslims had a strong thought on goat, whereas kashmiri pandits prefer lamb. Specific parts of lamb are used for preparation. Ex: neck is used in roganjosh, ribs are used for tabak maaz and kabargah, leg is used for dhaniwal and rishta, etc.,



During Wazwan a fixed flow of eating a meal is followed. The kashmiris usually eat on floor. A white cloth called dastarkhwan is spread on the floor and a large palled tarami is placed between four people. After at last, desserts are then served along with dry fruits. Sheer chai is famous it is had by the people after meal as it is believed that it has a great digestive capacity. Few dishes made during festivals and wazwans are:

DISH	DESCRIPTION	PHOTOGRAPH
Rishta	It is one of the famous traditional dish served in wazwan as course. It is prepared by poaching method of cooking of lamb dumplings made from leg meat, in a rich red gravy flavoured with safron and cock`s comb. Red gravy is flavoured with red chilli powder, cloves, ginger powder, cinnamon, and heeng water	
Gushtaba	The boneless cubes of lamb is beaten along with lamb fat with a wooden mallet on a coarse stone gives paste texture. It is flavoured with black cardamom seeds, fennel and pepper corns, kashmiri garam masala, and ginger powder. The gravy is finished by adding cooked yoghurt, turmeric, and corianderleaves.	
Katlam	katlam is usually crispy and thin. It is one of the types of breads.	
Dhaniwal Korma	This is a rich prepration of lamb in a yoghurt- based gravy. Meat legs is used in the preparation of gravy where it starts with ghee along with garlic paste, cloves, and green cardamom are added. the gravy is finished by adiding cooked yoghurt, turmeric, and coriander powder, and then garnished with coriander leaves	
Tabak Maaz	This also a famous lamb prepration using meat from ribs. the lamb ribs are boiled in a mixture of milk and water with aniseed powder, ginger, turmeric, heeng and cinnamon powder till meat absorbs all water. Meat is taken out cut into pices and pan fried in ghee till thar are crisp and golden brown , tempered with cardamom, fennel and cinnamon	
Aab gosht	The lamb is cut into small pieces and boiled in water along with aniseed powder, ginger, garlic, and salt till tender. Then the gravy is seperately made cooking fried onion paste in ghee with adding black pepper powder and reduced milk. The milk is reduced with green cardamom. Later the dish is finished by adding lamb stock.	







Kabargah	This is similar to tabak maaz, but the difference is that this is used to make soft the pices in oil and after boiling of lamb ribs and it is dipped into a batter which is made with gram flour and spices, and then fried until crisp.	
Methi maaz	This is served as appetizer (which is serve before meal). Small bone less pices of lamb are combined with the stomach of lamb, the oesophagus or the food pipe, and lungs, these are cooked with spices and paste of boiled fenugreek leaves.	
Yakhni	Boneless pices of lamb known as boti and on bone pices of lamb cook in stew process in yoghurt based gravy flavoured with fennel, cardamom, and dried ginger powder to make yakhini. The most common one is nadroo yakhini	
Roganjosh	lamb removed out br searching from shoulder and it is simmered (slow cooking process) in a gravy from mustard oil, yoghurt, red coloured water from cock`s comb flowers, brown onion paste, and spices such as fennel powder and cardamom and ver (kashmir masala) is also added to the dish for flavouring.	
Dum aloo	It is the unique prepration of potatoes, which is made to look royal and taste great. Medium sized potatoes are boiled , peeled all before deep frying in mustard oil at medium temperature. The potatoes are stewed in yoghurt based gravy flavoured with kashmir red chilli paste, brown onion, and ver. This is then cooked on dum until the oil starts to float on top.	
Rwangan tsaman	Cottage cheese known as tsman is commonly eaten in kashmir for various dihses. It is some times cooked with fresh fenugreek leaves and called methi tsaman. Rwangan refers to tomatoes and this prepration calls for stewing cottage cheese in tomato gravy flavoured with ver and other spices.	

Table 1.6.1(c)

1.6.2 PUNJABI

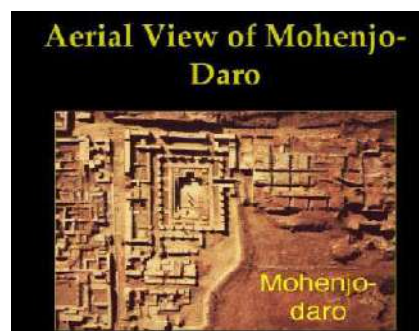
Punjabi cuisine is related with food from the Punjab region of India and Pakistan. Tandoori is the one of the cooking methods that is invented in Punjab and then now famous in other parts of India, UK, Canada and in many parts of the world. The local cuisine of Punjab is heavily get affected by the agriculture and farming lifestyle from the times of Harappan and Mohenjo-Daro civilization.



The food of Punjab will range from spicy to sour, and sweet to tangy. All the gravies of Punjabi dishes are made by using ginger, garlic, onions and tomatoes and the most common flavourings are cumin and coriander.

LOCATION:

Punjab is located in the Sutlej river basin on the northern plains of India. The fertile land in Punjab is always watered because the availability of many rivers likes Sutlej, Ravi and Beas, which usually flow into Pakistan and then the Arabian Sea. The capital of Punjab is Chandigarh which also the capital of Haryana. Apart from food Chandigarh is also famous for textiles, sports equipment, and hosiery clothes. Motor parts industry too is well developed in this state.



Punjab was combined with three states together, namely Punjab, Himachal Pradesh and Haryana. But after independence, the land was divided into three based on their own culture and language.



HISTORICAL BACKGROUND:

Rig Veda one of the oldest texts in south Asia is believed to have been composed in Punjab. It explains about the life of the Vedic times and the socio-cultural development of ancient Punjab, earlier known as Sapta Sindhu.




- In 15th century Shri Guru Nanak dev ji founded Sikh religion
- In 19th century- British rule, several Punjabi freedom fighters
- In 1947- at the end of British rule, the Punjab was split between India and Pakistan.

Punjabi cuisine was highly influenced by Mughal invaders who brought with them the tradition of the great tandoor and now Punjabi tandoori cooking is celebrated as one of the most popular cuisine throughout the world. Punjab was also ruled by Maharaja Ranjit Singh until the year 1839. He is a noble and brave king, who fought against the Afghans and won the kingdom that which is located from the river Sutlej in Peshawar to the Indus in the south of Ladakh.



SEASONAL AVAILABILITY:

Due to its fertile land watered always by the rivers flowing through it, almost all kinds of fruits and vegetables grow in Punjab; however some of the ingredients used in Punjab cooking are;

English name / local name	Description	Photograph
Mustard leaves (Sarson)	These are used during the winter months of the year. The braised preparation is eaten with special chapattis also known as Makki Ki Roti. The greens actually have more vitamins, carotenes, vitamin k, and flavonoid anti-oxidants.	
Amaranth Leaves (Bathua)	These are combined with mustard leaves to make them creamy and to reduce the bitterness of the mustard leaves while cooking.	
Black Carrots (Kaanji)	These are available from March till June. Their juice is known as kanji and is mixed with spices and it gets developed in clay pots.	














Black-eyed bean (Rongi / lobhia)	These are light brown coloured kidney beans are cooked along with onions and tomatoes and eat with whole-wheat bread, such as tandoori or pulka.	
Chick peas (Choley)	These are commonly eaten in Punjab. The effect of Rawalpindi (Pakistan) can be seen in Pindi choley, a preparation of blackened chick peas often eaten along with flour bread called kulcha.	
Dried fenugreek leaves (Kasoori methi)	These leaves come from Kasoor the place in Pakistan and hence it is named after it. The leaves are lightly browned over a tawa and add in vegetables to add flavour.	
Raw Mango Powder (Aamchoor)	Dried pieces of mango are used either fully or it will make into powder form. It is used in dishes to add sourness and it is combined with other powdered masalas and used as stuffing's for okra (ladies' finger), bitter gourd or even small brinjals.	
Lentil fritters (Badiyan)	It is made by grinding the lentils with various spices and drying it in sun for future uses. They are deep fried and combined with potatoes to prepare vegetable stew (to cook in its own juice).	

Table 1.6.2(a)

SPECIAL EQUIPMENTS OF PUNJAB COOKING:

The equipment used in Punjabi cuisine is same to same as those we are used in other states of India. With the effect of Mughals in northern region of India, many of the cooking pots such as deg, handi and lagan made of heavy brass are still used in the Punjabi cuisine. Some of the regional equipment commonly used in Punjabi cooking is:

English name / Local name	Description	Photograph
Madhani	It is a wooden churner (bubble) fixed to a brass pot. It is used for churning butter out of cream.	
Chakla belan	Chakla is a small marble and belan is a rolling pin, usually made of wood. These are used to roll the Maida dough and to prepare various Indian roti or Breads such as chapattis and puris.	
Kadhai	It is a utensil made of brass, iron or aluminium and it is a deep, concave utensil and it is used for deep frying.	
Grater (kadoo kas)	It has a sharp cut of different sizes which is used to grate.	
Sieve (Channani)	It is used to filter flour and commodities. It has small holes of various sizes used to sieve it finely without any insects or stones.	
Masala daani	It refers as spice box. It contains the commonly used dry spice, both whole and powdered. It is usually seen in every home.	
Pauni	It is a holed or perforated spoon used for removing fried food commodities from oil.	
Ladle (karchi)	It is a ladle used for stirring and mixing food.	

















Tawas	It is flat base equipment usually made of cast iron and is used for making Indian breads such as parathas and roti. These are available in various sizes.	
Patila	It is made of brass and lid. It is used in cooking for the purpose of boiling or simmering and sautéing. It is used for making gravies and cooking in high quantity. These are also available in various sizes.	
Dori danda	It is a strong ware pot with a long piece of wood, used for making food soft like chutneys or spices. The pestle could be either of wood or stone.	
Tandoor	It is clay oven chamber, which is burn with charcoal. It is used for baking various Indian breads like naan, roti etc.	
Bhatti	It is used for grilling kebabs. Where coal is only medium on fire, where the food is cooked on grilled rods along with coal.	
Khoncha	It is a flat metal spoon used for stir frying or sautéing the ingredients.	

Table 1.6.2 (b)

SPECIALITY COOKING FOR FESTIVALS AND OCCASIONS IN PUNJAB:

Most of the Punjabi menus are very seasonal and the purpose of making those dishes is to provide nutrition to the body. The dishes that which are especially prepared in summer like bottle gourd, lentils etc., are largely eat along with butter milk. The winter season brings along vegetables rich in vitamin C to protect the body from natural cold. The few dishes prepared in Punjabi cooking are:

Dish	Description	Photograph
Kadhi pakora	This dish made by slow cooking of sour curd with gram flour and spices. It is then tempered with coriander seeds, cumin seeds, whole red chillies, asafoetida, onions, and tomatoes. Where the deep fried (make into brown) fritters of onions, potatoes, and spinach called pakora are then added to the dish.	
Rajma	Where red kidney beans get cooked with ginger, garlic and tomatoes, and add turmeric and red chilli powder to get flavour. These are paired well with jeera pulao.	
Rao Ki kheer	This is a different preparation because, rice get cooked in sugarcane juice, where it reduces the caramelized (browning the sugar by applying heat) texture.	
Pindi choley	This dish comes from Rawalpindi, where the chickpeas are boiled along with black tea to give its traditional black colour. These cooked chickpeas then cooked with onions, tomato and spices. These are commonly served as breakfast or for snacks.	
Amritsari kulcha	It looks like naan, this bread is pan fried and heavier, it can be both plain and stuffed. Kulcha is a typical Punjabi recipe. Amritsar, a city in Punjab is famous for its Amritsari kulchas or Amritsari naan. Flour dough is rolled into a flat, round shape and baked in an earthen clay oven until golden brown. When baked, it is usually rubbed with butter, and then eaten with spicy chole (chickpea curry).	

Punj ratani dal	It is prepared by cooking five dals with onion and tomatoes, which shows as an example for five rivers in Punjab. The commonly used lentils are channa, split urad, green moong, kidney beans and masoor dal.	
Sarson da saag	Fresh mustard leaves are combined with amaranth leaves and apply heat along with garlic and ginger, onions, and tomatoes until they become creamy. This dish is finally garnish or decorate it with white butter and eaten with Makki Ki Roti.	
Maa di daal	Broken black lentils are combined with Bengal gram and slowly cooked along with onions and tomatoes on a low flame, until it gets creamy. It is good with chapattis.	
Tandoori chicken	Complete chicken skin removed or de-skinned and marinate or applying masalas over night with curd, red chilli pastes and spices. It is then inserted in sticks of tandoor and gets cooked.	
Murgh butter masala	Tandoor cooked chicken is stewed (cook in its own juices) in creamy tomato sauce and garnished with butter and red chillies. The gravy of tomatoes is also known as makhni gravy and this gravy adds moisture to the tandoori chicken.	
Shahi paneer	Paneer cubes are gets cook with makhni gravy to produce shahi paneer.	
Malai kofta	Fried cheese balls, potatoes, and spices are added to smooth gravy of onion and tomatoes which is flavoured with cream and garam masala.	







Mutter paneer	Cottage cheese cubes and green peas are getting cooked in stew method in an onion and tomato gravy to prepare mutter panner. It is eaten along with pulao or chapattis. It is usually yellow in colour; it turns into yellow by adding turmeric.	
Aloo Gobi	It is prepared by frying potatoes and cauliflower in an onion and tomato gravy. The gravy is generally flavoured with ginger. It is usually eaten with tandoori roti and parathas	
Dahi bhalle	These are lentil fitters, which are get soaked in creamy whisked (mixed) yoghurt and eaten along with food. These are especially prepared on special occasions.	
Malpua	This is a dessert made by shallow frying a batter made from semolina and milk solids. The fried pancake is then poached (to cook something such as a fish, or an egg with its shell removed, by putting it in gently boiling water or other liquid) in honey flavoured sugar syrup.	
Gajar ka halwa	In normal terms it is known as carrot halwa, it is eaten during winter due to its availability. The carrot gets grated and it is cooked along with ghee and milk and while cooking milk reduces to thick consistency at a particular time. The halwa is then sweetened with sugar and garnish it with nuts and almonds or raisins.	
Phirnee	It is a traditional dessert usually made during summer months. Where the rice is get soaked in water and after soaking it make into paste and then added to the boiling sweet milk. The dish is to cook until it gets thickened and it pours into terracotta pots. The extra moisture from the dish is soaked by earthenware pot and thus the dish sets soft to serve.	

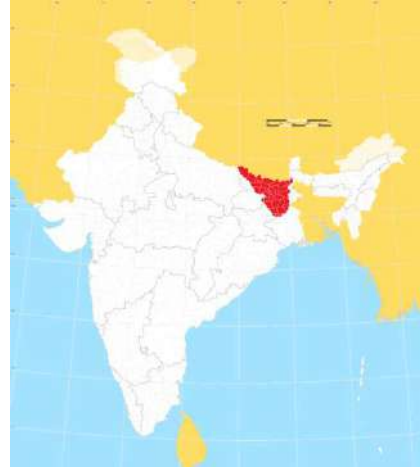
Table 1.6.2 (c)

1.6.3 MUGHALAI & AWADHI

Awadhi is a cuisine native to the city of Lucknow, which is the capital of the state of Uttar Pradesh in northern India. The cooking techniques of Lucknow are similar to central Asia, the Middle East, and northern India with the cuisine contains both vegetarian and non-vegetarian dishes.

The Awadh region has been greatly influenced by Mughal cooking techniques. The city is also known for its Nawabi foods. The Bawarchis and Rakabdars of Awadh gave birth to the Dum style of cooking or the art of cooking over a slow fire.

–the richness of Awadhi cuisine lies not only in the variety of cuisine but also in the ingredients used like mutton, paneer, and rich spices including cardamom and saffron.



–Dastarkhwan, a Persian term, literally means a laid-out ceremonial dining spread. It is customary in Awadh to sit around and share the dastarkhwan.

–the chefs of Awadhi transformed the traditional dastarkhwan with elaborate dishes like Kababs, Kormas, Kaliya, Nahari-kulchas, Zarda, Sheermal, Roomali roti's and Parathas.

LOCATION:

As Awadh is not a state, the Mughlai food of Lucknow is commonly known as Awadhi cuisine. In the times of nawabs this region was known as Awadh. Lucknow commonly known as 'city of nawabs', which shows the Persian culture of art, poetry and fine cuisine. Lucknow is also known as the golden city of eastern Uttar Pradesh. It is situated in the Gangetic plains and the entire region is surrounded by rural towns and villages such as Malihabad, kakori etc.



HISTORICAL BACKGROUND:

Nawabs contributed a great deal to Awadhi Cuisine. It was a Fazal azim's credit to prepare food. There are various nawab rulers who ruled Awadh and some of them are:

1754-1827 AD - GHAZI-UD-DIN HAIDER



Ghazi-ud-din haider is a man with royalty and he is very much interested for the sport of wild animal fighting. He uses to spent lots of money towards for the maintenance and the growth of the wild animals. He is the person who finds out parathas by travelling to various places and the chefs from his kingdom used to make 6 parathas per day using 5 seers of ghee in each paratha.

1 seer = 1 kilo gram.

The chefs used 30 seers of ghee per day which were very famous all over that period of time.

1827-1837 AD - NASIR-UD-DIN HAIDER

Nasir-ud-din haider find out of food and he brought many dishes to the Awadh cuisine and invented variety of dishes by various chefs in these cuisines. During the ruling of Nasir-ud-din-haider, a cook came to Lucknow who prepared *khichidi* by using pistachios and almonds instead of rice and lentils. He cuts the almonds into the shape of rice and pistachio nuts into the shape of lentils so by this the dish will get cook perfectly and it looks like khichidi. Once if it served or tasted, we cannot forget it again.



Three classes of people were employee in preparing of food.

- First, there were scullions who cleaned pots and dishes and worked under the cooks.
- Second, there were Bawarchi; the cook prepares meals in large quantities or high number of people.
- Third was Rakabdar, these are the chefs who are expert and usually cooked in small pots for few people only.



1847-1856 AD - WAJID ALI SHAH

Wajid Ali shah was the eldest son of Amjad Ali Shah. He is a great poet and was also interested in food and other luxuries in life. Wajid Ali Shah later settled in Kolkata, even today also if you visit Kolkata, they use to serve the delicacies of the food from the Mughal times in areas around khidderpore.



* There are seven well known pulao's from Awadhi cuisine. They are:

1. Gulzar, the garden

2. Nur, the light.
3. Koku, the cuckoo.
4. Moti, the pearl.
5. Chambeli.
6. Jasmine



COOKING STYLE:

There is various cooking style (techniques) that used in Awadhi cuisine are:

BAGHAR:

It is the technique where it is used to temper or softening the dish with ghee/oil and spices is known as baghar. Whether this technique is used to do at the beginning of the dish or it will be done at the end of the dish. When baghar (translated as instant flavourings or tempering) is done correctly there will be a change in the spices, they will become browner, dry spices will arrange and increase lightly, and the smell will change from a raw spice flavour to a great or energetic toasted flavour. This style can be used in two different ways; either we can use the oil in the pan to cook other ingredients or to pour the oil over a completed dish to add another flavour at the end to the dish. Examples for this type of style are Dal, Kadhi from North India.



DHUNGAR:

It is the quick smoke procedure used to flavour any meat dish, dals, or even raita. Light aroma that gives the quality of the dish. This can be followed at the end or in the middle of cooking Dhungar is an ancient style of smoking and giving the flavour of burnt charcoal smoke into the dish. This technique was started during ancient time when Mughals came to India; they brought this technique with them. When this technique is get started, they use to make a hole in the ground then they use to wrap the food product in many layers of banana leaves and they use to put the wrapped or covered stuff in the hole surrounded by burning charcoals and then they use to put clarified butter (Ghee) over those coal and then as soon as smoke got started they use to seal it with a cover. The best example for this cooking style is Galavat ke kebab.



DUM DENA:

Dum literally means breath. This process includes placing half cooked food in a utensil and seal it with flour dough. It will cook very slowly with help of fire where charcoal is placed on the above and below. Where it gives excellent aroma, texture and flavour due to slow cooking. The two main points in this style of cooking are: bhunao and Dum, or 'roasting' and 'maturing' of a prepared dish. In this cuisine, herbs and spices are important. The process of slow roasting gently allows each ingredient to release their maximum flavour to the dish. The covering of the lid of the handi with dough gain maturing. Cooking slowly in its juices, the food retains its natural aromas.



In some cases, cooking dough is spread over the container, like a lid, to seal the foods; this is known as pardah (veil). Upon cooking, it becomes bread which has absorbed the flavours of the food. The bread is usually eaten with the dish.

GHEE DURUST KARNA:

This is one of the important steps in cooking in almost any Awadhi dish. It is essential to temper or season when it is cooking in medium flame. It is important to remove raw flavour of ghee or oil and in the place of that rawness we have to add flavour with kewra and cardamoms. The method will follow while making ghee durust karna is:



About 500g of ghee or oil is heated to a smoking point when the heat is got reduced. To this, 1 tablespoon of kewra water is sprinkle and 6 green cardamoms are added. This is then stirred till the water evaporates and the ghee gives a cool aroma.

GIL-E-HIKMAT:

Gil refers as earth or mud in Persian language and Hikmat means the procedure of hakins. It is an interesting cooking method influenced from Persian cooking. The meat or vegetable to be cooked are taken fully and stuffed with nuts and spices are wrapped in banana leaf or cloth and covered with clay or multani mitti and buried 4-6 inches deep and placed on the top of fire and get cooked for 6-8 hrs and then food is removed out and served.



LOAB:

The term loab refers as final stage of cooking when the oil is used during cooking rises to the surface, giving the dish a finished looking. It will occur when slow cooking of gravy dishes is available or involved.

**ZAMIN DOZ:**



In this process a dug is placed in the bottom of the bowl and the ingredients are placed and covered with mud and charcoal is getting placed over it.






**MOIN:**








It refers as making dough short. In this process fat (like butter) is rubbed into the flour and made into dough for parathas or kachoris. This makes the final product crisp, flaky and crumbly.

**SEASONAL AVAILABILITY:**

Lucknow is famous for its mangoes. Some of the best mangoes come from this region only. Lucknow is also famous for some special spices and herbs. The availability of the ingredients is:

Ingredient (local name)	Description	Photograph
Saffron (Kesar/zafran)	The word saffron comes from the Arabic word zafran which means yellow. Saffron is famous all over the world, but Spanish saffron and Kashmiri saffron are famous in India. It is a costly spice among all the spices, because it takes 75,000 flowers to get half kg of saffron.	
Allspice (Kebab chini)	This spice is native to West Indies and is widely used in European Cooking. It is not very commonly used in India, except in certain Mughlai food. Similar to cloves, but more acidic in nature and deeply flavoured. Best used in spice mixes. These berries are smell like blend of cinnamon, cloves and nutmeg.	

Royal cumin (Shahi jeera)	It is an aromatic spice with a delicious characteristic flavour. It is an important ingredient in Awadhi cuisine, used for flavouring meat dishes. It has a very slight flavour. Therefore, when it is cooked with the rice the slight flavour will be extracted.	
Mace (javitri)	Mace is the dried outer shell of a nut, golden yellow in colour. It has a strong nutmeg flavour. It will be used either in whole or in nut form. It gives a delicious flavour to the sweet and savoury dishes.	
Lazzat-e-taam	This is not a spice, but an ingredient of garam masala. Lazzat-e-taam literally means 'that which gives flavour to the food'. It is a mix of special ingredients such as green cardamom, black cardamom, mace, cinnamon, nutmeg, black pepper, baobee, coriander seeds, allspice, coconut, jarkush, cumin, shahi jeera, sandal wood powder, rose petal powder, makhana, bay leaves, poppy seeds, fennel seeds, anise seeds, white pepper, kewra water and ittar.	
Bayberry (baobee)	The popular bayberry was spelled as beyber, hence the name baobee. They are commonly found throughout the USA. These bluish white berries are dried and used in Awadh cuisine.	
Dried lemon grass (Jarakush)	It is also known as zarakush. It is actually a dried lemon grass that gives a pleasant smell or fragrance. It is natural to the tropical regions of Asia and the Indian subcontinent. Dried or fresh lemongrass is commonly used to make herbal teas and other drinks. When cooking with lemongrass, you can use fresh, dried, or powdered leaves. It is popular in many Asian cuisines and adds an absorbing flavour to soups and stews.	

Sandal wood (Chandan)	Sandal is the wood of the sandal trees mostly grown in south India. Usually it is used in many religious functions but the sweetness or smell of wood is used as powdered or in liquid form.	
Fox nuts (makhana)	These are referring as lotus seeds, but actually seeds of water Lilly plant. They are commercially (financial) get from the market. When they are roasted, they pop up like popcorns. They are deep fried or roasted before adding into the dish.	
Rose petals (Gulab patti)	Wild roses have a great flavour. These are dried in shape to preserve the colour and flavour. The powdered rose petals are added to kebabs, especially in kakori kebabs.	
Perfume (Ittar)	The using of perfumes plays an important role in Awadhi cuisine. They are used to gives the flavour and aroma to the dish and makes it delicate or soft. Most commonly they are made from musk deer, hunting of musk deer which is banned worldwide.	
Alum (Fitkari)	It is a valuable substance, used for medical purposes; it stops bleeding from cuts. It also cleans impurities from water. Alum is used in cooking to remove strong flavours from food. For example, there is a dish in Lucknow is benami kheer which is mainly made of garlic cloves where garlic is get boiled in water along with alum where it removes that strong smell.	
Gold leaf (soney ka warq)	It is an eatable thin sheet of gold, beaten between sheets of leather. These gold sheets are used for garnishing and decoration.	
Sliver leaf (chandi ka warq)	It is an eatable thin sheet of silver, beaten between sheets of leather. These sliver sheets are used for garnishing and decoration.	









Vetiver (kewra)	Kewra is extracted from the inner leaves and flower petals of a small kind of palm, common to southern India. Not only it is used in desserts, but also in some meat and rice dishes. It is used to give a flowery smell or fragrance to a variety of dishes ranging from rice to sweet dishes.	
--------------------	---	---

Table 1.6.3 (a)

SPECIAL EQUIPMENT USED IN AWADHI CUISINE:

Since Awadhi cuisine uses some typical styles of cooking, the equipment should also be very special. The majority of the equipment that is used in Awadhi cooking are usually made of brass or copper. As many of these metals get react with food that are acidic in nature and therefore it is important to line these with a thin layer of tin. This process is also known as *kalai*. A few of the special equipment that are used in Awadhi cuisine are:

Equipment	Description	Photograph
Bhagona or patili	It is generally made of brass. It comes with a lid and it is used when a great deal of bhunna or sautéing is required, or even for boiling and simmering.	
Deg/Degchi	It is a pear-shaped pot with a lid made of brass, copper or aluminium. The shape of these utensil is helpful to dum cooking method. It is used for cooking pulao, biryani, nehari etc.	
Kadhai	It is a deep concave (round) utensil made of brass, iron or aluminium and is used for deep-frying.	
Lagan	It is a round and flat copper utensil with slight round bottom. It is used for cooking whole or big cuts of meat or poultry especially when heat is applied from both top and bottom.	

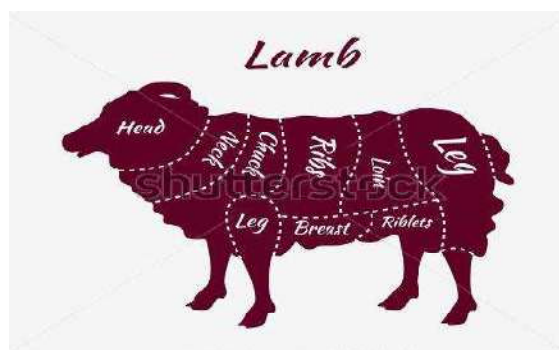
Lohe ka tandoor	It is an iron tandoor, and it is different from the clay tandoor that is most commonly used in hotels. It is a kind of dome-shaped iron oven used for making most of breads such as sheermal, taftan etc.	
Mahi tawa	It is a big griddle (frying pan) shaped, round, flat bottomed tray with raised edges. It is used for making kebabs. It is also used to the dishes that which require heat form the ends when it is covered.	
Seenī	It is a big round tray usually used as a lid for the lagan or mahi tawa when heat is applied from the top. Live charcoal is placed on it and the heat is transmitted through it to the food. Thus, it shows the indirect heat that which shows the effect on browning the food and cooking all the ingredients.	

SPECIALITY COOKING FOR FESTIVALS AND OCCAISONS:

The green fields of the northern plains have encouraged the people to farm animals such as goats, sheep, cattle and chicken, apart from vegetables and spices. Poultry farming around Lucknow is also very famous and it is very common to see people enjoying the rooster (cock) fights on the streets. The passion of cooks for lamb has led the butchers to cull out special cuts of lamb for each purpose. Some of the cuts of lamb for preferred dishes are:

CUTS: -

Neck: - Neck portion of the lamb has smooth muscles and hence the meat is not very fibrous or hairy. Neck is a cheap cut and available at supermarkets and butchers. It is left connected to the shoulder, but a good butcher should be



willing to separate it out for you. Lamb neck can be cooked slowly on a low heat, yet unlike the shoulder, it can also be treated like a steak and cooked quickly over a high heat until pink. The meat from the neck is used in kormas and for biryanis.

Rib cage: - This part of the animal provides varieties of cuts to cooks. The chop or bite are cuts from back bone. The bone can be single or double depending on the preparation. The softer part of the rib cage is known as *pasli ka panja* and has a very soft meat. The flesh which is present outside the rib cage has a lot of fat attached to it, which is also known as *rawaz*. This is used for cooking and also used in making doughs for sheermal and bakarkhani. Lamb ribs or cutlets are the most expensive cuts of lamb, but are unbelievable in taste and tender (soft).



Legs: - A lamb's forelegs are known as the aglidast and the hind legs are commonly known as raan. These are the purest cuts of a lamb as they have many uses. Like the shoulders, to cut the legs of a lamb one has to work hard, which means that this cut has a good, strong flavour. Leg of lamb is great roasted whole on the bone, or boned. It's a fairly thin muscle, so take care not to overcook it, or else it dries. Rub it all over with an herb oil, some garlic and even a little mustard, if you like, roast in the oven, then finish off on the barbecue to get a great smoked flavour.



Trotter: - It is also known as paye, is the shine bone of the hind and forelegs. It has a good quantity of collagen and therefore used for making.







Rump: - Also known as the puth, it is basically a bony structure that contains the livers and kidneys. It is covered by a lot of fat which is also used for cooking. The fleshy portion on the puth is also known as *puth ka purdah* and is used for preparing purdah kebabs.








Loin: - These are mini T-bone steaks cut from the waist of the lamb. On one side of the chop is the lamb loin and on the other side is the fillet. Just like chops, they're great for grilling or barbecuing – serve. A few loin chops kept together in one piece, then boned and rolled, make a lovely little roasting joint.



**SPECIAL DISHES:**

Dish	Description	Photograph
Murabba	In Awadh chefs used to make murrabas of whole dried small mangoes in a way that the green outer skin retained in its original look. It looks like a small unripe mango take from the trees and made into syrup.	
Zarda	Spring is the season of festivity in Awadh, it is popularly known as Vasant. People sing and dance to the classical tunes of reeg vasant and raag hindola. Fragrant basmati rice was prepared with saffron and sugar to celebrate this occasion. Even till date it is very common to see zarda being made during marriages and festivals.	
Kaliya	Kaliya is a mutton preparation with gravy and is yellow in colour. The colour come from the usage of turmeric or saffron or both. Cooks of Awadh always been creative with Kaliyas cooking by fish, chicken, and other meats.	
Rizala	Rizala is a mutton preparation in a creamy white gravy. This was created to give a different colour to gravy as most people associated red meats with red gravy. Rizala is a yoghurt-based gravy, flavoured, with cardamom and fresh green chillies.	

Shammi kebab	It is one of the formal foods in any Nawabi banquet and without making of the shammi kebab there will be no any event. This is made from meat cooked with chana lentils and then minced with spices.	
Haleem	Haleem can be related to a French pate, which has a paste-like texture of meat. The meat for Haleem is cooked with ghee, spices and broken wheat. The meat is slowly cooked till it gets into parts and then it will cook until each fibre breaks and looks like a texture of paste. Haleem is popular during the days of Ramzan.	
Nehari	At the time of Nasir-ud-din-Haider, a non-laknavi, who was generally known as mahumudi, opened a food stall in the Firangi Mahal quarter. His Nehari (breakfast curry) was appreciated by various kings and princesses. There are many kinds of neharis, and a very gelatinous shorba made from trotters is used for the preparation.	
Pulao	Nawab Abdul Qassim khan was a nobleman of taste. Varieties of pulao's get prepared in his kitchen. The pulao was believed to be tasty and light for the stomach. The rich used for the dish was such that it is melted in the mouth. There are various types of pulao's in Awadhi cuisine.	
Sheermal	Mahumdu, who is considered as a pride of Lucknow till date, who is also responsible for the creation of sheermal. It is a light odd or flaky bread often cooked in an iron tandoor because of its high fat content. The bread is coated with saffron and milk, after baking. It is usually accompanied with galouti kebabs.	




Malida	Where the pieces of bread mixed with ghee and sugar are an everyday sweet dish and are also had no special occasions such as fatiha and Niyaz. From this the preparation of malida, a sweet dish with semolina has developed, which is so light that it would turn into sherbet in one's mouth and there was no need to chew it. Some rulers are very fond of it.	
Kakori kebab	There are many stories behind this soft kebab from the kakori region of Awadh. One of the stories is about a toothless nawab who wanted to have a lamb kebab that melts in his mouth or else he would hang the chef. The chefs are very secret about this recipe and there is an interesting point in it is where there will be more than 100 spices in it. The kebab is get skewered onto a special square-shaped seekhs and grilled on an open charcoal grill.	
Galouti kebab	It is also known as galavat kebab, these kebabs derive their name from the word that means 'to melt in the mouth', the texture of the meat is almost like a paste and is cooked on a large flat utensil known as mahi tawa. This kebab is also famous by the name of tunday kebab as a famous shop called 'tunday main' who popularized these kebabs. It is usually hand pressed between sheermal bread.	

Table 1.6.3 (c)

1.6.4 RAJASTHANI

The Rajasthani food has a different place in the history of India as this place always been with royalty, kings, and costliest palaces. In the royal kitchens of Rajasthan, the food preparation rose to a level of art form as cooks always wanted to create new dishes and different for their kings and to their kingdoms. With the coming of Mughals to India, food changed



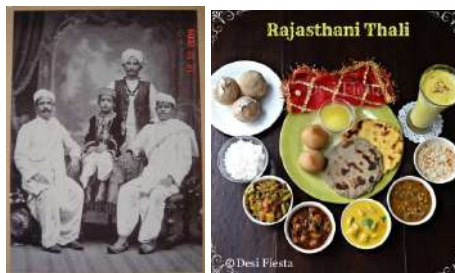
heavily and the royal kitchens were the first to get effected by the costliest eating styles of Mughals.

The climate and low availability of water also shows great change in people to get back the ingredients in such a way growing of ingredients locally. The lifestyle of people also shows great change like they cook the food once and they will store as it will be in same texture for several days and they eaten the food without heating. The dishes like ker sangri and panchkuta saag are best examples, where they stay for longer days.



Usage of dried berries and leaves cooked with milk, yoghurt, and spices are till date one of the most favoured food of the Rajasthani people. Lentils and their by-products like gram-flour, are the most commonly used ingredients in many forms. Lentils are used to make dals and sometimes soaked, ground, and dried to make mangodis and poppadums. Gram, bajra, and corn are some commonly used pulses in Rajasthan and are used all over the state for preparations of rabdi, kheechdi and rotis. Various chutneys are commonly made from locally available spices, such as turmeric, coriander, mint and garlic.

Marwaris are the biggest business community people from Rajasthan and are also known as baniya. Though they are originally from Rajasthan, they have settled all over north India. These people are mostly vegetarian and some of them do not even include onion and garlic in their



meals also. The kitchens of Marwaris are highly prohibited to all only the household ladies or professional cooks have a right to enter into it. A thali is a large metal plate and has an arrangement of many small bowls called katoris which consist of vegetables and accompaniments.

Apart from vegetarians there is also a community called Rajput community who is quite fond of meat. In the earlier days, hunting of wild animals was a sport followed by the rich and the royal families. Usage of wild animals such as deer, rabbit etc. was very common in the Rajasthani cuisine. Due to, dry climate many a time the meats used to be marinated, and cover it with whole-wheat dough, and buried under the ground with wood charcoal left burning on the top.

LOCATION

Rajasthan is a desert state of India. It is a colourful state located in north-west India. As this land is bordered with various fort all around it. Thar desert to the side of Pakistan, this place is rich in its culture and food. This state is diagonally covered with Aravalli hills and covered with south-eastern region. Jaipur is the capital of Rajasthan and is also known as the pink city.



HISTORICAL BACKGROUND

Rajasthan was controlled for 1000 years by the Rajputs. Maharaja jai Singh II ruled the state from 1693-1743 and like his ancestors he was careful in maintaining that friendly nature with the Mughal rulers. His fort was located on top of the hills of Amber and in 1727, he decided to move down to the plains. He carefully planned a city called Jaipur. He planned this city on the knowledge of ancient Hindu architecture and also built a one of the famous look out place called Jantar Mantar, which is till date an important tourist destination. The city of Jodhpur was founded by Rao Jodha in the year 1459. He was the chief of Rajput society called Rathores.




Most of the ancient architecture during 10th century was destroyed by the Mughals, but the remains of some of these can still be seen in parts of Rajasthan. Adhai din ka jhopra, a mosque in Ajmer, and some Jain temples such as Raounakpur and the famous hill station Mount Abu are a few examples of these oldest buildings.



SEASONAL AVAILABILITY

Although most of the vegetables are available in most of the parts of the country, but still a few special ingredients are unique to Rajasthan. The available ingredients are:

English name / local name	Description	Photograph
Capers and desert beans (ker and sangri)	These are always cooked together and this dish is made by combining ker and sangri. Ker is a kind of wild caper berry and sangri is a desert bean. This is found in the tropical regions of Jaisalmer and this softness is best enjoyed with bajrey Ki roti.	






Cluster beans (gawar ki phali)	These are cooked with spices such as turmeric, red chilli powder and coriander powder. This dish is finally mixed in curd gravy to make it a semi-dry preparation.	
Kumatiya	It is a kind of fruit but it is used as a vegetable. It is pickled along with ker, in low water regions and non-availability of fresh vegetables Kumatiya is the best choice for cooking.	
Millets (baajra)	It is a major crop of Rajasthan. It can grow in sandy soils and hence it is the most preferred crop in Rajasthan.	
Mateera	It is a kind of ground that looks like a water melon. It is white when it makes into half and has black seeds and flesh just like water melon, but is not sweet. It is just used to make Rajasthani curries.	
Kaachri	Also known as Cucumis trigonus is scientific language, this berry like fruit is cooked as a vegetable, when fresh and green. Once it is dried, it is used for adding a sour taste to the food and is also used as a meat softer or tenderizer.	

Table 1.6.4 (a)

SPECIAL EQUIPMENT

The equipments and utensils used in Rajasthan are same to the ones used in Punjabi cooking. A few equipment used in Rajasthani cuisine are:

Name of equipment	Description	Photograph
Tikra	This a clay pot that is mainly used for making a dal called tikri ki dal. The main importance of cooking dal dishes in this clay pot is which extracts earthy flavour into it.	






Chulah	In olden days stoves were made out of mud and cow dung was the most commonly used fuel. The low flame of the chulah would cook the food slowly allowing better mixture of the flavour of the spices.	
Sigri	This is an open barbecue grill used for grilling kebabs such as maas ke sooley.	








Table 1.6.4 (b)

SPECIALITY COOKING FOR FESTIVALS AND OCCASIONS

Rajasthan is a land of the usual Muslim and Hindu festivals and also have many special festivals of its own, celebrated in their own style. The colourful camel fair at Pushkar held in November every year in one such festival. In India, food has always been an integral part of any festivity and Rajasthan is no exception.

Some of the specialities cooked in this region are:

Dish	Description	Photograph
Laal maans	These red meats are made using lamb, yoghurt, onions and garlic. This dish uses a different chilli called mathania chilli that is natural to Rajasthan. This dish is uniquely smoked with cloves to give flavour to the meat.	
Safed maans	This is a white meat with yoghurt-based gravy and thickened with onions. This is the only difference between laal maans and safed maans.	
Maas ki kadhi	This is a yoghurt-based gravy, use turmeric and flavoured with dried fenugreek leaves. The gravy is get thickened with gram flour. Lamb, chicken or any other meat can be cooked in this gravy.	

Khargosh ka mokul	It is prepared by using wild hunted animals such as deer, rabbit etc. It is a yellow coloured, curd-based gravy, thickened with onions. The rabbit is first get marinated and then braised. Once it gets cooked, it makes into pieces and stir fried with gravy.	
Maans key sooley	It is eaten as an appetizer. Thin slices of lamb are firstly marinated overnight in buttermilk and salt. Next day the buttermilk is drained and then marinated it with mustard oil, red chilli powder, clove and black pepper. The meat is get inserted into thick iron rods and cooked on a charcoal grill.	
Khad ka pinda	It is combined with wild animals. In this rabbit is get marinated and covered with jute cloth. It is then covered with clay and cooked in the earth with simmering wood charcoals on top.	
Ker sangri	It is equal to a pickle and can be eaten cold or warm. Ker is a dried berry and sangri is a dried bean. Then they are soaked in turmeric water and then mixed with mustard oil and pickling spices.	
Dal baati churma	This is a classical combination of three dishes eaten together. Dal is also known as paanchmel dal, as it is a combination of 5 types of lentils cooked with garlic and ghee. The baatis are dumplings of whole-wheat flour, baked on dry cow-dung cakes called kandas. The baked baatis are dipped into melted ghee. Churma is a sweet preparation made by frying whole-wheat flour and ghee.	
Gawar ki phalli	These are cluster beans that are cooked with spices such as turmeric, red chilli powder and coriander powder. The dish is finished with curd gravy to make it a semi-dry preparation.	
Gathey	Rajasthani gathey are made by rubbing gram flour with yoghurt, mustard oil, dried fenugreek leaves, turmeric, salt into a dough. This dough is rolled into long cylindrical shapes and poached in salted water.	





	Then it cut into 1-inch long pieces and deep fried. This is now simmered in yoghurt-based yellow gravy.	
Pithorey	These are fritters [<i>usually consisting of a portion of batter or breading which has been filled with bits of meat, seafood, fruit, vegetables or other ingredients.</i>] made by combining gram flour, curd, turmeric, chilli powder, mustard seeds and ghee. They can be eaten as snacks or even stewed in a kadhi to make pithorey ki kadhi.	
Papad ki subzi	Poppadums are made from lentils and Rajasthani's combine them with potatoes to make a curry that is enjoyed with deep-fried pooris or kachoris.	
Bajrey ki raab	Millet is the main staple diet of Rajasthan. This is a drink helps to end the thirst in summer. To prepare this drink, a day's old bajrey ki roti is mixed with yoghurt and water and seasoned with salt.	
Missi roti	Famous bread prepared by rubbing gram flour, whole-wheat flour, chopped onion and green chillies into a dough. This chapatti is rolled out from this dough and cooked on a tawa.	

Table 1.6.4 (c)

1.6.5 TAMIL NADU

The different regional cuisine of the southern part of the country has been gaining popularity recently all around the country as well as the world. The usage of mustard seeds, urad dal, coconut oil, and curry leaves are very common in all parts of south India. The most famous cuisine from Tamil nadu is the chettinad cuisine from southern region of Tamil Nadu. This cuisine is spiciest and aromatic food in India. A community called Chettiyar has popularized this cuisine so much, that it got its name Chettinad, after their name. The Chettiyar community is famous for its vegetable dishes, but it also has meats such as chicken and mutton and fish. The most common spices like pepper corns, cinnamon, nutmeg, red and green chillies. Tamil nadu is also famous for its filter coffee which is also known as meter capee as it is poured from a



small steel glass into bowl and vice versa from a distance almost one meter to make the coffee frothy.

LOCATION

Tamilnadu is situated along the coast of Malabar and Coromandel, bordering with Arabian Sea, in South India. This is a land of temples and spices. Chennai is the capital of the state. Since it is close to the sea, many Tamilians settled near the sea for their livelihood. The ports near the sea allowed Tamilians to travel to south-east Asian countries such as Singapore, Malaysia, Indonesia. It is a fertile state and its agricultural land permits the growth of good crops. Coconut and tamarind are the two major crops that give a good taste in these foods. These hills of Tamil nadu are home for tea and coffee plantations.



HISTORICAL BACKGROUND

Situated on the southern part of India, Tamil nadu is known as the cradle of the Dravidian culture, which was pronounced for its own languages, customs and architecture. As early as 6th century BC, ships from south-east India to the Malay Peninsula and Myannar in search of precious metals. Pepper, which is also known as black gold was grown on the Malabar and Coromandel Coast and was also used as money in the old days. The south was ruled by the dynasties such as Cholas, Cheras, Pandyas and Pallavas and these dynasties protected their culture and prevent Muslim invasions.








Puducherry was used as a port to export goods to Europe as it was dominated by the French. Later when Puducherry was also taken over by the British, they established their control in Tamil Nadu also. The lady of the household also known as achis, commands the kitchen. Chettiars, who were traditionally merchants, traders and financiers travelled to places such as



Myanmar, Malaysia, Singapore, China and Thailand for the extensive use of the Burmese teak in their furniture. Apart from Chettinad cuisine from Tamil Nadu, Muslim cuisines also have a great effect in the form of payas and khushka which is a lamb biryani.

SEASONAL AVAILABILITY

The Chettiar ladies carefully preserve legumes and berries by drying them in the sun for later use in curries. Apart from a liberal use of oil and spices, most of the dishes are pepper corn, bay leaves, cinnamon, nutmeg and many other spices usually. The few unique ingredients are:

English name / Local name	Description	Photograph
Black rice (kavunarisi)	It is origin of south-east Asia, kavunarisi is highly used in the Chettinad cuisine to prepare sweet puddings. This rice grows in India in the Cauvery belt.	
Fresh neem flowers (veepam poo)	These are used for making pachdi and are specially prepared in TAMILIAN new year.	
Cinnamon camph (pachaikarpooram)	These are leaves of the large and evergreen, cinnamon camphor tree. The leaves have a waxy feel and smell of camphor when crushed. The leaves are used in curries and desserts.	
Puffed Bengal gram (pottu kadalaai)	It is puffed up Bengal gram that can also be mix into a fine powder. this is available commercially.	
Gingelly oil (Nallennai)	It is a sesame seed oil and is very commonly used to finish certain dishes.	
Arecanut (kottai paakku)	It is commonly found in south India and is the main ingredient in paan. It is also known as supari in Hindi.	
Ash gourd (pooshanikkai)	It is also known as the winter melon or petha in Hindi. This white fleshy gourd is used along with lentils to make sambar or even cooked into a vegetable.	









Capers (Marathi mokku)	The use of this spice is like with the Chettinad cuisine. This spice looks like a clove with sharp ends.	
Broad beans (Avaraikkai)	This is also known as sem phalli in Hindi. These are cut very finely to make poriyals or to make kootu.	

Table 1.6.5 (a)

SPECIAL EQUIPMENT

Earlier, the cooking utensils were made of copper, brass or lead. Many chettinad households, still use the old utensils made of brass, copper, or lead. These utensils have been passed on from the mothers to their daughters or mothers-in-laws over generations. The most common equipment used in Tamil cuisine are:

Equipment	Description	Photograph
Eyya chombu	It is a vessel made from lead to impart the right flavour to rasam.	
Kal chatti	It is a stoneware used for preparing tempering or softening.	
Kuziappa chatti	It is normally made of heavy bronze. It is circular in shape and has shallow looks like a cup. The left over sour dosa batter is poured inside it and cooked.	
Thenkuzal naazhi	It is used for making crisp lentil fritters called murukkus. It can also be used to press the rice dough to make vermicelli.	
Dosa thiruppi	A flat slicer that is used for spreading oil on the dosa and also for scraping dosa off the hot plate or tawa.	
Addaikal	It is a thicker tawa than the dosa tawa usually used for cooking Addai and hence the name.	






Thuruvammai	It is used as both coconut scraper and as a vegetable chopper. It is traditionally a bride's (girl getting to married) dowry. In some houses they use it to cut fish or meat.	
Idly panai	It is used for making idlis, and as many as 40-45 idlies can be made at a time, depending on the number of plates used. During Vinayaka Chaturthi idlies will be done in large quantity and distribute to poor people. It is used as one of the most used vessels in the kitchen. It is also used for making idiyappam etc.	
Uruli	It is a very hot pot used for cooking. Sambhar, vegetables, meat are usually cooked using this vessel. They will be available in various sizes according to our usage. It is very beneficial vessel because the food cooked in this vessel remains hot for a very long time.	

Table 1.6.5 (b)

SPECIALITY CUISINE FOR FESTIVALS AND OCCASIONS

The different traditional meal also known as sapad is traditionally eaten on a banana leaf known as vahaillai. During festivals, only vegetarian food is cooked. Pongal celebrated in January is a very important festival in Tamil Nadu that marks the farmers festival. During Diwali, many traditional sweets are prepared by the ladies of the house. Some of the special dishes for Tamil Nadu people are:

Dish	Description	Photograph
Kolambhu	Kolambhu or Kozhambu is a thin stew of vegetables with spices. It can also be of various types. The most common type is moar kolambhu, where buttermilk is used as the base and thickened with a paste of rice and lentils to make into a spicy stew with vegetables inside.	
Dosa	A dosa is a thin, spicy, crispy crêpe-like food made from fermented rice, very popular in restaurants in South India. It may be served plain with sambar and chutneys such as coconut chutney, or other curry or gravy. When served with potato folded inside, it is known as masala dosa. To make omelette dosa, simply pour beaten egg on the dosa before it is turned over. Adai is another type of dosa which is famous in Tamil Nadu.	









Idli	A south Indian steamed (cooked through hot air) cake of rice, usually served with sambhar. It is made in south India are of various kinds and each has its unique ingredients. The various types of idlis are Rava Idli, vermicelli Idli.	
Payasam	It is a sweet preparation and various kinds of Payasam are eaten on various festivals and on special occasions also. Some of the common payasamas are—Pal Payasam, Parupu Payasam, Aval Payasam.	
Thuvail	It is like a chutney and can be made of various ingredients like tomato, ridged gourd, Gongora leaf, etc. these are sour in taste by adding tamarind pulp. The sourness will be change according to the ingredients also.	
Pachadi	It is commonly known as south Indian raitas. A variety of ingredients such as grated carrots, deep-fried sliced okra, roasted and mashed brinjals, etc. are mixed along with the smooth thick curd to prepare Pachadi. It is usually served by tempering the various spices.	
Pongal	Different types of Pongal will be prepared according to family traditions. It is made by combining rice, lentils, milk, nuts, and flavoured with spices such as green cardamom.	
Koottu	It is usually made by boiling green gram along with bite sized pieces of vegetables and also fruits such as jack fruit and raw bananas. It is flavoured with turmeric and red chillies. Grated coconut and rice paste are used for thickening the Koottu.	
Thenkuzal and murukkus	These are commonly eaten as an evening snacks prepared on many festival occasions and marriages. These are made in various kinds especially in Tamil Nadu. Rice flour and lentil flour are rubbed along with ghee and spices and pressed through a perforated die of a thenkuzal press into a hot oil. They are fried until they are crisp.	
Vadai	It can be termed as fritter. These are prepared with various ingredients in Tamil Nadu. Some of the common Vadai are: ulundhu Vada, kola Vadai, sago, rava etc.	

Table 1.6.5 (c)

1.6.6 MAHARASHTRA

Maharashtra means 'great state'. This state gives birth to many freedom fighters and nationalists. The separate culture of Maharashtra has also given India a range of food that gives a various type of sweets, sour and various tastes. Since, farming is the major occupation of the people of Maharashtra. The culture of Maharashtra also effects their food. Maharashtrian food is heavy on spices and also uses ginger, garlic and onions. Maharashtra can be divided into 5 main regions such as Konkan, Vidarbha, Marathwada, Kolhapur, and Western Ghats.

KONKAN

The cuisine of Konkan having mainly fish and the gravies are more coconut-based as the region is on the coastal line. A special spice is known as *triphala* is used as a souring agent in fish dishes in the region of Konkan. The cuisine of sindhurgarh have various types of pancakes. Varieties of seafood such as shark, crabs, prawns are evenly cooked in the form of curries.



VIDARBHA

This region includes the districts of Nagpur, Chandrapur, Yeotmal. The climate of the region of Vidarbha is very dry as it receives scanty rainfall. Here the most of the people eat a dish called *hurda*, which is a raw jowar that is roasted and mixed with curd. The food of this region is very spicy and is usually dry and mixed with lots of ginger, green chillies and lime. In fact, oranges from Nagpur are transported to all parts of India.



KOLHAPUR

The people of this region are mostly non-vegetarians. Therefore, the meat cookery of this region is very specialized. Kolhapur is basically a very dry region because of scanty rainfall. There is a high range of water scarcity in this region. The gravies are hot and spicy with a high red colour, but the taste is excellent because of unique blend of spices. The non-vegetarian dishes consumed are mutton and chicken preparations, mutton Kolhapuri being the most famous of them all.



LOCATION

It is located in the north-western part of the Deccan plateau and is bordered by Gujarat, Madhya Pradesh, and Karnataka on the southern side. Rivers Krishna and Godavari flowing through the state make Maharashtra an agricultural state. It is the largest producer of cotton and the second largest producer of sugarcane of India.



HISTORICAL BACKGROUND


The caravan trade between the north and south of India led to the construction of Buddhist caves that still exist in its most beautiful surroundings. Maharashtra is the word comes from the word rathi, which means a chariot driver, and Maharashtra has witnessed some brave warriors who came to be known as Maharathis.

In 1526, the first Mughal emperor, Babar established his control in Delhi, the Mughal power started to spread through the north till the south of India. Shivaji Bhosle was considered to be the founder of the Maratha empire. Muslim powers like Nizamshahi, Qutubshahi established their control in the Deccan region. He honoured with the name 'Raja'. In the year 1817, Peshwas declared war on the British. This battle was fought in Kirkee which was the residential area in the east of Pune. On India's independence in 1947, western Maharashtra and present-day Gujarat were joined to form the state of Bombay. Bombay city became the capital of the new state.



SPECIAL INGREDIENTS USED IN MAHARASHTRIAN CUISINE

Some regional ingredients that are native (birthplace) to a particular region and which give its cuisine the different flavour and identity. The ingredients are:

English name (local name)	Description	Photograph
Alphonso mango (hapus)	This mango comes from Ratnagiri on the Konkan coast. It is one of the most costliest mango in India and is highly sweet mango. These mangoes are eaten or drink not only as juices and desserts, but also use it for making puree called aamras which is eaten with pooris.	







Pepper (Chircoot)	These are very similar to szechuan pepper. This spice is mostly used by the Koli fisher folk on the konkan coast. Black pepper is native to Kerala in Southwestern India and is extensively cultivated there and elsewhere in tropical regions. Vietnam is the world's largest producer and exporter of pepper.	
Pomfret (pamplet)	It is most commonly eaten fish in maharashtra and is available in salty waters from arabian sea.	
Szechwan pepper (triphala)	This spice is most commonly used in the konkan region of Maharashtra. It is used for adding a sour flavour to fish.	
Wild mangosteen (kokum)	It is a dark-coloured fruit that when salted and dried changes its colour to a deep purple or even black. It is a souring agent in curries and also drunk as a beverage called sol kadhi which is good for health during summer seasons.	
Yam (suran)	A large root vegetable which is highly used in Maharashtrian cuisine. The edible tuber has a rough skin difficult to peel, but softens after heating. The skins vary in color from dark brown to light pink. The majority of the vegetable is composed of a much softer substance known as the "meat". This substance ranges in color from white or yellow to purple or pink in mature yams.	
Ramdana leaves (rajgira)	These are the seeds of Amaranth plant and the people think that these leaves are sent by god. The seeds are used to make ladoos.	
Butter beans (val)	Small white beans which looks like a navy beans which are from USA. These are mainly used to prepare valche verdi, which is made by growing the val and cooking it along with spices.	
Bombay duck (bombil)	It is a type of fish that is very commonly eaten by Maharashtrian people. It will be coated with poppy seeds and cook it on the pan deeply or may be cooked in a curry.	

Table 1.6.6 (a)

SPECIAL EQUIPMENT

Apart from many common types of equipments such as tawa, kadhai, handim etc., that are used in other parts of India, Maharashtra cuisine also uses some special equipment for the preparation of certain dishes. These are also called by different names in the local language. For example, a patila would be known as patela. Some of the special equipments are:















Equipment	Description	Photograph
Chool	It is a cooking stove made out of mud. Dry cow dung or wood is used for firing the stove.	
Thikra	It is a tawa made from mud and it is used in the Raigarh district. It is used like a normal tawa to make breads as it gives an earthy flavour to the dish.	
Mande tawa	It is like a wok made out of a special earthenware pot. It is upturned and fire is switched on from bottom. Mande is made out of a dough of rawa and maida. Powdered sugar and a bit of atta are mixed in the dough balls and which are flattened into rotis on the hand.	
Modak patra	It is a copper vessel made for making modaks. Modaks are the important desserts during the vinayaka chaturthi.	
Pata-warwanta	It is a rectangular piece of stone, approximately it will be 2 inch by 1 ft on which spices are ground with stone pestle.	
Gundponglu tawa	It looks like a idli tawa and is used for making steamed balls or dumplings.	
Khalbatta	It is a cast iron vessel which is used to powder masalas and spices. A heavy iron rod is used to pound(insert) the spices.	
Puranchey yantra	It is a kind of sieve. It is used for making a paste of chana dal and jaggery used for making puran poli, a famous Maharashtra dish.	
Veeli	It is a sword shaped blade fixed on a wooden block used for slicing and chopping of vegetables.	

Table 1.6.6 (b)

SPECIAL DISHES FOR FESTIVALS AND OCCASIONS

Maharashtra is the land of festivals and festivals in India are incomplete if food is not combined with it. The vegetables must be steamed in medium level itself only and lightly seasoned so it can gain their nutritional value. The special dishes which are cooked during festivals are:

Dish	Description	Photograph
Pharal	It is traditionally eaten on fasting days as snack. It is a mixture of 2 to 3 dishes such as sabudana khichdi topped with sev or any such crunchy snack. It is usually served with dreid fruits.	
Shankarpalya	These are sweet snacks which are made with flour. Flour, oil, salt and water are rubbed into a hard dough. It is rolled out into thin and cut into various shapes. These are then deep-fried until crispy.	
Puran poli	A whole-wheat bread, inside stuffed with split yellow peas and cooked with sugar and cardamom, is rolled out thin and cooked on a griddle with butter. It is commonly made on holi.	
Khatachi amti	It is a sour (little bitter) lentil preparation made from chana dal. This dish is also prepared on holi. It is a thin tangy tempered spicy dal from maharashtrian cuisine.	
Shrikhand and poori	It is a type of dessert made up of yoghurt and powdered sugar, accompanied with deep-fried pooris. It will be prepared on maharashtrian new year.	
Modak	It is a steamed rice flour balls or dumplings stuffed or inserted with jaggery, coconut and ghee. It is mainly prepared on Vinayaka Chathurthi as an offering to Lord Ganesha.	
Narali bhaat	It is made by mixing coconut with rice and is commonly made on the day where there is an community called Koli community where they worship sea and offer coconuts to the sea.	
Basundi poori	Reduced milk with sugar and flavoured with cardamom is enjoyed with deep-fried pooris on the special day of Dussehra. It is one of the special days in the Maharashtrian calendar.	




Tilgul ladoo	Round sweet dumplings made from jaggery and sesame seeds are distributed among friends during <i>Sankrant</i> festival. <i>Sankrant</i> is a festival in Maharashtra where it is a festival of kite flying and is celebrated to offer goodbye to the monsoons and welcome the harvesting season.	
Varan	It is a simple dal made by using toor dal and turmeric. It is flavoured with heeng (asafoetida) and jaggery. This dal is made on almost all the festivals.	
Masaley bhaat	This rice and brinjal preparation, flavoured with red chillies, is commonly made in marriage ceremonies.	

Table 1.6.6 (c)

1.6.7 GOAN

Visitors to Goa go to think that food and drink in Goa means the famous fish curry, rice, and fenni package. For most of the Goans, the three basic necessities of life are fish, curry, and rice. These three items combine to make a heavenly daily meal for the average Goans. But goan cuisine, like the land itself, has many flavours and tastes with its various treasures of culinary delicious dishes. Seafood is usually a must on the menu. Goans take pleasure not only to take what they eat, but also how they cook. In Goa the traditional way of cooking in clay pots on firewood continues in most rural areas of Goa.



This style of cooking adds an additional smoky flavour to the food, which is highly valued by the Goans. Seafood such as lobster, oyster, prawns, crabs, pomfrets, clams, ladyfish, mussels, are used to make a variety of curries, fries, soups and pickles. Besides fresh seafood, dried and salted fish dishes are also highly taken by Goans.

LOCATION

It lies in the west of India, Panaji being its capital. Goa is 1,022 metres above the sea level and covers an area of almost of 3,702 kilometres. The two main rivers Zuari, and Mandovi, flow through the Sahyadri ranges of the Western Ghats. The temperature ranges

from 18⁰ C and 35 degree C in summers. Being it is close to the Arabian Sea, Goa is also known for its beaches.

HISTORICAL BAKCGROUND

Goa has always been on the top list of its tourists, whether international or from India itself. Once it is highly influenced with Portugese, Goa still effected with portugese culture eve after 50 years of freedom from the portugese. Offically goa was governed by two other Portugese enclaves, namely Diu and Daman.



History of Goa have to go to third century BC when it was ruled by the Mauryan dynasty. It was later ruled by the Satavahanas of Kolhapur at the beginning of the Chrisitian era, and it is passed to the Chalukyans of Badami, who controlled it from 580 to 750 AD. Over the next few years goa was ruled by Shilharas, the kadambas and the Chalukyans of Kalyani. The rulers of Vijayanagar ruled Goa for almost a 100 years and the Goa port was very well utilized for receiving horses all the way from Arab to increase the cavalry of the Vijayanagar rulers. The advantage of large natural harbours and wide rivers was suitable to the Portugese who were used to travelling by sea. in the year 1961 india conquered the portuguese and forced them to leave without any war or bloodshed. It was in 1987 that Goa got its status as a state with Panaji as its present capital.



SEASONAL AVAILABILITY

The heart of goa lies in its villages. toddy (vinegar) tapping, fishing, and farming have been passions for goans. The distilled coconut drink commonly known as coconut fenni is the most popular drink in goa. Goa's main crops would include areca nut, cashew nut, coconut, rice, millets, sugarcane, and other forest produce. The christians prefer to use toddy, while the hindus use kokum and tamarind as the souring agent. People from north goa grind their coconuts and spices individually while the southern goa like to grind them together, and then pass it through a fine muslin cloth. The special ingredients that used in Goan cuisine are:

\





English name / Local name	Description	Photograph
Red Rice	The locally grown parboiled rice having plump reddish grains with a nutty flavour is the most common from of rice available.	
Coconut Vinegar (Toddy vinegar)	It is a coconut used as a raising agent. When it is fermented it is converted into vinegar that is commonly used as a souring agent in fish curries.	
Lemon berry (Tefla)	Tarty lemon berry is often used as a souring agent in curries by the Hindu community.	
Bimblim or bilimbi	This small fruit is very similar to gherkin, and is used as a souring agent.	
Palm jaggery	It is obtained from the sap of palm trees it is a dark brown coloured product available in round or pyramind shapes from the market and used in many Goan desserts.	
Goan sausages (Chouricos)	It is the popular Goan sausage is made by filling pork guts with fat and other organs, vinegar, and a dash of fenni. After filling the guts, the sausages are hung out in the bright sun to dry.	
Dried Fish	Apart from seafood, dried and salted fishes such as bombil and dried prawn are also used highly.	
Goan chilly	The famous goan chillies are a must for most of the dishes that are bright red in colour but soft in taste.	
Fish tamarind (kokum)	It is a sour deep red coloured fruit that gives a sharp and sour flavour to a dish. It is another important ingredient like the tamarind.	

Table 1.6.7 (a)

SPECIAL EQUIPMENT

The traditional way cooking in clay pots on firewood still continues in most rural areas of Goa. This style of cooking adds an additional smoky flavour to the food. With changing times and the lack of wood, people find it more easy and economical to use fuels such as cooking gas and kerosene. Some people also use dry cow-dung cakes, which is a very cheap and efficient fuel.

Some of the different equipment used in Goan cooking are:











Equipment	Description	Photograph
Clay pots	Most of the goan cooking is done in earthen pots. The use of earthen pots improves the flavour of the food and in these vessels it does not get spoil easily. A classic example is the Goan fish curry, which when kept for a day in this vessel tastes even better.	
Brass utensils	Pots and pans of brass are commonly used in cooking desserts. This is because of the fact that the thick and heavy bottom metal prevents the sticking of jaggery and coconut to the bottom.	
Varn	It is a grinding stone which has a round stone that is moved around in circular motion to grind to make pastes of spices.	
Dantem	It is used for grinding cereals. It consists of two-wheel shaped stones fitted on top of each other. The stone on top has a hole in the centre in which the grains have to be put. The top stone is rotated and due to that action the cereals get ground into flour, which collects all round the stone.	
Coconut spoons	A very less cost which used highly where coconut shells is a spoon for cooking. The shells are split into halves, polished and attached to a long wooden handle to make a spoon.	
Moltulem	These are earthenware dishes that are traditionally used for serving prepared dishes. They gave an attractive and ethnic appeal to the Goan food and also helps to get back the flavour and aroma of the food.	









Table 1.6.7 (b)

SPECIALITY CUISINE FOR FESTIVALS AND OCCASIONS

The food here is about the Hindu festivals and Christian festivals. Even death anniversary and thread ceremony have special menus attached to them. The pre-wedding dinner of Christians also known as Jevon is usually a meal to serve beggars in order to please the departed souls. The meal is served traditionally on banana leaves or jackfruit leaves. Even though it is a meal for the poor the price includes dishes such as prawns, roast pork, rice and many other vegetarian dishes that are served in unlimited quantities. It is also customary to share sweets with those who are crying the death of a family member. Ladainha is another well-known Goa tradition during which after the prayers are over, boiled gram dal with diced coconut is distributed. It is also to have fenni (type of cashew fruit wine) served in wine glasses.

Many other festivals such as Christmas, New Year, and the Carnival, Goa's biggest attraction. Some of the major festivals of Goa are Christmas, Diwali, Feast of Three kings, Ganesh Chaturthi, Easter Sunday, Sao Joao Festival etc. the most commonly used ingredients in goan meat dishes are pork, beef, mutton and chicken. Some of the dishes used to make during festivals are:

Dish	Description	Photograph
Saar	This can be called a soup course. It can be made from any vegetable and is usually sweet and sour in taste. It is specially served on death and thread anniversaries.	
Khat khatem	It is a different Hindu dish which is a collection of vegetables diced and cooked in a thick and soft coconut masala. It is commonly eaten.	
Varan	It is a yellow lentil preparation, often softened with mustard seeds and red chillies. It is served on any occasion.	
Moonga ganthi	. It is a lentil preparation made by boiling sprouted moong dal with curry leaves, green chillies and soft coconut. Flavoured with masala of red chillies, coriander seeds, and pepper corns and tempered with asafoetida and mustard seeds. It is also served on death and thread anniversaries.	

Coconut kadi	It is a liquid usually used as a digestive between meals. It is coconut milk that is flavoured with spices and kokum. It is done usually on death and thread ceremonies.	
Vade kokoi	It is a kind of deep-fried bread spiced with dried ginger and chilli powder and served with jaggery molasses. It is also done on both death and thread ceremonies.	
Cabidel	It is a curried preparation of pork giblets. This dish was handed over by the portugese. It is prepared on special catholic functions.	
Chouricos	These are derived from chouricos de rien of Portugal, which means sausages of the kingdom. Chouricos are spicer than the general sausages. These are combined with many dishes are feijoada and are cooked on almost any special occasion.	
Rechado	It is a red-coloured spicy paste made from red chillies, vinegar, and spices. It is usually coat over fish and the fish is get roasted. It is served on marriages only.	
Caldo verda	It is a goan soup that is thickened by adding mashed potatoes and is garnished by juliennes (it is a type of cut) of spinach. It is usually served during Christmas feasts.	
Leitao assado	A babe pig is marinated with portuguese white chillies, ginger and garlic paste and fenni (it is an famous wine made of cashew). The entire babe pig is roasted in the oven and then it is carved by the head of the family. It is a traditional Christmas preparations.	
Xacutti	It is a curry made primiarly made of chicken variations. It may also be made of lamb, pigeon and sometimes turtle and dove. It is generally eaten with sannas, with a glass of fenni. The base of gravy is made from grated coconut which is roasted and then ground with other spices to make a rich, dark gravy. It is one of the famous dish all over the	





	country and it is served in almost all Christian festivals in Goa.	
Putte	A paste of rice flour, grated coconut and jaggery is wrapped in a jackfruit leaf to look like a cone. It is then steamed to make putte. It is made by Hindus for Naag panchami and Christians for Novem.	
Patoleo	It is prepared in the same manner as putte, but the mixture is stuffed in a turmeric leaf instead, which gives a unique flavour to the dish. It is usually made by Hindus for Naag panchami and Christians for Novem.	
Bolos	These are cakes made from coarsely-ground wheat flour, which is fermented by adding toddy vinegar and then baked. It is made specially during the times of the carnivals.	
Sorptel	Traditionally, sorptel is made from spleen, liver, pork fat, and pork meat cut into cubes and boiled and cooked in a gravy. It is one among the famous dishes that is suitable for almost any festival or a special occasion. It can be cooked for 4-5 days in advance and then be warmed up a day before serving.	

Table 1.6.7 (c)

1.6.8 KERALA

Kerala is the land of green magic. The natural beauty of the tropical forests on the Western Ghats and the coastal line on the Arabian sea is an correct choice for romantic honeymooners. Kerala is famous for its delightful cuisine, colourful dances and its Ayurvedic effect over food and spa treatment. Kerala is the home for Malayali



Christians, and Nambudiri Brahmins, kerala Hindus, and the Moplahs. The christian cuisine is also known as Syrian cuisine, the muslim cuisine is known as moplah cuisine, and the cuisine of the Nambudiris as Brahmin cuisine. The coastal cuisine of kerala is a part of the spice route that connects Europe with South-East Asian countries. Traders from China,

Thailand, Indonesia and Malaysia used Kerala as their port. The concept of *Chinese fishing nets* in Cochin is an example of the influence of China on the culture of Kerala.

LOCATION

Kerala is also known as ‘God’s own country’. This state of India between the Arabian Sea and the Western Ghats is one of the most fertile places in India. It is the only place in India where one could probably see every natural form of nature. It has the sea, backwaters, meadows, mountains and beaches. The land of Kerala stretches from north to south at a distance of 360 miles and the maximum width of 70 miles. This unique state is positioned in such a way that it receives two monsoons, one of the south-west and the other of the north-east. The greenery of Kerala is thus a result of its climatic conditions. Tea plantations are concentrated in the areas around Munnar and the low lands of Kuttanad, and central Kerala has the highest production of rice.



HISTORICAL BACKGROUND

Legendary folk tales tell us that the Lord Parashuram, who was the sixth incarnation (incorporation) of Lord Vishnu, stood on the highest peak of the mountain on the Western Ghats and threw his axe far into the sea and commanded the sea to retreat. The resulting land that emerged became as Kerala.



Because of that reason this place is called as ‘God’s Own Country’. Kerala derives its name from two words—‘kera’ which means coconut and ‘alam’ means storehouse. So it means the land of coconut. This shows the importance of this nut in its cuisine and their culture.

Kerala is also the *Land of Spices*. People around the world have been sailing to Kerala in search of spices, ivory (light), and sandalwood for almost 2,000 years. Vasco da Gama led the Portuguese to India, as earlier the ownership of the spice trade was controlled by Arabs and Romans. A Keralite is better known as Malayali. This term comes from the word Malayalam, which is the local language spoken here. Malayalam is one of the six Dravidian languages and looks like the other languages such as Tamil, Telugu



and Kannada. Kerala represents the three major world religions that exist side by side in great harmony. The population of Kerala is divided among 50% Hindus, 25% Christians and 25% Muslims. Hindus are concentrated around Thiruvananthapuram, which is also the capital of


the state, and Muslims are centred in Kozhikode, earlier known as Calicut. The Christian's area is the central part of Kerala around Kochi and Kottayam. Christianity was established in Kerala as early as 52 AD.









The present day of Kerala was created in 1956 from Travancore, Cochin and Malabar. Malabar was initially a part of the state of Madras where both Travancore and Cochin were ruled by Maharajas. The economy of Kerala has also progressed with tourism and other produce such as rubber, cashew nut, pepper and spices such as cardamom and cinnamon. The Nambudiris, on the other hand are strict vegetarians. Onions and garlic do not find a place in their food. Traditionally the temples of Kerala served meals to all devotees visiting the temples and the Nambudiris cooked the food. Thus the famous sadya meal got started. These sadya has its own rules.

The Muslims of Kerala are the first followers of Islam in the country. The cuisine of Muslim community of Kerala is known as the Moplah cuisine. Food here is light and spicy, and gravies are flavoured with coconut milk and pastes. The hot and spicy food allows the body to cool down as temperatures in this hot and humid climate range between 30 degrees C and 35 degrees. The various types of pickles are invented in this region itself only.

SEASONAL AVAILABILITY

Most households of the kitchen have their own kitchen gardens in the backyard. These backyards not only meet the needs of every day cooking in homes, but also have fruit trees such as those of jackfruit and papaya. Some of the special ingredients used in this cuisine are:

English name (local name)	Description	Photograph
Banana (Pazham)	Raw or ripe bananas are an everyday used in a kitchen of southern India. Many kinds of bananas are used in Kerala and each has its own names and terms. <i>Nethrakaya</i> is a variety of banana that is used for making banana chips, while Mysore pazham is a tart flavoured banana often eaten along with puttu for breakfast.	

Mangoes (Manga)	Varieties of mangoes are used in the cuisine as pickles or as curries made from ripe mangoes. The season of mangoes is from April to July. Moovandam and killi maduram are a few varieties of sweet mangoes.	
Jackfruit (Chakka)	There are two varieties of jackfruit—pasha chakka, which is juicy and stringy, and varichaka, which is crisp and is used as a fruit. The seeds of a jackfruit are used in curries.	
Breadfruit (Kadachakka)	It is a starchy fruit and its shape looks like a jackfruit. It is eaten in curries as well as deep fried for snacks and accompaniments.	
Tamarind (Puli)	The fruit is believed to have come from Thailand and Arabs took it to their country and called it as tamar e hindi. This is how it got its English name as tamarind. Tamarind is used as a souring agents in many dishes.	
Fish tamarind (Cambodge)	It is a sour deep red coloured fruit that gives a sharp and sour flavour to a dish. It is another important ingredient like the tamarind. It is a tart fruit that is used for flavouring and acts as a souring agent in Malabari fish curries. It is also called as Malabar tamarind.	
Shallots (Cheriya ulli)	These are small onions that act as the base for many curry pastes. Kerala cuisine uses more shallots than onions as these have more flavour.	
Drum stick (Muringakka)	These are often stir-fried or made into curries. The leaves of drumsticks, also called as muringayila are often cooked with lentils and eaten with rice.	
Snake gourd (Padavalanga)	Many types of gourds are used in Kerala cuisine. The most common one is the snake gourd which is used for making curries.	







Coconut (Thenga)	Kerala is the home for coconuts, which are used in different forms and styles. The fresh creamy flesh of a coconut is called elaneer and is used in many desserts. The coconut milk is used as a base for many curries and desserts.	
Siddha root (Kurunthoti root)	It is a herb quite popular in Kerala, Tamil Nadu and Sri Lanka. It is commonly given to pregnant women for the healthy development of the child in the womb. This root can be boiled along with milk to make desserts or flavoured rasam.	

Table 1.6.8 (a)

SPECIAL EQUIPMENT

Though each cuisine of Kerala uses special equipment to prepare dishes, there are also some common equipment used by all of them. Some of the special and traditional equipment used in Kerala cuisine are:

Equipment	Description	Photograph
Cherava	It is used to grate coconut. It has tooth shaped sharp metal blades placed on a wooden platform. The coconut is first halved and then grated on this equipment.	
Ural and ulakka	A ural is a large drum-shaped stone used for powder rice and spices with a long wooden rod called ulakka. It is an interesting sight to see two women pounding rice in a ural at the same time.	
Ammi and ammikuuti	It is a equipment contains a flat grinding stone called ammi with a cylindrical stone called ammikutti and is used for grinding wet masalas. Most households still use this in the place of mixer and a grinder.	
Thavi	These are ladels made from coconut shells, which have a long bamboo handle. Muttamala, a speciality dessert, is made by passing egg yolks through a one-holed thavi into a sugar syrup.	






Idooni achu	It is a noodle press for preparing thin vermicelli from rice doughs. These vermicelli are used for making idiyappam and puttus.	
Cheena chatti	It means a pan from China. It is a wok-shaped utensil used for stir-frying vegetables and fish. There are many varieties of chattis and most are made from iron or copper.	
Puttukutti and kudam	It has a special cylindrical container called puttukutti which is attached to a narrow-necked vessel called kudam. These kudam is filled with water and put on fire. The steam then generated from kudam to puttukutti where there is a puttu in that where it will get cook through steam. Where puttukutti is made from bamboo, but now-a-days in these place we are using steel and aluminium.	
Uruli	This equipment is very traditional to Kerala and is used as flower pots to welcome guests. Traditionally, it is used for deep-fry desserts and broil rice flour. It is made of copper.	
Kudukka	It is an earthenware clay pots are used for cooking food in Kerala. The clay pots are commonly called as kalams and kudukku and are specially used for stewing fish. These are also called meenkalam, as fish is also called meen in Hindi.	

Table 1.6.8(b)




SPECIAL CUISINE FOR FESTIVALS AND OCCASIONS




Kerala is a land of festivals and occasions as it is a melting point of three religions. The Moplah and Malabar communities celebrate Bakrid and Ramdan. Muslims of Kerala also celebrate Muharram and Milad-e-Nabi. Biryani and desserts play a major role in wedding meals.





The various cultures existing in Kerala have their own cuisines. The Syrian Christian cuisine, the Moplah cuisine, etc., have their own specialties and festive dishes. *Onam* is the most popular festival in Kerala that comes in the month of August or September. The famous boat race will also take place around that time. Another important festival in Kerala is *Vishu*. It comes in the month of April or May, when the monsoon season is getting to start. It is celebrated to offer prayers to Mother Earth. The elders of the house organize a visual treat in the night by offering coconuts, vegetables, fruits



and cereals to the Gods and decorating the idols and photographs of Gods and deities with ornaments. In the morning, everyone is supposed to see the *vishnu kani* or the visual treat. The speciality dishes of Kerala are:

Dish	Description	Photograph
Appams and ishtews	These are from the Syrian Chrisitan cuisine. Fermented rice paste is cooked on a special wok and eaten with stew. The stew could be vegetable stew or even meat stew called masaishtew.	
Erachi ishtu (lamb stew)	This is a meat stew from the Moplah cuisine. Meat cubes and potatoes are cooked with coconut milk, chillies and ginger-garlic paste.	
Kozhi curry (Chicken Malabari curry)	The ingredients used in this dish are coconut oil, cinnamon, shallots, ginger garlic, crush green chilli, sliced onions, cardamom. These are goes with basic masalas such as chilli powder, coriander powder, and turmeric powder. Chopped tomatoes and pieces of chicken are then added. When the chicken is get cooked then add coconut milk, is added and reduced for sometime. A tempering is made with curry leaves, mustard seeds, and coconut oil is then poured over the chicken. The dish is then finished with garam masala.	

Meen molee (Molee fish)	<p>Wash and clean the fish and pat dry it.</p> <p>Marinade (soak it in the pastes like coriander paste), the fish with marinade ingredients listed above and set aside for 15-20 minutes. Heat oil in a pan and slightly fry marinated fish pieces on a medium heat and keep it aside. Heat a pan (preferably in 'Kalchatti' an earthen pot) and pour required coconut oil. (Note : It will enhance the original taste). Chop the mustard seeds; add the ginger, garlic and saute for a minute. Add the sliced onion, curry leaves, green chillies and saute till it becomes soft and translucent. Add the tomatoes and saute for a minute. (Note : Do not mash the tomatoes). Add the pepper powder and simmer the heat. Add thin coconut milk/moonampaal and salt and mix well.</p> <p>Add the fried fish pieces carefully, cover and cook the fish. As the fish is half done while frying you just need to cook for another couple of minutes.</p> <p>Now pour the 2nd extract - semi thick coconut milk / randampaal and hold onto the sides of the pan and boil it until the fish is well totally immersed in the gravy. Let it cook slowly for sometime till the fish completely absorbs it. Remove the pot from the fire, pour the 1st extract- thick coconut milk/onnampaal; place it on low fire again for a minute and gently shake so that it gets mixed . (Note : Don't stir after the fish is cooked, as the fish might break.) Remove the pot from the fire and add some lime juice or vinegar. Top with some coconut oil in the end.</p> <p>Enjoy and Serve</p>	 
Meen porichathu (shallow-fried fish)	<p>Clean the fish in salt and water, and keep it aside after draining the water completely. Then take a bowl, add spices like red chillies, green chillies, ginger, garlic, curry leaves, cardamom, cloves, cinnamon, salt and turmeric. Mix it. Add lemon</p>	

	<p>juice and ginger-garlic paste and sprinkle some water to make it into a paste. Marinate the fish in the masala paste and keep it aside for 15-20 minutes.</p> <p>Heat oil in a pan, and fry both the sides till it turns light brown.</p>	
Erachi varattiyathu (beef masala)	<p>Powder coriander seeds, peppercorns, fennel seeds, garam masala, dried red chilies and turmeric in a spice grinder. Add it to the meat and rub well. Add salt and cook adding water if needed, till the meat is done. There should be only about 1 cup of gravy left behind. Heat oil in a pan and saute the onions and curry leaves. Once the onions have softened, add the ginger garlic paste and cook for 1 more minute. Add the meat along with the gravy and cook till the oil separates, 1-2 minutes. Check for salt and add extra black pepper if needed. Serve hot with Chapathi, Poori, Paratha, Pathiri, Rice.</p>	
Pathiri (flat bread)	<p>It is made from rice flour and wholewheat flour and is prepared for almost any meal in Moplah cuisine. For special occasions, the pathiri can be stuffed with chicken, beef or fish. Pathiris can be deep-fried or steamed.</p>	
Puttu	<p>These are thin vermicelli strands of rice dough that are steamed in a special utensil called puttu kutti. Many kinds of puttu are made and these look like string hoppers made in Sri Lanka. Puttus are usually eaten for breakfast.</p>	
Malabari Paratha	<p>These are flaky shallow-fried parathas served with beef masala. The dough is kneaded to a very soft consistency (flexibility) and then flattened with by flipping on a table. Oil is then applied on the thin dough and rolled like a lachha paratha. It is then shallow-fried until crisp.</p>	




Kanji (porridge)	It is made with rice and lentils and flavoured with shallots and turmeric. It is usually had for breakfast and is famous dish of the Moplahs. Porridge is a food commonly eaten as a breakfast cereal dish, made by boiling ground, crushed or chopped starchy plants—typically grain—in water or milk. It is often cooked or served with added flavourings such as sugar, honey, fruit or syrup to make a sweet cereal or mixed with spices or vegetables to make a savoury dish. It is usually served hot in a bowl.	
Muttamala	It is a speciality dessert made during Ramadan months and weddings. These are strands of egg poached in sugar syrup.	
Idiyappam	Thses are thin vermicelli of rice. These can be eaten during any meal. To make idiappams, rice flour is cooked with hot water until it looks like a dough. It is then pressed through the vermicelli press also known as idooni achu.	

Table 1.6.8 (c)

1.6.9 BENGALI

Bengali cuisine is the only traditionally developed multi-course tradition from the indian subcontinent. Rice and Fish are traditional favourite foods, leading to a saying that "fish and rice make a bengali". Bengali cuisine is known for its subtle (yet sometimes fiery) flavours, and its spread of confectioneries and desserts. It also has the only traditionally developed multi-course tradition from the indian subcontinent that is analogous in structure to the modern service à la russe style of french cuisine, with food served course-wise rather than all at once.

Bengal's vast range of fish-based dishes includes hilsa preparations, a favourite among bengalis. Bengalis make distinctive sweetmeats from milk products, including rôshogolla, chômcôm, and several kinds of pithe. The old city of dhaka is noted for its distinct indo-islamic cuisine, including biryani, bakarkhani and kebabdishes. The food is rich in its medicinal values. Till date in many villages kalai dal or biuli dal, which is also commonly known as urad dhuli or black split lentils are used as contraceptives, and dumerer dalna is given to diabetics. The



usage of *paanch phoran*, which is a combination of five spices, namely mustard seeds, fenugreek, cumin seeds, aniseed and nigella is common in vegetable preparations. Unlike in north India, here the spices are soaked and then ground into a paste before cooking in oil. The gravies and curries are thin and then have to be eaten with rice. The fish is cooked in various styles here. It can be fried to make mach bhaja or cooked in light thin gravy with brinjals and potatoes commonly known as macher jol. The fish can also be marinated or soaked in fresh mustard paste and then steamed in a banana leaf.

LOCATION

Bengali cuisine is a culinary style originating in Bengal, a region in the eastern part of the Indian subcontinent, which is now divided between Bangladesh and West Bengal. West Bengal is surrounded by three international borders of Nepal, Bangladesh, and Bhutan. It is bordered on one side by the Himalayas, and other by fertile Sunderbans. Bengal is famous for its jute, silk, and textile industry and since it has a coastline, fishing is also a common trade here. Since the River Ganges flows through Bengal, one can always find river in plenty.



HISTORICAL BACKGROUND

Bengal fell under the sway of various Turkic rulers from the early thirteenth century onwards, and was then governed by the British for two centuries (1757–1947). The Jews brought bakeries to Bengal, the exiled (not there present) families of Wajid Ali Shah and Tipu Sultan brought different flavours of Mughlai cuisine. British patronage and the Babu Renaissance fueled the development of these different culinary strands into a distinct heritage. From the culinary point of view, some major historical trends influenced Bengali food.

THE RULE OF THE NAWABS-

- Bengal has been ruled by Muslim governors since the days of the Delhi Sultanate.
- For more than 500 years, Muslim rule in Bengal was centred in Dhaka.
- West Bengal first came into prominence when Murshid Quli Jafar Khan became the first Nawab of Bengal under the Mughals in 1717.



-Dhaka evolved a vibrant cuisine based heavily on the influence of the Mughal courts, popularly called Mughlai (or Moglai) cuisine and characterised by rich sauces and a generous use of meat (especially beef).

-These food traditions continued in the courts of the nawabs of bengal. After dhaka's culinary growth to mughalai cuisine, which primarily used beef as its main meat course due to the influence of the mughal rulers and governors, the primary meat changed from beef to mutton or lamb.



-After the mughals left bengal their cooks remained and found out that using beef would not be very popular as they set up food carts, hence they used mutton or lamb as a substitute and this spread into the roots of some of bengals famous recipes such as "kosha mangsho", maach dhakai style which is popular in dhaka .

-Another key influence to the food came much later, when wajid ali shah, the last nawab of awadh, was exiled by the british 1856

-Concerning awadhi cuisine, the nawab is said to have brought with him hundreds of baburchis (“cooks”), khansamas (“stewards”) and moshlachis (“spice mixers”).

-The recipes that have a mughal bengali influence do not use mustard, like the recipes that are traditional to hindu bengali's .

CHRISTIANITY AND OTHER EUROPEAN INFLUENCES

-The christian influence came to bengal a few hundred years after its arrival on the western borders of india.



-Though the dutch and the french also had colonies in west bengal, they have had little impact on bengal's culinary habits.

-Baghdadi jews set up kolkata's famous jewish bakeries.

-The key culinary influence of the christian community was the ritual of tea. Baking, which was pretty much unknown until the british came along, became widespread.

-As legend goes, to cater for the needs of british workmen, nizam's restaurant in kolkata invented the first kati roll.

THE CHINESE

-The introduction of the taste maker monosodium glutamate came along with sweet corn, much later, and got infused into what is widely popular as "bengali chinese". The cuisine is characterised as much by what is missing – mushrooms. As the chinese opened



restaurants for bengalis, they added to the bland cantonese sauces with sliced chillies and hot sauces, creating unique dishes such as chicken sweet corn soup, chilli chicken and manchurian.

THE PARTITION OF BENGAL

-The partition of bengal (1947) following independence from the british in 1947 separated west bengal from bangladesh.

-This large-scale displacement along religious lines led to some changes of food, because there were differences in food habits between the muslims and the hindus.

-After partition, kolkata continued to wield an outsize influence in the cultural and food habits of west bengal.

-Their influence has been, in particular, in the sweet shops (e.g. ganguram's) and street foods of kolkata; many have marwari or chinese origins.

THE INFLUENCE OF THE WIDOWS

-The treatment of hindu widows has always been highly repressive.

-While most bengali castes ate meat and fish, this was barred for widows.

-Widows also did not use “heating” foods such as shallot and garlic, but ginger was allowed—this found a core place in bengali curries, both vegetarian and non-vegetarian.

-Expensive spices such as saffron, cinnamon or cloves were used very sparingly if at all; nuts, dry fruits, milk and milk products (such as cream, ghee or curd) were similarly scarce.







-Leftover cuts in particular, such as spinach ends or vegetable peel, are transformed





-*Chitrita banerji* in her book quotes a nineteenth-century bengali writer mentioning that “it was impossible to taste the full glory of vegetarian cooking unless your own wife became a widow”.



SEASONAL AVAILABILITY

The tropical climate of bengal is conducive for the growth of many green vegetables and fruits. Availability of such unique ingredients has led to combinations of meat, fish and vegetables to produce many famous dishes are:

English name (local name)	Description	Photograph
Runner beans (barbatii)	These are thin long beans used for vegetable preparations commonly. The dried bean from this is known as lobiya or the cow pea.	
Snake gourd (chichinga)	Snake gourd to me is a very peculiar type of vegetable. Its white and green stripes and more than 2 feet in length, it really looks quite similar to the reptile from which it has taken its name. It is commonly used in southern India.	
Oval gourd (potol)	Oval gourd is a vine plant in the cucurbitaceae family, similar to cucumber and squash, though unlike those it is perennial. This is used to make potoler dolma or even desserts.	
Spiny gourd (kakrol)	It has tiny spines all over its body and that is why it has got its name as “spiny gourd”. It is also known as teasle gourd, kakrol, kankro, kartoli, kantoli and bhat korola. It is mainly cultivated in the mountain regions of india. It is also used as medicine to cure different health problem in different form such as powdered or dried from.	
Basella alba or Malabar spinach (pui shaak)	Basella alba is an edible perennial vine in the family basellaceae. It is found in tropical asia and africa where it is widely used as a leaf vegetable. It is native to the indian subcontinent, southeast asia and new guinea. Thin leaves of these are combined with lentil dumplings known as boris.	
Red spinach (lal shaak)	Its extremely healthy, good for blood, contains iron and lots other nutrition factors. Red spinach is again teamed with boris to prepare vegetable dishes.	

Banana flower (mocha)	<p>Banana flower, what we call mocha is a delicacy to have. it is prepared in different ways, using various ingredients. The banana flower is a large, dark purple-red blossom that grows from the end of a bunch of bananas. its leaves snugly enclose delicate, sweetly scented flowers.</p> <p>"Mochar ghonto" is a uniquely bengali preparation of the banana flower.</p>	
Puffed rice (muri)	<p>It is combined with by heating sand in a pot, and then throwing in grains of rice.</p> <p>The rice may have been washed in brine to provide seasoning. the rice puffs up and is separated from the sand by a strainer. A variant of muri is khoi, which is popped rice. both varieties are used to make many different snack foods</p> <p>•ex : jhal-muri (which is puffed rice with spices, vegetables and raw mustard oil.), a moa(is made by taking muri with gur (jaggery) as a binder and forming it into a ball)</p>	
Jack fruit (ainchor)	<p>A raw jackfruit is known as ainchor and the ripened one is called katha. The raw one is used for making vegetable preparations, while the ripened one is eaten as a fruit.</p>	
Banana stems (thor)	<p>The banana stem is really not a stem at all; it is the flower stalk of the banana plant. Banana stem has a crisp texture and a mild flavour, both somewhat sweet and tart with a slightly bitter after taste. The edible part of the banana stem is the inner portion of the fibrous stalk. the rough and hard outer layers are removed.</p>	















Stems of taro plant (kochu shaak)	Taro are used as vegetables for their corms, leaves, and petioles. West bengal, taro roots are thinly sliced and fried to make chips called kochu bhaja. The stem is used to cook a very tasty kochur saag with fried hilsha fish head or boiled chhola (chickpea), often eaten as a starter with hot rice. The roots are also made into a paste with spices and eaten with rice. the most popular dish is a spicycurry made with prawn and taro roots.	
Water lily stems (shapla shaak)	The stem is fibrous and peeled, cut into smaller pieces and eaten as dry vegetables, commonly called as chorichori or stewed with fish. The flower is often referred to as shapla. hence named shapla shaak.	
Broad beans (shim)	These are a kind of flat broad beans available in winter. It is combined with potatoes or stir-fried to make a charchori.	

Table 1.6.9 (a)

Bengal is also famous for fishes and many varieties here are known by their own unique local names. Some of the types of fish commonly used in Bengali cuisine are:



Fish (local name)	Description	Photograph
Hilsa (Ilish)	<p>Ilish is an oily fish rich in omega 3 fatty acids.</p> <p>In bengal, ilish can be smoked, fried, steamed, baked in young plantain leaves, prepared with mustard seed paste, curd, begun (eggplant), different condiments like jira(cumin) and so on.</p> <p>It is said that people can cook ilish in more than 50 ways.</p> <p>Ilish roe is also popular as a side dish. Ilish can be cooked in very little oil since the fish itself is very oily.</p>	
Carp (rui)	<p>Carp are various species of oily freshwater fish from the family cyprinidae, a very large group of fish native to europe and asia. It canbe served fried called bhaja. It can be cooked in watery gravy known as jol.</p>	

Dried fish (shootki)	Shutki or dry fish when uncooked has a got a typical characteristic pungent smell, pungent enough to evoke nausea. It has got a stinky smell, very similar to that of dry shrimp powder belachan used in malaysian and indonesian cooking. Drying fresh fish is a method of preservation by removing water from the fish as the land was prone to floods.	
Indian butter fish (pabda)	Pabda fish is a fresh river fish available in plenty in river ganges which flows through bengal. This fish has a fatty texture, it is called butterfish. This fish is usually 6 inches in length and served whole.	
Clown knife Fish (chitol maach)	It has a strange shape with an elongated head, a huge jaw and humped back. It is sometimes known as the indian featherback. It is overall silvery in color. This firm flesh around the stomach part is used for making koftas or muithas.	
Mango fish (topsey)	It is highly esteemed fish in bengali cuisine. Topsey or mango fish is the sea fish that swims upstream to breed in river waters during mango period. The besan coated method of frying it is one of the tastiest ways of having this fish.	
Sea bass (bhetki)	Bhetki are classified as per the name of the states like bombay bhetki, kolkata bhetki. Bombay bhekti is a sea fish, kolkata bhekti is a river fish and related to sea bass. Bhetki fish is a very tasty and expensive fish enriched with high nutrition ingredients. they become very large sized. They live in the upper level of water. bhetki fish is also known as vetki fish, koral fish etc.	
Prawns/shrimps (chingri)	Chingri (prawn/shrimp) is particularly popular and comes in varieties—kucho (tiny shrimp), bagda (tiger prawns) or galda (scampi). The bigger one is called golda chingri and the smaller shrimp only chingri. Prawns are cooked on very special occasions.	

Cat fish (tangra/magur/ Shingi)	Catfish (locally known as magur) is eaten as a favored delicacy during the monsoons. Its name is due to prominent barbells that resemble the whiskers of a cat. This is found in shallow waters.	
Perch (koir)	Perch is a common name for fish of the genus perca, freshwater gamefish belonging to the family percidae. It can live without water for quiet a few hours. It is commonly eaten as curries in Bengali cuisine.	
Carp (katla)	Carp are various species of oily freshwater fish from the family cyprinidae, a very large group of fish native to europe and asia. This is very popular freshwater fish eaten in bengal in form of curries or shallow-fried. The katla fish can grow very quickly as it feeds on water debris and algae.	

SPECIAL EQUIPMENT

Many cooking utensils such as kadhai, handi and patila are common in many Indian states. As Bengali cuisine some different equipment are used for making mis-en-place (arranging the things before cooking. Ex. Making pastes, powders etc.). Some of the equipment used in Bengali cuisine are:

Equipment	Description	Photograph
Bonthi	It is used for cutting almost anything ranging from shrimps to pumpkins. Boti is a cutting tool used mostly in bengal. Boti has a wooden or metallic rest on which the blade can be folded down. Women using boti grab it by putting a foot on that rest. since both hands remain free, it provides excellent grip.	
Khunti	It is a flat metal spatula with a long handle for sauteing and stir-frying. Just like hata, it is made from steel/iron/aluminum/brass/wood.	



















Hatha	It is a scoop with a long handle to cook lentils. it has the shape of a large spoon, but rice serving hatas are flat like hand. Generally hatas, that are used for cooking purpose are made from steel, iron, aluminium, brass, wood and serving hatas are made up of german silver.	
Jhanjri	It is a large wire meshed flat spoon used for deep frying fish or breads. It is made from steel/iron/aluminum/brass.	
Sharashi	It is a kind of pincer. It is used for holding hot vessels or removing them from the fire.	
Ghutni	It is a wooden hand blender used for pureeing lentils and sauces.	
Sil nora	It is a flat grinding stone with a stone grinder, which is used for grinding and making pastes of spices and vegetables.	
Chaki belon	Belan is a wooden cylinder and chaki is a flat, rounded wooden platform. Belan chaki is used for making flat breads like roti, paratha and puri.	
Handi	It is a round-bottomed cooking pot that has a slightly narrow neck and a wide rim to facilitate holding and drainage of rice.	







Table 1.6.9 (b)

SPECIAL COOKING STYLES OF BENGAL CUISINE

There are some different cooking styles of bengali. They are:

AMBAL	a sour dish made either with several vegetables or with fish, the sourness being produced by the addition of tamarind pulp.	
BHAJA	anything fried, either by itself or in batter.	
BHAPA	fish or vegetables steamed with oil and spices. a classic steaming technique is to wrap the fish in banana leaf to give it a faint musky, smoky scent	
BHATE	any vegetable, such as potatoes, beans, pumpkins or even dal, first boiled whole and then mashed and seasoned with mustard oil or ghee and spices.	
BHUNA	a term of urdu origin, meaning fried for a long time with ground and whole spices over high heat. usually applied to meat.	
CHACHCHARI	usually a vegetable dish with one or more varieties of vegetables cut into longish strips, sometimes with the stalks of leafy greens added, all lightly seasoned with spices like mustard or poppy seeds and flavoured with a phoron. the skin and bone of large fish like bhetki or chitol can be made into a chachchari called kanta-chachchari, kanta, meaning fish-bone.	

CHHANCHRA	a combination dish made with different vegetables, portions of fish head and fish oil (entrails).	
CHHENCHKI	tiny pieces of one or more vegetable - or, sometimes even the peels (of potatoes, lau, pumpkin or patol for example) - usually flavoured with panch-phoron or whole mustard seeds or kala jeera. chopped onion and garlic can also be used, but hardly any ground spices.	
DALNA	mixed vegetables or eggs, cooked in a medium thick gravy seasoned with ground spices, especially garam masahla and a touch of ghee.	
DUM	vegetables, especially potatoes, or meat, cooked over a covered pot slowly over a low heat.	
GHANTO	different complementary vegetables (e.g., cabbage, green peas, potatoes or banana blossom, coconut, chickpeas) are chopped or finely grated and cooked with both a phoron and ground spices. dried pellets of dal (boris) are often added to the ghanto. ghee is commonly added at the end. non-vegetarian ghantos are also made, with fish or fish heads added to vegetables. the famous murighanto is made with fish heads cooked in a fine variety of rice. some ghantos are very dry while others a thick and juicy.	

JHAL	literally, hot. a great favorite in west bengali households, this is made with fish or shrimp or crab, first lightly fried and then cooked in a light sauce of ground red chilli or ground mustard and a flavouring of panch-phoron or kala jeera. being dryish it is often eaten with a little bit of dalpored over the rice.	
JHOL	a light fish or vegetable stew seasoned with ground spices like ginger, cumin, coriander, chilli and turmeric with pieces of fish and longitudinal slices of vegetables floating in it. the gravy is thin yet extremely flavourful. whole green chillies are usually added at the end and green coriander leaves are used to season for extra taste.	
KALIA	a very rich preparation of fish, meat or vegetables using a lot of oil and ghee with a sauce usually based on ground ginger and onion paste and garom masala.	
KOFTAS (or boras)	ground meat or vegetable croquettes bound together by spices and/or eggs served alone or in savory gravy.	
KORMA	another term of urdu origin, meaning meat or chicken cooked in a mild yoghurt based sauce with ghee instead of oil.	
PORA	literally, burnt. vegetables are wrapped in leaves and roasted over a wood or charcoal fire. some, like eggplants (brinjals/aubergines), are put directly over the flames. before eating the roasted vegetable is mixed with oil and spices.	









TARKARI	a general term often used in bengal the way `curry' is used in english. originally from persian, the word first meant uncooked garden vegetables. from this it was a natural extension to mean cooked vegetables or even fish and vegetables cooked together.	
----------------	---	---






Table 1.6.9 (c)

SPECIAL DISHES FOR FESTIVALS AND OCCASIONS

Bengali cuisine believes in the simplicity of a dish and the importance is given to the taste, colour, texture, and the flavour of the food. The flavour in the dishes is created by using fresh ingredients. It is a local saying in Bengal that Bengal is a land of thirteen festivals in twelve months. The most important ones celebrated here are Durga Puja and the Bengali new year. Another festival called Jamai Shasthi is celebrated in favour of the sons-in-law of the families. Jackfruit forms a part of this special festival. Durga pooja is celebrated for 4 days in this state, first two days the people eat vegetarian only. On the evening of the last day of the puja, when the idols of the goddess are immersed into waters of River Ganges, and they consume sweets and each other to spread love and good feelings. Some of the special dishes are:

Dish	Description	Photograph
Luchi	Luchi (circular, deep-fried unleavened bread) or porothha (usually triangular, multi-layered, pan fried, unleavened bread) are also used as the primary food item on the table. It is considered that wheat-based food came in from the north and is relatively new in advent. Both luchi and parothha could have stuffed versions as well, and the stuffing could vary from dal, peas, etc.	

Radha balhobi	Radhaballabhi is a famous bengali recipe commonly prepared for breakfast. Most of the times it is also served as an appetizer during lunch/dinner. Radhaballabhi is usually prepared with urad dal and spices for festival occasion like krishna janmashtami. It is a slightly sweeter poori in taste than kachoris.	
Bhaja	Anything fried, either just after it has been salted or dipped in any kind of water-based batter. does not include croquettes, or crumb-coated items. Bhaja literally means 'fried'. Bhaja is sometimes coated in a beshon (chickpea flour) and posto (poppyseed) batter	
Macher paturi	This is one of the royal dishes from bengal A bengali favourite fish is wrapped in banana leaf with mustard paste and cooked in steam through slow cooking.	
Shorshe bata ilish	It is an essential bengali dish. The seasonal hilsa fish is cooked in mustard paste and it best enjoyed with steamed rice. It can be cooked for everyday meals or even during festivals and occasions.	
Chitol mahcer muitha	A traditional bengali fish curry with chital mach or clown knife fish. This recipe is cooked in a typical bengali style with mustard oil, green chillies and other spices.	
Pabda macher jhal	A traditional fish curry prepared with cat fish or pabda maach known as pabda mach-er tel jhal. Pabda mach-er tel jhal is prepared with a paste of onion- mustard seed and tempered with nigella seeds.	

Chingri malai curry	Chingri malai curry also known as prawn malai curry, is a bengali curry made from prawns and coconut milk and flavoured with spices. The main ingredients are prawns and coconut milk, along with ghee or mustard oil, onions, turmeric powder, chopped green chilli, garlic paste, and ginger paste flavoured with spices.	
Doi mach	Marinated pieces of freshwater fish cooked in a yogurt based gravy. The curry is robust, slightly spicy and delicately sour with the curd and spices. The fish is really tender and soft having absorbed the wonderful flavours of the gravy.	
Kasha mangsho	Kosha mangsho is a nonvegetarian bengali recipe. [mutton curry]. It is traditionally cooked on jamai shasti (welcome ceremony for bengali groom) and is served with luchi (refined flour puri). In kolkata golabari's kasha mangsho is very famous. ['gol' means round and 'bari ' means house]. Kosha mangsho is velvety gravy with juicy pieces of the meat.	
Potoler dolma	“Potoler dorma”, the name itself is quite heavy and it's taste similarly very exquisite. In this recipe, potol(in bengali) mean parwal or pointed gourd, is stuffed first with minced meat or minced fish or shrimp, and then cooked in onion-tomato gravy.	
Aloo posto	Loosely translated that's potato in poppy seeds and red lentil soup for lunch. Posto or poppy-seeds or khaskhas is a popular ingredient for several dishes in bengal. The aloo posto and musur dal go very well with plain white rice.	


Dhokar dalna	This recipe recreates the traditional dhokar dalna which is a dish made from chana dal koftas or lentil cakes soaked in delicious bengali style curry. “Dhoka” in bengali or hindi actually means a sham, an act of cheating someone.	
--------------	---	---

Table 1.6 9 (d)

1.6.10 ANDHRA

Telugu cuisine is a cuisine of south india origin or native to the telugu people from the states of andhra pradesh and telangana. It is also the cuisine of the telugu-speaking population of karnataka and tamil nadu with slight variations due to local influences. Generally known for its tangy, hot and spicy taste, the cooking is very different due to the vast spread of the people and varied tropological region.



All three regions — coastal andhra, rayalaseema and telangana — have different cuisines, where in semi-arid telangana state region millet-based breads (roti) is main staple food, while rice is main in irrigated andhra and rayalaseema regions and ragi is popular in rayalaseema regions which is mainly semi-arid. Many of the curries (known as koora), snacks and sweets vary in the method of preparation and differ in name, too.

Andhra pradesh state is the leading or main producer of red chili, rice and telangana state is millets in india influences the general use of spices — making the food one of the richest and spiciest in the world. Vegetarian as well as meat and seafood (coastal areas) are mainly used on the menus. Dal (lentils), tomato and tamarind are largely used for cooking curries. Spicy and hot varieties of pickles form an important part of telugu cuisine.

There are many regional variations due to topographic differences in telugu-speaking populations spread over a large area. They can be classified based by region into coastal andhra, rayalaseema, telangana and hyderabadi cuisine.

LOCATION

Andhra Pradesh is bordered by Telangana, Chhattisgarh, and Orissa in the north, the Bay of Bengal in the East, Tamil Nadu to the south and Karnataka to the west. Among the other states, which are situated on the country's coastal area, Andhra Pradesh has got a coastline of around 974 km, which gives it



the 2nd longest coastline in the nation. Two major rivers, the Godavari and the Krishna run across the state. A small enclave 12 sq mi (30 km²), the Yanam district of Puducherry, lies in the Godavari Delta in the north east of the state. The state includes the eastern part of Deccan plateau as well as a considerable part of the Eastern Ghats.

HISTORICAL BACKGROUND


After death of ashoka the confusion resulted satavahana and chieftain. They were followed by ikshvakus, pallavas, vishnukundins, chalukyas, cholas. This period laid main base for telugu culture. Twelfth and thirteen centuries gave rise and fall of the great kakatiya empire and vijayanagaram. Later qutub shahis came as ascedents and gave rise to hyderabdi cuisine. From its ahes rose four states, of which Vijayanagar became the most well known, reaching its height during the reign of Krishnadevaraya.






















With his death the empire get vanishedreak or break down of their kindom, then qutub shahis the great builders came and rule the andhra pradesh. In 1687, their fort of Golconda fell to Mir Aumuruddin, former king of the Asaf Jahis, ruled Hyderabad till it became part of the Indian Union.

SPECIAL INGREDIENTS USED IN THIS CUISINE

With the development of transport systems, ingredients are now available in all parts of a state. However, these are special local ingredients that are only for one particular place and the usage of the same is limited to the local cuisine of that state. Andhra pradesh is the home of herbs and spices and many of the spices are different used in medicines and were brought in by the Mughal rulers. Some of the different ingredients used in these state are:

Ingredient/local name	Description	Photograph
Tamarind	Tamarind is one of the widely used ingredients in telugucuisine recipies. Most meal accompaniments use tamarind. Chutneys, pulusu, sambar(lentil stew), rasam(tamarind soup), pulihora all use tamarind in good amounts. In most parts of india, tamarind extract is used to flavour foods ranging from meals to snacks,and tamarind sweet chutney is popular in india as a dressing for many snacks.	

Chickpeas (kabuli senagalu)	Chickpeas looks like shelled hazelnut beans. It is also known as kabuli chana, it is extensively grown in kabul in afghanistan.	
Rice parboiled (uppudu biyyam)	The rice after being harvested is soaked and then steamed in large steam pressures in controlled temperatures, and then dried and milled. This changes nutritional values of rice and rice becomes light yellow colour and fades away when cooked.	
Cowpeas (bobbarlu)	These are also known as black-eyed beans or lobiya in north India. It can be used as a stew or can be braised with spices.	
Field beans (chikkudu)	These are from family of broad beans also known as fava beans. They are used fresh and tender. The leaves of this plant are used in curries.	
Agathi leaves (avise)	These are classified under green leafy vegetables and are known by many names around the world. It is also known as humming bird tree leaves or West Indian pea tree leaves. It is also a medicinal herb, used for preparing porrials. These are 2 types- one produce red flowers and another produce white flowers. The plant produce white flowers are good for cooking.	
Sorrel leaves (chukka koora)	These looks like spinach but slightly sour taste. These leaves combine well with spices of andhra cuisine. These are also used in other south indian cuisines.	
Gongura (puntikura)	This is from species of sorrel leaves but more sourer than them.	
Water Amaranth (ponnaganti koora)	These are also known as gudrisaag in hindi. It is the rich source for vitamins and minerals. This is used often used in medicines.	
Banana rhizome (arati dumpa)	The root or rhizome of banana plant is used in stir fried dishes or even curries.	

Tapioca (karrapendalam)	It is also known as cassava root, a starchy plant. It is starch used as thickening agent in many south-east asian cuisines.	
Yam elephant (kanda dumpa)	This is edible tuber of putrid smelling aroid of south-east asia. It is commonly grown in philippines. It is used for various culinary uses. It can be deep-fried chips or eaten in curry.	
Cassia flower (thangedu puvvu)	These are yellow colour flowers from cinnamon tree. They are not popular in andhra cuisine, used by tribes of the state. It is most nutritive part of plant.	
Cho cho marrow (seema vankaya)	Cho cho marrow or chayote is a vegetable with many names selling it. It is commonly eaten in southern india, extensively used in stir fries and curries.	
Cluster beans (goru chikkudu)	Cluster beans are also known as gwar ki phalli in hindi. It is also majorly used for the extraction of a gum known as guar gum. It is also used as ice cream stabilizers.	
Spine gourd (akakara)	Spine gourd is also known as kankonda, and meetha karela. It is used in sambhars or in curries in andhra food.	
Cudapa seeds (sara pappu)	In hindi it is called as chironji or chaoroli nuts. A type of nut particularly used in making desserts It is used as thickening agents in curries and kormas.	
Betel roots (pan ki jad)	This condiment is typically used in hyderabadi cuisine as a main ingredient in a potli masala. It is used in dry form as flavouring spice for meat dishes. Used widely in other south-east asian countries such as malaysia and indonesia.	
Vetiver roots (khus ki jad)	These are roots of khus plants. The aromatic roots used as an ingredient in potli masala and to flavour kormas.	
Stone flower (pathar ke phool)	Pathar ke phool are widely used in hyderabad and down south. in famous hyderabadi pathar ki kebab. It is also used in potli masala from hyderabad and flavouring the rice for biryani. It is also an ingredient for the chettinad masala used in south.	






Mareti bud (marathi moggu)	It is mostly used in the south india. It is one of the important ingredients of chettinad masala.	
Cinnamon camphor (paccha karpuram)	These leaves of camphor plant emit a pleasant fragrance of camphor. Only edible camphor should be used in cooking.	
Zizyphus (regu pandu)	These are a type of jujubes and are extensively used in pickles and chutneys. They are often crushed with red chillis, jaggery and tamarind and used in curries.	
Red chillies	Grassy, earthy, and hot indian red chiles gain their red colour when dried. Toasting these small chiles adds depth of flavour and balances their natural control. Chilli pepper pods, which are berries, are used fresh or dried. chillies are dried to preserve them for long periods of time, which may also be done by pickling. Guntur red chilli powder is very famous for pickles and various dishes.	
Purslane leaves (kulfa)	These are smooth, fleshy annual herb grows only 30 cm height. Leaves are simple thick and smooth. Stem is feeble, smooth, shiny and lightpink colour. With yellow flowers and small fruits with numerous black seeds. These are mild salty and sour in taste used well in hyderabadi cuisine.	

Table 1.6.10 (a)

SPECIAL EQUIPMENT

The equipment used in the cuisine of Andhra Pradesh depend on the type of cuisine. A few other special types of equipment that are used in the cuisine of Andhra Pradesh are:

Dish	Description	Photograph
CHIPPA	This is a clay pot wok shaped. Chippa gosh a lamb got its name from this equipment.	















TATHEE	This is a metal stand similar to barbie grill. Placed on charcoal to grill..	
TIRAGALI	This is a stone mill used for grinding cereals and lentils. It grinds into fine powder, a perfect consistency to make desserts like adhirasam.	
KAVAM:	It is a kind of churner. It is also called as indian whisk. It is usually twisted with hand. Mostly yoghurt is used for making buttermilk.	
PONGANALU	This equipment is made up of cast iron. With many depressions in it. It is used to make a dish ponganalu with batter of rice and dal on fire.	
JAADILU	These are traditional ceramic pickle storage jars. As ceramic does not react with pickles.	
ROLU/POTHRAM	It is a traditional stone mortar with pestle. It is used for grinding whole spices and chutneys.	
MUKUDU/SKILLET	Delicious curries and rice dishes are made by stir-frying in a mukudu(skillet).	

Table 1.6.10 (b)

SPECIALITY CUISINE FOR FESTIVALS AND OCCASIONS

The cuisine of Andhra Pradesh is mostly vegetarian but the coastal areas have a vast range of seafood preparations. Fish and prawns are curried in sesame and coconut oils and flavoured with freshly-ground pepper. Here food is served with rice. There are so many dishes in andhra cuisine such as:

Dish	Description	Photograph
Ulavacharu	Ulava charu is a famous soup made from horse gram. It is a local delicacy served in all parties. It is homemade, usually in villages, because the preparation is labor-intensive.	
Bommidayila pulusu	Bommidala pulusu is a fish stew that is a specialty of andhra pradesh. Bommidayila pulusu is a traditional andhra fish curry. Andhra cuisine is known to be cooked with a generous amount of spices and aromatics.	
Pongali	Pongali is usually made on pongal. Green gram is coked with rice flour and flavoured with black pepper. This porridge is tempered with curry leaves, red chillies and a pinch of hing.	
Majjiga pulusu	It can be called a type of sambhar made with butter milk. Butter milk is heated with paste of condiments like coconut, red chilli, onion, garlic, pepper corns, coriander seeds, cumin seeds, turmeric, and red gram. It is tempered with mustard seeds and curry leaves.	
Poori and patoli	Poori and patoli is a favorite breakfast or festive dish. Patoli is soaked split black chickpeas (senagapappu or chana dal) ground to a coarse paste and seasoned in coriander seeds, onions and, at times, with cluster beans (goruchikkudu kayi).	
Uppupindi	Uppupindi is coarsely broken rice upma steamed with vegetables and tempering seeds. This dish is had during festive days when people fast during the day and have it at night.	
Inguva charu	Inguva charu is a sour-and-sweet stew made with tamarind and hing. it can be had with rice or uppupindi.	
Bellam pulusu	Bellam pulusu is another highly flavoured thick sweet stew made out of rice flour, jaggery (cane sugar), corn cobs and whole shallots.	

Pickles	Pachadi (chutney) and ooragaya are two broad varieties of pickles that are used at times with rice. Pachadi is typically made of vegetables/greens and roasted green/red chilies. it is prepared fresh and is consumed within a day or two. Ooragaya is prepared in massive amounts seasonally and uses liberal amounts of chilli powder, methi (fenugreek) powder, mustard powder and groundnut oil.	
Pakodi	Andhra cuisine has some native non vegetarian snacks such as kodi pakodi (chicken pakora), peetha pakodi(crab pakodi), chepa vepudu (fish fry),royyala vepudu(shrimp fry) etc.	
Bongulo chicken	The agency(forest) area near rajamundry is very famous for bongu chicken (bamboo chicken) curry. Bongulo chicken (chicken in bamboo), a traditional form of cooking with almost no oil and little spice, which can be cooked in 15 minutes that too with simple bamboo and coal. The trick is to use the bamboo as a pressure cooker which again gains the aroma locked inside the chicken pieces letting the meat cook in its own natural fats.	
Royyala kura	The state's large shrimp farming makes shrimp and prawns widely available. Royyala kura: prawns cooked in a tangy paste of tamarind and onion. Andhra royallu iguru is a sea food curry recipe from andhra where fresh prawns are cooked in onions and indian spices and masala resulting in a very tasty curry preparation!	
Talakaya kura	Talakaya kura: a hearty, rustic meat gravy with bold flavours. This delicacy is made with the lamb's head, corriander and spices. It had a good flavour of mild sweetness and as usual the spiciness as also there.	
Endu chapala vankaya	Endu chapala vankaya: a flavoursome dry fish gravy cooked with brinjal.	
Gongura mamsam	Gongura mamsam: a spicy curry made with tender lamb pieces cooked in gravy of gongura (roselle leaves) and freshly ground green chilli paste. The recipe gives a different and unusual taste to the mutton as the gongura	





	leaves or sorrel leaves have tangy taste.	
Attirassulu (arasalu)	Attirasaalu is a traditional dish and is prepared during festivities like sankranti, dusshera, deepavali. It is made out of rice flour, jaggery and ghee / edible oil. Jaggery may be use in the place of with granulated sugar.	
Uggani	Uggani is a dish unique to rayalaseema region especially kurnool and kadapa districts. It is made by boiled paddy corn and is generally yellowish in color due to liberal usgae of turmeric powder and is usually served with mirapakaya bajji (chilli bajji). Uggani bajji is served primarily as breakfast but generally eaten as a snack food too. It is spicy and is one of the ethnic and authentic dishes of rayalaseema.	
Pootharekulu	Pootharekulu - a famous sweet preparation where sweet powder with cardamom flavour is stuffed into very thin pancake skins made of rice flour. It is a popular sweet from atreyapuram , east godavari, india. 'Pootha' is coating and 'reku' (plural rekulu) is sheet in telugu. pootharekulu are also known as ‘paper sweets’ as they looks like the folded paper. Pootharekulu can be stuffed with different items such as fine powdered sugar, jaggery, dry fruits, chocolate powders	
Karappoddi	Karappoddi, popular curry powder that is served with idly, dosa and upma.	

Table 1.6.10 (c)

1.6.11 HYDERABADI

Telugu cuisine is a cuisine of south india origin or native to the telugu people from the states of andhra pradesh and telangana. It is also the cuisine of the telugu-speaking population of karnataka and tamil nadu with slight variations due to local influences. Generally known for its tangy, hot and spicy taste, the cooking is very different due to the vast spread of the people and varied tropological region.

All three regions — coastal andhra, rayalaseema and telangana — have different cuisines, where in semi-arid telangana state region millet-based breads (roti) is main staple food, while rice is main in irrigated andhra and rayalaseema regions and ragi is popular in

rayalaseema regions which is mainly semi-arid. Many of the curries (known as koora), snacks and sweets vary in the method of preparation and differ in name, too.

Andhra pradesh state is the leading or main producer of red chili, rice and telangana state is millets in india influences the general use of spices — making the food one of the richest and spiciest in the world. Vegetarian as well as meat and seafood (coastal areas) are mainly used on the menus. Dal (lentils), tomato and tamarind are largely used for cooking curries. Spicy and hot varieties of pickles form an important part of telugu cuisine.

There are many regional variations due to topographic differences in telugu-speaking populations spread over a large area. They can be classified based by region into coastal andhra, rayalaseema, telangana and hyderabadi cuisine.

LOCATION

It is located in central Telangana and is spread over an area of 260 km². The city lies in the Deccan Plateau and rises to an average height of 536 m above the sea level. Hyderabad is blessed with a unique landscape – spectacular rock formations which are about 2,500 million years old; amongst the oldest and hardest rocks in the world. Rocky and hilly regions around the city are under obliteration for urbanization. Granite ridges and hillocks weathered into picturesque balancing forms are a part of the Deccan Shield area. Grey and Pink Granites are among the world's oldest. Crops are commonly grown in the surrounding paddy fields. The city's soil type is mainly red sandy with areas of black cotton soil.



HISTORICAL BACKGROUND

Archaeologists excavating near the city have unearthed Iron Age sites that may date from 500 BCE. The region comprising modern Hyderabad and its surroundings was known as Golkonda and was ruled by the Chalukya dynasty from 624 CE to 1075 CE. As Chalukya empire became into four parts in the 11th century, Golkonda came under the control of the Kakatiya dynasty from 1158,






Sultan Quli, a governor of Golkonda, fought against the Bahmani Sultanate and established the Qutb Shahi dynasty in 1518; he rebuilt the mud-fort of Golkonda and named the city "Muhammad



nagar". The fifth sultan, Muhammad Quli Qutb Shah, established Hyderabad on the banks of the Musi River in 1591, to avoid the water shortages experienced at Golkonda. During his rule, he had the Charminar and Mecca Masjid built in the city. On 21 September 1687, the Golkonda Sultanate came under the rule of the Mughal emperor Aurangzeb after a year-long rule of the Golkonda fort.

SPECIAL EQUIPMENTS

The Mughlai cuisine from Hyderabad uses the same equipment as used in the Awadhi cuisine. They are:

Equipment	Description	Photograph
Bhagona or patili	It is generally made of brass. It comes with a lid and it is used when a great deal of bhunna or sautéing is required, or even for boiling and simmering.	
Deg/Degchi	It is a pear-shaped pot with a lid made of brass, copper or aluminium. The shape of these utensil is helpful to dum cooking method. It is used for cooking pulao, biryani, nehari etc	
Kadhai	It is a deep concave (round) utensil made of brass, iron or aluminium and is used for deep-frying.	
Lagan	It is a round and flat copper utensil with slight round bottom. It is used for cooking whole or big cuts of meat or poultry especially when heat is applied from both top and bottom.	
Lohe ka tandoor	It is an iron tandoor, and it is different from the clay tandoor that is most commonly used in hotels. It is a kind of dome-shaped iron oven used for making most of breads such as sheermal, taftan etc.	
















Mahi tawa	It is a big griddle (frying pan) shaped, round, flat bottomed tray with raised edges. It is used for making kebabs. It is also used to the dishes that which require heat form the ends when it is covered.	
Seeni	It is a big round tray usually used as a lid for the lagan or mahi tawa when heat is applied from the top. Live charcoal is placed on it and the heat is transmitted through it to the food. Thus, it shows the indirect heat that which shows the effect on browning the food and cooking all the ingredients.	

Table 1.6.11 (a)

SPECIALITY CUISINE FOR FESTIVALS AND OCCASIONS

Dish	Description	Photograph
Oorru kodi pulusu	Oorru kodi pulusu: telangana's special flavourful country chicken curry. This natu kodi pulusu is a traditional pongal recipe very popular in village style.	
Golichina mamsam	Golichina mamsam is a popular meat dish in telangana. Golichina means fry in telugu and it is made with local spices. It is a simple yet fiery mutton dish that goes well with either rice or paratha.	
Dalcha	It is common to combine meat and lentils to make dish nutritious. Meat is cooked with chana dal and whole spices, and braised with yoghurt to soften the meat. This is tempered with ghee, garlic, and whole red chilli.	
Boti and thunti koora	Popular telangana curry dishes (known as koora) include boti and thunti koora are made out of red sorrel leaves.	
Potlakaya pulusu	Potlakaya pulusu, or snake gourd stew is one among the a daily staple dish. It is to be absorb alongside hot rice and ghee.	
Sarva pindi	Sarva pindi, a spicy pancake, is a staple breakfast, made with rice flour, chana dal, ginger, garlic, sesame seeds, curry leaves and green chiles.	

Puntikura chana dal	Puntikura chana dal: a vegetarian alternative to 'gongura ghosht', chana dal is cooked in spices and tempered with mustard and curry leaves.	
Hyderabad gosht biryani	Hyderabadi biryani originated as a blend of mughlai and iranian cuisine in the kitchens of the nizam, rulers of the historic hyderabad state. Hyderabadi biryani is also a staple part of pakistani cuisine due to its exotic flavour and aromatic taste.	
Kacchi biryani	The kachchi biryani is prepared with meat marinated with spices overnight and then soaked in yogurt before cooking. The gosht (meat) is sandwiched between layers of fragrant long-grained basmati rice, and cooked on dum (steaming over coals), after sealing the handi (vessel) with dough.	
karijelu	Karijelu, is a dumpling dish similar to the maharashtrian karanji, which in telangana is cooked with sweet stuffing, or a savory stuffing with mutton or chicken kheema.	
Pakki biryani	In a pakki biryani, the meat is marinated for a shorter time, and cooked before being layered with the rice and cooked in a dough-sealed vessel. In pakki yakhni (with cooked gravy), the ingredients are cooked before baking. The gravy is redolent of mace, ittar and kewra. saffron and cardamom are also used.	
Pathar ke kebab	This is speciality of hyderabadi cuisine. Thin ecolapse of lamb is marinated with spices like stone flower. People cook this kebab on hot stones to associate with this name.	
Murgh nizami	It is named after hyderabadi rulers nizams and famous by them. It is yellow coloured yoghurt based gravy. Thickened with sesame seeds, peanuts and sunflower seed paste. And finished with chopped mint and lemon juice.	
Haleem	Haleem is usually made during ramdan. It is very nutritious and gives a lot of energy after fasting. Lamb is cooked along with broken wheat until soft.	
Gil-e-firdaus	It is a dessert made by grated marrow with milk and sugar. Thickened by sago seeds and khoya. Flavoured by rose essence and cardamom. Garnished by silvered almonds and	


	pistachios.	
Khubani ka meetha	Very common dessert made on occasions. Dry apricots are stewed with honey and garnished with freshly whipped cream.	

Table 1.6.11 (b)

1.6.12 GUJARATI CUISINE

Gujarat is mainly a vegetarian state due to the influence of Jain vegetarianism. Many communities, however, do include seafood, chicken, and goat in their diet. Gujarati cuisine varies widely in flavour and heat, depending on a family's tastes as well as the region of Gujarat to which they belong. North Gujarat, Kathiawad, Kachchh, and Surat are the four major regions of Gujarat that contribute their unique touch to Gujarati cuisine. Many Gujarati dishes are distinctively sweet, salty, and spicy together.

GUJARATI THALI

The typical Gujarati thali consists of rotli, dal or kadhi, rice, and shaak/sabzi. The thali will also include preparations made from pulses or whole beans (called kathi in Gujarati) such as mung, black-eyed beans etc., a snack item (farsaan) like dhokla, pathra, samosa etc. and a sweet (mishthan) like mohanthal, jalebi, doodh pak etc.



LOCATION

Gujarat is sometimes referred to as the "Jewel of western India". Gujarat borders Pakistan's Sindh province (colony or department) to the northwest, is covered by the Arabian Sea to the southwest, the state of Rajasthan to the northeast, Madhya Pradesh to the east, by Maharashtra, Union Territories of Diu, Daman, Dadra and Nagar Haveli to the south.



HISTORICAL BACKGROUND

Historically, the state of Gujarat has been one of the main centres of the Indus Valley Civilization. For nearly 300 years from the start of the 1st century AD, Saka rulers played an outstanding part in Gujarat's history. The greatest ruler of the Satavahana dynasty was Gautamiputra Satakarni who defeated the Western Satraps and



conquered some parts of gujarat in the 2nd century.

The kshatrapa dynasty was replaced by the gupta empire with the occupation of gujarat by chandragupta vikramaditya. Towards the middle of the 5th century, the gupta empire went into decline. The maitrakas of vallabhi became very powerful with their rule prevailing over large parts of gujarat and adjoining malwa.











In the early 8th century, arab invaders were defeated and repelled (check) by a hindu alliance between the north indian gurjarat emperor Nagabhata 1 of the pratihara dynasty, the south indian emperor vikramaditya ii of the chalukya dynasty. In the late 8th century the kannauj triangle period started.








From 1297 to 1300, allauddin khilji, the turkic sultan of delhi, destroyed the hindu metropolis of anhilwara and incorporated gujarat into the delhi sultanate. The sultanate of gujarat remained independent until 1572, when the mughal emperor akbar the great conquered it and take out it to the mughal empire.

SEASONAL AVAILABILITY

The cuisine changes with the seasonal availability of vegetables. In summer, when mangoes are ripe and widely available in market, for example, keri no ras is often an integral part of the meal. The spices used also change depending on the season. Garam masala and its constituent spices are used less in summer. Regular fasting, with diets limited to milk, dried fruits, and nuts, are common place





Ingredieint	Description	Photograph
Mangoes	The most famous types of mangoes available in gujarat are alphonso, kesar, rajapuri, totapuri, dasehri, langra, neelam, badam, jamadar, and vanraj. Not just ripe mangoes, people enjoy raw mangoes too. Many kind of pickles are prepared during the season, which are devoured round the year.	
Poptas (green gram)	It is known as harabaras in some communities. It is used as an ingredient in both savory and sweet dishes. Whole cooked mung beans are generally prepared from dried beans by boiling until they are soft. Mung beans are light yellow in colour when	





	their skins are removed.	
Green Tomatoes	Green tomatoes are firm and acidic, sometimes to the point of astringency, but all of these things mellow out when they're cooked. Fried green tomatoes are one of the most popular ways to cook them, and for good reason they hold up well to being sliced, dredged, and fried, and the slight sour flavour works well with a crunchy coating. Green tomatoes also hold up well to stewing and pickling.	
Bhavnagiri (Big green chillies)	Peppers are very hot and turn from green to red when mature. That make for lovely bharela marcha (stuffed chillies) or vagharela marcha (sauteed chillies) that are prepared in gujarati households as a side dish.	
Brinjals	It is often described as the "king of vegetables". The raw fruit can have a somewhat bitter taste, or even an astringent quality, but becomes tender when cooked and develops a rich, complex flavour. Many recipes advise salting, rinsing and draining the sliced fruit (a process known as "degorging") to soften it and to reduce the amount of fat absorbed during cooking, but mainly to remove the bitterness of the earlier cultivars.	
Potatoes	Potato is very popular traditional staple. Potatoes are prepared in many ways: skin-on or peeled, whole or cut up, with seasonings or without. The only requirement involves cooking to swell the starch granules. Most potato dishes are served hot, but some are first cooked, then served cold.	
Unripe bananas	The greener, less ripe bananas contain higher levels of starch and, consequently, have a "starchier" taste. Bananas are eaten deep fried, baked in their skin in a split bamboo, or steamed in glutinous rice wrapped in a banana leaf. They can be steamed, made into curries fried into chips (upperi) or fried in batter.	
Fresh green garlic	Green garlic is young garlic with tender leaves that is harvested early in the season before the bulb is fully formed. Green garlic is more mellow and less spicy in flavour than regular garlic, and can be used raw or cooked like scallions.	






Sweet potato	It is a popular variety of preparation in most parts is roasted slow over kitchen coals at night and eaten with some dressing primarily salt, possibly yogurt. Fresh sweet potato is chipped, dried and then ground into flour; this is then mixed with wheat flour and baked into chapattis.	
Kand (Yam)	it belongs to the tuber family just a root vegetable similar to a sweet potato, potato, yam or colocasia. Their color varies from dark purple to lavender. Recipes like undhiyo, fried, vegetable, steamed, handvo, fritters, desserts, kheer etc could be made from kand.	
Whole papdi or papdi beans	Papdi beans, or green flat beans, are a big part of gujarati cuisine. Papdi beans are long, flat beans with smooth, green skin. Papdi beans are picked when young and still tender. Older, more mature beans get woody and fibrous and are inedible. They have a taste similar to green beans. Papdi beans are often served as an accompaniment to meat or fish dishes.	
Baby methi	Fresh fenugreek leaves are an ingredient in some indian curries. Sprouted seeds and microgreens are used in salads. The young plants are harvested with their roots still attached and sold in small bundles in the markets	
Gaanth gobi	Kind of a miniature cabbage was also spotted. It is a greenish white colored big and round vegetable, somewhat similar to cabbage, although it does not have leaves covering. There are long light green colored extrusions, which come out as its shoots. It is large and woody or hard and comes in late winters.	
Radishes	Radishes are grown and consumed throughout the world, being mostly eaten raw as a crunchy salad vegetable. Radish leaves are sometimes used in recipes, like potato soup or as a sauteed side dish. They are also found blended with fruit juices in some recipes.	
Corn	Maize and cornmeal (ground dried maize) constitute a staple food in gujarati cuisine. Within the gujarati community, white corn cobs are in great demand to prepare makai ni khichdi, makai nu shaak.	






.Table 1.6.12 (a)






SPECIALITY DISHES FOR OCCASIONS AND FESTIVALS




Dish	Description	Photograph
Saurashtra food	Western gujarat that is saurashtra is dry and green vegetables, hard to come by. But the peninsula's mixed farming provides abundant dairy produce. The food is simple and nutritious and wholesome. The scarcity of greens has also encouraged pickling and preparing foods from dehydrated vegetables.	
Central Gujarat food	Central gujarat – ahmedabad and kheda is the granary of gujarat. A majority of the people are farmers and the food grains they grow are often stored at home. Grains broken during cleaning is never sold but used in the home to prepare dhokla, vada, etc.	
Gud papdi	Made from wheat flour, roasted in ghee to a golden brown colour, mixed with jaggery; It is flattened in a thali, sprinkled with poppy seeds, cut into square pieces and served.	
Bohri cuisine	One of the oldest muslim communities in gujarat is that of the bohris. They are known for their works of charity, their social awareness. They are staunch followers of islam and most of them are businessmen involved in the business of perfumes and utensils. Bhoris are usually non-vegetarians who love rich but not very spicy and oily food. Meat would include – lamb, poultry, beef, pork is strictly forbidden. bohri cuisine is a very fine blend of exotic spices and herbs. Some of the most commonly used spices and herbs are cinnamon, cardamom, cloves, bay leaf, peppercorn, mace, nutmeg, saffron, mint, coriander. Food is traditionally prepared in copper vessels. lunch is served on a common metal plate – a thali; large enough to seat eight people around it; set upon a stool.	





	Dinners sit on the floor. all food is placed in the centre of the thal for the family to share.	
Kutch Dabeli	Dabeli or kutchi dabeli or double roti is a snack food of india, originating in the kutch region of gujarat. It is a spicy snack made by mixing boiled potatoes with a dabeli masala, and putting the mixture between pav (burger bun) and served with chutneys made from tamarind, date, garlic, red chilies, etc. and garnished with pomegranate and roasted peanuts.	
Godiya Ladoos	godiya ladoos usually prepared in winter with wheat flour, semolina, jaggery, ghee, dry ginger powder and eating gum.	
Khajoor pak	It is mixture of dates and dry fruits cooked together in little ghee. Then it is flattened in a thali, cut into squares and garnished.	
Basundi	Basundi is an indian dessert mostly in gujarat. It is a sweetened dense milk made by boiling milk on low heat until the milk is reduced by half. Heavy cream may be added during the boiling process to hasten the thickening process. once reduced, a little sugar, cardamom, charoli and/or saffron are added. Basundi is served chilled, often garnished with slices of almonds and pistachios. The addition of condensed milk gives a nice flavour and wealth to basundi.	

Ghari-Ghebar	It is a disc-shaped sweet made from paneer (cottage cheese), oil, flour and sugar syrup. There are many varieties of ghevar, such as plain, mawa and malai ghevar. It is a honey comb shaped delicacy made using plain flour and ghee. Ghevars are usually large in size, squares or rounds and are either sweetened with syrup or served topped with sweet raabdi or thickened milk.	
Halvasan	Halwasan is a traditional recipe of gujarati regions. Halwasan, prepared with wheat porridge and milk, enriched with dry fruits and too easy to make can be prepared easily for any festival.	
Keri No Ras	Aamras is also a traditional gujarati dish called as keri no ras. It consists of sugared mango pulp, which is passed through muslin to remove fibrous strands of the fruit. It is commonly eaten with rotli or pooris.	
Malpua	Malpua is like a pancake. The pancake can be sweetened. The malpua can be soaked in cardamom flavoured sugar syrup. Malpua is prepared in many variations. malpua made in milk, refined flour, mava, semolina.	
Puran Poli	Puran poli is made from chana dal or split yellow gram, plain flour, jaggery or sugar, cardamom powder and/or nutmeg powder, gheeand water. Sometimes toor dal is used in gujarat. The size and thickness of puran puri also varies greatly, in gujarat where the stuffing used is toor dal, it will be small in size and thickness will be more.	

Shrikhand	Shrikhand is an indian sweet dish made of strained yogurt. The strained yogurt, referred to as "chakka", and sugar are mixed thoroughly in a deep bowl. Cardamom, saffron, nuts, fresh fruits and any other flavours are then added and mixed. It is then left in the refrigerator for the sugar to dissolve. the dish is served chilled. Shrikhand is eaten as either a side-dish with breads such as poori or as a dessert. A popular variant of shrikhand, matho, which has fruit added, is served as a sweet dish or dessert particularly in gujarati cuisine.	
Sutarfeni	Sutarfeni is an indian sweet, shredded, flaky - rice-flour roasted in ghee (clarified butter), blended with melted sugar to form a cotton candy, and topped with finely chopped pistachio and almonds. The product is typically flavoured with powdered cardamom. It may be white in color, scented with floral essences such as rose water or screwpine, or it may be colored and flavoured with saffron.	
Cholafali	These spicy mixed flour fingers are a very popular diwali snack from gujarat. Its sour and spicy seasoning of chilli powder and dry mango powder make it one of the irresistible snack.	
Ghooghra	Ghughra is very crispy and yummy street food of jamnagar (gujarat). Ghughra is traditional gujarati sweets/dessert. It is also known as karanji, gujia or gujhia. Ghughra is fried desserts filled with coconut and dry fruits. There is another variant of ghughra also, it used as tea time snacks.	
Fafda	Fafda is a popular gujarati crunchy snack made with gram flour, turmeric and carom seeds. It is fried crisp and served with chutney.	

Daal Dhokli	Daal dhokli is a gujarati and maharashtrian dish made by boiling thick wheat flour noodles (dhokli) in a pigeon pea stew (dal). In maharashtra, it is known as varan phal, where varan refers to the pigeon pea stew and phal refers to wheat noodles. It is considered a comfort food.	
Dhokla	Dhokla is a vegetarian food item that originates from the indian state of gujarat. It is made with a fermented batter derived from rice and split chickpeas. Dhokla can be eaten for breakfast, as a main course, as a side dish, or as a snack. It is usually served with deep fried chillies and chutney made from coriander. It is garnished with coriander and often with grated coconut.	
Khaman	Khaman is a food common in the Gujarat state of India made from soaked and freshly ground channa dal or channa flour. It is mostly served with sev, fried chillies and chutney. The batter is made with a mixture of rice and lentil flour, resulting in a distinct texture and taste. Khaman is often confused with dhokla however, khaman are softer and light yellow in color while dhokla are generally harder and white or very pale yellow in colour.	
Farsi falafel	Falafel is a deep-fried ball or patty made from ground chickpeas, fava beans, or both. Falafel is a traditional middle eastern food, commonly served in a pita, which acts as a pocket, or wrapped in a flatbread known as taboon. "Falafel" also frequently refers to a wrapped sandwich that is prepared in this way.	
Ganthia	Ganthia is a popular tea-time snack made of flavoured and deep-fried besan strips. The crunchy gujarati snack tastes best with deep-fried chillies, pickles and tea. It can also be used as an ingredient in chivdas and mixtures. Ganthia is also used to make subzi in gujarati homes. Ganthia is made by combining besan, salt,	

	soda bi-carb, carom seeds, water, etc. into a smooth dough, which is then pressed into a sev maker and deep-fried in oil.	
Handwoh	<p>This is a very yummy rice stuffing recipe that is most commonly used in the middle east. It is used to stuff lamb, chicken, and just about anything else you want!</p> <p>A savoury tea-cake that is crisp on the outside and soft on the inside. It is made with an aromatic mix of buttermilk, flour, coriander, chillies, lentils and rice.</p>	
Kachori	<p>In gujarat, kachori is usually a round ball made of flour and dough filled with a stuffing of urad dal, yellow moong dal, black pepper, red chili powder, and ginger paste. A variant includes sweet upwas (fast) kachori, made with potato, coconut, and sugar.</p> <p>Kachoris are often served with a chutney made from tamarind, mint, or coriander.</p>	
Khakra	<p>The most popular and traditional gujarati recipe khakhra looks similar to a papad or thin parantha but is really crusty and crispy. These masala khakhra if served with tea taste super scrumptious. khakhras come in many flavours like plain khakhra, masala khakhra, jeera khakhra, carom khakhra, methi khakhra, bajra khakhra and so on. It's a crispy snack that can be had with either curd or chutney. Khakhra is a thin cracker common in the Gujarati and Rajasthani cuisines of western India, especially among Jains. It is made from mat bean, wheat flour and oil. It is served usually during breakfast. Khakhras are individually hand-made and roasted to provide a crunchy and healthy snack that can be enjoyed with a selection of spicy pickles and sweet chutneys.</p> <p>Varieties</p> <p>Khakhra is made in several varieties, such as methi</p>	

	(fenugreek), jeera (cumin), bajri, pudina, garlic and ajwain, among others. Mungdi is a sweet type of khakhra.	
Sev khamani	Sev khamani is a gujarati recipe with chana dal or bengal gram. The chana dal is crushed and stir fried with spices, chillies, ginger, garlic and sprinkled with chopped coriander/celentro leaves, pomogranate and fine thin sev. Sev khamni is traditionally made from dhokla and also known as amiri khaman.	
Gujarati Samosa	This much-loved tea treat is stuffed with a chunky filling of peas sauteed with sugar and lime juice. Unlike other samosas, the gujarati version does not use boiled potatoes. Here, raw potatoes are chopped and allowed to cook in oil. The use of cabbage is another distinguishing factor, as also the making of pattis with wheat flour rather than maida.	
Gujarati Kadhi	A staple in almost every household, gujarati kadhi is a lovely curry with sweet undertones. This cooling curry is great to escape the heat.	
Bardoli ki Khicdi	Bardoli ki khichdi is a fragrant rice dish prepared along with a variety of other ingredients. This is one rice delight from gujarat that should not be missed at all. Assorted spices along with peas, potatoes and raw mangoes are used in making bardoli ki khichdi.	




Bajri no Rotlo	Rotlas are made with bajra, jowar or nachni flour, and combine very well with ghee, jaggery. The rotis made from these flours were traditionally cooked in small earthen or brick stove called “chulha”. Bajra rotla taste amazing with baingan bharta. it is also served with urad dal (white lentil) and garlic chutney.	
Thepla	Thepla is made by mixing indian dry spices like turmeric, red chili powder etc in wheat flour and fried on tawa. This is known as sada thepla or plain thepla. The more popular version of thepla is one where finely chopped feenugreek leaves (methi) or coriander (dhaniya) is mixed in flour. Sometime bottle gourd (lauki/dudhi) is also grated and mixed with wheat flour.	
Bhakhri	Bhakhri is made mostly from wheat flour, jowar flour, bajra flour, nachni (or finger millet) flour, and even rice flour bhakhris are made primarily with hot water, and flour. Being a staple bread, bhakhri is served with curd, chutney, baingan bharta, vegetables, and rice.	

Table 1.6.12 (b)

QUESTIONS:**2 marks**

1. List the seasonal availability ingredients of Kashmir.
2. Explain about Tarami.
3. Explain about Krech.
4. List the seasonal ingredients used in Kashmir region.
5. Describe about Green Leaves.
6. Describe the importance of saffron in cooking.
7. Describe about Rogan josh.
8. Explain about Katlam.
9. Explain about morels.
10. Describe the importance of tasht and naar.
11. List the special equipments used in Punjabi Cuisine.
12. Explain about Tawas.
13. Explain about the special equipment Tandoor from Punjabi Cuisine.
14. Describe about the special recipe Pindi Choley.
15. Write about the importance of Black Carrots.
16. Describe the making process of Malai Kofta.
17. Describe the making process of Tandoori Chicken.
18. Explain in detail about Mustard Leaves.
19. Explain in detail about Amaranth Leaves.
20. Describe about Masala daani and its importance in cooking.
21. Describe about Dastarkhwan.

22. Who introduce Dum style of cooking to Awadh?
23. List different types of pulao's from Awadhi.
24. Explain about Baghar.
25. Explain about Lohe ka tandoor.
26. Explain the making process of Galouti kebab.
27. Describe about malida.
28. Explain making process of sheermal.
29. Describe about the cut trotter.
30. Explain the part rib cage from lamb.
31. Describe about Mateera.
32. List the seasonal availability ingredients of Rajasthan.
33. Explain about Maans key sooley.
34. Explain about Marwaris community.
35. Explain about Cluster beans.
36. Describe about Bajrey ki raab.
37. Explain about Chulah.
38. Explain about Tikra.
39. Explain about Kumatiya.
40. List the important points in Rajasthani cuisine.
41. Explain about Chettiyar community in Tamil Nadu.
42. Explain about Ash gourd.
43. What do you understand by the term Capers.
44. Explain the word Thuvammai.
45. Describe about kuziappachatti.
46. Describe the process of Thenkuzal and murukkus.
47. Explain the making process of Kolambhu.
48. Describe the making process of Thuvail.
49. Explain in detail about Uruli.
50. Explain the making process of dosa.
51. Explain about pomfret.
52. Describe about Yam.
53. Explain the term Mande tawa.
54. Explain about Pata Warwanta.
55. Describe about Modak.
56. Explain about Tilgul ladoo.
57. Explain about shrikhand and poori.
58. Describe the making process of puran poli.
59. What do you understand by the term gundpongulu tawa.
60. list the special dishes made in maharashtra cuisine.
61. Describe about Red Rice.
62. Describe about Coconut Vinegar.
63. Explain about Bimblim and Goan Sausages.
64. What do you understand by the term Chouricos.
65. Explain the importance of Ladainha tradition.
66. Explain about patoleo.
67. Explain about coconut kadi.
68. Explain about Saar.
69. Describe about Varn.
70. Describe about Goan Chilly.
71. Explain about siddha root.
72. Define the importance of coconut in kerala.
73. Define banana.
74. Define idiyappam.
75. Explain about fish tamarind.
76. Define puttu.
77. Define ammi and ammikuuttu.
78. Explain about idooniachu.
79. Explain about ural and ulakka.
80. Explain about siddha root.
81. Define Paanch phoran.
82. Define runner beans.
83. Explain how water lilly stems helpful in cooking.
84. Explain about banana stems.
85. Describe about puffed rice.
86. Describe about indian butter fish.
87. Describe about catfish.
88. Detail about sil nora.
89. Explain about handi.
90. Describe the difference the between Jhal and Jhol.
91. Define Chickpeas.
92. Define Cowpeas.
93. Define stone flower.
94. Explain the importance of tiragali in andhra cuisine.
95. Explain skillet.
96. Describe about bellam pulusu.
97. Explain about gongura mamsam.
98. Explain about majjiga pulusu.
99. Describe the making of ulavacharu.
100. Explain the importance of kavam in andhra cuisine.
101. List the special equipments of Hyderabad cuisine.
102. Define Ooru kodi pulusu.
103. Describe lohe ka tandoor.

- | | |
|--|--|
| <p>104. Explain about lagan.</p> <p>105. Explain about karijela.</p> <p>106. Describe haleem.</p> <p>107. Explain about Gil-e-firdaus.</p> <p>108. Describe puntikura chana dal.</p> <p>109. Describe Zizyphus.</p> <p>110. Explain about importance of stone flower.</p> <p>111. Describe about Poptas.</p> <p>112. Explain how green tomatoes help for cooking.</p> <p>113. Which is called as “king of vegetables” and explain.</p> | <p>114. Describe how bhavnagiri help for cooking.</p> <p>115. Describe about unripe bananas and its importance.</p> <p>116. Explain about keri no ras.</p> <p>117. Describe the process of gujarati kadhi.</p> <p>118. List the unique ingredients of Gujarati cuisine.</p> <p>119. Explain about khaman.</p> <p>120. Describe about farsi falefel.</p> |
|--|--|

QUESTIONS: - 5 Marks

- | | |
|--|---|
| <p>1. Explain about the history of Kashmir.</p> <p>2. List the type of equipment used in Kashmiri cuisine and explain.</p> <p>3. Explain about Wazwan meal in Kashmir.</p> <p>4. Explain about any 3 special dishes from Kashmir cuisine.</p> <p>5. Explain about Wild Spinach and Black Beans.</p> <p>6. Explain about the recipe of Dum Aloo.</p> <p>7. Describe about Rishta, Gushtaba.</p> <p>8. In detail explain about saffron and importance of it in cooking.</p> <p>9. Classify the difference between Dan & tasht and naar.\</p> <p>10. Explain about Bauhina flowers</p> <p>11. Explain about the Punjab and its history.</p> <p>12. How tandoor cooking style came to Punjab.</p> <p>13. Explain about Amritsari Kulcha.</p> <p>14. Describe the recipe of Gajar ka Halwa.</p> <p>15. Explain the differences between Mutter paneer and Shahi paneer.</p> <p>16. Classify the difference between Bhatti and Tandoor, Dori danda.</p> <p>17. Describe about Pauni and Lentil fritters.</p> <p>18. Describe about chickpeas, black eyed beans.</p> <p>19. Describe about raw mango powder and its making.</p> <p>20. Describe about Punj ratani dal, Sarson da saag, Dahi balle.</p> | <p>21. Draw the lamb and explain various cuts of lamb.</p> <p>22. Briefly explain the history of Awadh.</p> <p>23. Explain the differences between Kakori Kebab and Galouti kebab.</p> <p>24. Explain about the importance of Ittar in cooking.</p> <p>25. List the types of cooking techniques in Awadh and explain it.</p> <p>26. Describe the difference between Seeni vs Lagan.</p> <p>27. Describe the difference between Bhagona vs Degchi.</p> <p>28. Explain the importance of Kewra in cooking.</p> <p>29. Explain the uses of Gold Leaf and Silver Leaf in cooking.</p> <p>30. Explain the different types of cooking techniques in Awadhi cuisine.</p> <p>31. List seasonal availability of ingredients used in Rajasthani cuisine and explain.</p> <p>32. Explain about special equipments used in Rajasthani cuisine.</p> <p>33. Explain about the complete history of Rajasthani cuisine.</p> <p>34. List any 5 special dishes of Rajasthani cuisine and explain.</p> <p>35. Difference between normal barbecue griller and sigri.</p> <p>36. Explain about the seasonal available ingredients in Rajasthani cuisine.</p> |
|--|---|

37. Explain the recipe of Dal baati churma.
38. Describe the difference between laal maans and safed maans.
39. Describe about Capers and desert beans.
40. Explain about missi roti, bajrey ki raab, papad ki subzi, pithorey.
41. Briefly explain about the history of Tamil Nadu.
42. List the unique equipments of Tamil Nadu and explain.
43. List any 5 special dishes from Tamil Nadu and explain.
44. Explain about black rice, fresh neem flower, cinnamon camph, gingelly oil, arecanut.
45. Explain the location importance of Tamil Nadu.
46. Explain the dosa making process.
47. Describe about idly panai.
48. Explain in detail about kal chatti, thenkuzal naazhi.
49. Explain about puffed Bengal gram.
50. Explain about Addaikal, dosa thiruppi, Koottu.
51. Describe briefly about the history of Maharashtra.
52. List and the regions of Maharastra and explain.
53. List any 5 special dishes and explain.
54. Explain about the special equipments of Maharashtra.
55. Explain the difference between Pepper and Szechwan Pepper.
56. Explain the difference between Pomfret and Bombay Duck.
57. Explain in detail about the region of Kolhapur.
58. Explain in detail about the region of Vidarbha.
59. Explain the difference between Patawarwanta and Khalbatta.
60. Explain the working process of Mande tawa.
61. List the types of special equipments used in Goan cuisine and explain.
62. Explain the different types of special dishes from Goa.
63. Explain the importance of speciality dishes from Goan and their traditions.
64. Describe briefly about the history of Goa.
65. Explain about the types of seasonal availability of ingredients in Goa.
66. Explain in detail about Dantem, Moltulem.
67. Difference between clay pots vs brass utensils.
68. Explain the working process of Varn and Dantem.
69. Explain in brief about Moltulem.
70. List the various dihes made on death and thread anniversaries.
71. List the special equipments used in kerala cuisine and explain.
72. Explain in detail about the history of kerala cuisine.
73. Describe how coconut related to kerala and how it is described.
74. Explain the complete preparation of Meen molee.
75. List any 7 special dishes of kerala and explain.
76. List the seasonal availability of kerala and explain.
77. Explain in detail about the preparation method of kanji.
78. Explain about kozhicurry.
79. Describe about puttukutti and kudam.
80. Explain about the moplal cuisine and appams and istews.
81. Explain briefly about the history of andhra cuisine.
82. Explain how tamarind helps in cooking of andhra.
83. Explain about Agathi leaves.
84. List the special equipments of andhra cuisine and describe it shortly.
85. Difference between Tiragali and Rolu.
86. Explain the making process of Bongulo Chicken.
87. Describe the making process of pootharekulu.
88. List any 5 famous dishes from andhra cuisine.
89. List the unique ingredients that used especially in Andhra Pradesh.
90. Difference between Vetel roots and Betel roots.
91. List the special equipments of Hyderabad cuisine.

- | | |
|--|--|
| <p>92. Explain the influence of Nizams.</p> <p>93. Describe the history of hyderabadi cuisine.s</p> <p>94. Differentiate between Pakki biryani and Kachhi biryani.</p> <p>95. List any 7 special dishes from Hyderabad cuisine.</p> <p>96. Differentiate between Seeni and Mahitawa.</p> <p>97. Describe the complete recipe for Hyderabad Gosht biryani.</p> <p>98. Classify the differences between normal samosa and Guajarati Samoa.</p> <p>99. Explain any 5 dishes from Gujarati cuisine.</p> <p>100. Explain in detail about the history of Gujarati cuisine.</p> | <p>101. List and explain any 7 special seasonal ingredients.</p> <p>102. Differentiate between dhokla and khaman.</p> <p>103. Explain the making process of thepla.</p> <p>104. Explain the difference between samosa and kachori.</p> <p>105. Explain the making process of khakra and its types.</p> <p>106. List and explain desserts from Gujarathi cuisine.</p> <p>107. Describe about saurashtra, bohri, central Gujarat cuisine briefly</p> |
|--|--|



UNIT

2

INTERNATIONAL CUISINES**2.1 FRENCH CUISINE**

France is a nation of food lovers and the food culture contains some interesting facts. Food is to be enjoyed and savoured, for example, lunch time in France is usually two hours long just for this reason. Except for large cities, almost everything closes from noon until two pm when French restaurants are open for lunch.



There are many restaurants operating in France with over 5,000 restaurants in Paris alone. With so many restaurants, there are many food guides to assist. The most famous and successful restaurant guide in France is the Michelin Guide Rouge, which has approximately 50% market share. It has enormous influence; the award of a single star by the Guide Rouge to a restaurant can add 25% to its turnover and the loss of a star can mean financial ruin for a restaurant.

A survey of over 500 people considered French food to be a turn on and a French restaurant was more romantic than an Italian meal.

Researchers are still trying to explain the ‘French paradox’ - low rate of chronic heart disease despite high saturated fat diet; some explanations include their consumption of red wine, the French style of eating and/or the saturated fats being mostly from dairy. The French consume enough cheese to provide 25 kg of cheese per person, making them the largest cheese consumers in the world. In addition, the French produce over 300 different kinds of cheese. In addition to its use in cooking, cheese is often served as a course in itself. In this case, it is served after the main meal but before dessert. The seven important categories of cheeses are:



- White Mould cheese.
- Washed rind cheese.
- Uncooked semi-hard cheese.
- Hard cheese.
- Blue cheese.
- Goat's milk cheese.
- Ewe's milk cheese

Foie gras may be part and parcel of French cuisine, but its origins go back to 4,500 years ago in Ancient Egypt, from where it spread to Greece (500 B.C.E.), then to the Romans, ancestors of the modern French.

A truffle in the west sometimes means chocolates but in France, truffles are edible underground fungi. Believed to be an aphrodisiac, they are a favourite food in France. They are cultivated by men called trufficulteurs, who use trained pigs or dogs to hunt by smell alone for the truffles, which smell like walnuts or sunflower seeds. In the 14th century Guillaume Tirel, a court chef known as "*Taillevant*", wrote *Le Viandier*, one of the earliest recipe collections of medieval France. During that time, French cuisine was heavily influenced by Italian cuisine. In the 17th century, chefs François Pierre La Varenne and Marie-Antoine Carême spearheaded movements that shifted French cooking away from its foreign influences and developed France's own indigenous style. Cheese and wine are a major part of the cuisine. They play different roles regionally and nationally, with many variations and appellation d'origine contrôlée (AOC) (regulated appellation) laws.

FOIE GRAS: Foie gras is considered as a food product made of the liver of a duck or goose that has been especially fattened.

In 1652, the first French cookbook appeared. "*Le Cuisine François*," was written by a famous French chef, La Varenne, and it showed how French cuisine had become a vital part of cooking and dining in Europe. The book provided many preparation methods, including making a roux (a mix of flour and butter used for thickening soups and sauces). Before roux, the French, and others, had simply put bread in the soup to thicken it. Changes like these would make French cooking the most important type of cooking in Europe, and then the world.



There are on average two new cook books produced very day in France. American Julia Child is world recognized for introducing French cuisine to America with her debut cookbook, *mastering the Art of French Cooking*.

There are four methods to French food:

- **Classical French cuisine** which is rich and filling, with many dishes using cream-based sauces.



- **Haute cuisine** is classical French cuisine taken to its most classy and exciting. Food is elegant and elaborate with a strong attention on presentation. Only the finest ingredients are used and the meal is similarly costly.
- **Nouvelle Cuisine** was developed in the 1970s, as a reaction against the classical school of cooking. The food is simpler and lighter. Portions are smaller and less rich; the heavy cream sauces of the classical approach are particularly avoided. Cooking is less elaborate and quicker, with more importance on seasonal ingredients.
- **Cuisine du terroir** focuses on regional specialties and is somewhat more rustic in nature. Local produce and food traditions are the main focus.

Greatly influenced by the French geography, the French cuisine also includes a high range of regional cuisines effect because the dishes are popular in these particular areas. They are:

- LORRAINE has Quiche Lorraine
- BRITTANY specialties include crêpes and galettes
- BURGUNDY has boeuf bourguignon
- RHÔNE-ALPES has gratin dauphinois
- PROVENCE specialties include Bouillabaisse, Ratatouille, Salade Niçoise and Pissaladiere.

Foods for Which the French are Famous

There are some foods and beverages that are typically French. While you may find them all over the world, you will always associate these foods with France.

Dish	Description	Photograph
Coq au vin-- (pronounced co co van)	It is a chicken frickasee (<i>a dish of stewed or fried pieces of meat served in a thick white sauce</i>) cooked in red wine with mushrooms and sometimes garlic.	
Crêpes--(pronounced crehp)	It is a very flat pancake typically stuffed with fruit or cream. Crêpes being cooked at a fast-food style creperie. A crêperie may be a takeaway restaurant or stall, serving crêpes as a form of fast food or street food, or may be a more formal sit-down restaurant or café.	





Baguette-- "(pronounced like it appears)	It is a long French bread loaf (an item of food formed into a long shape and sliced into portions) of French bread that is commonly made from basic lean dough (the dough, though not the shape, is defined by French law). It is distinguishable by its length and crisp crust.	
Chocolate mousse	This lighter than air dessert originated in France. Sweet mousses are typically made with whipped egg whites (beaten egg whites), whipped cream, or both, and flavoured with one or more of chocolate, coffee, caramel, puréed fruits, or various herbs and spices, such as mint or vanilla.	
Éclair--(pronounced as clair)	The word comes from French éclair "flash of lightning", so named because it is eaten quickly (in a flash). It is a pastry stuffed with cream and topped with icing.	
Crème Brûlée-- (pronounced crehm broo lay)	It is custard topped with hard caramel. Crème Brûlée also known as burnt cream or Trinity cream is a dessert consisting of a rich custard base topped with a layer of hardened caramelized sugar. It is normally served slightly chilled; the heat from the caramelizing process tends to warm the custard producing a cool centre. The custard base is traditionally flavoured with vanilla.	

Table 2.1 (a)

Regionalism in French Food

You will also find that a region's food is heavily influenced by the region's own history and border countries. For example, in Alsace, which is separated from Germany only by the Rhine River, common foods include *choucroute garnie* (sauerkraut with sausages, salt pork and potatoes) and *spätzle*, which is a type of German dumpling with egg noodles.

Bread, Cheese and Wine

While French dishes are known for their complex, and rich flavours, most French people eat bread, wine and cheese daily.

Artisan Cheese

The French consume an average of 45 pounds per person of cheese per year! It is safe to say that cheese is a major staple of the



French diet and should you be visiting France, you would be remiss not to sample the region's cheese. There are some 400 different types of [French cheeses](#), all classified by the type of milk they are made with (cow, goat, or ewe), whether or not the milk was pasteurized, how they were pressed . . . and so on. What's more, every region is known for particular kinds of cheese.

Bread and Pastry

In France, most people go to the boulangerie, and get their bread fresh or bake it fresh on a daily basis. Bread is eaten with chocolate or with cheese. In the morning, you might have pain au chocolate avec café “(bread with chocolate and coffee) or in the evening you might take your bread with wine at your meal.



Wine

There is not a region in France that is NOT known for some type of [wine](#). Wine is commonly served with dinner along with water or carbonated mineral water. If you were to think about all the wines that have French names, it would soon become clear that the wine industry is quite large in France. For example:



- Champagne comes from the Champagne region in France.
- Chardonnay (believed to have originated in France)
- Merlot
- Burgundy wine

These are just a small sampling of the wines that are produced in France. France reportedly makes close to 900 million dollars off of the wine industry.

Truffles

Although truffles can be found all over the world, French cuisine is known for them. The truffle is a strong-tasting fungus that grows under trees in forested areas. Leave it to the French to make a fungus simply divine!



Techniques You Probably Know

There are many French cooking techniques that you probably know:

- Flambé--to cook or finish something by pouring alcohol over it and then lighting it on fire.

- Sauté--cooking something in fat, over high heat
- Emulsion--an emulsion means that you have a lot of fat distributed evenly through a mixture. (An example in mayonnaise.)
- Julienne--if you julienne vegetables properly, they will be as thin as match sticks.

Early French Cuisine

During the middle Ages, French food was already an important part of life for many people, but a French meal looked very different then than it does nowadays. Perhaps the largest difference is that during this time, a large number of different dishes were all prepared for a meal, but they were served in agreement. This way of presenting food was aptly named *service en confusion*, where all food items were placed on the table at once, and much of the food was eaten with one's hands. The practice of serving various dishes as separate courses would not be introduced until centuries later, as would the practice of serving each person at the table instead of putting the dishes on the table family style.

In spite of these differences in how people served and ate food, many features of 21st century French food were already in place. Food during this period already had rich sauces filled with spices. Though the techniques were different then, many dishes have their roots during this period, such as sweet pastries and large pieces of meat served with sauces or mustards. The culture of drinking alcoholic beverages also existed, but beer was more common than wine.

Another important parallel between now and then is that the visual appeal of food was already considered paramount in the middle Ages. Aesthetics have changed, but the idea that food is not only a treat for the taste buds, but also a visual feast, has remained stable.

Later Italian Influence

When Catherine de Medici came to France in the 1540s, Italian influences came with her. Although food had always been visually appealing in France, the idea of food as theatre was new. Under her reign as Queen and then Queen Mother of France (three of her sons became King of France); the dinners she hosted helped move French cuisine forward in history. Fine tableware and glassware became important during this period, and the use of colour also took centre stage. New foods were also introduced during this time, both from the Mediterranean, such as tomatoes, as well as from distant regions, such as green beans coming to France for the first time from the New World.

Advent of French Courses

One of the defining characteristics of a modern French meal is that there are several courses, served slowly and in series. This concept was introduced at Versailles by King Louis XIV. Instead of allowing the food served 'in confusion' as before, the Sun King encouraged the servants to bring one dish at a time. It was also during this period that silverware became commonplace.

Historical Chefs Shape Traditional Dishes

Crème

Crème is one of the most well-known French chefs in history. Travelling the world, he brought another feature of contemporary French dining back to France: serving each guest at the table, which he learned in Russia. Crème was also known for his impressive feats of architecture with food, such as making bridges and towers out of pastries and breads. A walk by fancy French bakers' and pastry shop windows confirms that this practice is still a favourite in France.



Montage

Montage is another great French chef, who wrote what is still considered to be the Bible of French Cuisine: the *Larousse Gastronomique*. A comprehensive book, it provides every detail needed for a flawless French meal. This book helped bring the standards he wrote about to every corner of France, decreasing the influence of regional cuisines, and increasing the influence of a national, French, culinary art.



Escoffier

Escoffier is responsible for the modern way of preparing food in restaurants, meaning that different people prepare each part of a dish. While one chef is grilling the meat to perfection, another is preparing the sauce. This manner of cooking allowed all elements of the meal to be prepared by a person specialized in that area, as well as ensuring that all components are still hot when they arrive on the table. Many consider Escoffier to be the most prominent figure in establishing French *haute cuisine*. These traditional dishes, have now been fused with the *nouvelle cuisine* to form what is common in the 21st century.



Nouvelle Cuisine Is Born

Since the 1950s, French food has been refined and pared down. While the basic principles of artistry and the refinement of taste remained central, this period reduced the serving size of the meal and increased the size of the plate to serve it on as well as the number of decorations around the food. The number of courses decreased, and varied according to the meal and the occasion. For example, while a midweek lunch may consist of only three courses, a seven course meal is common on weekends.



2.2 CHINESE CUISINE

Food has a special meaning to the Chinese people. The "waste not, want not" ethos means that a surprising range and variety of plants and animals, and every part of a plant or animal is used. This has given rise to a remarkable diversity in regional cuisine, but to Westerners it can be overwhelming - surprising, fantastic, delicious, horrifying or disgusting - but above all, different.



China's Regional Cuisines

China can be divided into many geographical areas, and each area has a distinct style of cooking. The ingredients used in the food are based on the natural agricultural products of the region.

In Northern China, for example, wheat is eaten more than rice as a staple food. Food using wheat as its main ingredient, such as noodles and dumplings is common there. China's Southern cuisine uses far more rice, with such staples as rice noodles and zongzi - sticky rice wrapped in leaves. Southern food, is typically spicier, and many minorities eat chilies every day.

Chuan Cuisine (Sichuan Cuisine)

Sichuan Cuisine is the most widely served cuisine in China. The dishes of Sichuan Cuisine are famous for their hot and spicy flavour. An outstanding facet of Sichuan dishes is the delicate use of pepper or chilli. The ingredients used are great in variety, including poultry, pork, beef, fish, vegetables and tofu. The methods of cooking vary according to the texture required. Fast-frying is the most widely used cooking method.

Sichuan Cuisine wins universal praise for its hotness, sourness and numbness it produces, which are rare in other regional cuisines. This together sum up the unique flavour of Chuan Cuisine, which enjoys a good reputation as a cuisine that is "one dish with one

flavour and one hundred dishes with one hundred flavours". Its cooking methods include baking, sautéing, dry-sautéing and steaming. Chuan Cuisine has good combinations of flavours and often has thick gravy.

Although, Chuan Cuisine is served at every corner of the world, the most authentic Sichuan food is still to be found at its hometowns: Chengdu and Chongqing.

Typical Sichuan Dishes

Mapo Bean Curd (Mapo Tofu)

Mapo Bean Curd is bean curd set in a chilli-and-bean based sauce, which is usually a thin, oily, and bright red suspension, and often topped with minced meat, usually pork or beef. Seasonings include water chestnuts, onions, other vegetables, or wood ear fungus. The taste of Mapo Bean Curd is fittingly described as numbing, spicy hot, fresh, tender and soft, aromatic and flaky. Mapo Bean Curd is easy to find outside of China.

Spicy Diced Chicken (Kung Pao Chicken)

Spicy Diced Chicken is cooked by frying diced chicken, dry red pepper and golden peanuts. Spicy Diced Chicken is as popular among Westerners as Mapo Bean Curd.

Fuqi Fei Pian (Husband and Wife Lung Slices)

Fuqi Fei Pian is made of thinly sliced beef, bovine lung or tongue seasoned with chili oil. There is a romantic story of the origin of this famous Sichuan dish. Guo Zhaohua (the inventor) and his wife sold their acetarious (treated with vinegar) beef slices by trundling a small cart along the street. Their beef slices were very delicious, and no one could resist the charming smell in that street. People liked the food made by this couple very much, so they gave it the name Husband and Wife Lung Slices.

Sichuan Hot Pot

Sichuan Hot Pot, like most of the cuisine in that humid and populous province, is very spicy. The broth is flavoured with chilli peppers and other pungent herbs and spices. The main ingredients include hot pepper, Chinese crystal sugar and wine. Slices of kidney, chicken breast, beef tripe, goose intestines, spring onion, soy bean sprouts, mushrooms, duck and sea cucumber are the usual meats used in the dish.

Sichuan Dishes Menu

English

1. Sichuan Hotpot
2. Husband and Wife Lung Slices (slices of beef and offal seasoned with chili oil)
3. Water Boiled Beef
4. Fish Flavoured Beef Shreds
5. Fried Bean Curd and Beef with Cayenne Pepper (very spicy)
6. Boiled Mutton
7. Twice Cooked Pork
8. Steamed Pork with Spicy Cabbage
9. Kung Pao Chicken (diced chicken fried with peanuts/cashews)
10. Chongqing Spicy Deep-Fried Chicken
11. Sesame Oil Chicken
12. Duck Hotpot (the hotpot is divided into two parts: one spicy, one plain)
13. Boiled Fish with Pickled Chinese cabbage
14. Dongpo Cuttlefish
15. Stir-Fried Bean Curd in Chili Sauce

Cantonese Cuisine

Cantonese Cuisine, also known as Yue Cuisine, is the culinary style of Guangdong Province, which was called Canton when the Wade-Giles Romanization of Chinese was in use. This particular type of Chinese food has been popularized by Chinese restaurants around the world as the majority of those who set up these restaurants were of Cantonese origin.

Guangdong dishes are characterized by their tender and slightly sweet taste. Sauces are a crucial seasoning in Guangdong cuisine. Classic Cantonese sauces are light and mellow. The most widely used sauces in Guangdong Cuisine include: hoisin sauce, oyster sauce, plum sauce and sweet and sour sauce. Other ingredients popular in Guangdong Cuisine include spring onions, sugar, salt, soya bean products, rice wine, corn starch, vinegar and sesame oil. Garlic is used heavily in some dishes, especially those in which internal organs, such as entrails, may emit unpleasant odors. Ginger, chili peppers, five-spice powder, powdered white pepper, star anise and a few other spices are used, but often sparingly.

The raw materials for Guangdong Cuisine are very plentiful. "The Chinese eat everything with four legs, except tables, and everything that flies except airplanes" is the most suitable expression of the countless variety of Guangdong food. Things that are rarely eaten or rarely seen on Western tables are commonly used in Guangdong dishes. Snake, cat

and pangolin (scaly anteater) are considered by the Cantonese people to be most delicious food.

In contrast to the fast-fried cooking method of Sichuan dishes, Guangdong people prefer to braise, stew and sauté their food. These cooking methods aim to preserve the flavour of the dishes.

Cantonese Dishes

Traditional Dishes

These dishes are the earliest collection of Chinese food. They are often simple and easy to learn and cook, and are widely found in Chinese homes. They are also the most common foods on the menus of Cantonese restaurants.

Chinese Steamed Eggs

Chinese Steamed Eggs are made by beating eggs to a creamy consistency and then steaming. Variations are derived by adding different ingredients, such as spring onion and soy sauce.

Deep Fried Dishes

Although deep fried dishes are not the main stream of Guangdong dishes, there are quite a number of them which are very popular both in China and in the West.

Zhaliang (literally "Fried Two")

Zhaliang is made by tightly wrapping a rice sheet roll round a youtiao (deep-fried dough stick). Zhaliang is widely eaten in Guangdong and Hong Kong. It is usually eaten with soy milk.

Youtiao

A youtiao is a long, golden-brown deep-fried strip of dough. Youtiaos are usually eaten for breakfast with soy milk.

Noodle Dishes

Shahe Noodles (Shahefen)

Shahe noodles are a kind of rice noodles which probably originate from the town of Shahe, now part of Guangzhou. They are broad and white in color. Their texture is elastic and a little chewy. They do not freeze or dry well and are thus generally (where available)

purchased fresh, in strips or sheets that may be cut to the desired width. Shahefen is popular in southern China's Guangdong, Guangxi and Hainan provinces.

Other Dishes

Baiqie Chicken (White Cut Chicken)

Baiqie Chicken is made by boiling salt-marinated chicken in water or chicken broth. When it is done, the chicken looks golden in color and tastes fresh and light, preserving the best of the original taste of chicken.

The famous Baiqie Chicken served by Panxi Restaurant in Guangzhou is believed to be the most delicious. The restaurant has received the Golden Tripod of High-Quality Production from the Department of Commerce for its Baiqie Chicken.

A Cantonese Food Menu

English

1. Dry-Fried Beef and Noodles
2. Barbequed Pork (Char Siu)
3. Soy Sauce Chicken
4. White Cut Chicken
5. Preserved Salted Duck
6. Tea-Smoked Duck
7. Brine-Soaked Duck
8. Dace (fish) Balls
9. Steamed Frog on a Lotus Leaf
10. Shark Fin Soup
11. Cantonese Seafood Soup
12. Orange Cuttlefish
13. Sea Cucumber (Hoi Sam)
14. Small Pan Rice
15. Pastries (Gou Dim)



Xiang Cuisine

Hunan cuisine, also called Xiang cuisine, stems from a province that has an age-old reputation as a "land of fish and rice". Hunan Province has always been a cornucopia as far as foodstuffs go. The salient features of Hunan cuisine are richness, creaminess, and moistness, combined with a



delicate use of chili. Hunan cuisine is also fragrant, with crunchy fresh vegetables that are cooked "al dente". It is said of Hunan cuisine that it not only has the saltiness of the cuisines of North China and the sweetness of the cuisines of South China, it also has the spicy-hotness as well as the tanginess of more local dishes. Moreover, Hunan cuisine relies on fresh, local ingredients that are seasonal staples, which is another reason why Hunan cuisine is often less expensive than other cuisines.

Hunan cuisine favours cooking techniques such as sautéing, stir-frying, steaming and smoking. It is renowned for its "stewed" dishes. However, Hunan cuisine excels at braising and baking, which lend themselves admirably to the raw materials that make up Hunan cuisine. Equally as important to Hunan cuisine is the art of cutting meats and vegetables, both to please the eye and, in the case of meats, to enhance the tenderness of the finished product.

The special seasonings of Hunan cuisine include soy sauce, tea seed oil, spicy oil, Chinese red pepper, fennel and cassia bark, each of which add its own particular colour and flavour to the cuisine. Hunan cuisine is noted for pungency, thanks to its generous but judicious use of spices, especially the use of chilli, which is as standard to Hunan cuisine as it is to South American or Indian cuisine. To the people of Hunan, chilli can be enjoyed in almost every dish except ice cream.

Xiang Cuisine Menu

English

1. Steamed Hams
2. Pork Tripe Soup
3. Spicy Chicken
4. Steamed Fish Head with Diced Spicy Red Peppers
5. Money Fish
6. Red Roasted Shark's Fin
7. Sugar Candy Lotus

Lu Cuisine

Lu Cuisine, also called Shandong Cuisine, is originated from the native cooking styles of East China's Shandong Province. Its history can date back to Qin Dynasty (221 BC to 207 BC). It has become one of China's eight cuisines since Song Dynasty (960 AD to 1234 AD). It is the most prevalent distinct regional cuisine in China, popular throughout Beijing, Tianjin and Northeast China.

Lu Cuisine is more inclined to keep the freshness of ingredients than other cuisines and fond of salt flavour, featured with tender, savoury and crisp. It is particular about making soup.

Seafood is the most notable ingredient of Lu Cuisine as Shandong is a coastal province, including scallops, prawns, clams, sea cucumbers, and squid, which are all local ingredients of exemplary quality. Besides seafood, corn, peanuts, grains such as small grains, millet, wheat, oat and barley, and staple vegetables of Shandong province including potatoes, tomatoes, cabbages, mushrooms, onions, garlic and eggplants.



There are over thirty cooking techniques applied in Lu Cuisine, among which Bao technique (quick-fry) and Pa technique are frequently and well used in Lu Cuisine. In Bao (quick-fry), foods are deep-fried in very hot oil over high heat and then the oil is poured out and seasonings are added to the food, which is left in the wok. Pa technique, derived from Shandong Province, is first to cut the well-cooked ingredient into a particular shape, then stick some powder and fry it into golden, finally add some kind of sauce to sauté it while stirring continuously.

Lu Cuisine Dishes

English

1. Stewed Pork Hock
2. Diced Pork Cooked in a Pot
3. Braised Colon in Brown Sauce
4. Lungs in Milk Soup
5. Four Joy Meatballs
6. Eight Treasures Stuffed Chicken in Milk Soup
7. Dezhou Grilled Chicken



Hui Cuisine

Hui Cuisine is also called Anhui Cuisine or Wan Cuisine. It is one of the eight famous cuisines of China, derived from North China's Anhui Province. Anhui Cuisine mainly consists of three styles representing three regions: Yangtze River region, Huai River region, and Southern Anhui region. Among them the South Anhui style is the most notable. The birthplace of South Anhui style is She County, located at a world-famous tourist destination, Huangshan (the Yellow Mountains).

Anhui is abundant in uncultivated fields, mountains and forests, which provide Anhui Cuisine rich local ingredients. Hui Cuisine uses only local produce, so the freshness of the dishes is unparalleled. Most ingredients in Anhui Cuisine, such as pangolin, stone frog, mushroom, bayberry, tea leaves, bamboo shoots and dates all come from mountain areas. The Yellow Mountains are rich in raw materials suitable for cooking. Wild herbs are readily available here. Hui Cuisine places a great deal of attention on natural foods, which makes it a healthy cuisine. It follows traditional ways and uses foods that are also used for medicinal purposes. The use of wild herbs is one of Hui Cuisine's great features.



Hui Cuisine is particular about controlling cooking time and temperature. High, medium or slow heat is applied according to the quality and characteristics of the different materials and the flavour requirements of finished dishes. Hui Cuisine requires skill in sautéing and stewing to achieve a delicate lightness in taste. Some typical dishes stewed in brown sauce may appear a little heavy on oil compared to some other styles. Ham is also often added to enhance the taste.

Some dishes representative of the Hui style of cuisine are: Stir-Fried Frog with Log Flower Mushrooms; Phoenix-Tailed Shrimp Steak; Li Hongzhang Hotchpotch; Bagong Mountain Bean Curd; Grape Fish, Mountain Bamboo Shoots, Assorted Meats; Phoenix-Tailed Shrimp in a Bird's Nest and Red Taro in Honey.

Hui Cuisine Menu

English

1. Ham and “Whippy” Bamboo Stew
2. Stewed Turtle with Ham
3. Red-Cooked Chicken
4. Snowy Winter Roast Chicken
5. Tasteless Smoked Duck
6. Fat King Fish in Milk Soup
7. Honeycomb Tofu
8. Braised Masked Palm Civet



Zhe Cuisine

Zhejiang cuisine, called Zhe cuisine for short, is originated from South China's Zhejiang Province. It is famous for its mellow, yet not greasy, taste. It consists of three major styles, namely Hangzhou style, Ningbo style and Shaoxing style. Among them, Hangzhou style is the great cooking style. It has good taste as well as soft looking. It requires skill in the cooking techniques of quick frying, stir-frying, braising and deep-frying and features clearness, freshness, tenderness, delicateness and purity. Besides seafood and freshwater fish, Hangzhou style exhibits a fondness for bamboo roots. About half the dishes on a Hangzhou menu contain bamboo roots, which add a tender element to the food. Ningbo chefs are especially skilful in making seafood. The best-known Ningbo cooking techniques are stewing, baking and steaming. The taste is moderate in freshness and saltiness. Ningbo chefs' specialties are making dishes fresh, tender and soft. Attention is placed on its original flavour. Shaoxing style is fragrant, crisp, soft and glutinous, with thick soup and pure flavour. Shaoxing style specializes in poultry and freshwater fish.

Zhejiang Province, located at the Yangtze River Delta, is the famous "land of milk and honey" in China. Using the rich collection of local ingredients, Zhe Cuisine has an extensive selection of materials and a precisely matches these materials. Attention is placed on the season and variety of main ingredients. The choice of supplementary ingredients and seasonings is aimed to give prominence to the main ingredients, strengthen freshness and fragrance and get rid of the smell of fish and greasiness. Most attention is placed on moderation in duration and degree of cooking as well as seasoning.

Zhe Cuisine Menu

English

1. Dongpo Pork (Stir-Fried Pork)
2. Beggar's Chicken
3. West Lake Fish in Vinegar Gravy
4. Splendid Fish
5. Fish Balls in Clear Soup
6. Sliced Fried Eel
7. Braised Croaker Soup
8. Fried Cuttlefish Rolls
9. Fried Shrimps with Longjing Tea



Su Cuisine

Jiangsu Cuisine, called Su Cuisine for short, originates from the native cooking styles of South China's Jiangsu Province. It has a fresh taste, with moderate saltiness and sweetness, which is thick without being greasy, and light without being thin. Meanwhile it places an attention on the making of soup and retaining the original taste of the ingredients. Once it was the second largest cuisine among ancient China's royal cuisines, and it remains a major part of the state banquet in China.

Su Cuisine is made up of or composed of six styles:

- Nanjing Style,
- Yangzhou Style,
- Suzhou Style,
- Huai'an Cuisine,
- Xuzhou Cuisine and
- Haizhou Cuisine.

Among them Nanjing Style, Suzhou Style and Yangzhou Style are very important styles. Nanjing Style is famous for its fine cutting techniques, which makes the dishes not only fine-tasting, but also very delicate and good-looking. It features freshness, fragrance, crispness and tenderness. Suzhou Cuisine tends to be sweet in taste and excels in using vegetables of the four seasons, freshwater fish and seafood. Yangzhou Style, which has been called Huai-Yang Style in the past, is renowned for its fine cutting techniques, perfect timing, fresh colour and original design.

There is an excellence in cooking methods such as stewing, simmering, and baking over a slow fire, warming up, steaming, sautéing, stir-frying, and skilful braising in mud and baking on forks. Su Cuisine has exhibited a fondness for duck dishes since about one thousand years ago. A rich variety of local vegetables are widely used in Su Cuisine, including water shield (or *Brasenia*) from Taihu (Tai Lake), lotus, Chinese chestnut, winter bamboo shoots, water bamboo and water chestnuts.

Su Cuisine Menu

English

1. Water Melon Chicken
2. Brine-Boiled Duck
3. Sweet and Sour Mandarin Fish



4. Duck Wrapped in Shark Fins
5. Fireside Broth

Min Cuisine

Min Cuisine, also called Fujian Cuisine, originates from South China's Fujian Province. The history of Min Cuisine dates back to 5000 years ago. It consists of three styles, namely Fuzhou style, which is usually tastes light compared with other styles, often with a mixed sweet and sour taste; Western Fujian style, featuring slightly spicy flavouring from mustard and pepper; and Southern Fujian style, which usually tastes spicy and sweet.



The three notable features of Min Cuisine are: the use of delicacies from the mountains and sea as the main ingredients, a specialist in soup making and expertise in applying various kinds of seasonings. Fujian's abundant natural resources mean Fujian Cuisine is rich in high-quality ingredients, especially delicacies from the mountains and sea.

Min Cuisine pays a great deal of attention on utilizing soup. As a saying about the region's cuisine goes: "It is unacceptable for a meal not to have soup". Fujian people like to use various kinds of sauces and seasonings to create the tastes of salty, sweet, sour and spicy. Salty seasonings include shrimp sauce, shrimp oil and soy sauce; sour seasonings include white vinegar and qiaotou (a vegetable similar to green onion and garlic); sweet seasonings include brown sugar and crystal sugar; sweet-smelling seasonings include brown sugar, spiced powder, aniseed and cassia bark; and spicy seasonings include pepper and mustard.

The cooking techniques of Fujian Cuisine are: pan-frying, deep-frying, boiling, baking, stewing, mixing, sautéing with wine, stewing in gravy, grilling, cooking with red rice wine, simmering, stir-frying, smoking, braising and salting. Among them the most characteristic one is cooking with red rice wine, which includes stir-frying with red rice wine, and baking with red rice wine, quick-frying with red rice wine and deep-frying with red rice wine. The "drunken" (cooked in wine) dishes are prevalent in Fujian Province and very famous throughout China.

Min Cuisine Dishes

English

1. Stewed Chicken with Three Cups Sauce



2. Steamed Chicken in Red Fermented Rice
3. Sliced Chicken in Red Fermented Rice
4. Buddha Jumping Wall (Sea Food and Poultry Casserole)
5. Steamed Strengthening Fish
6. Tai Chi Prawns
7. Hot and Sour Squid
8. Sweet and Sour Litchi.

2.3 ITALIAN CUISINE

GEOGRAPHIC SETTING AND ENVIRONMENT

Located in southern Europe, Italy is slightly larger than the state of Arizona. Most of Italy is mountainous, and it is home to Mount Vesuvius, the only active volcano on the European mainland.

A fertile valley surrounds the Po River, the largest river in Italy. Many different plants grow in its rich soil.

Italy is surrounded by water on three sides and benefits from a variety of seafood and coastal vegetation.

Climate varies depending on elevation and region. Colder temperatures can be found in the mountainous regions, particularly within the high peaks of the Alps, a mountain range in the northwest. Temperatures are warmer in the Po River valley, the coastal lowlands, and on Italy's islands (Sicily and Sardinia), with an average annual temperature around 60°F.

Plants and animals also vary depending on elevation and region. Italy hosts a wide variety of trees, including conifers, beech, oak, and chestnut in the higher elevations. Evergreens, cork, juniper, laurel, and dwarf palms are widespread throughout the Po River Valley and Italy's islands.

HISTORY AND FOOD

From the early Middle Ages (beginning around A.D. 500) to the late 1800s, Italy consisted of separate republics, each with different culinary (cooking) customs. These varying cooking practices, which were passed down from generation to generation, contributed to the diversity



of Italian cuisine. Italy's neighbouring countries, including France, Austria, and Yugoslavia, also contributed to differences in the country's cuisine.

Italy changed in many ways when the economy flourished following World War II (1939–45). During this time, farming was modernized and new technologies and farming systems were introduced. Various culinary practices throughout the country's regions began to be combined after people started migrating from the countryside to the cities. Many southern Italians travelled to the north at this time, introducing pizza to northern Italians. Those from the north introduced risotto (a rice dish) and polenta (a simple, cornmeal dish) to the south. Fast foods, mostly introduced from the United States, have brought more culinary diversity to Italy. However, pride in the culture of one's region, or *companilismo*, extends to the food of the locality, and regional cooking styles are celebrated throughout the country.

FOODS OF THE ITALIANS

Although Italians are known throughout the world for pizza, pasta, and tomato sauce, the national diet of Italy has traditionally differed greatly by region. Prior to the blending of cooking practices among different regions, it was possible to distinguish Italian cooking simply by the type of cooking fat used: butter was used in the north, pork fat in the centre of the country, and olive oil in the south. Staple dishes in the north were rice and polenta, and pasta was most popular throughout the south. During the last decades of the 20th century (1980s and 1990s), however, pasta and pizza (another traditional southern food) became popular in the north of Italy. Pasta is more likely to be served with a white cheese sauce in the north and a tomato-based sauce in the south.

Italians are known for their use of herbs in cooking, especially oregano, basil, thyme, parsley, rosemary, and sage. Cheese also plays an important role in Italian cuisine. There are more than 400 types of cheese made in Italy, with Parmesan, mozzarella, and Asiago among the best known worldwide. *Prosciutto* ham, the most popular ingredient of the Italian *antipasto* (first course) was first made in Parma, a city that also gave its name to Parmesan cheese.

There are many regional variations of cooking throughout Italy, but in general grain foods such as pasta, bread, rice, and polenta are mixed in a variety of interesting ways with vegetables, beans, fish, poultry, nuts, cheeses and meat.

Grain foods

Since ancient times, grains such as wheat have been a staple food throughout Italy. Indeed, wheat is one of the most revered foods in Italian cookery. It's used to make a variety of interesting breads including ciabatta, focaccia and crusty whole grain bread. Pasta, which

is made from wheat and comes in dozens of different shapes, has also been a highly-prized food for centuries

Vegetables and fruits

There's an old saying that good cooking begins in the market, and never is this truer than with authentic Italian cuisine which relies heavily on fresh produce. The most commonly used vegetables include tomatoes, garlic, onions, bell peppers (capsicum), eggplants (aubergine), cabbage, zucchini (courgettes), artichokes, fennel, mushrooms, celery, asparagus, broccoli, spinach, cauliflower and lettuce.



These vegetables are traditionally chopped and added to bakes, pasta dishes, risottos and pizza or turned into salads, soups, antipasti (appetizers) and side dishes. Fruits, both fresh and dried, are eaten as snacks and desserts. Popular types of fruit include grapes, berries, citrus fruit such as oranges and lemons, figs, pears, cherries, apples and plums.

Olives and Olive oil

Southern Italy shares a similar Mediterranean climate to Greece, Provence and Spain. This warm, sunny climate makes it ideal for olive growing.

Whole olives are used in cooking, but the most revered part of the olive is the honey it produces. The first cold pressing of the best olives produces extra virgin olive oil. This golden-green, richly flavoured oil is used in hot dishes, marinades, salad dressings or drizzled on fresh crusty bread.



Fish, shellfish, poultry and eggs

The coastline of Italy is dotted with fishing villages and fish and shellfish are a traditional staple in most parts of the country.

Popular varieties of fish include tuna, anchovies, sardines, swordfish, cod, salmon, shrimp, crab, squid, clams and mussels. This fish and shellfish is traditionally added to stews, pasta dishes, bakes, risottos and pizzas, or simply served grilled, baked or lightly fried in olive oil with side dishes. Poultry, especially chicken, is also eaten regularly. Eggs, which are a common ingredient in many Italian dishes such as frittata, are traditionally eaten regularly, but in modest amounts.

Legumes and nuts

Legumes (beans, peas and lentils) are a highly popular food throughout Italy. In the Tuscany region, for example, beans are so highly regarded that Tuscans are fondly known as the "bean eaters." Commonly eaten beans include chickpeas and cannellini beans. Green peas and green beans are also regularly used in Italian cookery, as are lentils, which are added to soups and stews.



Nuts such as pine nuts, walnuts and almonds are used in cooking or eaten as snacks. One of Italy's most famous sauces, pesto—which originates from the seaport of Genoa—is a mixture of pine nuts, garlic, fresh basil, Parmesan cheese and olive oil. (There are also other variations of pesto such as Sun-dried tomato and walnut pesto.)

Cheeses

Cheese is traditionally eaten regularly, but in moderation, throughout Italy. Some of the most popular types of cheese include Parmesan (the most highly regarded type being Parmigianino Reggiano), mozzarella (classically made from the milk of a water buffalo, but available in a cow's milk variety), Romano, gorgonzola and ricotta.

Cheese is used in bakes or to top pizza, sprinkled over pasta dishes, mixed through risottos, tossed in salads or eaten with fruit as a dessert.

Herbs and seasonings

Letting the flavour of fresh ingredients shine through is a fundamental part of Italian cookery, so elaborate spices don't feature prominently. Instead fresh or dried herbs such as basil, flat-leaf parsley, rosemary and oregano are used simply to highlight the flavours of the food. Other important seasonings include salt, freshly cracked pepper, vinegar (such as balsamic vinegar) and foods that impart a rich flavour such as anchovies, garlic, capers, olives and sun-dried tomatoes.



Lemon juice and wine are also common flavour enhancers, and fruity extra-virgin olive oil adds flavour and texture when a little is stirred through dishes like's stews, soups or pasta sauces at the end of cooking.

Beverages and desserts

Wine has been the most popular alcoholic beverage since ancient times. It's customary in Italy to consume



wine with meals, and in moderation. Strong coffee is the most popular non-alcoholic beverage.

Traditionally, elaborate desserts have been reserved for special occasions. Fresh and dried fruit, or a little cheese, are the typical dessert.

To protect his produce from too much handling, this vendor displays a sign reading "Please don't touch" in Italian. Per favore is "please."

Cory Langley

Pasta e Fagioli (Noodle and Bean Soup)

Ingredients

- 5 cups water
- 1½ cups dried white beans: navy, baby lima, or northern
- 1 onion, coarsely chopped
- 2 cups canned Italian-style tomatoes, with juice
- 1 cup each of celery and carrots, finely chopped and sliced
- 3 cloves garlic, coarsely chopped, or 1 teaspoon garlic granules
- ½ pound cooked smoked ham, chopped
- 3 bay leaves
- ½ cup macaroni (shells, bows, or elbows), uncooked
- Salt and pepper, to taste
- ½ cup Parmesan cheese, grated, for garnish



Procedure

1. Place water and beans in saucepan.
2. Bring to a boil over high heat for 3 minutes and remove from heat.
3. Cover and set aside for 1 hour.
4. Add the onion, tomatoes, celery, carrots, garlic, smoked ham, and bay leaves.
5. Mix well and bring to a boil over high heat.

6. Reduce to simmer, cover, and cook until beans are tender (about 1½ hour). Stir frequently.
7. Add macaroni and mix well. Cover and continue simmering until macaroni is tender (about 12 minutes).
8. Remove and throw out bay leaves before serving.
9. Serve hot soup in individual bowls with a side dish of Parmesan cheese for the guests to sprinkle into their soup. Serve with crusty bread to dip in the soup.

Fettuccine Alfredo

Ingredients

- 1 cup butter or margarine at room temperature
- ½ cup heavy cream
- ½ cup Parmesan cheese, grated
- 1-pound cooked pasta, such as fettuccini (cook according to directions on package)
- Salt, pepper, and ground [nutmeg](#) to taste



Procedure

1. Cook pasta according to directions on package. Warm a serving bowl in the oven set to the lowest temperature until ready to use.
2. Place butter or margarine in a mixing bowl, and using a wooden spoon, beat until light and fluffy. Gradually add cream and mix until well blended.
3. Add the cheese by Tablespoon, beating well after each addition.
4. Using oven mitts, remove the heated serving bowl from oven and place on a heatproof work surface.
5. Place the drained, cooked pasta in the warm bowl and add cheese mixture.
6. Make sure all the pasta is coated with the sauce.
7. Add salt, pepper, and nutmeg to taste and continue to coat pasta.
8. Serve while very hot with a side dish of grated cheese.
9. The dish goes well with a green salad with Italian dressing and warm garlic bread.

Polenta

Commercial instant polenta is available in packages in the supermarket, usually displayed near the packaged rice. It would be an adequate substitute for the traditional method of preparation.

**Ingredients**

- 1 pound coarsely ground corn meal
- 8 cups water
- 1 teaspoon salt

Procedure

1. Measure the water into a large pot, add the salt, and heat the water to boiling.
2. Add the corn meal to the boiling water in a very slow stream, stirring constantly with a wooden spoon to keep lumps from forming.
3. Don't let the water stop boiling.
4. Continue stirring as the polenta (mush) thickens, for about 30 minutes, adding small amounts of boiling water if necessary (the longer you stir, the better the polenta will be; the finished polenta should have the consistency of firm mashed potatoes).
5. The polenta is done when it peels easily off the sides of the pot.

Saltimbocca allay Romana (Veal Scallops with Sage and Prosciutto)

Note: This recipe involves hot oil. Adult supervision is suggested.

Ingredients

- 12 slices of veal scallops (1½ pounds)
- 12 fresh sage leaves
- 12 slices of prosciutto ham
- Flour, for dusting
- 3 Tablespoons unsalted butter
- 3 Tablespoons olive oil
- 1 cup white wine



- 1½ pounds freshly cooked spinach, seasoned with salt and pepper

Procedure

1. Spread out veal scallops and lay one sage leaf and one slice of ham on each.
2. Roll up and secure with toothpicks.
3. Lightly dust each with flour.
4. Heat the butter and oil in a skillet large enough to hold all the rolls in one layer.
5. Sauté, turning the rolls carefully, until brown.
6. Lift the veal from the pan and set aside on a warm platter.
7. Add the wine to the skillet, add salt and pepper to taste, and cook to reduce the size by half.
8. Arrange the hot spinach on a warm dish, place the veal on it, and cover with the wine sauce.

FOOD FOR RELIGIOUS AND HOLIDAY CELEBRATIONS

Every Italian village celebrates its own saint's day with a festival featuring fireworks, feasting, and dancing. The traditional main dish for these festivals is roasting suckling pig. A popular Easter dish throughout Italy is *Agnellino* (roast baby lamb), often served with roasted artichokes.

Santa Lucia Dinner

Minestrone soup

Osso bucco (braised veal shanks) with baby artichokes

Lemon orzo (a rice-like pasta)

Arugula salad with lemon-garlic vinaigrette dressing

Ripe peaches and figs

Biscotti

Although the holiday bread called *panet-tone* is the best known of Italy's many holiday desserts, regions throughout the country have their own traditional holiday sweets featuring local ingredients. In the north, butter is a major ingredient of these desserts. *Zelten* cakes, similar to fruitcake, are filled with raisins, dates, figs, almonds, pine nuts, orange peel, rum, and cinnamon, are baked two or three weeks before Christmas because they improve with

time. Strudel is popular in the Tyrol region in northern Italy. In the south, dessert recipes are more elaborate and use olive oil (instead of butter), lots of eggs, candied fruit, and honey. Among the best known are *struffoli*, fried cubes of egg pastry covered with honey and sprinkled with colored sugar, a specialty from Naples.

Italian Easter Bread

Ingredients

- 3 cups flour
- $\frac{1}{4}$ cup sugar
- 1 package active dry yeast
- 1 teaspoon salt
- $\frac{2}{3}$ cup warm milk
- 2 Tablespoons butter, softened
- 7 eggs
- $\frac{1}{2}$ cup mixed candied fruit, chopped
- $\frac{1}{4}$ cup almonds, chopped
- $\frac{1}{2}$ teaspoon anise seed
- Vegetable oil



Procedure

1. In a mixing bowl, combine 1 cup flour, sugar, yeast and salt.
2. Add milk and butter; beat 2 minutes on medium.
3. Add 2 eggs and $\frac{1}{2}$ cup flour; beat 2 minutes on high.
4. Stir in the fruit, nuts, and anise seed, mixing well.
5. Stir in enough remaining flour to form soft dough.
6. Place on a lightly floured board and knead until smooth, 6 to 8 minutes.
7. Place in a greased bowl; turn once. Cover and let rise in a warm place until doubled, about 1 hour.
8. If desired, dye remaining eggs (leave eggs uncooked); lightly rub with oil.

9. With a fist dipped in flour, punch dough down. Divide in half and roll each piece into a 24-inch rope.
10. Loosely twist ropes together; place on the baking sheet and form into a ring. Pinch the ends together.
11. Gently split ropes and tuck eggs into openings. Cover and let rise until doubled, about 30 minutes.
12. Preheat oven to 350°F. Bake for 30 to 35 minutes, or until golden brown. Remove from the pan and cool on a wire rack.

Serves about 6.

Panettone (Italian Christmas Bread)

Ingredients

- 4 Tablespoons yeast
- 2 cups warm water
- ½ pound butter, melted
- 4 teaspoons salt
- 1 cup sugar
- 4 eggs, beaten
- 6 egg yolks, beaten (discard egg whites or save for another use)
- 10½ cups flour
- 2 cups citron, sliced fine
- 2 cups raisins, seedless
-



Procedure

1. Dissolve yeast in the water. Mix in the butter, sugar, salt, eggs, and yolks.
2. Stir about 10 cups of flour into the butter and yeast mixture until blended.
3. Spread a little flour on a board. Turn dough out onto the board and knead for 8 to 10 minutes. When the dough is soft and smooth, knead in the citron and raisins.
4. Place dough in a greased, round pan, and brush the top with melted butter.

5. Cover, and allow rising until the dough has doubled in bulk (about 1 hour).
6. Preheat oven to 425°F.
7. Using a sharp knife, cut a deep cross in the top of the loaf.
8. Bake for about 8 minutes, or until the top begins to brown. Lower heat to 325°F and bakes for 1 hour more.

Serves about 10.

Biscotti

Ingredients

- 6 eggs
- 1½ cup sugar
- ½ cup butter, melted
- ½ cup vegetable oil
- 3 cups flour
- 2 teaspoons baking powder
- 4 teaspoons vanilla or almond extract



Procedure

1. Preheat oven to 350°F.
2. Beat eggs. Add sugar and beat until thick and golden.
3. Add melted butter and oil and beat well.
4. Add vanilla or almond extract and blend well.
5. Add flour and baking powder, and beat until a thick dough forms.
6. Turn dough into ungreased 9-inch by 13-inch pan.
7. Bake at 350°F for 15 to 20 minutes.
8. Remove from oven and slice into three strips, 3 inches by 13 inches each.
9. Cut each strip into slices about 1 inch wide.



10. Place slices on a cookie sheet. Toast slices under the broiler. Turn, and toast other side.

Biscotti should be crunchy. Serve with coffee. Makes about 24 biscotti.

(Top) The baked biscotti are placed on a cookie sheet, ready to be toasted under the broiler.

(Bottom) When done, biscotti should have a light, crunchy texture.

MEALTIME CUSTOMS

Italians generally eat three meals a day. Adults eat a light breakfast (*la prima colazione*), often stopping at a coffee shop on their way to work for a *caffellatte* (coffee with milk) or *cappuccino* with bread, butter, and jam, or cake. Lunch and dinner are similar meals. They consist of an antipasto (an appetizer based on cold meats), a pasta or rice dish (depending on the region) such as risotto, a main meat or fish course, a salad, and cheese and fruit. Lunch (*il pranzo* or *la seconda colazione*) is the main meal of the day for many Italians and is eaten between noon and 2 P.M.

Whether eating at home or in a restaurant, Italians take food seriously. They prefer to dine in a leisurely fashion, savouring their meals over a bottle of wine and conversation. Wine and bread are always served during main meals. Even children are often allowed a taste of wine. In southern Italy, where people take a long break during the hottest part of the day, dinner (*la cena*) is served later than in the north, often after 7:30 P.M.

Originally a rural tradition, these snacks lost popularity following World War II as people migrated to Italian cities. However, increased interest in traditional dishes and consuming healthy, lighter meals has helped these snacks become popular again, even in the United States.

Frittata

Ingredients

- 2 eggs
- 1 teaspoon flat-leaf parsley, finely-chopped
- 1 small zucchini (known as *courgettes* throughout Europe), sliced thin
- 1 Tablespoon olive oil
- Salt and pepper to taste
-



Procedure

1. Place eggs and parsley into a bowl and beat well.
2. Heat oil in a skillet over medium heat.
3. Swirl the oil around in skillet to coat the bottom. Add the egg mixture.
4. Arrange zucchini slices in a single layer on top of the eggs.
5. Cook for 3 to 4 minutes. Hold a lid over the pan, and turn the pan over, flipping the frittata into the lid. Carefully slide the frittata back into the skillet, cooked side up. Cook other side until firm, about 2 more minutes. Add salt and pepper to taste.
6. Cut into 4 or 6 wedges.

Serve warm or at room temperature. Serves 4 to 6.

Bruschetta (Toasted Garlic Bread)**Ingredients**

- 6 slices of crusty white bread, cut ½- to ¾-inch thick, slices each cut in half
- 2 cloves garlic, lightly crushed
- ¼ cup extra virgin olive oil
- Salt

**Procedure**

1. Grill or broil the bread on each side.
2. Rub each slice with a crushed garlic clove, letting the juices sink into the bread.
3. Sprinkle olive oil and salt on the bread.
4. Serve warm, if possible.

Cannoli**Ingredients**

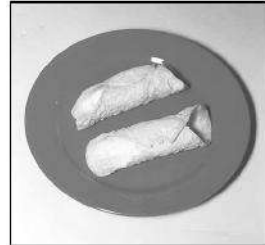
- 18 ready-made cannoli shells
- 2 pounds ricotta cheese
- 2 cups powdered sugar



- ¼ cup candied orange and citron, finely diced
- ¼ cup semisweet mini-chocolate chips
- ⅓ cup pistachio nuts, chopped medium to fine

Procedure

1. Mix the ricotta with the powdered sugar until it is no longer grainy.
2. Blend in the candied fruit and chocolate.
3. Whisk until the mixture is very creamy.
4. Place filling in a wide-nozzled pastry tube and fill the shells.
5. Place the chopped nuts on a flat surface and lightly dip both ends of the cannoli into the nuts to decorate. Then serve immediately. It serves to 18.



Unfilled cannoli shells are available in most supermarkets.

POLITICS, ECONOMICS, AND NUTRITION

The government in Italy controls much of the agriculture of the country. It controls how much wheat can be produced, for example, and how much wheat can be imported. The government was not successful during the 1990s in its efforts to increase agricultural production. Italy imports about one-half of its meat, and in the late 1990s and through 2001, concerns over European beef because of mad cow disease and hoof and mouth disease caused the prices of beef to increase.

Questions: - 2 marks

- | | |
|--|---|
| 1. Describe about French classical menu. | 13. Describe about Youtiao. |
| 2. Explain about haute cuisine. | 14. Explain about deep fried dishes in china. |
| 3. Infer on Nouvelle Cuisine. | 15. Write about Shahe noodles. |
| 4. Describe about Cuisine du terrior. | 16. Write down about Baiqie Chicken. |
| 5. Describe about Éclairs. | 17. List down the dishes of Min Cuisine. |
| 6. Explain about Baguette. | 18. Describe the history of Min cuisine. |
| 7. Infer on Crepes. | 19. List down the menu of Hui Cuisine |
| 8. Write a short note on Truffles and explain. | 20. Explain the climatic temperature of Italy. |
| 9. Write about Coq-au-vin. | 21. Describe the history and food of Italy. |
| 10. Write a short note on Montagne Chef. | 22. Explain about grain foods. |
| a. Describe about Fuqi Fei Pian. | 23. Importance of vegetables and fruits in Italy. |
| 11. Explain about Mapo bean curd. | |
| 12. Explain the importance of Cantonese cuisine. | |

24. Explain the food habits of Italian people.
25. Which is the most important popular ingredient used in Italian antipasto.
26. Mostly commonly used legumes and nuts. Explain.

Questions: - 5 marks

1. Describe about French Food methods in 4 ways.
2. Briefly explain about Nouvelle Cuisine.
3. Classify the difference between Cuisine du terroir and Haute Cuisine.
4. Describe about Regional areas influences and popular dishes of French.
5. Describe about Crème Brûlée.
6. Explain the recipe of Chocolate Mousse.
7. Explain about Artisan Cheese.
8. Describe about wine and various regions.
9. Write a short note on Escoffier Chef.
10. Explain about the regionalism in French food.
11. Describe about Min Cuisine.
12. Explain about Su Cuisine.
13. Infer on Zhe Cuisine.
14. List down the menu of Cantonese Cuisine.
- 15.
16. Describe about Hui Cuisine.
17. Describe about Lu Cuisine.
18. Infer on Xiang Cuisine.
19. Infer on Cantonese Cuisine.
20. Expand about the history of Chinese Cuisine.
21. Write a short note on Chuan Cuisine.
22. Write down about the recipe of Pastae Fagioli.
23. Describe about the recipe of Fettuccine Alfredo.
24. Explain about Polenta.
25. Describe about Saltimbocca alla Romana.
26. List down the dishes fall under Santa Lucia Dinner.
27. Write down the recipe for Italian Easter Bread.
28. Explain about Panettone or Italian Christmas Bread.
29. Describe about biscotti.
30. Describe about frittata.
31. Explain the recipe for cannoli.

UNIT

3

KITCHEN HYGIENE AND SANITATION

3.0 Introduction: The food processing sector is one of the largest industries in India and increasing its contribution to world food trade every year. In India, food sector has emerged as a high-growth and core profitable sector due its huge potential for uplifting the agricultural economy, creation of large scale processed food manufacturing and food chain facilities, and the resultant generation of employment and export earnings.

3.1 Laws governing the food industry:

The Indian food processing industry is governed by respective laws which control the aspects of sanitation, certifications and other required documents like permits that are required to start up and run a food business. The constitution that deals with food security in India was the Prevention of Food Adulteration Act, 1954 (hereinafter referred to as "**PFA**"). A new act brought into force as Food Safety and Standard Act, 2006 that fully overrides all food related laws except few laws which were in operation prior to the enforcement of Food Safety and Standard Act, 2006. This new act is the result of new demands and changes that took place in our food industry.

The following are the eight laws which were exemption from FSSA, 2006.

- The Prevention of Food Adulteration Act, 1954
- The Fruit Products Order, 1955
- The Meat Food Products Order, 1973
- The Vegetable Oil Products (Control) Order, 1947
- The Edible Oils Packaging (Regulation) Order, 1998
- The Solvent Extracted Oil, De oiled Meal, and Edible Flour (Control) Order, 1967
- The Milk and Milk Products Order, 1992
- Essential Commodities Act, 1955 (in relation to food)

3.1.1 Reasons for the FSSA (Food Safety and Standard Act, 2006)

FSSA initiates standardization of India's food regulations as per international standards. It revoked, a new national regulatory body, the Food Safety and Standards Authority of India (hereinafter referred to as "**FSSAI**"), to promote advanced scientific based

standards for food and to regulate and monitor the manufacturing and processing units, supply chain management, sales and importing of food so as to guarantee the availability of safe and wholesome food for human consumption. All food imports will therefore be subject to the provisions of the FSSA and rules and regulations which as notified by the Government on 5th of August 2011 will be applicable.

The FSSAI functions under the administrative control of the Ministry of Health and Family Welfare. The main aim of FSSAI is to

1. Lay down science-based standards for articles of food
2. To regulate manufacture, storage, distribution, sale and import of food
3. To facilitate food safety

Importance of FSSA 2006.

The following are the statutory powers that the FSS Act, 2006 gives to the Food Safety and Standards Authority of India (FSSAI).

1. Framing of regulations to lay down food safety standards
2. Laying down guidelines for accreditation of laboratories for food testing
3. Providing scientific advice and technical support to the Central Government
4. Contributing to the development of international technical standards in food
5. Collecting and collating data regarding food consumption, contamination, emerging risks etc.
6. Disseminating information and promoting awareness about food safety and nutrition in India

Location

FSSAI is located in 5 regions

1. Northern Region – With head office at New Delhi
2. Eastern Region
3. North Eastern Region
4. Western region
5. Southern Region

3.1.2 Important Regulations of Food Safety and Standard Act, 2006

A. Packaging and Labelling:

FSSA furnished separate packaging and labelling systematization known as Food Safety and Standards (Packaging and Labelling) Regulations, 2011 (hereinafter referred to as the "**Packaging and Labelling Regulations**") which lay down the legal and governance requirements for packaging and labelling of products. A plain reading of the Packaging and

Labelling Regulations, show that there are different kinds of products: Pre-packaged, Proprietary and other specific products as mentioned in the regulations.

The Packaging and Labelling Regulations provide the general requirements for labelling of food products prescribed under the FSSA, as follows:

- i. The particulars of declaration required under these Regulations to be specified on the label shall be in English or Hindi in Devnagri script: Provided that nothing herein contained shall prevent the use of any other language in addition to the language required under this regulation.
- ii. Pre-packaged food shall not be described or presented on any label or in any manner that is false, misleading or deceptive or is likely to create an erroneous impression regarding its character in any respect;
- iii. Label in pre-packaged foods shall be applied in such a manner that they will not become separated from the container;
- iv. Contents on the label shall be clear, prominent, indelible and readily legible by the consumer under normal conditions of purchase and use;
- v. Where the container is covered by a wrapper, the wrapper shall carry the necessary information or the label on the container shall be readily legible through the outer wrapper and not obscured by it.

In addition to these general requirements specified above, every package of food shall also carry the following information on the label:

- (I) Name of the food;
- (ii) List of ingredients;
- (iii) Nutritional information;
- (iv) Declaration regarding veg. and non-veg;
- (v) Declaration regarding food additives;
- (vi) Name and complete address of the manufacturer;
- (vii) Net quantity;
- (viii) lot/code/batch identification;
- (ix) Date of manufacturing or packing;
- (x) Best before and use by date;

- (xi) Country of origin for imported food; and
- (xii) Instructions for use.

Since a large variety of food products are being imported into India, under the Packaging and Labelling Regulations, it becomes necessary to mention the country of origin of the food on the label of food imported into India, and when a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposes of labelling.

B. Signage and Customer Notices:

The signage and customer notices is necessary in respective to food outlets.

C. Licensing Registration and Health and Sanitary Permits

It is also important to note that FSSA, being the only legislation applicable to the food industry throughout the country, will also apply as far as the national health and sanitary permits are concerned.

The Food Safety and Standards (Licensing and Registration of Food Business) Regulations, 2011 (hereinafter referred to as "License and Registration Regulations") govern the aspect of license and registration of a food business operator.

Under Regulation 2.1 of the License and Registration Regulations, all food business operators in the country are required to be registered or licensed in accordance with the License and Registration Regulations, hence no person shall commence any food business unless a valid license is possessed by the food business operator, and the conditions with regard to safety, sanitary and hygienic requirements have to be complied with at all times by them.

One of the prime purposes of these conditions is to ensure that the food business operator maintains sanitary and hygienic standards as specified in each food category. It is hereby recognized and declared as a matter of legislative determination that in the field of human nutrition, safe, clean, wholesome food is indispensable to the health and welfare of the consumer of the country.

It shall be the deemed the responsibility of the food business to comply with the labelling, safety and health and sanitary requirements laid down in the License and Registration Regulations. The labelling requirements are specified under the regulations and they need to be complied with at all times especially with regard to pre-packaged goods.

3.2 General principles of food safety

Section 18 of the FSSA provides for the general principles which are to be followed by the various authorities while implementing the provisions of the Act such as endeavour to achieve an appropriate level of protection of human life and health and the protection of consumers' interests[4], carrying out risk management, etc.

Further, there are general provisions related to food products contained in Chapter IV of the Act. These include the regulation of the use of additives or processing aid in the food or the presence of contaminants, insecticides or pesticides residues, veterinary drugs residues, etc. in the food products. There are special provisions dealing with packaging and labelling of foods. Moreover, the Act also regulates the food products which can be imported. Unfair trade practices and misleading advertisements are prohibited under the Act.

Analysis of food

The Act gives out the responsibility to the Food Authority to notify food laboratories and research institutions accredited by the National Accreditation Board for Testing and Calibration Laboratories or any other accreditation agency[5] for the analysis of food samples. This analysis is to be done by Food Analysts appointed by the Commissioner of Food Safety.

Offences and Penalties

Section 48 lays down the provision of offences. It provides the circumstances where a person shall be liable for rendering any food item injurious by the various means such as adding to it an article or substance or removing certain elements from the food which results in deterioration of its quality. FSSA provides for penalties and punishments for contravening the provisions of the Act.

The Act consists of a comprehensive list of offences in which the penalties shall be imposed.

- A penalty for selling of food which is not of the quality as per the regulations under the Act. The penalty, in this case, shall not exceed five lakh rupees.
- A penalty for manufacturing for sale, storing, selling, distributing, importing food of sub-standard quality which may extend to five lakh rupees.
- A penalty for manufacturing for sale storing, selling, distributing or importing misbranded food products which may extend to three lakh rupees.
- The Act prohibits misleading or deceptive advertisements and there is a penalty for the same which may extend to ten lakh rupees.

- A penalty is also prescribed for manufacturing, storing, selling, distributing or importing a food product containing extraneous material and such penalty may extend to one lakh rupees.
- The Act imposes a penalty on the food business operator or importer who fails to comply with the provisions of the Act which may extend to two lakh rupees.
- There is a penalty which may extend to one lakh rupees for manufacturing or processing food in unhygienic or unhealthy conditions.
- The Act also imposes a penalty for the possession of adulterant.
- Further, the Act also lays down that if no separate penalty is provided and an act is in contravention to the provisions or regulations of the Act, then a penalty shall be imposed which may extend to two lakh rupees.

Apart from penalties, there are punishments too which are laid down in the Act. The term of imprisonment differs according to different categories.

- Manufacturing for sale or storing or selling or distributing or importing food which is unsafe is punishable under the Act.
- The Food Safety Officer may seize food products and a person who interferes with such seized items is liable for punishment.
- There is punishment for providing false or misleading information.
- Punishment is also laid down for obstructing or impersonating a Food Safety Officer.
- The Act provides for compulsory obtaining of license with the exception in a few cases and a case of non-compliance is punishable under the Act.
- There is a provision for punishment in case of subsequent offences under the Act.

Apart from penalty and punishment, the person contravening the provisions of the Act may also be held liable to pay compensation to the victim or the legal representative of the victim if such contravention has led to death or injury.

3.3 FOOD ADDITIVE

Food additive, any of various chemical substances added to foods to produce specific desirable effects. Additives such as salt, spices, and sulfites have been used since ancient times to preserve foods and make them more palatable. With the increased processing of foods in the 20th century, there came a need for both the greater use of and new types of food

additives. Many modern products, such as low-calorie, snack, and ready-to-eat convenience foods, would not be possible without food additives.

There are four general categories of food additives: nutritional additives, processing agents, preservatives, and sensory agents.

Nutritional additives

Nutritional additives are used for the purpose of restoring nutrients lost or degraded during production, fortifying or enriching certain foods in order to correct dietary deficiencies, or adding nutrients to food substitutes. The fortification of foods began in 1924 when iodine was added to table salt for the prevention of goitre. Vitamins are commonly added to many foods in order to enrich their nutritional value. For example, vitamins A and D are added to dairy and cereal products, several of the B vitamins are added to flour, cereals, baked goods, and pasta, and vitamin C is added to fruit beverages, cereals, dairy products, and confectioneries. Other nutritional additives include the essential fatty acid linoleic acid, minerals such as calcium and iron, and dietary fibre.

Processing Agents

A number of agents are added to foods in order to aid in processing or to maintain the desired consistency of the product.

Processing additives and their uses			
Function		Typical chemical agent	Typical product
1	Anticaking	Sodium aluminosilicate	Salt
2	Bleaching	Benzoyl peroxide	Flour
3	Chelating	Ethylenediaminetetraacetic acid (edta)	Dressings, mayonnaise, sauces, dried bananas
4	Clarifying	Bentonite, proteins	Fruit juices, wines
5	Conditioning	Potassium bromate	Flour
6	Emulsifying	Lecithin	Ice cream, mayonnaise, bakery products
7	Leavening	Yeast, baking powder, baking soda	Bakery products
8	Moisture control (humectants)	Glycerol	Marshmallows, soft candies, chewing gum
9	Ph control	Citric acid, lactic acid	Certain cheeses, confections, jams and jellies

10	Stabilizing and thickening	Pectin, gelatin, carrageenan, gums (arabic, guar, locust bean)	Dressings, frozen desserts, confections, pudding mixes, jams and jellies
----	----------------------------	--	--

Antioxidants

Antioxidants play a major part in ensuring that our foodstuffs keep their taste and colour and remain edible over a longer period. Their use is particularly important for avoiding oxidation of fats and fat-containing products. When antioxidants are thoroughly mixed with fat or oil, the onset of the final stages of autoxidation when rancidity - development of unpleasant off-flavours and odours- becomes evident, is delayed. Another important reason is that certain vitamins and various amino acids can easily be destroyed by exposure to air, and antioxidants serve to protect them. They also help to slow down the discoloration of fruit and vegetables.

Natural occurring antioxidants

One simple way, for example, of stopping apples going brown is to add a small amount of lemon juice. The ascorbic acid (vitamin C) contained in many citrus fruits is a natural antioxidant and for this reason finds frequent use in food production (E 300-E 304). Vitamin C and its various salts are added to protect soft drinks, jams, condensed milk and sausage. Other natural antioxidants are the tocopherols (E 306-E309), which are members of the vitamin E family. Tocopherols are found mainly in nuts, sunflower seeds and soya and maize shoots, and they are mostly used for preserving vegetable oils, margarine and cocoa products.

Since both compounds are very popular antioxidants and the requirements for them cannot be met completely from natural sources, ascorbic acid and tocopherols have also been produced artificially for quite some time. It is nowadays possible to copy the molecular structure of these compounds so closely that there are no longer any differences in either structure or effects, which means that these “nature-identical” substances are essentially identical to their originals.

Man-made antioxidants

Man-made antioxidants are used as well as natural ones. The most important artificial antioxidants belong to the group of gallates (E 310-E 312). Gallates are added mostly to vegetable oils and margarine to stop them from going rancid and preserve their taste.

Two other substances, which do not belong to the above groups, are BHA (butylhydroxyanisol, E 320) and BHT (butylhydroxytoluene, E 321).

Anti microbials

Antimicrobials are most often used with other preservation techniques, such as refrigeration, in order to inhibit the growth of spoilage and pathogenic microorganisms. Sodium chloride (NaCl), or common salt, is probably the oldest known antimicrobial agent. Organic acids, including acetic, benzoic, propionic, and sorbic acids, are used against microorganisms in products with a low pH. Nitrates and nitrites are used to inhibit the bacterium *Clostridium botulinum* in cured meat products (e.g., ham and bacon). Sulfur dioxide and sulfites are used to control the growth of spoilage microorganisms in dried fruits, fruit juices, and wines. Nisin and natamycin are preservatives produced by microorganisms. Nisin inhibits the growth of some bacteria, while natamycin is active against molds and yeasts.

3.4 Food Adulteration

Adulteration of food commonly defined as “the addition or subtraction of any substance to or from food, so that the natural composition and quality of food substance is affected”. Adulteration is either intentional by either removing substances to food or altering the existing natural properties of food knowingly. Unintentional adulteration is usually attributed to ignorance’s, carelessness or lack of facilities for maintaining food quality. Incidental contamination during the period of growth, harvesting, storage, processing, transport and distribution of foods are also considered.

“Adulterant” means any material which is or could be employed for making the food unsafe or sub-standard or mis-branded or containing extraneous matter.

Food is declared adulterated if:

- A substance is added which depreciates or injuriously affects it.
- Cheaper or inferior substances are substituted wholly or in part.
- Any valuable or necessary constituent has been wholly or in part abstracted.
- It is an imitation.
- It is colored or otherwise treated, to improve its appearance or if it contains any added substance injurious to health.
- For whatever reasons its quality is below the Standard

Adulterated food is dangerous because it may be toxic and can affect health and it could deprive nutrients essential for proper growth and development.

3.4.1 Common adulterated foods

Some of the common adulterated foods are milk and milk products, atta, edible oils, cereals, condiments (whole and ground), pulses, coffee, tea, confectionary, baking powder, non - alcoholic beverages, vinegar, besan and curry powder.

Types of adulterants

Type	Substances Added
Intentional Adulterants	Sand, marble chips, stones, mud, other filth, talc, chalk powder, water, mineral oil and harmful colour.
Incidental adulterants	Pesticide residues, droppings of rodents, larvae in foods.
Metallic contaminants	Arsenic from pesticides, lead from water, effluent from chemical industries, tin from cans.

Table 3.2.1 (a)

Poisonous or Deleterious Substances

Generally, if a food contains a poisonous or deleterious substance that may render it injurious to health, it is adulterated. For example, apple cider contaminated with *E.coli* O157:H7 and Brie cheese contaminated with *Listeria monocytogenes* are adulterated.

If a food contains a poisonous substance in excess of a tolerance, regulatory limit, or action level, mixing it with "clean" food to reduce the level of contamination is not allowed. The deliberate mixing of adulterated food with good food renders the finished product adulterated

Filth and Foreign Matter

Filth and extraneous material include any objectionable substances in foods, such as foreign matter (for example, glass, metal, plastic, wood, stones, sand, cigarette butts), undesirable parts of the raw plant material (such as stems, pits in pitted olives, pieces of shell in canned oysters), and filth (namely, mold, rot, insect and rodent parts, excreta, decomposition).

Economic Adulteration

A food is adulterated if it omits a valuable constituent or substitutes another substance, in whole or in part, for a valuable constituent (for instance, olive oil diluted with tea tree oil); conceals damage or inferiority in any manner (such as fresh fruit with food coloring on its surface to conceal defects); or any substance has been added to it or packed with it to increase its bulk or weight, reduce its quality or strength, or make it appear bigger or of greater value than it is (for example, scallops to which water has been added to make them heavier).

Microbiological Contamination and Adulteration

The fact that a food is contaminated with pathogens (harmful microorganisms such as bacteria, viruses, or protozoa) may, or may not, render it adulterated. Generally, for ready -to-eat foods, the presence of pathogens will render the food adulterated. For example, the presence of *Salmonella* on fresh fruits or vegetables or in ready-to-eat meat or poultry products (such as luncheon meats) will render those products adulterated.

Ready -to- eat meat and poultry products contaminated with pathogens, such as *Salmonella* or *Listeria monocytogenes*, are adulterated. For raw meat or poultry products, the presence of pathogens will not always render a product adulterated (because raw meat and poultry products are intended to be cooked and proper cooking should kill pathogens).

Bacteria	Sources	Onset Period	Typical symptoms and duration of illness
Salmonella	Raw(meat , milk, eggs, poultry,)carriers	Usually 12 to 36 hours	Abdominal pain, diarrhea , vomiting and fever
Clostridium perfringens	Animal and humans excreta, soil(on vegetables), dust, insects and raw meat	Usually 8 to 12 hours	Abdominal pain and diarrhoea. Vomiting is rare(12 to 48hours)
Staphylococcus aureus	Human nose , mouth , skin, boils and cuts. Raw	1 to 7 hours usually 2 to 4	Abdominal pain ,mainly vomiting, some diarrhoea, low temperature(6 to 24 hr)

	milk from cows or goats		
Clostridium botulinum	Soil, fish , meat and vegetables	Usually 12 to 36 hrs	Difficulties in swallowing, talking and breathing , double vision and paralysis of the cranial nerves. Fatalities are common and the recovery of survivors may take several months
Bacillus cereus (toxin in food)	Cereals , especially rice, dust and soil	1 to 6 hours	Vomiting, abdominal pain and some diarrhoea (12 to 24 hours)
Toxins in Intestine	As above	6 to 24 hrs	Abdominal pain, diarrhoea and some vomiting (1 to 2 days)

Table 3.4 (a)

3.5 CAUSES OF FOOD SPOILAGE:

Food spoilage and deterioration is no accident. It is a naturally occurring process. To understand how to maintain the quality of food and prevent spoilage, we need to know what can cause it. Factors that affect food spoilage include:

- **Microorganisms**
- **Enzymes**
- **Air**
- **Light**
- **Insects, Rodents, Parasites and Other Creatures**
- **Physical Damage**
- **Temperature**
- **Time**

Microorganisms

Many types of microorganisms can cause food problems. The microorganisms that can cause food-borne illness are called pathogenic microorganisms. These microorganisms grow best at room temperatures (60-90°F), but most do not grow well at refrigerator or freezer temperatures. Pathogenic microorganisms may grow in foods without any noticeable change in odour, appearance or taste. Spoilage microorganisms, including some kinds of bacteria, yeasts and molds, can grow well at temperatures as low as 40°F. When spoilage microorganisms are present, the food usually looks and/or smells awful.

Foods contaminated with [pathogenic microorganisms](#) usually do not look bad, taste bad, or smell bad. It is impossible to determine whether a food is contaminated with pathogenic microorganisms without microbiological testing. To avoid potential problems in foods, it is very important to control or eliminate these microorganisms in food products.

Pathogenic microorganisms can be transmitted to humans by a number of routes.

Diseases which result from pathogenic microorganisms are of two types: **infection** and **intoxication**.

- **Foodborne infection** is caused by the ingestion of food containing live bacteria which grow and establish themselves in the human intestinal tract.
- **Foodborne intoxication** is caused by ingesting food containing toxins formed by bacteria which resulted from the bacterial growth in the food item. The live microorganism does not have to be consumed.

For a **foodborne illness** (poisoning) to occur, the following [conditions](#) must be present:

- The microorganism or its toxin must be present in food.
- The food must be suitable for the microorganism to grow.
- The temperature must be suitable for the microorganism to grow.
- Enough time must be given for the microorganism to grow (and to produce a toxin).
- The food must be eaten.

Enzymes

Enzymes, substances naturally present in food, are responsible for the ripening process in fruits and vegetables. Enzymes are responsible for texture, colour and flavour changes. For example, as a banana turns from green to yellow to brown, not only does the

colour change, but there is also a change in the fruit's texture. Unblanched, frozen corn-on-the-cob may taste like the cob over time. This is the result of enzyme action.

Air

Oxidation, a chemical process that produces undesirable changes in colour, flavour and nutrient content, results when air reacts with food components. When fats in foods become rancid, oxidation is responsible. Discoloration of light-colored fruits can be reduced by using an antioxidant, such as ascorbic acid or citric acid, before freezing. Vapour-proof packaging that keeps air out helps reduce oxidation problems.

Light

Light exposure could result in color and vitamin loss. Light also may be responsible for the oxidation of fats.

Insects, Rodents, Parasites and Other Creatures

These creatures require food to survive and damage food, making it more vulnerable to further deterioration.

Physical Damage

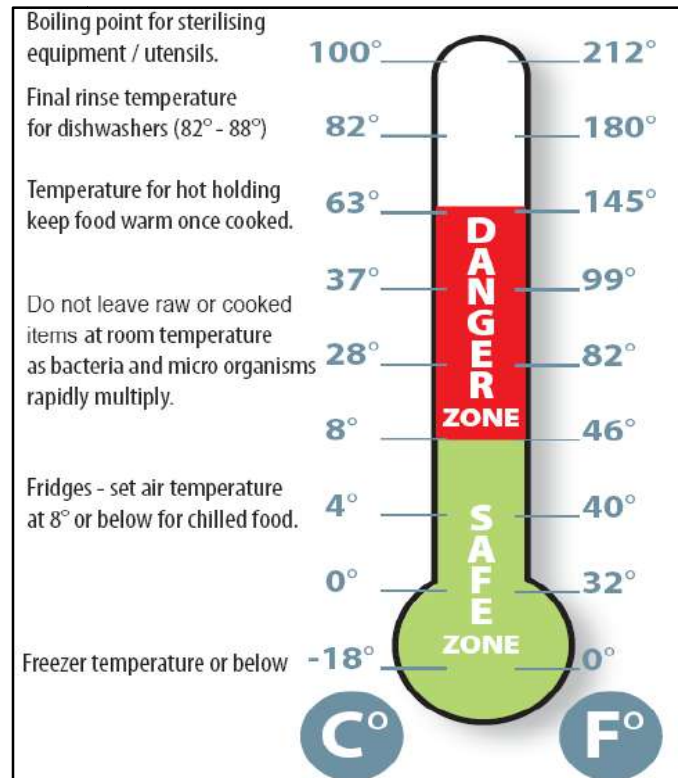
Bruises and cracks on raw produce leave areas where microorganisms easily may grow. Improperly packaged foods, dented cans and broken packages provide places for microorganisms, air, light and creatures to enter. Gentle handling of food items will help maintain food quality and safety longer.

Temperature

Temperature affects storage time, and food deteriorates faster at higher temperatures. Recommended temperatures for storage areas are:

- **Cupboard/Pantry 50-70°F**
- **Refrigerator 34-40°F**
- **Freezer 0°F or below**

Microorganisms, both spoilage and pathogenic, grow rapidly at room temperature. To slow microbial growth, the enzymatic and oxidation processes, store foods at lower temperatures.

Requirements for bacteria growth:-**Warmth:-**

The best temperature for the multiplication of germs is 37°C (body temperature). Although they will **start growing rapidly between 20°C and 50°C**.

To **stop their growth** the temperature of food should **be below 5°C or above 63°C**. The temperature range of 5°C to 63°C is often referred to as the “**danger zone**”.

Food poisoning germs reproduce rapidly at room temperature but most will not grow in refrigerator (1°C to 4°C) and none in frozen food (-18°C).

Temperatures for storing food

Food stored in a freezer	-18°C / -23°C
Raw meat/poultry	0°C to 2°C
Raw fish and shellfish	0°C to 2°C
Cooked meats/meat products	0°C to 4°C
Cooked fish/fish products	0°C to 4°C
Dairy products/fats	0°C to 4°C
Eggs	Below 8°C
Salad items, herbs, leafy vegetables	0°C to 4°C
Cooked foods/high-risk items	0°C to 4°C
Ambient food storage, e.g. cans, dry foods	Cool, well ventilated
Grains, general grocery items	

Time

Microorganisms need time to grow and multiply. Other reactions, such as oxidation and enzyme action, also require time to develop. Purchase reasonable quantities, especially of perishable foods, to help avoid long-term storage.

3.6 FOOD BORNE DISEASE/ILLNESS:-

These illness can result from eating food or water which carries harmful micro-organisms. The pathogen doesn't multiply but small numbers are required to fall in ill.

Mostly found in small intestine of ill people, carriers, animals or pests. Likely to be on **ready to eat food** as a result of **sewage contamination, poor hygiene practices**, especially not washing hands after going to toilet and poor slaughter house hygiene which allows animal faces to get onto our meat. This is known as the faecal – oral route.

Micro-organism	Sources	Onset period	Typical symptoms
Campylobacter (most common cause of diarrhoea from bacteria)	Raw poultry, meat, milk, farm animals, pets, birds, sewage and untreated water	2 to 5 days	Diarrhoea (often bloody), abdominal pain, nausea and fever.
E.Coli o 157 (often fatal for the elderly and young children)	Intestines of people and animals, sewage and untreated water.	Usually 3 to 4 days	Nausea, diarrhoea (often bloody), abdominal cramps. Kidney failure, especially children.
Listeria (multiplies in refrigerated foods, even below 3°C)	Soil, sewage, water, vegetation, people, animals and birds	1 to 70 days	Flu-like symptoms. Vomiting, diarrhea and fever. Abortion in pregnant women.
Norovirus (only multiplies in the body)	Ill people, the environment and sewage, (Airborne and person to person spread)	Usually 24 to 48 hours	Vomiting (projectile), diarrhea, abdominal pain and fever.

Typhoid	Carriers, sewage/manure and water	Usually 8 to 14 days	Fever , nausea, malaise, headache, rose spots on trunk, slow pulse , anorexia, constipation and sometimes diarrhea(severa)
----------------	-----------------------------------	----------------------	--

Table 3.4 (a)**Controlling Food Spoilage**

To produce clean, sanitary food, all food handlers must maintain high standards of personal cleanliness and hygiene. This begins with good grooming.

Humans provide the ideal environment for the growth of microorganisms. Everyone harbors bacteria in the nose and mouth. These bacteria are easily spread by sneezing or coughing, by not disposing of tissues properly and by not washing hands frequently and properly. Touching your body and then touching food or utensils transfers bacteria. Hands should be washed before and after handling raw food; after smoking, drinking or eating; after coughing or sneezing; after removing the garbage; and after touching dirty clothes, side towels or anything that may contaminate the hands. Human waste carries many dangerous microorganisms, so it is especially important to wash your hands thoroughly after visiting the restroom. An employee who is ill should not be allowed in the kitchen. If during work, an employee develops symptoms such as fever, diarrheal, vomiting, sore throat with fever or jaundice, he or she must report to a manager and request to be dismissed until recovered.

You can do several things to decrease the risk of an illness being spread by poor personal hygiene:

- _ Wash your hands frequently and thoroughly. Gloves are not a substitute for proper hand washing.
- _ Keep your fingernails short, clean and neat. Do not bite your nails or wear nail polish or artificial nails.
- _ Keep any cut or wound antiseptically bandaged. An injured hand should also be covered with a disposable glove.
- _ Bathe daily, or more often if required.
- _ Keep your hair clean and restrained.
- _ Wear work clothes that are clean and neat. Avoid wearing jewelry or watches.
- _ Do not eat, drink, smoke or chew gum in food preparation areas.

Procedure For Proper Hand Washing

PROCEDURE FOR PROPER HAND WASHING



① Using hot water (100°F/38°C), wet hands and forearms.



② Apply an antibacterial soap.



③ Rub hands and arms briskly with soapy lather for at least 20 seconds.



④ Scrub between fingers and clean nails with a clean nail brush.



⑤ Rinse thoroughly under hot running water. Reapply soap and scrub hands and forearms for another 5–10 seconds. Rinse again.



⑥ Dry hands and arms with a single-use towel, using the towel to turn off the water. Discard the towel in a trash receptacle.

Sanitary means that harmful substances are reduced to safe levels. Thus, something may be clean without being sanitary; the visible dirt can be removed, but disease causing microorganisms can remain. The cleaning of dishes, pots, pans and utensils in a food service operation involves both removing soil and sanitizing. Soil can be removed manually or by machine. Sanitizing can be accomplished with heat or chemical disinfectants. Procedures for manually washing, rinsing and sanitizing dishes and equipment generally follow the three-compartment sink setup

- Scrape and spray the item to remove soil.
- Wash the item in the first sink compartment using 110°F (43°C) water and an approved detergent. A brush or cloth may be used to remove any remaining soil.
- Rinse or spray the item in the second sink compartment using clear, 110°F (43°C) water.
- Sanitize the item in the third sink compartment by either:

- a. immersing it in 171°F (77°C) water for at least 30 seconds, or
 - b. immersing it in an approved chemical sanitizing solution used according to the manufacturer's directions.
- Empty, clean and refill each sink compartment as necessary, and check the water temperature regularly.

Food service items, dishes, silverware and utensils should always be allowed to air-dry, as towel drying may recontaminate them. Any cracked or chipped china should be discarded, as it can harbor bacteria that pose a food safety hazard.

Pest management

Food can be contaminated by insects (for example, roaches and flies) and rodents (for example, mice and rats). These pests carry many harmful bacteria on their bodies, thus contaminating any surface with which they come in contact. An insect or rodent infestation is usually considered a serious health risk and should be dealt with immediately and thoroughly. Pests must be controlled by

- (1) building them out of the facility,
- (2) creating an environment in which they cannot find food, water or shelter, and
- (3) relying on professional extermination.

The best defense against pests is to prevent infestations in the first place by building them out. Any crack—no matter how small—in door frames, walls or windowsills should be repaired immediately, and all drains, pipes and vents should be well sealed. Inspect all deliveries thoroughly, and reject any packages or containers found to contain evidence of pests.

Flies are a perfect method of transportation for bacteria because they feed and breed on human waste and garbage. Use screens or “fly fans” (also known as air curtains) to keep them out in the first place. Controlling garbage is also essential because moist, warm, decaying organic material attracts flies and provides favorable conditions for eggs to hatch and larvae to grow.

Pest management also requires creating an inhospitable environment for pests. Store all food and supplies at least 6 inches off the floor and 6 inches away from walls. Rotate stock often to disrupt nesting places and breeding habits. Provide good ventilation in storerooms to remove humidity, airborne contaminants, grease and fumes. Do not allow water to stand in drains, sinks or buckets, as cockroaches are attracted to moisture. Clean up spills and crumbs immediately and completely to reduce their food supply.

Despite the best efforts to build pests out and maintain proper housekeeping standards, it is still important to watch for the presence of pests. For example, cockroaches leave a strong, oily odor and feces that look like large grains of pepper. Cockroaches prefer to search for food and water in the dark, so seeing any cockroach on the move in the daylight is an indication of a large infestation.

Rodents (mice and rats) tend to hide during the day, so an infestation may be rather serious before any creature is actually seen. Rodent droppings, which are shiny black to brownish gray, may be evident, however. Rodent nests made from scraps of paper, hair or other soft materials may be spotted. Should an infestation occur, consult a licensed pest control operator immediately. With early detection and proper treatment, infestations can be eliminated. Employees should be very careful in attempting to use pesticides or insecticides themselves. These chemicals are toxic to humans as well as to pests. Great care must be used to prevent contaminating food or exposing workers or customers to the chemicals.

Protecting food from contamination by:-

- Buying food from **approved suppliers**
- **Training of food handlers well**
- High standards of **personal hygiene and good hygiene practices**
- **Well designed and constructed food premises and food rooms**
- Effective **pest control**.
- **Segregation of raw foods and high risk foods at all level** of food delivery stages in the department like delivery, storage, preparation, serving and distribution. **Particular in thawing food and cooling cooked meat food.**
- Maintaining **good storage facilities for waste and unfit food.**
- Well designed and proper use of suitable equipments/utensils.
- **Effective cleaning and disinfection.** Particular care in needed with wiping cloths.

Preventing bacteria with in food from generating themselves:-

- Storing food out of danger zone that is above 63°C and below 5°C.
- Cooling food as rapidly as possible.
- Not allowing dried foods to absorb moisture.
- Using suitable preservatives such as salt , sugar or vinegar.

- Fermentation ,e . g in the making of salami or yoghurt.
- Ensuring that during preparation the food is kept in danger zone as short as possible

Destroying those bacteria with in food by:-

- Cooking food above 63°C .
- Implementing pasteurization , sterilization or canning in processing food.
- Using chemicals like chlorine in washing lettuces and vegetables.
- Irradiation.

QUESTIONS: 2 marks

- 1) Define Food additives.
- 2) Explain Food Adulteration.
- 3) List different types of Food additives
- 4) Explain about FSSAI .
- 5) Explain about FSS Act.
- 6) Explain the term Sanitation.
- 7) Write a short note on Pet Management.
- 8) Explain the symptoms of Thyroid.
- 9) Describe the term Food borne illness
- 10) Explain Danger Zone.

QUESTIONS: 5 marks

- 1) What is Personal Hygiene. List the key points to avoid food spoilage.
- 2) Briefly explain the process of proper Hand washing.
- 3) Explain how temperature influence food spoiling.
- 4) What is food adulteration? Explain it briefly.
- 5) What is FSSAI. Explain its importance in Indian food industry.
- 6) List of offences in which the penalties shall be imposed under FSSA act.
- 7) Identify the eight laws which were exemption from FSSA, 2006..
- 8) Explain the powers of FSSA 2006.
- 9) Explain the types of Food adulterations.
- 10) What is Microbiological Contamination. List few bacteria's and their symptoms.



UNIT

4

INTRODUCTION TO BAKERY & CONFECTIONERY

4.0 Introduction:


Bakery is a traditional activity and occupies an important place in food processing sector. In spite of the advent of semi-automatic and automatic bread lines as well as biscuit plant, a fairly sizeable cross-section of the population still prefers fresh bread from bakery. With growing population and nutritional standards as well as demand for fresh, ready-to-eat convenience foods, the demand for bakery items has also increased greatly. Bakery items include bread, biscuit, cakes and pastries and these are consumed both as breakfast and snacks food.

4.1 BASIC PRINCIPALS OF BAKERY






FLOUR, SUGAR, EGGS, MILK, BUTTER, FLAVOURINGS—with this simple list of ingredients a seemingly endless variety of sweet goods, from breads to sauces to pastries, can be made. But to produce consistently good brioche, Bavarians, biscuits or the like, careful attention must be paid to the character and quantity of each ingredient, the way the ingredients are combined and how heat is applied to them. Unlike, for example, a cut of meat that can be grilled, roasted, sautéed or braised and still be the same cut of meat, bakeshop products depend on careful, precise preparation for their very identity. Accurate measurements are critical in the bakeshop. It is equally important to follow bakeshop formulas carefully and completely. Unlike other types of cooking, baking mistakes often cannot be discovered until the product is finished, by which time it is too late to correct them. For example, if salt is left out when preparing a stew, the mistake can be corrected by adding salt at service time. If salt is left out of a batch of bread dough, the mistake cannot be corrected after the bread has baked, and its texture and flavour may be ruined. It is probably more important to follow a written formula, measure ingredients precisely and combine them accurately in the bakeshop than anywhere else in the kitchen. In order to provide a thorough introduction to the skills needed in a bakeshop, this book focuses on preparing the types of breads and desserts usually found in a small retail shop or restaurant. Because this book is not designed for large wholesale or commercial bakeries, mixes, stabilizers and mechanical preparation and shaping skills are not included.

4.1.1 BAKESHOP TOOLS AND EQUIPMENT

Beginning cooks may find the tools of the bakeshop a bit complex. Indeed, the tools required for a professional pâtisserie are quite specialized. A well-rounded chef need not be concerned with possessing every gadget available, but should recognize and be familiar with most of the items shown in Figure. Although many of these hand tools will make a task easier, most can be improvised by a creative chef. Several of the items shown, such as the springform pans, tartlet pans and petit four molds, are used for shaping or holding batters and doughs. The various spatulas are used for spreading icings or fillings. The piping tools and cake comb are used for decorating and finishing baked goods. When purchasing tools and equipment for the bakeshop, look for quality and durability. Bakeshop ovens may be conventional, convection or steam injection models. Convection ovens can reduce cooking time, but the air currents may damage delicate products such as spongecake or puff pastry. Steam injection ovens use conventional heat flow but allow the baker to automatically add steam to the cooking chamber as needed to produce crisp-crust breads. Although expensive, steam injection ovens are a necessity for commercial bakeries and most larger restaurant and hotel bakeshops. Baking instructions in the following chapters are based on the use of a conventional oven. If a convection oven is used instead, remember that the temperature and baking time may need to be reduced.

EQUIPMENT	USAGE	PHOTOGRAPH
Sieve	Drum sieve is mostly used to sieve the flour and the size of the mesh through which it will be sieved will depend upon the type of flour being used. The wholemeal flour will be sieved through a coarse mesh as one does not want to sieve bran and other nutritious things away from the flour.	

Weighing scale	A digital weighing scale is preferred as the accuracy of the ingredients is very important	
Baking trays	Commonly known as sheet pans, these can be made of iron, or Teflon coated for non stick.	
Bread moulds	These are containers of various shapes and sizes. These are often sold by the volume they are intended for.	
Retarder prover	It is equipment that controls the rate of proving for the bread to be made. It can be automatically adjusted so that the breads are ready to be baked at programmed timings.	
Dough mixers	Many types of dough mixers are used to knead the dough. Spiral dough mixers are used in which dough hook and bowl both move in opposite direction, so that dough automatically scraped	

	while making the dough. They are also tuned to two speeds high and low.	
Dough divider	Equipment used for dividing the dough into equal sizes and portions. It is also used for shaping into round balls. It is lastly used in large establishments.	
Ovens	Baking oven, with steam attachment for better baking	
Dough scorers	A piece of equipment having a sharp surgical blade at the end, to score the breads at an angle before baking.	
Dough scrapers	Available in plastic or steel, they are used to scrape the doughs and also cut the dough for scaling.	
Wooden table top	Traditionally maple wood is used, as it is non porous and very hygienic. The wooden table top allows the bread dough to be at a required temperature as wood is a bad conductor	



	of heat and hence does not take or give heat to the dough and also dough rarely sticks to the wooden surfaces.	
Bench brush	A large hard bristle brush to clean the table top and to bush away excess flour.	
Spray bottle	Used for spraying water onto the breads, if the ovens are not equipped with steam injections.	

Table 4.1.1 (a)

4.1.2 INGREDIENTS

Although substituting ingredients may have little or no effect on some dishes (carrots can be substituted for turnips in a stew, for instance), this is not the case with baked goods. Different flours, fats, liquids and sweeteners function differently. Bread flour and cake flour are not the same, nor are shortening and butter. If one ingredient is substituted for another, the results will be different. Understanding ingredients, why they function the way they do and how to adjust for their differences will make the baking experience more successful and consistent.

The Five Major Ingredients in Baking

- Flour
- Sugar
- Fat
- Eggs
- Leavener

FLOURS

Flour provides bulk and structure to baked goods. Some flours are used to thicken liquids in items such as puddings and pie fillings, or to prevent foods from sticking during preparation and baking. Flour is produced when grain kernels are milled or ground into a powder. Grains are grasses that bear edible seeds. Corn, rice and wheat are the most significant grains for human consumption, but the most frequently used—and therefore the most important—ingredient in the bakeshop is wheat flour.

COMPOSITION OF FLOUR

Flour consists primarily of five nutrients: fat, minerals, moisture, starches and proteins. Fat and minerals each generally account for less than 1 percent of flour's content. The moisture content of flour is also relatively low—when packaged, it cannot exceed 14 percent under government standards. But its actual moisture content varies depending on climatic conditions and storage. In damp areas, flour absorbs moisture from the atmosphere.

Starches constitute 63 to 77 percent of flour and are necessary for the absorption of moisture during baking. This process, known as gelatinization, occurs primarily at temperatures above 140°F (60°C). Starches also provide food for yeast during fermentation.

Flour proteins are of crucial importance because of their gluten-forming potential. Gluten is the tough, rubbery substance created when wheat flour is mixed with water. Gluten strands are both plastic (that is, they change shape under pressure) and elastic (they resume their original shape when that pressure is removed). Gluten is responsible for the volume, texture and appearance of baked goods. It provides structure and enables dough to retain the gases given off by leavening agents. Without gluten, there could be no raised breads: The gases created by yeast fermentation or chemical leaveners would simply escape if there were no network of gluten strands to trap them in the dough.

In general, the higher a flour's protein content, the greater that flour's gluten-forming potential. In some cases, however, flour with, for example, 13% protein may perform better than one with 14% protein because the proteins in the flour are of superior quality. The proteins responsible for gluten formation are glutenin and gliadin. Flour does not contain gluten; only a dough or batter can contain gluten. Gluten is produced when glutenin and gliadin are moistened and manipulated, as when they are stirred or kneaded. In order to make a chewy product such as a crusty French loaf, a flour with a high protein content must be used. Lower-protein flours are used for tender soft products such as cakes or muffins. Table 29.1 lists the protein content and uses for several common flours. Substituting one type of flour for another may be acceptable in some formulas as long as the ratio of fats, moisteners

and other ingredients is adjusted accordingly. In most cases, however, substituting one type of flour for another will result in a changed and probably less desirable product.

Gluten development is affected by a number of factors, including mixing time and the presence of fat. Generally, the longer a substance is mixed, the more gluten will develop. Extreme over mixing in industrial equipment can break down the gluten structure, however. The type and balance of ingredients in a formula will also affect gluten development. Fats coat the protein in the flour, inhibiting the formation of the gluten bond. Flour needs to absorb liquid in order for the proteins to bond into gluten. Firm bread dough that can be kneaded and shaped before baking requires a high-protein flour. When this dough is made with water it will bake into a product with a solid structure. When whole milk is used in the same formula, the product will be more tender because the milk fat weakens the gluten bond.

The character of the wheat determines the character of the flour. Wheat is classified as soft or hard depending on the kernel's hardness. The harder the wheat kernel, the higher its protein content. Soft wheat yields a soft flour with a low protein content. Soft flour, also called weak flour, is best for tender products such as cakes. Hard wheat yields a hard flour with a high protein content. Hard flour, also known as strong flour, is used for yeast breads. Various types of flour are created by mixing or blending flours from different varieties of wheat. All-purpose flour, a blend of hard and soft flours, is designed for use in a wide range of foods. It is also referred to throughout this book because it is readily available in quantities appropriate for small food service operations. Large bakeshops rarely use all-purpose flour; instead, they choose flours specifically milled and blended for specific characteristics

AGING AND BLEACHING

Any flour develops better baking qualities if allowed to rest for several weeks after milling. Freshly milled flour produces sticky doughs and products with less volume than those made with aged flour. During aging, flour turns white through a natural oxidation process referred to as bleaching. Natural aging and bleaching are somewhat unpredictable, time-consuming processes, however, so chemicals are often used to do both. Potassium bromate and chlorine dioxide gas rapidly age flour. Chlorine dioxide and other chemicals bleach flour by removing yellow pigments in order to obtain a uniform white color. Bleaching destroys small amounts of the flour's naturally occurring vitamin E. Many artisan bakers use unbleached and unbromated flours exclusively. (It should be noted, however that potassium bromate has been identified as a possible carcinogen and may not be added to flour milled and sold in Canada or Europe.)

WHEAT:

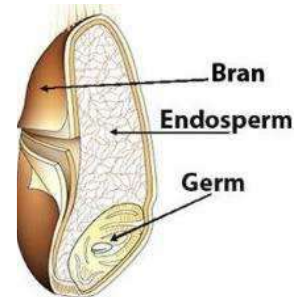
Wheat is a grass widely cultivated for its seed, a cereal grain which is a worldwide staple food. The many species of wheat together make up the genus ***Triticum***; the most widely grown is common wheat. The archaeological record suggests that wheat was first cultivated in the regions of the Fertile Crescent around 9600 BCE. Botanically, the wheat kernel is a type of fruit called a caryopsis. The scientific name of wheat is *Triticum durum* or



Triticum vulgar.

There are 3 parts to a wheat kernel (sometimes called a wheat berry):

- 1) The **BRAN** is the hard-outer covering of the wheat kernel, high in fibre & nutrients.
- 2) The **GERM** is the nutrient-rich embryo that will sprout and grow into a new wheat plant.
- 3) The **ENDOSPERM** is the biggest part (83%), the "insides" of the kernel - mostly starch.



- **WHITE FLOUR** is made from the endosperm only
= NOT a whole grain
- **WHOLE WHEAT FLOUR**
combines all 3 parts of the wheat berry
= a whole grain

SPECIALTY FLOURS

Whole-wheat flour is made by milling the entire wheat kernel, including the bran and nutritious germ. Whole-wheat flour has a nutty, sweet flavour and brown, flecked color. Products made with whole-wheat flour will be denser, with less volume than those made with white flour; bran particles cut through the gluten strands in the dough, resulting in a heavier

crumb. Whole-wheat flour has a reduced shelf life because fats in the germ can become rancid during storage. Whole-wheat pastry and high-gluten flours are available. Though not a flour, wheat germ is often used in place of some flour in recipes for flavour and fiber. Wheat germ, preferably toasted, can be used in place of up to one-third of the wheat flour in a dough formula. The finished product will have a denser texture, however.

Vital wheat gluten(gluten flour) is the pure protein extracted from wheat flour. With an average protein content of 75 percent, it is used to boost the protein content of weaker flours such as rye and whole-wheat flour. It must be blended with other ingredients to form a dough or batter.

Self-rising flour is an all-purpose flour to which salt and a chemical leavener, usually baking powder, have been added. It is not recommended for professional use. Chemicals lose their leavening ability over time and may cause inconsistent results. Furthermore, different formulas call for different ratios of salt and leaveners; no commercial blend is appropriate for all purposes.

Non wheat flours, also referred to as **composite flours**, are made from grains, seeds or beans. Corn, soybeans, rice, oats, buckwheat, potatoes and other items provide flours, but none of them contain the gluten-forming proteins of wheat flour. Composite flours are generally blended with a high-protein wheat flour for baking. Substituting composite flour for wheat flour changes the flavour and texture of the product.

Rye flour is commonly used in bread baking. It is milled from the rye berry much as wheat flour is milled from the wheat berry. Rye flour comes in four grades or colors: white, medium, dark and rye meal. White rye flour is made from only the center of the rye berry. Medium and dark rye flours are made from the whole rye berry after the bran is removed and have the most intense rye flavour. Rye meal is the entire rye berry milled into a flour of different granulations, most often coarse-textured flour. Some mills refer to their rye meal as pumpernickel flour. Others use pumpernickel to describe dark rye flour. All rye flours have a warm, pungent flavour similar to caraway and a gray-brown color. Although rye flour contains proteins, they will not form gluten, so bread made with 100% rye flour will be dense and flat. Therefore, rye flour is usually blended with a high protein wheat flour to produce a more acceptable product.

NUTRITION

Flours are generally high in carbohydrates and low in fat. The grains from which they are milled are often rich in vitamins and minerals. Some of these nutrients, however, are lost

during milling. In enriched flours, thiamin, riboflavin, niacin and iron are added at levels set by the government.

SUGAR AND SWEETENERS



Sugar (Fr. sucre) and other sweeteners serve several purposes in the bakeshop: They provide flavor and color, tenderize products by weakening gluten strands, provide food for yeasts, serve as a preservative and act as a creaming or foaming agent to assist with leavening.






4.2 SUGAR






Sugars are carbohydrates. They are classified as either (1) single or simple sugars (monosaccharides), such as glucose and fructose, which occur naturally in honey and fruits, or (2) double or complex sugars (disaccharides), which may occur naturally, such as lactose in milk, or in refined sugars.





The sugar most often used in the kitchen is **sucrose**, a refined sugar obtained from both the large tropical grass called sugarcane (*Saccharum officinarum*) and the root of the sugar beet (*Beta vulgaris*). Sucrose is a disaccharide, composed of one molecule each of glucose and fructose. The chemical composition of beet and cane sugars is identical. The two products taste, look, smell and react the same. Sucrose is available in many forms: white granulated, light or dark brown granulated, molasses and powdered.






4.2.1 TYPES OF SUGAR






BARBADOS SUGAR	A 'moist' dark brown, soft sugar with an individual flavour. 'Barbados sugar, more commonly called <i>muscovado sugar</i> or merely raw sugar, is a type of minimally processed sugar that is a dark brown in colour. It is often used to mask the flavour in dishes requiring bicarbonate of soda	
BEET SUGAR	White crystalline sugar (sucrose) obtained from sugar beets. Beet sugar is the refined extract of non-gmo sugar beets and is 99.9% sucrose, making it an ideal substitute for cane sugar in most recipes.	

BROWN SUGAR	Brown sugar is a sucrose sugar product with a distinctive brown colour due to the presence of molasses. Brown sugar adds flavour to desserts and baked goods. Brown sugar caramelizes much more readily than refined sugar, and this effect can be used to make glazes and gravies brown while cooking.	
CANE SUGAR	Cane sugar is sucrose which has been extracted from sugarcane. Today, most markets carry cane sugar in a variety of forms, from minimally processed raw sugar to sugar cubes..	
CARAMEL	Caramel is a beige to dark- brown confectionery product made by heating a variety of sugars. It can be used as a flavouring in puddings and desserts, as a filling in bonbons, or as a topping for ice cream and custard. Used as food colours (e150) a flavour.	
CASTER SUGAR	Castor or caster sugar is the name of a very fine granulated sugar, so named because the grains are small enough to fit through a sugar "caster" or sprinkler. Because of its fineness, it dissolves more quickly than regular white sugar, and so is especially useful in meringues and cold liquids. It is not as fine as powder sugar, which has been crushed mechanically (and generally mixed with a little starch to keep it from clumping).	
CORN SUGAR	Corn sugar is a natural sweetener that is made utilizing starch that is extracted from kernels of corn. The extracted corn-starch is then refined to create a solid sugar or to make another popular sweetening agent known as corn syrup. It is ideal for use as both a flavour enhancer and as an ingredient that influences the final	

	texture of the prepared food.	
CRYSTAL SUGAR	This is normal granulated cane or beet sugar. It is sold as grains or pressed into sugar cubes.	
DEMERARA SUGAR	Demerara sugar is a light brown sugar with large golden crystals, which are slightly sticky from the adhering molasses. A little of the colour from the cane juice remains in the sugar, with traces of minerals and other impurities; this gives it its honey colour. It is often used in tea, coffee, or on top of hot cereals.	
FRUCTOSE (FRUIT SUGAR)	A rather sweet sugar (sweeter than normal sugar), mainly found in fruits and honey. Fructose is found in honey, tree and vine fruits, flowers, berries, and most root vegetables. Fructose exhibits a sweetness synergy effect when used in combination with other sweeteners. the relative sweetness of fructose blended with sucrose, aspartame, or saccharin is perceived to be greater than the sweetness calculated from individual components.	
GOLDEN SYRUP	A light-coloured syrup produced by the evaporation of cane sugar juice. It contains various sugars with some flavouring and colouring matter. It is not quite so sweet as sugar, since it contains more water and glucose. It is used to sweeten and flavour cakes and puddings, to make sauces, as a filling for tarts and in gingerbreads.	
GRANULATED SUGAR	The normal small sugar crystals used at home. There are many different types of granulated sugar. The types of granulated sugars differ in crystal size. each crystal size provides unique	

	functional characteristics that make the sugar appropriate for a food's special need.	
GUR	Jaggery or gur is partially refined sugar from India made of cane sugar or palm sugar. It is a concentrated product of date, cane juice, or palm sap (see palm sugar) without separation of the molasses and crystals, and can vary from golden brown to dark brown in colour.	
HIGH FRUCTOSE CORN SYRUP	A syrup obtained from corn starch. The starch is first enzymatically degraded to glucose, which is then converted enzymatically to the sweeter fructose. Used as a high intensity sweetener.	
HONEY	It is a sweet food made by bees for aging nectar from flowers. Honey gets its sweetness from the fructose and glucose, and has about the same relative sweetness as granulated sugar. The main uses of honey are in cooking, baking, desserts, as a spread on bread, and as an addition to various beverages.	
ICING SUGAR	Powdered sugar, also called confectioner's sugar or icing sugar, is a finely ground sugar made by milling normal granulated sugar into a powdered state used for icing. It usually contains a small amount of anti-caking agent usually corn-starch.	
LACTOSE	Glucose + Galactose = lactose. Lactose is a disaccharide sugar composed of galactose and glucose that is found in milk. Lactose is not added directly to many foods, because its solubility is less than that of other sugars commonly used in food.	

GLUCOSE	A sugar found in many plants, also in blood. The main source of energy for the body. It is less sweet than sucrose.	
MALTOSE	Glucose + glucose = maltose. Maltose, also known as malt sugar, is present in foods in which starch is broken down. The sugar is present in malt products such as malted milkshakes and malted candies. Maltose also appears in foods in which starch is fermented by yeast or enzymes, such as in bread or brewed beverages. Some breakfast cereals contain maltose, as do cooked sweet potatoes.	
SUCROSE	Glucose + fructose = sucrose. Sucrose is more commonly known as table sugar, which is made from sugar beets or sugar cane. Any food that has added sugar, such as desserts, soda and bread, contains sucrose.	
MAPLE SYRUP	Maple syrup is a syrup usually made from the xylem sap of sugar maple, red maple, or black maple trees, although it can also be made from other maple species. It is a solution of 70% sucrose and glucose in water. main constituent is sucrose. Maple syrup is often eaten with pancakes, waffles, French toast, oatmeal or porridge. It is also used as an ingredient in baking, and as a sweetener or flavouring agent.	
MOLASSES	It is a viscous by-product of refining sugarcane or sugar beets into sugar. Molasses is primarily used for sweetening and flavouring foods. It is a defining component of fine commercial brown sugar.	

PALM SUGAR	Sugar obtained from date palms. contains mainly sucrose. Palm sugar is mainly used in sweets and desserts, but also in curries and sauces.	
PRESERVING SUGAR	Specially made for jams, jellies etc. It has large crystals which dissolve slowly and produce less scum than granulated sugar.	
ROCK SUGAR	It is not as sweet as regular granulated sugar, rock sugar comes in the form of large clear, white or amber-coloured crystals. Clear and white crystals are made by slow crystallisation from a saturated sugar solution. White rock sugar has small cracks and which reflect the light, which results in a white colour. Amber coloured crystals contain some caramel. It is less sweet, due to the presence of water in the crystals.	
SANDING SUGAR	Sanding sugar is coarse sugar or decorating sugar. The crystals are 4 times larger than those of regular granulated sugar. It is used for decorating baked goods.	
SPUN SUGAR	Fine strands of hardened boiled sugar that are used to decorate various desserts. Spun sugar begins by cooking sugar, water and cream of tartar to the hard-crack stage. A fork or whisk is then used to dip into the sugar syrup and draw out fine threads.	





SUPERFINE SUGAR	This sugar's crystal size is the finest of all the types of granulated white sugar. It is ideal for delicately textured cakes and meringues, as well as for sweetening fruits and iced-drinks since it dissolves easily.	
SWEETENERS	Non carbohydrate sweet substances. Most are artificial, but some are natural. Sweetness ranges from 0.8x the sweetness of sugar (such as sorbitol) to 2000x (the protein thaumatin).	
SYRUP	A thick viscous solution of sugars in water. sugar content ranging from 50-80%. It is a condiment that is a thick, viscous liquid consisting primarily of a solution of sugar in water, containing a large amount of dissolved sugars but showing little tendency to deposit crystals.	
TREACLE	Treacle is any uncrystallised syrup made during the refining of sugar. Black treacle contains more of the harmless impurities than golden syrup and has a somewhat bitter taste. In many recipes molasses can be substituted if treacle is unavailable.	
VANILLA SUGAR	Fragrant and flavourful sugar made by burying vanilla pods (beans) in granulated sugar; usually in the proportion of two pods for each pound of sugar. The mixture is stored in an airtight container for a week before the vanilla pod is removed. the result is a delicious and aromatic sugar that can be used as an ingredient or decoration for baked goods, fruit and other desserts. Vanilla sugar can also be made with pure vanillin instead of vanilla. the flavour is strongly vanilla-like, but clearly distinct. this sugar should properly be named vanillin-sugar.	

Table 4.2.1 (a)

4.2.2 STAGES OF SUGAR COOKING:

Testing the temperature with a candy thermometer is the most accurate way to determine the desired and doneness of a syrup. In the old days, syrups were tested by dropping little syrup into a bowl of cold water and checking the hardness of the cooled sugar. The stages of doneness were given names that described their hardness.

BASIC PRINCIPLES:

- A solution of syrup of sugar and water is boiled to evaporate part of the water.
- As the water evaporates the temperature of the sugar rises. If left cooking it will caramelize or turn brown and change flavour.
- Sugar cooked to high temperature will be harder than sugars cooked to low temperature.
- Sugar syrup cooked to 240F from a soft ball when cooled.



Sugar syrup cooked to 300 F is hard and brittle when cooled.

Caramelization: - Caramelization is the browning of sugar, a process used extensively in cooking for the resulting sweet nutty flavour and brown colour.

STAGES OF SUGAR BOILING:

STAGES	FAHRENHEIT	CELSIUS
FARM BOIL	243	118
HARD BOIL	250-260	122-127
SMALL CRACK	265-270	130-132
THREAD	230	110
SOFT BOIL	240	115
CRACK	275-280	135-138
HARD CRACK	290-310	143-155
CARAMEL	320-340	150-170

Table 4.2.2 (a)

4.3 BREAD

4.3.1 Role of various ingredients in bread making.

- Yeast

- Water
- Sugar
- Salt
- Eggs
- Oil
- Fat

YEAST

Yeast is a living organism: a one-celled fungus. Various strains of yeast are present virtually everywhere. Yeast feeds on carbohydrates present in the starches and sugars in bread dough, converting them to carbon dioxide and ethanol, an alcohol, in an organic process known as fermentation:



When yeast releases carbon dioxide gas during bread making, the gas becomes trapped in the dough's gluten network. The trapped gas leavens the bread, providing the desired rise and texture. The small amount of alcohol produced by fermentation evaporates during baking.

Fats

Fat is the general term for butter, margarine, lard, shortening and oil. Fats provide flavor and color, add moisture and richness assist with leavening, help extend a product's shelf life and shorten gluten strands, producing tender baked goods.

The flavor and texture of a baked good depends on the type of fat used and the manner in which it is incorporated with other ingredients. In pastry doughs, solid fat shortens or tenderizes the gluten strands; in bread doughs, fat increases loaf volume and lightness; in cake batters, fat incorporates air bubbles and helps leaven the mixture. Fats should be selected based on their flavor, melting point and ability to form emulsions

Most bakeshop ingredients combine completely with liquids; fats do not. Fats will not dissolve but will break down into smaller and smaller particles through mixing. With proper mixing, these fat particles are distributed, more or less evenly, throughout the other ingredients, causing fat and liquid to blend or emulsify.

It is used to provide flavour and softness to the texture. Fats have a physical effect on the breads rather than any chemical reaction. Fat being a shortening agent reduces the toughness of the gluten and mellows the final product. It also have lubricating effect on the fine gluten strands giving extra volume to the final product. As the amount of fat increases, the fermentation rate decreases.

Effects of Fat

The effects of using fat are as follows.

- It increases the nutritious value of the bread
- It reduces elasticity, softens the crust and the crumb.
- It helps retain moisture in the baked product, thereby keeping it moist.
- It increases volume if used extensively.
- Fats such as butter and lard give flavour to the product.
- If used in large amounts, it retards fermentation.

OIL

Unlike butter and other fats, oil blends thoroughly throughout a mixture. It therefore coats more of the proteins, and the gluten strands produced are much shorter, a desirable result in fine-textured products such as muffins or chiffon cakes. For baking, select a neutral flavored oil unless the distinctive taste of olive oil is desired, as in some breads. Never substitute oil in a formula requiring a solid shortening.

EGGS

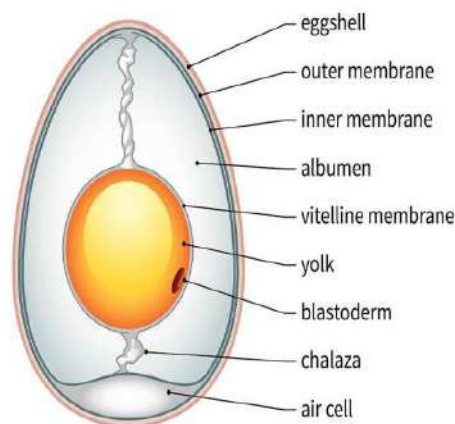
Eggs are used for richness and to give lightness and colour. Eggs are again rich in protein and hence will tighten the gluten strands, but this effect gets balanced as the fat in a yolk helps to soften the gluten as well. The use of eggs will yield softer bread. In many types of bread where a hard structure is required like hard rolls, one does not use eggs in the recipe.

Bird and reptile eggs consist of a protective eggshell, albumen (egg white), and vitellus (egg yolk), contained within various thin membranes. The most commonly consumed eggs are chicken eggs. Other poultry eggs including those of duck and quail also are eaten. Fish eggs are called roe and caviar. Egg yolks and whole eggs store significant amounts of protein and choline, and are widely used in cookery.

An egg basically consists of three parts:

1. A shell
2. An egg whites
3. An egg yolk

An egg from a hen consists of approximately 2/3 egg white and 1/3 egg yolk.



WATER

Water is most commonly used liquid in the bread making. It moistens the flour and helps in forming the dough. It also aids in the baking process. Water performs the following three main functions in the bread dough.

1. Helps hydrate and moisten the insoluble proteins.
2. Disperses the yeast amongst the entire dough.
3. Binds the flour and other ingredients into dough.

It is observed that the water content in the dough greatly affects the rate of fermentation. The speed of fermentation is greater in ferment and dough process as compared to sponge and dough process, which have an increase level of hydration.

SALT

The main function of the salt is to control the action of yeast as it slows down the fermentation process. It should be mixed with the flour for the best results. It also provides flavour to the bread. It also affects the quality of the crumb, crust, and colour of the baked product. So salt mainly performs the following functions.

- Imparts flavour
- Gives stability to gluten
- Controls the rate of fermentation
- Retains and of moisture and
- Affects the crust colour and crumb, due to control on the rate of fermentation.

MILK

It makes the bread whiter and softer, and provides moisture and a distant flavour. Milk has a physical effect on bread in the form of the tightening effect of gluten by the action of casein or the milk protein. Lactose or the milk sugar is the only sugar which cannot be fermented by the yeast and hence it remains in the dough right till the end, resulting in good crust colour.

BREAD IMPROVERS

Flour is of variable quality hence it becomes necessary at times to add bread improvers to the dough to bring the final product to a set standard. Bread improvers may be divided into three main categories. These include:

- Those of mineral nature, used by the miller.
- Those of organic nature, mainly enriching agents.
- Those of mineral and organic categories which are also foods for yeast.

Mineral improvers are popular because they increase the yield of the bread by necessitating the use of extra water. Some of the mineral improvers have a slight drying effect on the crumb.

4.3.2 METHOD OF BREAD MAKING

1. Straight dough method

- All the ingredients are mixed together, and the dough is fermented for a fixed time.
- The fermentation time of the straight dough depends on the strength of the strength of the flour. Strong flour requires more fermentation time to mature adequately
- Flour which requires 2 to 3 hours for maturing should be used for making bread by straight method. Flours that take very long periods. It is very difficult to control the temperature of the dough and rise in temperature will cause acid taste and flavour in bread.

2. No time dough method

- Dough is fermented in the usual manner. It is just allowed a brief period for it to recover from the strains mixing.
- Since dough is not fermented, the two functions of fermentation are achieved to some extent by increasing the quantity of yeast and by making the dough little slacker and warmer.
- Although it is possible to make acceptable bread by using this method the product has poor keeping quality. Due to the absence of fermentation the gluten and starch are not conditional sufficiently to retain the moisture.

3. Salt delayed method

- This is a slight variation of straight method. Where all the ingredients are mixed except salt and fat.
- As a salt has a controlling effect on enzymatic action on yeast, the speed of fermentation of a less dough will be faster, and a reduction in total fermentation time will be faster.
- The salt is added at a knock back stage. The method of adding salt at the later stage may be according to the convenience of individual baker. It may be sifted on the dough and mixed or it may be creamed with fat and salt.
- Whatever way is mixing the salt, only three forth mixing should be given initially and one forth mixing at the time of adding salt.

- Due to absence of salt, the fermentation speed is enhanced and gluten is matured in a reasonably shorter time.

4.Sponge and Dough method

- Strong flour takes too long for conditioning and should not be used for making bread by straight dough method. for such flours sponge and dough method is more suitable where the problem of controlling the dough temperature time is not so acute.
- Flour, proportionate amount of water, yeast and sugar are mixed together. Longer fermenting sponges may also contain some amount of as well. Mix all the ingredients evenly.
- This sponge is fermented for a pre determined time. The ferment is carried out longest for almost 16 to 17 hours and minimum for an hour.


Advantages





- Scheduling flexibility. sponges can usually be held longer than finished dough.
- Increased flavour, developed by the long fermentation of the sponges
- Less yeast is needed, because it multiplies during the sponge fermentation.

5.Ferment and Dough method

- This is a variation of sponge and dough method.
- Very often a bread formula may contain milk, eggs, substantial quantity of fat and sugar.
- All these formula ingredients will have a retarding effect on yeast activity.
- If all the formula yeast, part of flour, yeast food and sufficient water are mixed together, the yeast gets initially an environment which is helpful to strong activity and at the end of fermentation time it is in a fit condition to take on extra load of fermentation in presence of milk, eggs, excessive fat, taste, and texture of the product.

4.3.3 Faults and remedies of the breads

FAULT	Cause and solution	
Too much volume	Possible Cause: Too much yeast Possible Solution: Check yeast quantity	

Badly shaped	<p>Possible Cause: Moulder settings too loose Possible Solution: Check moulder settings</p> <p>Possible Cause: Dough placed wrongly in tin Possible Solution: Check dough placement in tins</p>	
Lack of Crust colour	<p>Possible Cause: Baking temperature too low Possible Solution: Increase baking temperature</p> <p>Possible Cause: Baking time too short Possible Solution: Extend baking time</p>	
Cracked top crust	<p>Possible Cause: Proofer too dry Possible Solution: Check proofer settings</p> <p>Possible Cause: Dough left outside to skin Possible Solution: Place trolley in proofer after moulding</p> <p>Possible Cause: Under baked Possible Solution: Extend baking time</p>	
Holes in bread	<p>Possible Cause: Too much dusting flour on table Possible Solution: Reduce dusting flour</p> <p>Possible Cause: No intermediate proof Possible Solution: Rest dough for 10 min after scaling</p>	





Collapsed bread	Possible Cause: Slack dough Possible Solution: Reduce water quantity Possible Cause: Under mixed Possible Solution: Increase mixing time	
Bread sticks in tin	Possible Cause: Under baked Possible Solution: Extend baking time Possible Cause: Tin not greased sufficiently Possible Solution: Check tin oil application system Possible Cause: Slack dough Possible Solution: Reduce water quantity	
Sides collapsing	Possible Cause: Bread left in tins for too long Possible Solution: Remove from tins immediately after baking Possible Cause: Too much yeast Possible Solution: Check recipe Possible Cause: Under baked Possible Solution: Extend baking time	 

Table 4.3.3

Other types of faults are Holes under top crust, Holes at the bottom, Poor shelf life, Thick crust, Poor Oven spring, Poor retarding

4.4.0 CAKES

Cake is a form of sweet dessert that is typically baked. In their oldest forms, cakes were modifications of breads, but cakes now cover a wide range of preparations that can be simple or elaborate, and that share features with other desserts such



as pastries, meringues, custards, and pies.

The term "cake" has a long history. The word itself is of *Viking* origin, from the Old Norse word "kaka". The ancient Greeks called cake, which was derived from the word for "flat". It was baked using flour mixed with eggs, milk, nuts and honey. They also had a cake called "*satura*", which was a flat heavy cake. During the Roman period, the name for cake became "placenta" which was derived from the Greek term. A placenta was baked on a pastry base or inside a pastry case.

INGREDIENTS

Good cakes begin with high-quality ingredients however, even the finest ingredients must be combined in the proper balance. Too much flour and the cake may be dry; too much egg and the cake will be tough and hard. Changing one ingredient may necessitate a change in one or more of the other ingredients.

Each ingredient performs a specific function and has a specific effect on the final product. Cake ingredients can be classified by function as tougheners, tenderizers, moisteners, driers, leaveners and flavorings. Some ingredients fulfill more than one of these functions. For example, eggs contain water, so they are moisteners, and they contain protein, so they are tougheners. Understanding the function of various ingredients helps the student chef understand why cakes are made in particular ways and why a preparation sometimes fails. With additional experience, chefs should be able to recognize and correct flawed formulas, one step toward developing their own cake formulas.

TOUGHENERS

Flour, milk and eggs contain protein. Protein provides structure and strengthens the cake once it is baked. Too little protein and the cake may collapse; too much protein and the cake may be tough and coarse-textured.

TENDERIZERS

Sugar, fats and egg yolks interfere with the development of the gluten structure when cakes are mixed. They shorten the gluten strands, making the cake tender and soft. These ingredients also improve the cake's keeping qualities

MOISTENERS

Liquids such as water, milk, juice and eggs bring moisture to the mixture. Moisture is necessary for gluten formation and starch gelatinization, as well as for improving a cake's keeping qualities.

DRIERS

Flour, starches and milk solids absorb moisture, giving body and structure to the cake.

LEAVENERS

Cakes rise because gases in the batter expand when heated. Cakes are leavened by air trapped when fat and sugar are creamed together, by carbon dioxide released from baking powder and baking soda and by air trapped in beaten eggs. All cakes rely on natural leaveners—steam and air—to create the proper texture and rise. Because baking soda and baking powder are also used in some cake formulas, the material on chemical leaveners in Chapter 30, Quick Breads, should be reviewed.

FLAVORINGS

Flavorings such as extracts, cocoa, chocolate, spices, salt, sugar and butter provide cakes with the desired flavors. Acidic flavoring ingredients such as sour cream, chocolate and fruit also provide the acid necessary to activate baking soda.

Cake ingredients should be at room temperature, approximately 70°F (21°C), before mixing begins. If one ingredient is too cold or too warm, it may affect the batter's ability to trap and hold the gases necessary for the cake to rise.

4.4.1 Manufacturing process

Commercial baking firms generally turn out about billions of food items every day. Since it is necessary for all of the products to be uniform in shape, size and appearance to pass quality regulation tests, most bakeries make use of various automatic equipment like fillers, mixers and ovens for processing high volumes of consistent products. Manufacturers also use additives and preservatives for achieving uniform appearance and long shelf life.

Ingredients Involved

Commercial cakes are usually made using a batter prepared from fat, wheat flour, eggs, sugar, water, milk powder, flavourings, raising agents (sodium carbonate) and preservatives (sulphur dioxide). The ingredients are mixed thoroughly using either the flour or sugar batter methods. Nowadays, a method known as 'all-in-one' is also being used popularly, which combines all ingredients simultaneously except fruits.

Mixing Batter

A commercial mixer is generally used for mixing the batter, which keeps beating the mixture for about 10 minutes even after all the ingredients have combined thoroughly. As a result, air gets trapped inside the batter, which hikes up the affectivity of the raising agent. At

the end, the batter is poured into mould for baking. A small amount of oil gets automatically sprayed inside the mould before the batter is filled into it via an automated dosing system.

Baking

Once full, all the moulds are taken through the automatic oven via a conveyor belt. The humidity and temperature inside the oven is controlled very carefully so that the end product cools thoroughly and evenly and gives the best results. During the foremost rising process, the crust of each cake is sprayed with some amount of water so that its surface does not crack and remains flexible. When the cakes have risen entirely, their crust is left to dry and form a baked colouring.

Cooling and Packaging

When the cakes begin to cool, they release some moisture in the air. This moisture is removed with the help of powerful suction pumps to prevent formation of condensation. Once the cakes have cooled completely, they are released from their moulds and packed using packaging equipment so that they would be ready for shipment. In general, commercial cakes are packed in plastic wraps, sometimes also with an additional cardboard tray and box.

4.4.2 Faults & Remedies:

FAULT	POSSIBLE CAUSE	POSSIBLE SOLUTION
CRACKED TOP	<p>This usually occurs when the oven temperature is too hot which leads to the crust forming quickly while the cake is still rising which leads to the crust bursting to allow the cake rise. However, there are other culprits like:</p> <ul style="list-style-type: none"> • Too much rising agents • Cake tin too small • Too much flour 	<ul style="list-style-type: none"> • Check the temperature of your oven • Insure you are using the right size of pan • Follow the recipe correctly.
SUNKEN CAKE	<p>This usually occurs when the temperature of your oven reduces during baking and this happens when you either open</p>	<ul style="list-style-type: none"> • Do not open your oven till your cake sets and this usually takes about 30-40 minutes depending on your

	<p>the oven before the cake sets or when the oven goes off before the cake sets. Other factors include;</p> <ul style="list-style-type: none"> • Oven temperature too low • Too much of a particular ingredient e.g. fat, baking powder, sugar etc. 	<p>oven and the size of your cake. another way to know if it has set is if you start perceiving your cake. resist the urge to peak at your cake!</p> <ul style="list-style-type: none"> • Check your oven temperature • Follow the recipe correctly
SIDE OF THE CAKE CRUNCHY/BURNT	<p>This usually happens when you leave your cake in the oven for too long. Other factors include:</p> <ul style="list-style-type: none"> • Too much fat used to butter pan • Oven temperature too hot • Butter not suitable for baking • Cake tin not sufficiently lined 	<ul style="list-style-type: none"> • Do not over bake your cakes • Check your oven temperature • Butter and flour or line your pan well • Check your baking ingredients whether it is suitable for baking.
CAKE STUCK TO THE PAN	<p>This usually occurs when the pan used is not greased well or when the cake is cooled in the pan for too long.</p>	<ul style="list-style-type: none"> • Grease your pan well • Let your cakes cool in the pan for just 15 mins, then turn them over to a cooling rack to complete the cooling process
CAKE TOO DARK	<ul style="list-style-type: none"> • Oven temperature too hot • Incorrect amount of water/liquid • Excessive sugar 	<ul style="list-style-type: none"> • Check your oven temperature • Follow the recipe correctly
CAKE BURNED ON TOP	<ul style="list-style-type: none"> • Oven temperature too hot • Incorrect amount of water/liquid 	<ul style="list-style-type: none"> • Check your oven temperature • Follow the recipe correctly
CAKE SHINY AND STICKY	<ul style="list-style-type: none"> • Oven temperature too cool • Not baked long enough • Too much sugar in recipe 	<ul style="list-style-type: none"> • Check your oven temperature
CAKE SHRINKS	<ul style="list-style-type: none"> • Excessive liquid • Oven temperature too hot 	<ul style="list-style-type: none"> • Follow the recipe correctly • Check your oven temperature

	<ul style="list-style-type: none"> • Improper mixing procedure • Cake baked too long 	<ul style="list-style-type: none"> • Do not over bake your cake • Do not over mix the cake
INTERNAL CAKE APPEARANCE		
CAKE VERY DENSE/ DENSE GRAIN	<ul style="list-style-type: none"> • Enough air wasn't beaten into the cake • Eggs added too quickly • Not enough rising agent • Excessive liquid • Improper mixing 	<ul style="list-style-type: none"> • Mix your batter well • Follow the recipe correctly • Mix your batter well
COARSE AND IRREGULAR GRAIN	<ul style="list-style-type: none"> • Improper mixing procedures • Stiff batter • Oven temperature too cool • Batter turned too much 	<ul style="list-style-type: none"> • Mix your batter correctly • Follow the recipe correctly • Check your oven temperature
OFF COLOR CAKES	<ul style="list-style-type: none"> • Unclean equipment • Oven temperature too cool • Improper mixing procedure 	<ul style="list-style-type: none"> • Check your oven temperature • Mix your batter well • Use clean equipment
BURNT ON TOP, ISN'T COOKED IN THE MIDDLE	<ul style="list-style-type: none"> • Cake tin too small • Oven temperature too hot 	<ul style="list-style-type: none"> • Use the right pan size • check your oven temperature
DRIES OUT TOO SOON	<ul style="list-style-type: none"> • Excessive baking time • Insufficient liquid • Improper mixing procedure • Dry weather 	<ul style="list-style-type: none"> • Reduce your baking time • Mix your batter properly • Follow the recipe correctly • Wrap your cakes with cling film to avoid drying

Table 4.4.2 (a)

Questions:**2 marks**

1. List the main ingredients used in Baking.
2. Explain about egg.
3. Explain the importance of yeast.
4. Explain about rubbing method.
5. Define about Beet Sugar.
6. Define about Palm Sugar.
7. Describe about No time dough method.
8. Explain about sides collapsing fault from bread.
9. List down the types of cakes.
10. Explain about faults in cakes.

5 marks

1. Draw and explain about the parts of wheat.
2. Explain the importance of ingredients used in Baking.
3. Draw and explain about Egg diagram.
4. Describe about Mixing methods of Dough.
5. Differentiate between Italian butter cream and Swiss butter cream.
6. List any 6 types of sugar and explain.
7. Differentiate between Caster Sugar and Corn Sugar.
8. Differentiate between Demerara Sugar and Brown Sugar.
9. Explain the basic principles that we have to follow while preparing sugar syrup.
10. Describe about methods of Bread making.



UNIT

5

ADVANCED BAKERY**5.1 PASTRY**

It is a dough often used for preparing both, sweet and savoury meals. It contains flour, shortening like butter or oil, sugar, water, and salt. A filling is put inside the pastry and it is baked to get resulting food with crispy coat. There are various pastries made such as short crust pastry, puff pastry, and Filo pastry. For example, pastry is used for pies, puffs, croissants, and tarts.

Various types of pastries are used in the preparation of sweet and savoury dishes in the bakery and confectionery. These include:

- Short crust pastry.
- Flaky pastry.
- Puff pastry
- Danish pastry.
- Choux pastry.
- Rough puff pastry.
- Hot water pastry.

5.1.1 SHORT CRUST:

Short crust paste is crisp and brittle. it is not elastic and resilient like dough

and this shortness in a cookie or many pastry products is much desired to alter the textures and mouth feel of a product. Short crust paste is usually used for making savoury products such as turnovers and pies. The flour should have low gluten content,

one that is milled from soft wheat flour. The fat will reduce the flexibility of the gluten that is it makes the gluten strands shorter hence the term shortening for the fat used in the bakery and the term called as short crust pastry.

The usual method to make short-crust pastry is by the rub-in method. Chilled fat or butter is rubbed into the sieve flour so that it is finely dissolved and resembles a sandy or bread crump like texture. The fat forms a thin layer or coating on the gluten and gliding molecules, without turning out the fat into a continuous paste. The ration of fat to flour is normally 1:2, but the fat can be increased to equal the flour to obtain rich dough. It is



gluten. This can also happen when scraping and trimmings are added to the dough and re-worked. The use of too much flour for dusting will also alter the ratio of the mixture and cause toughening as the extra flour proteins—glutening and gliding does not have a coating of fat around it, and thus come together to form gluten.

5.1.2 LAMINATED:

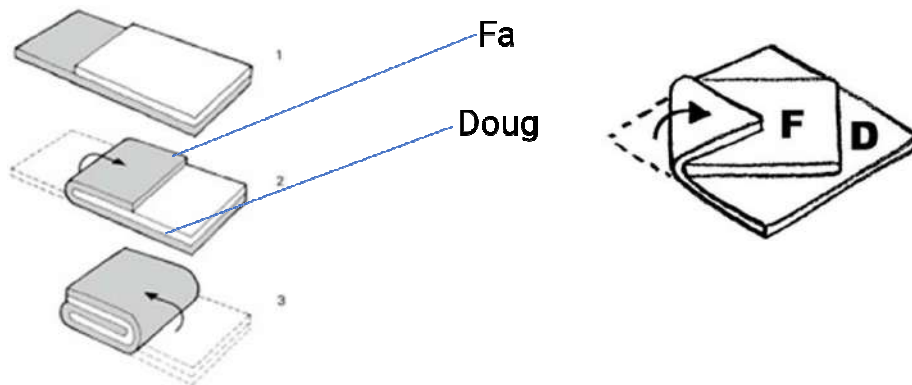
Laminated dough is a culinary preparation consisting of many thin layers of dough separated by butter, produced by repeated folding and rolling. Such doughs may contain over eighty layers. During baking, water in the butter vaporizes and expands, causing the dough to puff up and separate, while the lipids in the butter essentially fry the dough, resulting in a light, flaky product. Examples of laminated doughs include:

- Croissant pastry
- Danish pastry
- Flaky pastry
- Jachnun
- Kubaneh
- Puff pastry



Laminated dough gets its name from how it's made. "Laminating" dough refers to the process of folding butter into dough multiple times to create very thin alternating layers of butter and dough. The gluten in the flour also gets developed during the folding and rolling process. This is unlike other baked goods where butter is creamed in with the sugar and flour, so the result when baked is a pastry with hundreds of flaky, airy layers.

Two Methods:



5.1.3 PUFF:

Puff pastry, also known as Pâte Feuilletée or feuilletage in French, is a very delicate and rich pastry that consists of many thin alternating layers of dough and fat. This lamination is what gives puff pastry its light, crispy and flaky texture upon baking, the expanding air and water vapour ‘puff’ separate layers apart from each other, resulting in a delightful, crisp, light, flaky pastry called puff pastry.



Though it is a form of dough which is laminated, it is still classified into pastes as it is not baked directly.

Puff pastry has a wide variety of uses that include but is not limited to:

- Pies
- Tarts
- Allumettes
- Bouchees
- Vol-au-vents
- Mille-fuille

Products such as croissant, Danish pastry, strudel, creme, torte cakes are often grouped under puff pastry. However, since croissant and Danish pastry are yeast-leavened, there is a habit to eliminate them from the puff pastry category. Many newer variations also include flavoured/coloured dough's such as chocolate to add to its visual appeal and taste.

Origin

The origin of the puff pastry is quite unclear. While the Dictionnaire universel de cuisine credits a chef named Feuillet with its invention; other sources indicate that puff pastry was known to the ancient Greeks as shown in a charter drawn up by Robert, bishop of Amiens (1311). Despite this finding, puff pastry is known to have been brought back into fashion later by the artist, Claude Lorrain and a chef Feuillet, thus the name Pâte Feuilletée.

The dough/butter assembly is repeatedly sheeted out and folded into about ½ thick. Fold the two ends to the centre and then into half. Make sure that the edges/ corners are even. Rest the dough to relax the gluten. Do not refrigerate for too long as the fat will harden. This

method is followed to form alternating layers of dough and fat. Single, double folds or their combinations can be formed with a minimum of at least four single folds and up to a maximum of six. Failure to do this will result in the product that shrinks unevenly when they are baked. Repeat the rolling and folding a total of four times. The dough is now ready to be rolled out for the final shaping and cutting.

Recipe for Small-Batch Puff Pastry

B U T T E R B L O C K

- 1 pound 2 ounces (510 g) cold unsalted butter
- Pinch of salt
- 2 teaspoons (10 ml) lemon juice
- 4 1/2 ounces (130 g) bread flour

DOUGH

- 2 teaspoons (10 g) salt
- 1 cup (240 ml) water
- 2 ounces (55 g) unsalted butter, melted
- 1 teaspoon (15 ml) lemon juice
- 3 1/2 ounces (100 g) cake flour
- 11 ounces (310 g) bread flour

Preparation Method

To make the butter block

1. Work the cold butter into the proper consistency (see Note) with the warmth of your hand. Dissolve the salt in the lemon juice. Mix into the butter together with the bread flour.
2. Shape into a 12-inch (30-cm) square (6-inch/15-cm for the small-batch recipe) and refrigerate until firm.

NOTE : The butter block should not be so soft that it is hard to handle; you should be able to transfer the finished block easily from one hand to the other. It should not be so firm that it cracks or breaks if you press on it. Ideally, the dough and the butter block should have the same consistency. A dough that is softer than the butter will be forced to the sides by the firmer butter; a dough that is too firm will force the butter out on the sides. Either will result in poor-quality puff pastry. Take into consideration that the dough needs to rest for 30 minutes and try to time your work so that both the dough and the butter block are ready at the same time.

To Make The Dough By Hand (CLASSIC EUROPEAN METHOD)

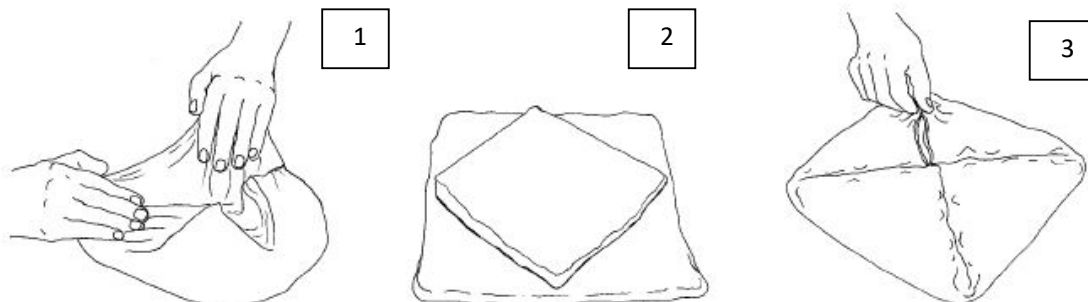
In this preparation method, the order of the ingredients is reversed. You start by using the full measurement of both flours and, instead of adjusting the consistency of the dough with bread

flour, adjust the amount of water added at the end. The butter should be firm rather than soft. The dough is worked much less and, when finished, should be not soft, smooth, and elastic but quite the opposite.

1. Sift both flours together onto your work surface—preferably a marble slab or table. Cut the firm butter into chunks, place on top of the flour, and, using your fingertips, cut it into the flour, pinching it down until the mixture resembles coarse crumbs.
2. Shape into a mound, make a well in the center, and add the salt and most of the cold water to the well. Stir to dissolve the salt. Gradually mix the flour and butter into the water, using the fingers of both hands. If necessary, gradually add more water to form a dough that holds together but is fairly sticky and rough looking.
3. Form the dough into a ball, kneading it as little as possible. Flatten the dough a little and cut a cross halfway into the ball. Cover and let rest for 30 minutes in the refrigerator.

To Assemble

1. Pull the corners of the cuts out to make the dough square-shaped (Figure 2-9).
2. Roll the opened dough out to a square slightly thicker in the center than on the sides and slightly larger than the butter block.
3. Place the butter block diagonally within the square so there are 4 triangles around the sides (Figure 2-10). Fold the dough triangles in so they meet in the center. Pinch the edges together to seal in the butter block (Figure 2-11).
4. Roll the dough into a rectangle 12 inch (1.2 cm) thick. Do not roll the dough wider than a sheet pan is long.

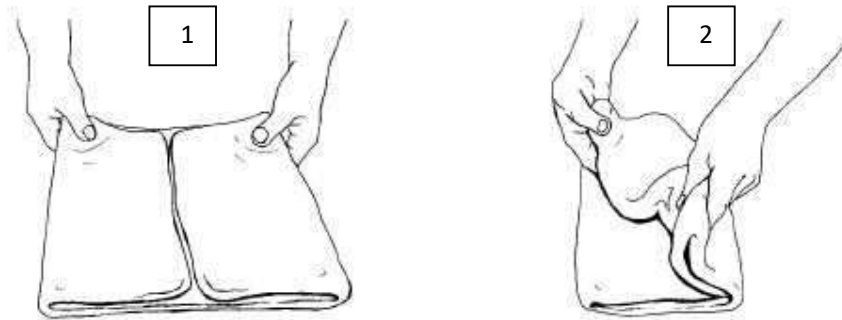


1. Opening the cut ball of dough to make it square
2. Positioning the butter block diagonally on the dough square
3. Sealing the butter block inside the dough

5. Give the dough 4 double turns (instructions follow), refrigerating it for approximately 30 minutes between each turn. Be sure the dough is well covered at all times.
6. After the last turn, roll the puff pastry out to approximately $3\frac{1}{4}$ inch (2 cm) thick. If this is difficult to do, refrigerate the dough for a few minutes to relax the gluten. Place the dough on a sheet pan lined with baking paper, cover, and refrigerate or freeze. Remember that you should not keep puff pastry dough in the refrigerator more than 5 days.

To Make Double Turn

1. As carefully and evenly as possible, roll out the dough to a rectangle 30 x 20 inches (75 x 50 cm), or 15 x 10 inches (37.5 x 25 cm) for the small-batch recipe. Arrange the dough rectangle with a long side closest to you.
2. Make a vertical mark in the center of the rectangle. Fold both ends of the dough in to this mark.
3. Brush excess flour from the top of the dough and fold once more, as if you were closing a book. The dough now has one double turn.
4. Carefully place the dough on a sheet pan, cover, and refrigerate for 30 minutes.
5. When you begin the second double turn, place the dough in front of you so that the short ends of the rectangle are on your left and right, opposite to the way the dough lay when you “closed the book” with the first turn. Roll out and turn as above; repeat as you make the remaining turns.



1. The first step of a double turn: folding both short edges in to meet in the center
2. Completing a double turn: folding the dough in half as if closing a book

5.1.4 Choux

Pâte à choux, also known as *éclair paste*, is a basic and versatile paste used to make many items in the pastry kitchen, including cream puffs or profiteroles, swans, croquembouche, and, of course, éclairs. Like short dough, pâte à choux is also used in combination with puff

pastry to make delicious sweets such as Gâteau Saint-Honoré and Choux Surprise. The translation of pâte à choux is “cabbage paste,” referring to the baked cream puff’s resemblance to a small cabbage head.



Pâte à choux, or choux paste, is not really a dough in the strictest sense, but rather a thick paste that could be described as a roux with the addition of eggs. There are many different recipes and philosophies to choose from when it comes to making this classic pastry. However, the one factor that holds true in each case is that the more eggs you are able to add to the base mixture (without causing it to lose its shape when piped), the higher and lighter your finished product will be, ideally becoming just a hollow shell.

COMPOSITION AND PREPARATION OF THE BATTER

Pâte à choux begins as a cooked mixture of water or milk, fat (usually butter), and flour, with a small amount of salt added if sweet butter is used. Sifted flour is added to the boiling water and fat and stirred in quickly. The resulting roux is then cooked for a few minutes while being stirred constantly to allow as much liquid as possible to evaporate so that the maximum number of eggs can be incorporated. Although some chefs use a slightly different formula that incorporates a stronger flour (especially for larger items, such as Paris-Brest, as opposed to profiteroles), now add as many eggs as the paste can absorb and still stay in a precise shape once it is piped out; the paste will have a slightly shiny appearance if the correct amount of eggs has been added. On the other hand, if not enough eggs are used, the baked pastries will be low and heavy with a gluey mass inside that must be removed before the pastries can be filled. Add the eggs a few at a time; you can then mix them in more easily and also avoid accidentally adding too many. Add a small amount of ammonium carbonate with the eggs to give an extra lift. The ammonium gas released during baking helps increase the volume; the strong-smelling gas quickly dissipates as the pastry cools. If you do not have ammonium carbonate, you need not substitute another leavener; simply leave it out.

ADVANCE PREPARATION OF INDIVIDUAL PIECES

Pâte à choux is never prepared ahead of time and refrigerated or frozen in batter or dough form before being shaped, as is, for example, puff pastry dough. It must be piped out first, then either baked or frozen immediately, before the paste develops a skin.

BAKING

The formed paste is put into a hot (425°F/219°C) oven (directly from the freezer without thawing, if frozen) to produce the maximum amount of steam, which rapidly expands the paste and leaves a large, empty space in the centre. The heat coagulates the gluten and proteins that set the structure and make a firm shell. After approximately 10 minutes, the heat is reduced (375°F/190°C) to finish baking and allow the shells to become firm and dry without getting too dark. Simply turning the thermostat control will not lower the heat quickly enough. Open the oven door partway as well to reduce the temperature, but do not open it fully; a sudden drop in temperature at this stage can cause the shells to collapse. As long as you do not let it become too brown, you cannot over bake pate à choux, so make sure that the shells have been baked long enough to hold their shape and not fall. The baked shells—for éclairs and profiteroles, for example—can be stored covered for a day or so before being filled, but once filled, they should be served the same day.

Recipe of Pate à choux

- 4 ounces (115 g) cake flour
- 5 1/2 ounces (155 g) bread flour
- 1 pint (480 ml) water
- 6 ounces (170 g) unsalted butter
- 1 1/2 teaspoon (2.5 g) salt
- 1 pint (480 ml) eggs
- 1 1/4 teaspoon (1 g) ammonium carbonate

Preparation Method

1. Sift the flours together on a sheet of baking paper and reserve.
2. Heat the water, butter, and salt to a full rolling boil, so that the fat is not just floating on the top but is dispersed throughout the liquid.
3. Form the ends of the baking paper into a pouring spout. Then, using a heavy wooden spoon, stir the flour into the liquid, adding it as fast as it can be absorbed. Avoid adding all of the flour at once, as this can make the paste lumpy.

4. Cook, stirring constantly and breaking up the inevitable lumps by pressing them against the side of the pan with the back of the spoon, until the mixture forms a mass and pulls away from the sides of the pan, about 2 to 3 minutes.
5. Transfer the paste to a mixer bowl. (If you are making the small recipe, adding the eggs by hand is quite easy; use the spoon and leave the paste in the saucepan.) Let the paste cool slightly so the eggs will not cook when they are added.
6. Mix in the eggs, 2 at a time, using the paddle attachment on low or medium speed. After the first few eggs are incorporated, add the ammonium carbonate. Add as many eggs as the paste can absorb and still hold its shape when piped.
7. Pipe the paste into the desired shape according to the individual recipe.
8. Bake at 425°F (219°C) until fully puffed and starting to show some color, about 10 minutes. Reduce the heat to 375°F (190°C) and bake about 10 to 12 minutes longer, depending on size.
9. Let the pastries cool at room temperature. Speeding the process by placing them in the refrigerator or freezer can cause them to collapse.

5.2 ICING

Icing, or frosting, is a sweet, generally creamy glaze or coat made of sugar with a liquid, such as water or milk, that is often enriched with ingredients like butter, egg whites, cream cheese, or flavourings. It is used to cover or decorate baked goods, such as cakes or cookies. When it is used between layers of cake, it is called filling.



Icing can be formed into shapes such as flowers and leaves using a pastry bag. Such decorations are commonplace on birthday and wedding cakes. Chef's colour dye (food colouring) is commonly added to icing mixtures to achieve the desired colour. Sprinkles, colouring mist, edible ink designs, or other decorations are often used on top of icing.



The simplest icing is a glacé icing, containing powdered sugar and water. This can be flavoured and coloured as desired, for example, by using lemon juice in place of the water. More complicated icings can be made by beating fat into powdered sugar (as in buttercream), by melting fat and sugar together, by using egg whites (as in royal icing), and by adding other ingredients such as glycerine (as in fondant). Some icings can be made from combinations of sugar and cream cheese or sour cream, or by using ground almonds (as in marzipan).

HISTORY OF ICING

Covering cakes with powdered sugar or other materials was introduced in the 17th century. The icing was applied to the cake then hardened in the oven. The earliest attestation of the verb 'to ice' in this sense seems to date from around 1600, and the noun 'icing' from 1683. 'Frosting' was first attested in 1750.



Icing can be applied with a utensil such as a knife or spatula, or it can be applied by drizzling or dipping (see glaze), or by rolling the icing out and draping it over the cake. The method of application largely depends on the type and texture of icing being used. Icing may be used between layers in a cake as a filling, or it may be used to completely or partially cover the outside of a cake or other baked product.

Simple Icing yield: 3 cups (720 ml)

This icing is also known as *flat icing* and *water icing*. If you use simple icing as part of your daily routine, here is an easy way to make it. Fill a storage container with powdered sugar and add as much hot water as the sugar will absorb; do not stir, but let it settle for a few minutes. Pour enough additional water on top to cover the surface in a 1-inch (2.5-cm) layer. Let the icing sit overnight. The next day, not only will you have perfectly fine simple icing, but the water on the top of the icing can be poured off and used instead of simple syrup on Danish pastries or puff pastry items.

Recipe:-

2 pounds (910 g) powdered sugar

3 tablespoons (45 ml) corn syrup (see Note)

¾ cup (180 ml) hot water

Preparation Method

1. Place the powdered sugar in a mixing bowl. Pour the corn syrup into the hot water and stir until melted. Add the liquid to the powdered sugar and mix until smooth.
2. Adjust the thickness with additional water as needed. The icing should be the consistency of sour cream.
3. Cover the surface with a thin layer of water to prevent a crust from forming (pour off before using). Store, covered, at room temperature.

Royal Icing

This type of icing is also called *decorating icing*, because that is its principal use. Royal icing is one of the best materials with which to practice piping. It is inexpensive and easy to make,

and it can be piped and formed into almost any shape. Royal icing is used a great deal around Christmastime to decorate gingerbread and Christmas cookies, and is essential for making gingerbread houses. Because it becomes hard and brittle when dry, royal icing is used more for decorating than for eating. However, it is traditional in some countries to use it on special-occasion cakes, such as wedding cakes. Personally, I limit its use to showpieces, or for piping a small amount on a cake or pastries. Be careful to keep royal icing covered at all times, and clean off any icing on the side of your cup or bowl. The icing dries quickly, and the small lumps will interfere with your piping. A wet towel on top functions well while you are working, but you should pour a layer of water on the icing and wrap the container in plastic for longer storage.

Recipe:-

1 cup (240 ml) egg whites (see Note)

2 pounds 8 ounces (1 kg 135 g) sifted powdered sugar

1/2 teaspoon (1 g) cream of tartar

Preparation Method

1. Pour the egg whites into a mixer bowl. Using the paddle attachment with the machine set at low speed, gradually add all but a few handfuls of the powdered sugar and the cream of tartar. Mix until it forms a smooth paste, adding the remaining powdered sugar if necessary.
2. Beat at high speed for just a few seconds if you are using the royal icing for piping. If you will be spreading the icing—on the top of a gingerbread house, for example—beat the icing a bit longer to make it light and fluffy.
3. Immediately transfer to a clean container and cover to prevent a skin from forming. If you are going to use it within a few minutes, place a damp towel on top instead. Stored, covered, in the refrigerator, royal icing will keep for up to 1 week

USES:

It is used to cover or decorate baked goods, such as cakes or cookies. When it is used between layers of cake, it is called **filling**.

5.3 PASTRY CREAM

Pastry cream is defined as it is a pure sweet filling that is used in many types of desserts. It is used in French pastries cakes (e.g., French strawberry cake), cream puffs, and

éclairs, as well as in classic Italian cannolis. Making pastry cream at home is not complicated, but it can go wrong quickly without the proper technique.

It is a dough often used for preparing both, sweet and savoury meals. It contains flour, shortening like butter or oil, sugar, water, and salt. A filling is put inside the pastry and it is baked to get resulting food with crispy coat. There are various pastries made such as short crust pastry, puff pastry, and Filo pastry. For example, pastry is used for pies, puffs, croissants, and tarts.

Baked items often look and taste good when paired with fillings and creams, and topped with sauces. They bring tempting presentation to the main cake or bread and also extend their flavour.

Pastes

Pastes are the compound of fruit pulp, lemon juice, and sugar. The bakers often add light spices such as cinnamon or cardamom, which go well with the sweet taste. Some widely used pastes in bakery are –

- Apple paste
- Banana paste
- Coconut paste
- Guava paste
- Mango paste

For preparing savoury puffed pastries, ginger-garlic paste is also used.

Steps in Making Pastry Cream:

The steps in making pastry cream are given below:

Step 1: Boil milk and half the sugar with scrapings from vanilla bean. This is done to test the quality of the milk. If the milk is old or sour it will curdle and secondly hot milk will form the emulsion of eggs fairly quickly and will also help the starch to swell faster.

Step 2: Beat egg yolks and remaining sugar together along with the starches to form a smooth creamy mixture. If making in large quantities, one can also whip this mix to form a smooth emulsion.

Step 3: Temper the egg and flour emulsion. Tempering means adding little amount of hot liquid into the egg mix whilst mixing continuously. This helps to bring both the mixes at almost same temperatures and hence when added, the egg and starch mixture will disperse equally and will not form lumps.

Step 4: Boil the pastry cream until it starts to bubble.

Step 5: Remove from fire and add butter and mix well.

Step 6: Use immediately or wrap with plastic and keep refrigerated until further use.

USES OF PASTRY CREAM IN CONFECTIONERY:

The uses of pastry cream are as follows:

- Pastry cream is used for fillings in tarts, pies, and flans.
- It is used for filling between sponge cakes to create gateaux and pastries. This is a neutral cream flavoured with vanilla. It can be flavoured with any desirable flavours.
- It is used as a base for hot desserts, as it can be baked also.
- It is also used for filling choux pastry items to create desserts.

Pastry Cream Recipe:-

1 pint (480 ml) whole milk
 1/2 vanilla bean or 1/2 teaspoon (2.5 ml) vanilla extract
 1 ounce (30 g) cornstarch
 4 ounces (115 g) granulated sugar
 1/4 teaspoon (1 g) salt
 2 eggs
 2 ounces (55 g) unsalted butter

Preparation Method

1. Place the milk in a heavy-bottomed saucepan. If using the vanilla bean(s), split lengthwise and scrape out the seeds. Add the seeds and the pod halves to the milk. Bring to a boil.
2. Keeping an eye on the milk, whisk the cornstarch, sugar, and salt together in a bowl. Gradually add the eggs and mix until smooth.
3. Slowly add about one-third of the hot milk to the egg mixture while whisking rapidly. Pour the tempered egg mixture back into the remaining milk.
4. Place over medium heat and cook, stirring constantly, until the mixture comes to a boil and thickens. Boil for a few seconds longer to make sure the raw starch taste has disappeared. Remove the vanilla bean(s), rinse, and save for another use. Stir in the vanilla extract, if using. Stir in the butter continuing to stir until it is completely incorporated.
5. Pour the custard into a bowl and cover with a piece of baking paper. When cooled, store in the refrigerator. If made and stored properly, pastry cream will keep fresh for up to 4 days. However, when it is that old, it should be used only for pastries in which it will be baked.

QUESTIONS:- 2 marks

1. Define Pastry
2. Explain Choux pastry
3. Name the French name for Choux pastry.
4. List types of Icing
5. What is Royal Icing?
6. Name the French term for Puff pastry
7. What is Short crust pastry?
8. Define Laminated Dough.
9. Write four examples of Laminated dough
10. Name four examples of Short Pastry.

QUESTIONS:- 5 marks

1. Describe about various types of pastries.
2. Explain about pastry.
3. Describe about short crust pastry.
4. Explain about laminated pastry.
5. Explain about puff pastry.
6. Discuss about Icings and its uses.
7. Explain steps included in making pastry cream.
8. Write the preparation of Puff pastry.
9. Demonstrate the preparation method of Choux pastry
10. Explain the types of Short pastries and Pastry cream.



HOTEL OPERATIONS
Paper – II
Food & Beverage Service-II

INDEX

Unit-1	ALCOHOLIC BEVERAGE	232
Unit-2	DISPENSE & COCK TAIL BARS	266
Unit-3	FUNCTION CATERING - BANQUETS	289
Unit-4	FOOD COST CONTROL	311
Unit -5	KITCHEN STEWARDING	323

UNIT

ALCOHOL BEVERAGE



1.1 Introduction

For thousands of years, people have concocted all kinds of alcoholic beverages. Many of these early brews were made from fermented milk, berries, and fruits. Ciders were made from every type of fruit known, and countless concoctions were created by mixing water with essences of herbs, seeds, and spices. Far older than written histories are cave pictographs showing humans drinking beverages in celebration.

A several thousand-year-old stone tablet was found on Mount Ararat, near where Noah's ark is thought to have landed, containing a recipe for making beer from grain. Another fermented beverage (tequila) was made from the agave cactus, and honey mixed with fermented liquid was used to make mead. Ciders were poured into open containers and allowed to stand until they "moved" by showing bubbles on the surface. The fermented juice of grapes was known to many early civilizations as far back as 8,000 to 10,000 years ago.

Alcoholic beverages can be made from grains like barley, rye, corn or maize; or fruits like grape, sugarcane, etc. A portable liquid containing ethyl alcohol of 0.5 percent or more by volume is termed as an "alcoholic beverage". It is obtained either by the fermentation of sugar-based foods, or the distilled of fermented products. Beer are brewed, wine are fermented where as rum, gin, brandy, vodka etc are distilled products of 55% or more alcohol content. In this chapter we shall discuss distilled spirits, fermented and brewing process.

The word 'alcohol is derived from the Arabic al-kohol. Originally, the word alcohol referred to any fine powder, which was applied to essences obtained by distillation by the alchemists of medieval Europe. Pure alcohol is a colourless, clear liquid with a burning taste. It derives its colour from the wood of the cask in which its matured, and/as from the caramel, or vegetable dyes which may be added during its maturation or bottling.

1.2 Definition of Alcohol beverage

Alcohol is an odourless liquid containing either ethyl or methyl alcohol. Ethyl is portable whereas methyl alcohol is fatal and used for industrial purposes only. Alcoholic beverages contain ethyl alcohol.

A portable liquid containing ethyl alcohol of 0.5 percent or more by volume is termed as an “alcoholic beverage”.

1.2.1 Alcoholic Beverage production process

Production of alcoholic beverage is complicated and time-consuming process. Each alcoholic beverage has unique flavour, taste and colour it happens only because of adopting the different production procedure.

Alcohol beverage are produced either of the following process:

1. Fermentation

2. Distillation and

3. Brewing

1. **Fermentation:** Fermentation is the process in which sugar is converted to alcohol and carbon dioxide by yeast. This process is basis for the producing all alcoholic beverages. The alcohol level of fermentation drinks is normally between 3-14%, depending on the amount of sugar present in the liquid. Once the alcohol level reaches 14%, the yeast gets killed, thus, bringing the fermentation process to a halt. The CO₂ released during fermentation is either allowed to escape or absorbed into the liquid to give effervescence.

Example: Red wine, white wine, sparkling wine, etc.

2. **Distillation:** Distillation is the process of separating elements in a liquid by vaporization and condensation. In the distillation process, the alcohol which is present in the fermented liquid (alcoholic wash) is separated from water.

Example: Spirits: - Whiskey, Rum, Gin, Tequila, vodka, etc.

3. **Brewing:** The process of making beer is known as brewing. The purpose of brewing is to convert the starch source into a sugary liquid called wort and to convert the wort into the alcoholic beverage known as beer in a fermentation process effected by yeast.

Example: Beer

1.3 Wines

1.3.1 History of Wine

Wine is one of the God's choicest gifts to man and its history is almost a romance. The old Testament in the bible gives evidence of wine existing, but there is definite evidence of its use in China in 2000 B.C. and in Egypt in 3000 B.C. as well. We are told by Sir John Malcolm in his first account of Persia that during the reign of King Jamshed, viticulture (science of growing grapevine) flourished and it is the Persians who are credited with the discovery of

fermentation. The Phoenicians from Lebanon later absorbed the science and introduced the wine and its secrets to the Romans and Greeks who subsequently propagated wine-making and dedicated a God to wine-the Roman Bacchus and Greek Dionysus. They took viticulture into the land that they conquered. The Greeks introduced it in Southern France to the Black Sea and from Sicily into Northern France. There is evidence that they exported wine to Egypt. The Romans planted vines in Bordeaux, the valleys of the Rhone, Marne and Seine and along the Mosel and Rhine. They are responsible for introducing viticulture to France, Hungary, Germany, England, Italy and Spain. The Romans embraced Christianity and when their empire collapsed, it is the Church that propagated wine-making as sacramental wine. Of all the alcoholic beverages, wine is regarded the most complex and interesting subject of study. This is so because each country and region used different types of grapes for wine production; implements own labelling laws; follows its own quality control; has different manufacturing process, wine evaluation methods, strong methods, follows several service procedures for various types of wines, etc.

1.3.2 Definition of Wine

Wine is an alcoholic beverage obtained from the fermented juice of freshly harvested grapes. It is prepared from both white and black grapes.

Or

Wines is an alcoholic beverage obtained by fermenting the juice of freshly gathered grapes in the district of origin according to local customs and traditions.

1.3.3 Classification of Wines

Wines are broadly divided in to four types those are:

1. Table wines
2. Sparkling wines
3. Fortified wines
4. Aromatized wines

1. Table wines: These include red, white and Rosé wines and are referred to as “still wines” as they lack carbonation. These wines are further classified as dry, Medium and sweet wines.

- Dry Wine: It is produced when all the sugar is converted to alcohol.

- Sweet Wine: It is obtained when there is some sugar left after fermentation, stopped naturally or intentionally by the manufacturer.
 - Medium Wine: It is neither too dry nor too sweet. It has traces of sugar left after the fermentation.
2. Sparkling Wines: Sparkling wines have carbon dioxide to make them fizzy, achieved when carbon dioxide is captured in the bottle. Champagne is the monarch in this category. The alcohol content is less than 14%. Traditionally come only from the champagne region of France. Other champagne manufacturer must use as sparkling wine. These wines are drunk on festival occasions and throughout a meal.
 3. Fortified Wines: these are wines fortified by addition of alcohol(Usually brandy) either during or after fermentation. This increases the alcoholic content from 14% to 24%. Examples of these wines are Sherry, Port, Madeira and Marsala. These wines are drunk either before or after a meal. Meals before a meal are called aperitifs like Sherry, Dubonnet, Campari, etc. while ones drunk after meals are called Dessert wines like sweet Sherry, Port, Madeira and some varieties of Sauternes.
 4. Aromatized Wines: These wines are prepared with the addition of brandy or neutral spirits and flavoured with herbs, barks and other flavourings, Examples are Vermouth, Dubonnet and Bitters.

1.3.4 Wine Making

Introduction: Wine is produced by the alcoholic fermentation of freshly harvested grape juice. Grapes naturally have the most important things needed for the fermentation process sugar and yeast. The variety of grapes used in making a wine contributes its characteristics. Wine making practices are implemented according to the local tradition and practices. The wine obtained by natural fermentation is termed table or still wine and the alcohol content of this wine mostly ranges from 10-14%. We learnt about the various types of wines, grape varieties, and their constituents.

❖ Still Wine

Still wine is the result of natural fermentation of grape juice. Still wine may be red, white, or rose and may be sweet, dry, or medium, according to the manufacturer's decision. Winemakers introduce different techniques at various stage of winemaking to produce still wine of unique characteristics.

The essential difference between the making of red wine and white wine is that the juice of black grapes undergoes fermentation with the skin to make red wine and the juice of black or white grapes undergoes fermentation without the skin to make white wine. Red wine gets its colour from the skin during fermentation.

Production of Still Wine: Let us know the process of making still wine- red, white, rose and blush wine.

1. Red wine: The process of making red wine is described here.

1. **Grape Harvest:** The first step in winemaking is the grape harvest which can be accomplished either mechanically or manually. The handpicked method is costly and time consuming as it selects the best quality grapes. It is often used in the preparation of costly wine. The mechanical method is more efficient, cost effective, and is well suited for large vineyards. Some producers harvest during the night time as the temperature is low. The type of harvest employed depends on the manufacture choice.
2. **Crushing and Destemming:** After the harvest, the grapes are crushed and quickly destemmed. They are crushed in many ways according to the manufacture's choice. Hydraulic, revolving, cylinders, and the pneumatic bar press are the widely used methods of crushing grapes. Some wineries situated in remote mountain regions still follow the old foot pressing method. The objective of crushing is not necessarily to squeeze all the juice out of the grapes, but to gently crack the skin and allow the juice to start its run. It may be pressed many times, but the first press yields the juice which is the richest in sugar. The gently crushed grapes are known as must.
3. **Fermentation:** The must is transferred to the fermentation tank which may be a wooden or stainless steel vast. The must contains wild yeasts, wine yeasts, and the acetobacter, a wine spoiling mould. If the moulds and wild yeasts are allowed to develop, the wine will be spoiled. With the addition of SO₂ to the must, the wine maker prevents any bacterial contamination and kills the harmful wild yeasts and the vinegar forming acetobacter. Moreover, the sulphur taste disappears during the maturation.

Unfermented must contains approximately 24% grape sugar, along with various acids, cream of tartar, protein, tannin, and minerals. If the must does not contain enough natural sugar to produce the required amount of alcohol, a small amount of sugar may be added which is termed as chaptalization. Every gram of sugar in the must is converted to about a half a gram of ethyl alcohol during fermentation. To achieve a 12% alcohol concentration, the must should contain about 24% sugar. The sugar

percentage of the must is measured with a saccharometer. However, chaptalization is subject to local regulations. Similarly, acid can also be added to the must, if the acidity is low. This is referred to as acidification.

During fermentation, the yeasts act on the sugar in the juice and produce carbon dioxide gas and ethyl alcohol. Heat is given off during fermentation, which affects the taste of the wine and also speeds up the fermentation process. In most wineries, temperature-controlled vats are used for fermentation to achieve good results. For red wine the temperature is typically 22-25°C, which is higher than that for white wines. Higher temperature is needed to extract more colour and tannin from the skin. The wild yeasts are killed when the wine reaches 4% alcohol, and the wine yeasts are killed when the alcohol reaches around 15%.

4. **Pressing:** In the end of fermentation, the new wine lies in the bottom of the vat and the solid matter floats on the top. The new wine, called the *vin de goutte*, is racked into another vat. The solid matter is pressed to obtain *vin de presse*. The first batch of *vin de presse* is rich in tannins and flavour and may be added to the *vin de goutte*. The quality of *vin de presse* is obtained from the subsequent presses decline progressively in quality. It may be used for local consumption, blending, or in making spirits.
5. **Ageing:** The wine is racked off its solids and placed in a container, to mature. The oak may be French or American, air dried or kiln dried, toasted or charred. The option of wood and its make dictate the flavour profile of the wine. During the process of ageing, the wine absorbs the vanilla flavour from the oak and interacts with the oxygen that invades through the fine pores. The oxygen eases out tannin and mellows the wine. Evaporation takes place during the wine life in the oak. The space must be topped up with similar wine to exclude the air and to prevent spoilage.
The yeast falls to the bottom of the vat and forms a layer of lees. The wine is racked to the other clean container leaving the lees behind. Most wineries rack ageing and red wine thrice during the first year and transfer them to a final ageing barrel.
The other option available for maturation is a stainless-steel tank. Such tanks need not to be replaced for years and are very easy to maintain.
6. **Malolactic Fermentation:** During the ageing process, a secondary non-alcoholic bacterial fermentation called malolactic fermentation takes place. In this type of fermentation, the bacteria convert the harsh malic acids in the juice into softer lactic acid. This imparts a softer mouth feel and a more inviting palate. Most red wine goes through malolactic fermentation to reduce their acidity.
7. **Filtration and Fining:** Wines require clarification as they are cloudy and contain very fine particles. The clarification is obtained by filtration and fining process. Filtration

removes the solid matters from wines including dead yeast cells. Finning is carried out to make the wine clear and star bright. This can be achieved by adding substances, such as the wine of an egg, gelatine, isinglass, bentonite, etc. These additives attract all the impurities and settle at the bottom of the cask. The wine is then raked into another container to remove the sediments. A good fining agent will not pass on its smell or taste to the wine.

Wine can also be fined through the application of centrifugal force or passing it through a series of cellular filters. However, wine lovers object to the cellular filter method, as it removes most of the flavours and pigments.

8. **Blending Wines:** Blending is the process of mixing wines of different years, age, grape, and regions to make either a new wine with a unique flavour, or to maintain consistency in quality. It requires a lot of experience and a very refined palate to blend wines successfully for today's global market. A winemaker may blend wines for various reasons, such as to adjust acidity, alcohol levels, tannin content, or to improve the colour, aroma, or flavour.
9. **Bottling wine:** After blending the wines are bottled in sterilized bottles. The wine bottle is slowly filled and topped with either nitrogen or carbon dioxide to displace any oxygen. The bottle is then capped with either a traditional, treated cork, or a modern screw cap, depending on the winery's tradition. Next the bottles are labelled and sent for either further bottle ageing or to the dealer for distribution. The steps involved in red wine production can be well understood from the flow chart.
10. **Carbonic Maceration:** This is an alternative method of making red wine. In this method, a bunch of grapes is placed in a clean container which is filled with carbon dioxide gas and is sealed. The container is fitted with a valve to ease out the pressure. The grapes at the bottom of the bunch get crushed by their own weight. The sugar is converted into alcohol and CO_2 is given off by the action of yeast present on the skin. The uncrushed grape in the bunch undergo their own fermentation. Since the grapes are deprived of oxygen, the skin cells die and the pigments colour the pulp and the yeast act on the sugar available in the pulp.

2. White wine:

White wine is made in the same way as explained but with a few changes. It should be remembered that white wine may be made from both white or black grapes, as the juice itself does not have any colour. The juice should not be allowed to remain in contact with the skin of the black grape; otherwise, the wine will take on the colour. The skin of the grape is separated before the fermentation commences. Fermentation occurs at a low temperature

range, that is, 15-18°C compared to red wine. During fermentation, the less may be stirred in to yield more flavours.

Cold stabilization is implemented in white wine by dropping the temperature to below freezing point. At this temperature, the cream of tartar forms crystals and falls out. White wine, which are not cold stabilized, suffer from the formation of tartaric crystals, commonly termed as white diamonds, in the bottle and on the cork. Though these crystals do not pose any problem to the consumer, they may be confused with broken glass, during the service. White wine is then blocked, rested, fined and bottled.

❖ **Rose and Blush Wines:**

They are made like red wines. The skin of black grapes can remain in contact with the must till the required tinge of colour is achieved and then they are separated. It takes about 24-36 hours. In case of blush wines, the skin of grapes is left just for a few hours.

❖ **Sparkling Wine:**

Sparkling wines have CO₂ which gives them effervescence or sparkle. There are four main methods of making sparkling wine. The objective of all the methods is to produce a clear wine with stream of bubbles of carbon dioxide.

Methods of Making Sparkling wine: The following are the methods of making sparkling wine:

Method of Champenoise:

This is the most complicated process of making sparkling wines and is followed in the champagne region of France. The best sparkling wine of this region are champagne, which is made by the method champenoise method. It is the traditional method of making champagne and is made according to Comité Interprofessionnel du vin de champagne regulations.

Dom perignon, a monk and a cellular, introduced champagne to the world. The three-classic grape varieties used in making of champagne are pinot noir, pinot meunier and chardonnay. The black grapes, pinot noir and pinot meunier, provide a fruity flavour and body to the wine. On the other hand, the white grapes, chardonnay, contributes fineness and elegance to the wine. Champagnes are expensive as it takes three to seven years to produce a bottle of champagne.

1. Primary Fermentation: The grapes are harvested at the correct ripeness and pressed quickly. The freshly pressed juice is separated from the skin immediately, so as to avoid the must from taking the colour of the skin.

The first fermentation occurs in wooden vat. Upon racking and fining, the method followed is like that involved in the making of white wine.

After fining, the clear wine is blended with wines from different wine yards of the champagne region, in varying proportions, to achieve the desired balance of flavours and acidity. Blending is the most critical phase in any winemaking.

2. Secondary Fermentation: Secondary fermentation is induced in the bottle. Let us see how it is done.
3. Liqueur de tirage: A small amount of cane sugar and yeast in old wine, termed as liqueur de tirage, is added to the wine to induce secondary fermentation. The wine is then bottled and sealed with good quality corks. They are stacked one on top of another in a cellar.
4. Secondary fermentation: starts in the bottle about six weeks after bottling. This is best carried out at 10-12°C and will take about three to six months. The yeast turns the sugar into alcohol and gives off CO₂ which dissolves into the wine.
5. Remuage: The bottles are placed in racks with oval holes with their necks, tilted slightly downwards. These racks are termed as pupitre. The specialist worker, called remuer, gives a slight shake to the bottle by grasping its bottom. After every shake, the bottles are placed at a slightly higher angle in the pupitre. This happens to each bottle every three days, for about six weeks, till the bottles stand vertically with the neck downwards, called sur le pointe.
6. Degorgement: It is the process of removing the sediments from the bottle which have collected on the cork. The bottle neck is dipped in a freezing brine solution, which freezes a small amount of wine in the cork containing the sediments.
7. Dosage: The champagne which was lost during degorgement is replaced with more similar wine and cane sugar solution called liqueur d'expédition. The amount of sugar added determines the degree of sweetness in the final product.
8. Re-corking: After the addition of dosage, the permanent cork is forced in and secured with agraiffe.
9. Shaking: The bottles are given a final shake up either manually or mechanically to ensure even distribution of dosage.
10. Resting: The wine is rested for four to six months to allow it to settle.
11. Packing and shipping: Finally, the wine bottles are cleaned, labelled and dispatched.

The average champagne has a pressure of between four and six atmospheres which is

typically about 60-90 pounds per square inch. The pressure of this magnitude is found in a double-decker bus tyre. Hence, the bottle is made up of thick glass with the deep curve at the bottom. This deep curve is termed as punt.

1.3.5 Food and Wine Harmony

Guidelines for pairing wine and food

Though traditional rules prevent beginners from making an awful selection of wine for their food, they would be able to make an even better choice if they know how to pair wine with food.

While pairing wine with food one should consider acidity, sweetness, weight, intensive, and tannin of the wine and analyse the texture, flavour, fat content, sweetness, and saltiness of the accompanying food.

In general, white wine are most acidic than red wines and are available in light, medium, and heavy styles with dry, medium, and sweet taste. Red wines have more tannin and most red wine undergo malolactic fermentation to soften their acidic level. They are available in light, medium, and heavy styles with medium and dry taste.

Different type of food will have sweet, salt, sour, spicy, and bitter taste with various textures. Some food has more of plate fat, whereas some will rich in animal fat. Let us analyse these factors to understand the process of matching wine with the taste.

Acidity: All wines have acidity of varying levels. There are high acid & low acid wines. Food also has acidity. Food with noticeable acidity level needs wine with noticeable acidity; otherwise, the taste of the food will dominate the taste of wine and make it dull and lifeless. For example, lemon chicken need a wine of higher acidity to accompany the dish that dish that chicken with truffles. Tomato dishes and fish preparations require acidic wine. Fish dishes require acidic wine as they always need lemon either during their preparation or presentation stages.

Tannin: Acidity in food does not go well with the tannin present in wine. Therefore, acidic food should not be served with red wine. However low tannin & light reds may be suggested if any guest want to drink red wine with acidic food. Tannin does no go will with fish. Therefore red wine are recommended with fish. Tannin is preferred with red meat as it help to cut the chewiness of the meat. Not all the reds are rich in their tannin content. Some have low tannin which can be matched with the food according to their

degree of tannin content. Cabernet sauvignon and syrah wine are high in tannin which go well with red meat. Pinot noir & gamay, which are low –tannin wines, may be suggested with fish service with sauce.

The bitterness in wine is derive from tannin. Tannin contributes to the texture and the astringent taste. It enhances the body or weight of the wine. Tannin that are derived from the skin of grape during fermentation and from oak during barrel ageing react with proteins when paired with dishes that are high in protein and fats such as red meat and hard cheese tannin act on proteins and make them softer. Tannin wines pair well with meat and protein foods. In food that do not have protein such as vegetables tannin highlights bitterness and a dry feel on the palate. Bitter tannin wines such as Barolo and cabernet sauvignon can overwhelm a lot of foods but can be softened by fatty food with a lot of protein such as hard cheese & meat.

Texture(weight): Food and wine will have texture that can be felt by tasting them. Some foods are creamy or fatty in the mouth, whereas others are very simple. For example, pate de foie gras is richer in the mouth as compared to green salad. The texture of these dishes is very different similarly the texture of wine changes depending on the fermentation and ageing techniques used. The texture must be considered while pairing dishes & wines. A dry chenin blanc fermented in stainless steel will be light in texture. It evaporates quickly on the tongue compared to chardonnay which is fermented and mature the oak. From the alcoholic percentage and the glycerin content of the wine, one can sense if the wine is heavier or lighter from the mouth feel. Wines with 12.5 % alcohol by volume (abv) and above are considered heavy and above are considered heavy and once with 11% abv and below are light. Light-texture dishes go well with lighter wines and heavy –textured dishes with full-bodied wines.

Flavour: The flavour of the dishes and wines must be considered while matching them. A heavy wine such as Spanish rioja reserve, will dominate light oysters preparation; a light wine like muscadet will be out of place when served with heavily flavoured beef goulash. White wine are, in general recommended with fish as they are lighter than the reds. Some dark and meaty textured fish, such as tuna may be served with red wine.

Fat: The food must be analyse for its fat content. Fatty food can be serves with acidic wines which counteracts the fattiness. A crisp, acidic sauvignon blanc can be suggested with sole bonne-femme. The crisp acidic of the wine acts as contrast and cuts through the creaminess of the sauce and given a different sensational taste. Pate de foie gras a fatty

food may be suggested with sauternes roast duck with orange sauce can be suggested with german spatlese. Tannin in red wine has the same influence of white wine.

Sweetness: Sweetness of the wine must match with the sweetness of the dish. Desserts have different degrees of sweetness and acidic levels. Peaches are lower in acidity as compared to raspberry. The preparation styles of these fruit and sweets must be considered while pairing the wine. Raspberry requires a light weight sharp sweet wine if served plain and if served with crust pastry or bound with cream, the acidity of the fruit is softened, and wine of medium acidity may be suggested. Peaches may be served with richer sauternes and late harvested Rieslings from Germany.

Sweet wine offered must be sweeter than the dish they are served with. Vintage brut champagne, paired with wedding cake, can make the wine taste tart and weak while the cake will have off flavours. In food as well. Sweet wine can be paired with spicy food of Asian cuisine. It can act as a contract to the burning sensation caused by chillies and spices. It can bring out the mild sweetness in some foods and can also contrast with salt; for example, pairing salty stilton cheese with a sweet port. Sweetness in a wine can balance tartness In food especially when the food is sweet.

Some dish such as foie gras duck vegetables dishes especially root vegetable & so on are slightly sweet and these dishes can be paired with slightly sweeter wine. Duck with orange salad needs acidic and sweet wine such as German Riesling spatlese. For vegetable dished, medium sweet rose wine go well.

Preparation method: The main ingredient may be finished off in many styles. For example a fish may be simply seasoned poached and served plain with salad or it may be finished off with rich white wine sauce. The wine suggested for the plain poached fish will not go well with the one served with the rich white wine sauce. Plain poached fish may be served with light white wine pouilly-fuisse and fish with rich sauce may be served with good bodies dry white wine le Montrachet. Certain dishes are made using wine. When wines has to be recommended for such a dish the one that was used during its preparation should be suggested.

Problem Dishes: Wines do not go well with all types of food. If served with certain foods, they taste dull and the flavour cannot be enjoyed.

Food that do not go well with wine are as follows:

- Chocolate
- Egg, especially boiled egg
- Highly acidic food such as relishes and salads with very sharp dressing
- Very spicy food

Chocolate and boiled eggs coat the taste buds. As a result, one cannot truly enjoy wine with these food items. The food source in vinegar and other seasoning cannot be served with any wine; even highly acidic wines do not go well with them.

1.3.6 Storage of Wines

For any lover, storing wine well is very important. These are a few simple principles that need to be understood in order to select proper wine storage conditions.

A good storage location for wine is generally dark is free of vibrations has high humidity and has low stable temperature.

The points that are keep in mind while storing wine:

1. The optimum temperature of the room should not be more 10-12 degree centigrade, because the bio-chemical reaction rates in wine double with increase of temperature.
2. The humidity should be between 75% to 85% if there is insufficient water vapours in the atmosphere moisture will evaporate from the corks and they become dry.
3. Wine bottles should be stored on their side so that cork is kept moist.
4. The space should be free from smells and debris extraneous smells can enter through the cork and contaminate the wine. Proper ventilation will help with this problem and keep the cellar from giving the wine a musty taste.
5. Light will prematurely age a bottle of wine naturally clear bottles are most susceptible to this problem, but ultraviolet light will penetrate even dark coloured glass. Ultraviolet light may give a wine unpleasant aroma and rum it extra care should be given to sparkling wines as they are more sensitive to light than other wine.

1.3.6.1 Faults of wine

1. Corked wines: These are the wines affected by a diseased cork caused through bacterial action or excessive bottle age. The wine tastes and smells foul.
2. Oxidation: This is caused by bad storage too much exposure to air, often because the cork has dried out in these conditions.
3. Acetification: This is caused when the wine is over exposed to air.
4. Cloudiness: It may be due to extremes in storage temperatures.
5. Mushy wines: This is due to lining is not done properly.

1.4 Beer

1.4.1 INTRODUCTION

Throughout history, where cereal grains were grown, people prepared fermented drink from them. People used wheat in Mesopotamia (now Iraq), barley in Egypt, millet and sorghum in other parts of Africa, rice in Asia, and corn in the USA to make fermented drinks. Today, beer making is a major industry worldwide.

Brewing beer is believed to be over 10,000 years old. Ancient to the Egyptians brewed beer about 6000 years ago and many civilizations brewed beer from various cereals. Germanic tribes were brewing in the first century AD and in Roman Britain, ale (beer) was the national of drink. Both the rich and the poor brewed beer and preferred beer to contaminated water. Early beer makers used a very simplistic brewing process and fermented beer for only a brief period – one to two days at the most. By around 1100 AD, brewing techniques had become more sophisticated.

For centuries brewers heated grain over open fires, resulting in dark, smoky malt that produced dark beer with a strong flavour. The introduction of hops in the brewing process in the fifteenth century gave unique bitter taste to the beer and also protected beer from going sour. The first beer brewed with hops in England was bitter ale. With the arrival of the industrial revolution in the mid-1800s, brewers invented a method to dry malt in large rotating heated drums that made the grain light in colour and produced a pale, golden beer. The introduction of compressed gas refrigeration in the late nineteenth century made the fermenting of beer possible at any time in any seasonal climate.

With technological developments, some breweries turned to mass production, employing large-scale, and state-of-the-art brewing equipment to produce millions of barrels of beer per year. More recently, brewers have come back to some of the older ways of making beer, such as brewing in smaller batches and leaving filtration and pasteurization to produce beers that retain more of the flavour and character imparted by the yeast during fermentation. Microbreweries and brewpubs which produce high quality beer in smaller quantities are located in regions dominated by large, industrial breweries, particularly in the USA. Beer is a brewing and fermented drink prepared from malted cereals, especially barley.

In the brewing process, the malt is extracted from the cereal by infusing it in the hot water which results in the product called wort and the hops are added to hot wort to obtain flavour and bitter taste. It is then cooled and fermented with the addition of yeast.

1.4.2 Production of Beer

To now about the production of the beer we must now the quality of the ingredients

1.4.3 Ingredients for Beer Production

The following ingredients are necessary to produce beer.

1. Malt: It is obtained from cereal. The best cereal for beer production is barley.
2. Water: Water is the most important ingredient in the making of beer as it is the major component of beer. The taste and type of water influences the character of beer. Many breweries have their own springs or wells for water. It is termed as liquor in brewery.
3. Hops: These are specially grown for brewing and the best are produced in Kent, Sussex and Worcestershire. The hop is a climbing vine, a member of the same family as cannabis. They are grown on strings to a height of more than three metres. The female flowers are used in brewery. Its cone-like blossoms contain a bitter dust called lupulin which has tannins and resins. The tannin helps clarify, stabilize, and preserve the beer, and the resins and oils are the principal sources of aroma and dryness. The flower cones are dried and packed in large sacks. The dryness or distinctive bitterness of the beer is contributed by hops. The hops also remove the sediments from the wort when it passes through the spent hops in the hop back. The shelf life of the beer will be longer, if more hops are used to the presence of tannin.
4. Sugar: Graded or refined sugars are added for fermentation and to add sweetness.
5. Yeast: Yeast is a living organism which is essential to induce fermentation. During the fermentation process, the yeast converts the sugar into alcohol and releases carbon dioxide gas. During the fermentation, the yeast multiplies and the new yeast is collected and stored for future use. Any one of the two types brewer's yeast—*Saccharomyces cerevisiae* and *Saccharomyces carlsbergensis* - is used in beer production
6. Finings: These are brightening agents added to clear and brighten the beer. Isinglass is commonly used as fining agent, which is obtained from air bladders of various fish, especially sturgeon. It attracts all the sediments to the bottom of the cask, making the beer clear and bright.

1.4.4 PRODUCTION OF BEER

Beer production involves a series of complicated process which call for close monitoring as the final quality and character of beer largely depends on the output of each stage. Following are the steps followed in the production of beer.

1. **Malting:** The first step in the production of beer is malting. In malting process, the starch in the cereal is converted to soluble sugar.
2. The barley is soaked in water for about three days and then spread on the malting floor which causes germination or sprouting. Moisture, warmth, and oxygen are necessary for the growth of shoot and rootlets. Moisture is made available by soaking, warmth, by spreading on the floor of the malting shed, and oxygen, by frequent turning of cereals. During the germination, the insoluble starch in the cereal is converted to soluble sugar by the enzyme diastase. The germinated cereal is termed as green malt. Green malt is then dried and roasted in a kiln to stop further germination. The temperature and the length of time the cereal is heated dictate the colour and taste of the beer.

Pale malts are used for light ales and dark malts for dark beers and stout.

After kilning, the dried and roasted malt is milled to coarse powder, called grist.

3. **Brewing:** The grist is sent to mash tun with hot water and any other grain additives such as unmalted barley, crushed maize, rye, and wheat. This is called mashing. The mash is heated for a few hours to extract the soluble materials from the grist. The temperature at this stage is around 65°C (150°F). During the brewing process, much of the sugar and colour is extracted together with non-fermentable substances. These non-fermentable substances give body to the beer. The sweet liquid at this stage is known as wort. It is run off the mash and the residue is sprayed with hot water to extract any remaining sugar. This process is termed as sparging. The left-over solids from the mash tun are used as cattle feed.

The wort goes into a huge copper brewing vessel, where the dried hops and sugar are added. The amount of sugar and hops added depend on the style of beer under production. Wort is boiled for one or two hours which makes the wort take on the bitter flavour from the hops. The hopped wort is then run into vessel called hop back.

4. **Hop Back:** The spent hops are retained on the screen base of the hop back and the hot wort filters through them. The spent hops are sold for agricultural uses. The hop-flavoured wort is channelized to wort receiver.
5. **Cooling and Pitching:** The wort is then cooled down to 15°C (60°F) by Para flow (heat exchange) system and transferred to fermenting vats where it is pitched with

yeasts for fermentation. The wort should not be at 30°C and above while adding the yeast. Yeast remains active between 5 and 30°C.

6. Yeast is essential to convert the sugar into alcohol. During the fermentation, the yeast multiplies, and the new yeast is collected for future fermentation. Two types of brewer's yeast are available-*Saccharomyces cerevisiae* and *Saccharomyces carlsbergensis*. The type of yeast added depends on the style of beer being produced – ale or lager. Yeast also adds to the taste of the beer.
7. Fermentation: In beer production fermentation is taken place in two layer one is top fermentation and bottom fermentation.
 - *Saccharomyces cerevisiae* yeast is used for top fermentation, which produce ale. The yeasts stick together as they multiply and form a surface layer on the liquid and convert sugar into alcohol and give off CO₂ being on the top of the liquid. The liquid ferments for a week at a much higher temperature range of 15-25°C (59-77°F) than lager. The fermented drink is now termed as ale beer. The gas released during the fermentation is trapped and absorbed into beer.
 - *Saccharomyces carlsbergensis* yeast is used for bottom fermentation, which produces lager beer. The yeast added falls through the liquid and converts the sugar into alcohol from the bottom of the vat. Bottom yeasts ferment at cooler temperature range of 5-9°C (41-48°F).
8. Maturing and Pasteurization: After the fermentation, the ale (top fermented beer) is racked into storage tank and stored for 3-21 days. It may be pasteurized or unpasteurized. After two or three days, it is put into casks without pasteurization with some working yeast cells which condition the beer in the cask known as cask conditioning. It is sold draught beer. Hops are added to flavour the beer and make the clarification easier.

Some speciality ales are bottled without filtration or with an added dosage of yeast, known as bottle conditioning. Bottle conditioned beers are also known as sediment beers. Worthyton white Shield, Bass, Guinness are the traditional bottle conditioned beers which contain sediments. Most of the bottled beer are pasteurized. The lager (bottom fermented beer) is racked into storage tank and matured for 10-24 weeks at the temperature range of 1-3°C. The lager will withstand low temperature without turning cloudy.

(Note: Both the top and bottom fermented beers of strong ales and lagers are matured for year.)

9. **Brightening/Clarifying:** The beers are then brightened with the addition of finings, carbonated and filtered.
10. **Packaging:** The beers are packed into sterilized casks, kegs, bottles, and cans, Some draught beer and canned beer are pasteurized by subjecting them to steam at 140°F (60°C) for 18 minutes to sterilize and lengthen the shelf life of the beer. The beer is then cooled, labelled, packed and distributed for sales.

1.4.5 TYPES OF BEER

Beers are classified into two basic types. They are

- Ale (top fermented beer)
- Lager (bottom fermented beer)

Each of the above type is available in various styles. Some of them are as follows:

1.4.4.1 Ales (Top Fermented Beers)

1. **Barley wine:** It is dark fruity beer with high alcoholic content which ranges from 6 to 11 per cent by volume.
2. **Bitter:** It is copper-coloured draught ale with predominant hop flavour which results in bitter taste.
3. **Brown:** It is dark brown sweet beer, low in alcohol.
4. **Mild:** It is lightly hopped, faintly sweet beer, which is slightly weaker and darker than bitter ale. These beers, with 3 per cent alcohol by volume, were meant for drinking in large quantities by manual workers.
5. **Stout:** A very dark beer made with a high proportion of malt and hops. The world's most famous stout is Guinness.
6. **Scotch ale:** It is very strong, often extremely dark, malt accented beer from Scotland.
7. **Porter:** Since this ale is popular amongst the porters of Dublin and London, it is called porter. It brewed from charred malt which contributes bitter taste and dark colour.
8. **India pale ale (IPA):** It has higher alcoholic strength with more hoppy flavour.
9. **Trappist:** It is a strong beer, 6-12 per cent alcohol by volume, manufactured in breweries owned by Trappist monks in Belgium and Netherlands.
10. **Tripel:** It is the term used by Belgian Trappist breweries to refer to the strongest blond beer. It is occasionally spiced with coriander and the alcohol range is 8-10 per cent abv. Wesmalle from Belgium is an example.
11. **Burton:** A strong, dark, draught beer mulled or spiced. It is popular during the winter.

1.4.4.2 Lagers (Bottom Fermented Beets)

1. **Bock:** It is a strong beer from Germany. In the USA, it is darker and sweeter. Belgian bock is less alcoholic.
2. **Doppelbock:** It is an extra strong beer from Germany
3. **Dortmunder:** It is a 'blonde' beer with a lightly hopped flavour.
4. **Ice beer:** It is strong beer. The strength is obtained by freezing since the water freezes before alcohol. The ice crystals are removed to concentrate the beer.
5. **Munchener:** It is a dark brown malty beer with alcoholic content of around 5per cent.
6. **Pilsner:** It is medium dark or amber-red lager originally produced in Vienna. Brewers use the term Vienne malt to indicate kilning malt to amber-red colour. This style is no more associated with the city.
7. **Märzen:** It mean March in German. Beer brewed in March and stored in caves before the summer. The Märzen beer has malty aroma, amber-red Vienna style, more than 5.5 per cent abv.
8. **Rauchbier:** It is produced from smoked malt, dark, around 5 per cent abv.

1.4.5 STORAGE OF BEER

Following are the ways for beer storage.

1. Beer must be stored in a well-ventilated cellar at the temperature of 13-15°C (55-95°F).
2. The casks received should be kept on the stallions and should remain at least for 24 hours to allow it to settle after its journey from the brewery.
3. Spiel control should be done carefully to ensure the quality of the beer and control the pressure inside the cask.
4. Tapping should he carried out 24 hours before it is required.
5. Beer left in the pipe at the end of the day should be drawn off and filtered back into its cask.
6. High temperature fluctuations will spoil the beer and it must be avoided.
7. Bottled beers should be stored in clean conditions and must not be subjected to extremes of temperatures.

8. Beer stored at too cold temperature will develop a 'chill haze'. It may disappear, if the temperature reaches about 7°C (45°F).
9. Bottled beers should not be exposed to sun light. The shelf life of the bottled beers varies. Brown ale has a shelf life of about three weeks, light ale, about six weeks, stout lagers, and nips of strong ales can be stored for six months in ideal conditions. Bottles displayed on the bar rack should be wiped clean and arranged in a way that their labels face the guests.
10. Adequate quantity of beer bottles of each brand should be stored in the cooler and replaced as and when the stock moves.

1.5 Spirits

1.5.1 Introduction

Distillation is the process of separating elements in a liquid by vaporization and condensation. This method has many applications and one of them is the production of spirits. In the distillation process, the alcohol which is present in the fermented liquid (alcoholic wash) is separated from water. Spirits are examples of distilled drinks and the plants producing the spirits are known as distilleries.

Brandy, whisky, gin, rum, vodka and tequila are examples of spirits which are prepared from the alcoholic wash as given in the following:

- Brandy – Fermented grape juice
- Rum – Fermented molasses
- Gin, whisky – fermented cereal
- Vodka – fermented potatoes or cereal
- Tequila – fermented sap of agave tequilana weber

All spirits are distilled from base of fermented liquid and have a high percentage of alcohol compared to fermented drinks. There are many distinct and popular types of spirits, each having its own flavour and body. There is difference in taste, smell and colour. They may be full bodied or pale and light-bodied, with strong or mild aroma, colourless or with colour and so on.

These differences within each category and brand make the drink unique. These differences in characteristics are largely influenced by the following:

- The ingredients used in the fermentation liquid-molasses, cereals, juices used in the fermentation process contribute to the character of the final product.
- The proof at which the spirit is distilled – higher the proof, lower the flavour and vice versa.
- The number of congeners allowed to go to condenser – the congeners influence the flavour, body and taste of the product.
- The type of casks used and the period of maturation – the type of the wood used in the cask, the maturation period, mellower the product.
- Blending – it is mixing the spirits of a particular kind of varying qualities to ensure consistency

All potable spirits are distilled from the alcoholic wash, which contains 7 – 12% alcohol. Ethyl alcohol vaporizes at a lower temperature of 78.5°C than water which vaporizes at 100°C. It makes it simple to separate alcohol from water. Liquid of higher alcohol percentage is achieved by repeated distillation which are diluted with the addition of pure water to get the required strength. The still is the apparatus which separates alcohol from water.

1.5.2 Types of Still

There are two types of still used for distillation spirits:

- Pot still
- Patent or continuous still

1.5.2.1 Pot still

The pot still method is the oldest method of distillation and most of the finest spirits are made by pot distillation. The pot still has shape of a huge onions and it has two parts: Still and Condenser

Distillation occurs in pairs of copper pot stills with tall swan necks. The first still is called 'wash still' which is large than the second still called 'spirit still'. The alcoholic wash is directed to wash still, where it is heated up. When the temperature reaches 78°C (172°F), the alcohol vapours rise, pass over the neck of the still and are led to the condenser through the spirit pipe which is an closed in cold-water container. The condensed liquid is termed as low wine which has an alcoholic content of around 30%.

Now the low wine is sent to spirit still for a second distillation. This is carried out to get a drink of higher alcoholic content. The first part of the distillation called 'foreshots/head'

(feints/tête) is kept aside for further treatment as it is pungent and impure. The central portion of the distillation, termed as 'heart' (Coeur) is the best part; it has an alcoholic strength of approximately 75%, is condensed and collected in the spirit container which is later matured in casks of various kinds.

The final part of the distillation called 'tails/aftershoots' (feints/queue), is weak in alcohol and contains fuel oils and impurities. Is added to the foreshots and sent back for redistillation.

The spirit thus obtained will have a high percentage of alcohol amount of other substances, such as acidic, esters, trace minerals, flavouring oils, etc., that are derived from the base wash and give flavour, body and aroma to the drink. These substances are called congeners. Drinks obtained from pot distillation have more congeners than obtained from patent still, which contribute to the body and aroma.

Examples: Cognac, malt whisky, Dutch gin, Irish Whiskey, tequila, liqueurs and dark rums are pot stillled.

Advantage: The advantages of this system are as follow:

- It produces spirits that are individualistic due to the presence of congeners
- Spirits with pronounced aroma are produced
- Small quantity of wash can be distilled

Disadvantages: The limitations of this system are as follows:

- It needs more time and labour
- It is costly to operate
- Stills need frequent cleaning and refilling, often after each distillation.

1.5.2.2 Patent Still

The patent still is also termed as continuous still or coffey still. It is named after Aeneas Coffey who patented the still in 1831. In this system, the alcohol is separated from the liquid by hot steam and product is 'cogener-free'; it has high alcohol content.

The patent still has two huge columns, each column is about 50-meter tall and are interconnected. These columns are divided into chambers by perforated copper plates and these plates are connected to a drip pipe that leads to the chambers by perforated copper

plates and these plates are connected to a drip pipe that leads to the chamber below. One column is the 'analyse' which vaporizes the alcohol from the hot wash and the other is a rectifier, which purifies, increase the strength and condenses the alcoholic vapours

The cold alcoholic wash enters and pass down the rectifier column in a long, serpentine-like pipe. It gets heated up by hot vapour rising up the column and the vapour cools when it contacts the cold wash pipeline. The hot wash enters the 'analysier' column at the top and flows and to a series of perforated plate. On its way down, it meets the ascending steam and it causes the alcohol vapours to rise. The balance of the wash which is heavy and impure, is drawn off at the bottom and converted into animal feed.

The alcoholic vapours rises up the analyser column and enters the rectifier column at the bottom. As it rises, gradually gets condensed by the incoming cold wash pipe and the wash becomes hot. The alcoholic strength of the ascending vapour increases as it rises, until it reaches the spirit plate where it is condensed and drawn off.

The first liquid of heads or foreshots and later the last liquid of aftershot or tail are sent back to analyser for further rectification. The pure spirit is channelized to the spirit receiver, which is diluted, matured in casks, blended, rested and bottled for trade.

The patent still produces congener-free spirits of high alcoholic strength. Light spirits, such as gin, vodka, white rum, neutral spirit, grain whiskey, and so on, are prepared in this method.

Advantage: The advantage of this system are as follows:

- It does not require too much of labour, cleaning and refilling.
- More quantity is produced as compared to pot still method
- It is cost-effective

Disadvantages: The limitations of this system are as follows:

- It is not suitable for distilling small quantity of spirits.
- Aroma and other essential elements that are required in a drink may not be achieved.

After manufacturing, most of the fermented and distilled drinks are aged before bottling to mellow them and to make them acquire unique characteristics.

1.5.3 Proof

A term used for indicating the alcoholic content of a spirit. It's measured with a device called a hydrometer. The term originated before there was precise instrumentation for determining alcoholic content. During that period a small quantity of spirit would be mixed with gunpowder and ignited. If the mixture burned with a steady blue flame, this was "proof" that it contained the proper amount of alcohol-approximately 50% by volume. The degree symbol (°) is used for proof. There are 3 systems for indicating proof or alcohol content.

1. **American Proof:** Proof is double the percentage of alcohol in a spirit. This a whisky labelled 100°US contains 50% alcohol by volume.
2. **British Proof:** The formula to determine proof was developed by Batholomew sykes in early 19th Century, according to whom a whisky labelled 100°UK contains 57.1% alcohol by volume. Spirits containing more than 57.1% alcohol are "overproof" & those with less are "Underproof".
3. **European:** The actual percentage of alcohol by volume is shown on the label. This is called the Gay Lussac (GL) system, for the French chemist who introduced it.

1.6 Whisky / Whiskey

1.6.1 Introduction

Both the above words are correct. They are spelt in 2 different ways. The identity of Scotch whisky has begun when Scotch commenced to be exported and to clearly distinguish their product. Canadians too have followed suit. The Irish and Americans prefer their drink with the vowel. Thus, their spirit remains whiskey (plural-whiskeys).

The vowel is not the only point disagreement between the scots and the Irish. Both want to take the credit for inventing this king of spirits. Chronicles agree that Irish monks probably began it all. From Ireland, the secret spread to Scotland via missionary monks settled in the Highlands.

Whisky is a spirit made by fermenting and distilling grain, which is usually barley, maize or rice or all. Whisky was derived from the German word 'Usquebeathe' which means 'water of life'.

The character of a whisky is determined according to the principle grains in the mash, the type of still used. The detail of distillation, the proof at which the spirit runs off the still, the type and length of ageing. For example, Bourbon, distilled pre-dominantly from corn, leaves

a sweet perception on the palate while scotch, made from barley that has been dried over peat fires retains a trace of smokiness in its scent and taste.

1.6.2 MANUFACTURE OF SCOTCH WHISKY

Scotch malt whisky is made from malted barley only and is manufactured by the pot still process. This process has the following steps:

1. **CLEANING:** The barley is washed to separate the husk and is then dried.
2. **MALTING:** The selected barley is soaked in water for 2-3 days. It is the water in Scotland that imparts the unique quality to Scotch. The barley is spread on the concrete floor to germinate for 8-12 days. The sprouting barley is constantly turned by hand to aerate it.
3. **DRYING OR GRIND:** Germinating is stopped at a certain time and the barley is dried over peat fires. The peat leaves smoke which flavours and gives an aroma to the malt during this process. The malt is then ground, not too finely and put into vast vats.
4. **MASHING:** The ground malt is crushed with hot water and the conversion of soluble starch into maltose is complete. The sweetish liquid produced (wort) is drawn off.
5. **FERMENTATION:** The wort is cooled and then passed into vessels where it is fermented by yeast which attacks the sugar and converts it into crude alcohol. The result is a sort of beer-like wash, with an alcoholic strength of about 10%.
6. **DISTILLATION:** The wash is distilled twice in pot stills. The wash is then heated. As alcohol has a lower boiling point than water, it converts into vapours which are then cooled and condensed back into a liquid. This produces a fairly weak impure spirit called “low wines” these are distilled again to produce scotch-malt whisky.
7. **MATURATION:** This new whisky is poured into oakwood casks where it is matured into a pleasant mellow spirit for about 15 years. Finer whiskies are matured in actual sherry casks or wine-treated casks.
8. **BLENDING:** After the malt whisky & grain whisky (see below) are matured they are blended to achieve consistent quality and bouquet.

Grain whisky is made from a mash of several grains—mostly corn, with small amounts of malted barley and unmalted barley. The barley used is not dried over peat smoke. As with malt whisky, the wort is fermented, but the resultant wash is fed into the continuous still, to run off at about 180 deg proof. Distillation at such high proof eliminates many of the substances that contribute flavour and character to pot still whiskies. The new grain whisky is aged in oak casks for a minimum of 3 years. Grain whiskies are then bottled unblended.

9. **FILTERING & BOTTLING:** The Scotch whisky is then finally filtered and bottled.

1.7 Vodka

Step 1 – Raw materials & their processing

The grain (rye, wheat, barley, corn) are sprouted and the potatoes are cooked, to transform the starch that they contain into sugar. Once their starch has been transformed, these raw materials are crushed, or ground, and mixed with water to extract the fermentable sugars and produce a mash.

Fermentation then takes place in a stainless-steel vat, in order to avoid any contamination of the mash by bacteria that could affect the aromatic range. The yeasts used by distillers are usually selected for their high ethanol yield and their low impact on the production of flavours. When fermentation has finished, the alcohol is transferred to a still for distillation.

Step 2 – Distillation & filtration

Most vodkas are produced using continuous distillation in a column still. However, some distillers still prefer traditional pot stills, which produce very flavourful vodkas. In this case, the spirit may be filtered through activated carbon to remove its flavours.

During the distillation phase, the master distiller decides when to make the cuts (between the heads, middle cuts and tails of the distillation) with a view to avoiding any contamination of the middle cut by the heads that are rich in methanol (presenting notes of solvents and varnish) or by the tails, that are equally toxic since they are saturated with fuel oils. This is repeated several times (usually 4 to 8); the successive distillations enabling the alcohol content to be raised to 95-96% and the extraction of a maximum of aromatic compounds.

Step 3 – Filtering & bottling

After distillation, the alcohol is filtered through activated carbon to remove any aromatic residue and render it as neutral as possible. Dilution is carried out with successive additions of distilled or demineralised water, until the desired alcohol content is obtained. A final filtering step is then carried out, before the alcohol is left to rest before bottling.

Whether it is consumed neat or in the form of a cocktail, vodka continues to attract a young, sophisticated clientele. In parallel to its success as a refined luxury product, it is also much appreciated for its more functional role as an excellent cocktail base, with a soft, smooth texture. Ultimately vodka only has one limiting factor: its relatively neutral aromatic range, which is especially true of western and American vodkas.

Western consumers have yet to embrace the ‘Russian style’ shot of neat vodka enjoyed during a meal. However, the emergence in Poland and other countries of flavoured vodkas, produced by simple distillation, could be the key to attracting a new clientele.

This tradition is not exclusive to Poland, Russia and the Ukraine. It is also alive and well in the Scandinavian countries, where flavoured vodkas are very popular in the summer.

1.8 Rum

Step 1 – Sugar cane juice or molasses

As a rule, rum can be divided into those produced by distilling sugar cane juice, and those made from molasses. Obtained by crushing sugar cane, sugar cane juice deteriorates very quickly, and so needs to be fermented as soon as possible, and then distilled to produce agricultural rum. A thick, residual syrup that results from the refinement of cane sugar, molasses is used as an ingredient in desserts and sweets, and in the production of numerous types of rum.

Sugar cane (‘*Saccharum officinarum*’) grows in tropical regions in the equatorial zone. It can be found in Florida, Texas, Louisiana, the West Indies, in Hawaii, in Central and South America, and in Indonesia, Thailand, the Philippines, China, India, islands in the Indian Ocean, Australia, and in southern Spain. There are many varieties with various degrees of resistance to disease and levels of sugar content. The cane consists of water, fibres and saccharose. The saccharose is concentrated at the base of the cane.

The canes are harvested manually or mechanically at the age of 11 months, before they flower. The leaves and tops of the sugar canes are left in the fields. The bases are quickly transported to the sugar refinery to avoid any of the sugar being lost. The bases of the canes are then ground into fibres and hot water is added to extract the sweet juice. The pressing process results in two products: cane juice to produce rum, and the bagasse, consisting of the fibrous residue, which is used as fuel.

In the case of molasses-based rum, the sugar is extracted from the cane juice and then transformed into molasses.

Step 2 – Cane wine and fermentation

Yeast is then added to the mash (molasses diluted with water or sugar cane juice), which is then fermented and gradually converted into alcohol until it eventually produces a sugar cane wine containing around 8% to 10% alcohol. A fundamental stage in the development of the flavours of the future rum, the fermentation of the sugar cane wine is conducted in various ways in different parts of the world, resulting in a very broad aromatic range.

There are three types of fermentation:

- **Spontaneous fermentation:** This relies on the yeasts and micro-organisms naturally present in the atmosphere or in the sugar cane juice. Such fermentation takes place in open vats and takes between 1 and 2 weeks. Small distilleries, especially those in Haiti, still practise spontaneous fermentation.
- **Controlled fermentation (batch):** Usually carried out in batches, this kind of fermentation uses laboratory-grown yeasts that are added to the sweet liquid. Some distilleries cultivate and maintain their own strains of yeast that they protect, like a trademark. Such fermentation is spread over 2 to 3 days and enables the production of a consistent percentage of alcohol and range of flavours.
- **Controlled fermentation (continuous):** This is a growing trend in the rum industry. It involves keeping a fermentation vat permanently filled, with the continuous addition of more molasses. This enables the yeasts to be kept active by removing a quantity of the mash, whose sugars have already been digested by the yeasts, from different sections of the vat.

Step 3 – Choice of still

Like many other spirits, rum can be distilled in a column still, continuously, or in a pot still (used by the more traditional producers). The type of distillation practised is often influenced by the country's colonial history. Former British and French colonies still use copper pot stills, while those of Spanish origin tend to prefer column stills. The type of rum produced very much depends on the distillation method: in basic terms, heavier rums tend to come from pot stills (due to the middle cut of the distillate being collected at between 68% and 70% alcohol) while lighter rums are produced by column stills (the distillate collected has an alcohol content above 90%, thereby eliminating the heavier vapour).

Pot still - batch distillation: this 'batch' distillation technique requires regular stopping of the still so that it can be cleaned and allowed to rest before loading with another batch for distillation. This is the most traditional of distillation methods.

Column still - continuous distillation: usually consisting of two or four columns, each one feeding the next, this type of distillation does not require any interruption, with the columns being continuously supplied. Consisting of different levels of concentration, through which the steam circulates, this technique enables the rum's aromatic profile to be

monitored and controlled. Only its lightest vapour in terms of flavour reaches the column's final level. The heavier vapour remains at the lower levels.

Step 4 – Ageing

Since there are no legal regulations, the ageing process and associated designations vary from one producer to another. While most ageing takes place in old bourbon barrels, rum can also be aged in cognac barrels and new oak barrels. Special cask-finished rums are quite rare; these are usually produced by Italian and French merchants, who use Banyuls, port, sherry and madeira barrels to impart flavour to the rum. There is no required minimum period, but few rums claim to be aged for more than 8 or 12 years. Matured at the site of production, the barrels are exposed to extreme weather conditions, resulting in considerable evaporation.

The evaporation issue: ageing conditions in the Caribbean, in a tropical climate, are completely different to those in Europe. As oak is permeable to alcohol molecules, which are themselves soluble in water, the combination of a high temperature and high humidity results in substantial evaporation and a faster ageing process. In a tropical climate, a typical annual loss would be 6% to 8% of the barrel, compared to 2% in a temperate climate, such as in Scotland or Ireland.

On this basis, only 65% of the barrel's initial contents will remain after 5 years of ageing, about 45% after 10 years, and 30% after 15 years. In Scotland it would take 55 years for a similar degree of evaporation to occur.

In addition to the increased evaporation, the ageing process itself is accelerated in tropical climates. Two years of ageing in the Caribbean is equivalent to 6 to 8 years in Scotland. Several solutions have been considered to reduce the evaporation problem, without having to change the product description, in particular transporting the barrels of rum to Europe for ageing. There are two opposing camps: those who believe that rum should be aged in its country of origin, and those who want to age it in Europe, in order to benefit from a slower esterification and oxidation process.

1.9 Gin

Step 1 – Neutral alcohol

The vast majority of gin is made from neutral alcohol produced from grain or molasses. In the case of grain alcohol, the mash usually consists of a mixture of grains such as corn (75%), barley (15%) and other grains (10%) including rye.

Step 2 – Production methods

‘Distilled gin’: This method enables the production of the highest quality gins. Distillation takes place in batches, using a traditional pot still. This still is heated with steam via a

resistance placed in the base of the boiler. Neutral alcohol is placed in the boiler, reduced to between 45-60%. When the alcohol comes to the boil, the steam becomes impregnated with the flavours of the berries and the aromatic plants. The distillation heads and tails are less pure and are recycled and then redistilled whereas the middle cut is transferred to the bottling centre to be diluted and bottled.

Flavouring by infusion: This consists of placing all the aromatic plants, juniper berries and spices either in a cotton pouch suspended in the still above the alcohol, or in a 'perforated chamber' at the top of the still. On contact, infusion occurs, and the alcohol vapour becomes impregnated with the flavourings released by the aromatic plants.

Flavouring by maceration: This process consists of macerating the juniper berries, aromatic plants and spices directly in neutral alcohol at 45%, either by allowing them to soak freely in the alcohol or by placing them in cotton bags for 24 to 48 hours. Some distilleries filter the mixture before distillation, to separate the aromatic plants from the alcohol. Others distil the whole mixture, thereby producing a particularly flavourful spirit.

'Compound gin': This technique is based on the mixing of a neutral alcohol (usually from molasses) with either a concentrated gin flavouring (cold compounding) or artificial juniper berry, spice and aromatic plant essences (compound essence). This method does not involve any redistillation. It is mostly used in mass-produced gin.

Step 3 – Diluting & filtering

Once distilled, the alcohol is left to rest for a few hours in the vat, then its alcohol content is gradually reduced by dilution to the desired percentage. Cold filtration may be carried out by chilling the spirit to -2°C, it is then passed through a cellulose filter in order to remove any particles in suspension. Other filtration techniques may also be used, such as activated carbon, by allowing the spirit to flow through a layer of carbon.

In addition to the flavouring method, by maceration, distillation, or by mixing, gin is divided into various categories:

LONDON GIN (London Dry Gin): This category, also known as '*English style*', represents the quintessence of gin. The term 'London' does not signify origin, but rather a style, which can be reproduced anywhere in the world. 'London Gins' or 'London Dry Gins' are distilled gins, to which no artificial ingredient (flavouring or colouring) may be added; only sugar may be added, in strict proportions (with a maximum of 0.1 g per litre in the final product).

PLYMOUTH GIN: This is currently the only gin to enjoy registered designation of origin status. This gin is produced by a single distillery in Plymouth, in the south of England, the Blackfriars Distillery (Coates & Co) who hold the exclusive right to use the designation.

OLD TOM GIN: An ancestor of London Dry Gin, this gin was very popular in the 18th century. Milder and slightly sweet, it was more highly flavoured in order to mask a harsher, less pure spirit base than those currently used. It is a style that is gradually dying out.

YELLOW GIN: Gin that has been aged for several months in oak barrels, resulting in its characteristic colour, with glints of yellow.

1.10 Tequila

Step 1 - From agave fruit to agave juice

The production of tequila starts with the harvesting of the agave hearts, or piñas. A 70kg piña will produce about 10 litres of alcohol.

After they have been removed the agave plants, the piñas are transported to an oven (usually steam operated) to be cooked. Cut into halves or quarters, they are then traditionally baked for 50 to 72 hours. This can be reduced to 12 to 48 hours for industrially produced tequila. The cooking phase enables the inulin in the agave to be transformed into fermentable sugar. Once cooked the piñas are ground by a traditional or modern mill to separate the fibres from the juice. Three or four changes of water are needed to extract all of the sugar and obtain agave juice, or ‘honey’.

Stage 2 - Fermentation and distillation

Fermentation can take 2 to 5 five days in an industrial distillery, or up to 12 days in a traditional distillery. At the end of this step, the ‘beer’ will have an alcohol content of between 4% and 7% and is filtered before being distilled. While both types of still (pot and column) can be used, preference is usually given to traditional copper stills since they enable a double distillation, as required by law.

Step 3 – Ageing & bottling

Two types of container are used to age tequila: oak barrels and oak vats. The barrels can be new or used. They usually come from the United States (after having been used for bourbon), or from France, and have a capacity of 180 to 200 litres. In certain cases, the law permits the use of a maximum-sized barrel of 600 litres. Whatever their capacity, all the barrels must be sealed by the CRT (Tequila Regulatory Council).

The vats, which generally have a capacity of 20,000 litres, can hold more alcohol. The tequila is diluted and then filtered before bottling.

1.11 Brandy

1.11.1 Introduction: Dutch word “Brand-wijn” means burnt wine. Universally France is accepted to be the home land of brandy and is known for its brandy producing region namely

cognac and Armagnac. Brandy of good quality is being made in Italy, Greece, Australia and USA.

1.11.2 Definition: Brandy is a spirit distilled from the fermented mash of grapes.

1.11.3 MANUFACTURES OF BRANDY

1. Picking: The grapes are picked and gather together
2. Pressing: In this process in which whole grapes are pressed to produce must. Grapes are pressed by four methods
 1. Trodenning
 2. Ballon press
 3. Manual hydraulic press
 4. Electronic press

The must is then transferred to fermentation tanks made of wood or stainless steel

3. Fermentation: The fresh yeast is added to the must; in this process sugar in the must is converted into alcohol and CO_2 this process of fermentation takes about 5-7 days.
4. Racking: After the fermentation is completed the wine is placed in casks tanks or barrels to rest so that residue dead yeast cells and skin particles known as “lees” settles at the bottom of the cask, after which the clear wine is shifted to another cask. this is repeated 3-4 times.
5. Filtering/fining: Fining is done to remove the sediments in the wine. it is done by adding egg white or blood or gelatine.
6. Distillation: The mash is then distilled by two method
 - i. POT STILL – COGNAC, ARMAGNAC ETC
 - ii. PATENT STILL – INDIAN BRANDIES
7. Maturation: After distillation they are aged in oak casks, small amount of Caramel is added as it adds amber colour to brandy.
8. Bottling & Labelling: They are then bottled and labelled for sale.

1.11.3 Cognac

Cognac region lies just north of Bordeaux. Cognac the royal family of the brandy world is made by distillers of cognac region. The grapes are grown strictly according to the law of France. The cognac brandies are matured and distilled at cognac houses. the grapes that are been use in cognac region are colombar and st-emilion

The cognac region is divided into six sub divisions which in order of quality are:

1. Grande champagne
2. Petite champagne

3. Borderies
4. Fins bois
5. Bons bois
6. Bois ordinaries

Maturation ratings and letters of cognac

Letter	Abbreviation
C	COGNAC
E	ESPECIAL
F	FINE
V	VERY
S	SUPERIOR
P	PALE
O	OLD
X	EXTRA

Symbols / Letters	Meaning	Matured Years
	ONE STAR	Matured For 3 Years
	TWO STARS	Matured For 4 Years
	THREE STARS	Matured For 5 Years
VS	VERY SUPERIOR	Matured For 10-12 Years

VSO	VERY SUPERIOR OLD	Matured For 15-20 Years
VOP	VERY OLD PALE	Matured For 15-20 Years
VSP	VERY SUPERIOR PALE	Matured For 15-20 Years
VSOP	VERY SUPERIOR OLD PALE	Matured For 25-30 Years
XO	EXTRA OLD	Matured For 45 Years

Questions

Short Answer Question:

1. Classify the beverage and explain it
2. Write the history of Wine
3. Identify the type is of distillation and explain it.
4. List the type of sprit proof and explain it

Long Answer Question:

1. Classify the type of wine and explain it.
2. Illustrate the red wine manufacturing procedure.
3. Illustrate the sparkling wine procedure.
4. Explain the manufacturing processes of whiskey



UNIT

BAR OPERATIONS



2.1 Introduction

A bar is a licensed place selling all kinds of alcoholic beverages to the customers. Bars are found in hotels, resorts, clubs, casinos, and many such establishments and they can also be operated as independent units. A bar is one of the key revenue generating areas of the food and beverage (F&B) department of the hotel industry. The main function of a bar is to serve alcoholic drinks in appropriate glassware according to the customers' preferences. Most customers like their drinks with ice; some without ice; some like to add mixes such as tonic water, soda, lemonade, ginger ale, flavoured effervescence drinks, etc.; and some prefer their drink with nothing added, or 'neat'. Complimentary snacks, finalized by the management, are served along with the drinks.

Some like to settle down for cocktails and some only for juices and mocktails. To carry out its operations efficiently, the bar must have adequate supply of all kinds of alcoholic drinks, ice, water, mixes, kitchen stock, appropriate glassware, straws, drip mats, etc., within the reach of the bartenders. Bars act as the service and storage area for all these items mentioned. The other important requirements for bar operations are water supply, electric supply, lighting, and drainage. A bar needs a continuous hot and cold water supply for many applications. Water is required for making ice, washing, and to mix with drinks. The drainage system should ensure that the water drains quickly without any stagnation. Some of the types of bar, categorized either according to the kind of alcoholic drinks served or the place where it is served are discussed in the following section.

2.2 TYPES OF BAR

The types of bar are discussed in this section.

2.2.1 Pubs

It is a word derived from 'public house' which is licensed to sell alcoholic beverages. Pubs mainly serve all kinds of beers along with other alcoholic drinks. Most pubs were once owned by the breweries to market their products, but today they are operated by other business promoters.

2.2.2 Lounge Bar

Lounge is an area meant for relaxing which is normally located near the reception area. Some establishments have lounge bar which serves all kinds of alcoholic beverages to the guests at the lounge. The drinks may be collected from the main bar and carried on a tray to the lounge and served. If the volume of business is more and there is adequate area in the lounge, a separate

bar may be set up to address the needs of the guests. Lounge bar is often seen in airports, clubs,

casinos, luxury hotels, ships, etc.

2.2.3 Wine Bar

The wine bar sells only wines of all kinds, mainly the most expensive wines. It has a good collection of wide range of wines. The guests are given a free sample of wine for tasting before making purchase decisions. They may buy bottles of wine for consuming later or drink in the wine bar itself. This kind of bar is a comparatively new concept and becoming very popular amongst wine connoisseurs and affluent people.

2.2.4 Cocktail Bar

The cocktail bar serves all kinds of cocktails along with other alcoholic drinks. It may be found in airport, casinos, hotels, ships, etc.

2.2.5 Banquet Bar

This is a temporary bar set-up in banquet suites to serve alcoholic drinks during a specific function. The type and quantity of drinks to be served are generally predetermined at the time of booking the function. The drinks may be either bought by those who wish to drink or paid by the host for all the drinks consumed by his/her guests during the function. The banquet bar collects the required stock either from the main bar or from the cellar. Sometimes, guests would bring their own bottles of liquor in which case corkage charges will be levied.

2.2.6 Dispense Bar

It is the bar attached to a restaurant, serving alcoholic drinks to the guests in the restaurant during their meal time. The stock may be either collected from the main bar or from the cellar. The dispense bar has a minimum stock of drinks that may be suitable for aperitif to accompany the dishes offered, and as digestives.

2.2.7 BAR DESIGN

The bar should be designed in such a way that it should be functional and efficient.

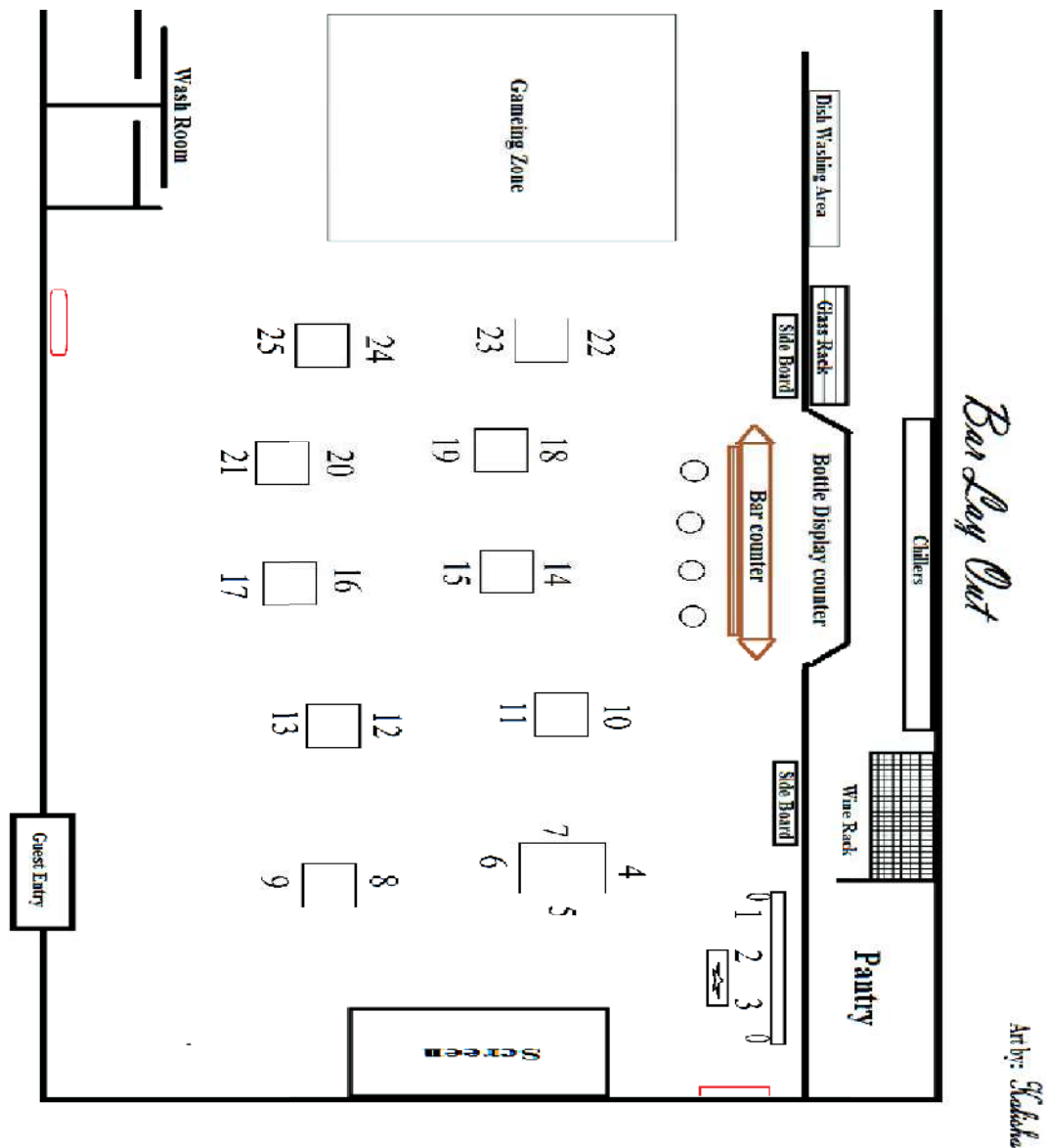
It can be achieved by keeping the customers' requirement and workflow in mind.

2.3 Parts of a Bar

These outlets serve alcoholic and non-alcoholic beverage with limited food. They have comfortable seating and pleasant lighting. A bar can attach to a restaurant, can be stand-alone beverage outlets or can be individual standing unit – not attached to any hotel. A non-Alcoholic beverages stimulant, refreshers, nourishes cocktail and mock-tails are served. Complimentary snacks are served with alcoholic beverages. The various kinds of bars are pubs, lounge, nightclubs, discotheques, sports bar, speed bar, etc

The whole bar can be divided to different part according the usage as well as the operations bar consists of the following three parts:

1. The front bar
2. The back bar
3. The under bar



2.3.1 Front Bar

It is the meeting point for customers and bartenders where customers place order for their drinks and are served by the bartenders. The front bar should be functional and have adequate space for pouring the drinks and serving them. The height of the bar is normally 42-48 inches. The width of the bar is 16-18 inches with the surface of water proof and alcohol-proof material and should be easy to clean. Most bar surfaces are made of laminated plastic or high-quality granite. They may or may not have armrest running from one end to the other. If provided, around eight-inch space must be added up to the width of the bar and the armrest should be padded for comfort. The waiters pour the drinks along with the mixers, such as soda, water, etc., into the appropriate glass arranged in the glass rail (drip rail) which is recessed for about three inches at the bartender side. The front bar is supported on a vertical

structure called 'bar die' which separates customers from the bartenders' work area. The customer side may be padded, decorated with carving, or left plain. A footrest runs the length of the counter on the customer side from the floor of about 9-12 inches. If a sit-down bar is designed, it will have high stools, tall enough to convert the bar to table and each stool will have the space allocation of two-feet length of bar. The stools should be very comfortable with proper height with rungs for footrest or the footrest of the front bar should be within the reach.

2.3.2 Back Bar

It is located at the back of the front counter leaving sufficient space for the bartenders to do their work. The back bar consists of display rack set over the storage cabinets. The backbar holds all kinds of liquor bottles and sparkling-assorted glassware in an attractive manner which enhances the appearance of the bar. Often, the back bar is lined with mirror at the back which reflects the bottles stored in the rack. It also acts as a merchandising device by displaying the bottles. The mirror adds depth to the room, helps the bartenders to observe the customers discretely, and the customers to view others in the room. Many bars include pictures, posters, tinted glass, plants, antiques, etc., to make the back bar more attractive and to break the monotony. In most bars, the overhead slotted racks are fitted to store the stemware which makes the bar very attractive. The base of the back-bar functions as a storage space and the part of it may be a refrigerated cabinet. The extra stock, such as drinking straws, napkins, cocktail umbrellas, salvers, jugs, condiments, sugar, etc. are stored. The base of the bar may accommodate special equipment, such as bottle cooler, glass foster, espresso machine, non-alcoholic beverage dispenser, cash register, and so on. The base bar is wider than the display rack. The design of the back bar must be functional and at the same time very pleasant to look at from the top to the bottom as it is the centre of attraction in any bar and is in constant view of e-- the customers. The design must blend with the overall decor of the bar.

2.3.3 Under Bar

It refers to the area under the front bar of the bartender's side. The under bar should be designed keeping in mind the kind of drinks to be made, equipment required, and mixes needed for the drinks. In other words, work flow must be considered while designing the under bar. It is the main centre for the entire bar operations as the bartenders will be facing the guests while preparing their drinks. The under bar may be divided into many workstations according to the volume of the business and the length of the counter. Each station will have its own supply of fast-moving liquor, mixes, ice, glasses, blender, sink, garnishes, etc., within

reach. The liquors in each station are grouped into 'well brands' and 'call brands'. Well brands are house brands that are served to the guest who do not specify a particular brand of liquor. They may just ask for scotch, bourbon, rye, gin, vodka, etc. Hotels will be serving the brand that is kept in stock. Call brands are the brands requested by the guest by name. Some examples are Blue Sapphire Gin, Johnnie Walker, Red Label, etc. If the blender is required for most of the drinks, it may be provided in each section; otherwise, it is kept separately at the back bar. Most busy bars will have automatic dispensing system for mixes in each station. If draught beer is served, the beer dispensing unit must also be provided. Clean glasses should be grouped according to the type and stored in the glass shelves near the station, on the back bar or in the overhead racks, and the prepared glasses for the drinks should be kept ready in the glass rail or near the ice box. Storage area should be provided for storing reserve stock of spirits, wines, liqueurs, beers, and kitchen supplies. The under bar should have provisions for waste disposal and hand wash. Some restaurants may not have dispense bar attached to them; therefore, the waiters or sommeliers will be collecting the drinks from the main bar. In such cases, one or two sections must be completely devoted to catering to the needs of the restaurant guests. The bartender should have adequate area to collect the bar/beverage order ticket (BOT), prepare the drinks, issue them to the concerned waiters/sommeliers, receive empty glasses, empty bottles, prepare the bill, etc. If a separate section is not set aside, the restaurant staff will be forced to collect the drinks from the stations moving through the customers' station. This will result in accidents and confusion. All the three parts of the bar—front bar, back bar, and under bar—must be functional keeping the requirements of the guests and the bar staff in mind. The minimum space from the back of the back bar to the front of the front bar is eight feet to ensure comfortable operations.

Shapes of Bars A bar may be in different sizes and shapes. The size of the bar depends on the volume of the business, variety of drinks on offer, and the area available. The shape of the bar depends on the area available, shape of the area, convenience of operations, and the theme of the decor. It may be straight, L-shape, U-shape, wave-shape, round, square, etc. Irrespective of the shape, all bars will have three sections—front, back, and under bars. The location of the back bar is usually behind the front bar, fitted against the wall. In a freestanding square, round, rectangle, and any irregular shapes, the back bar will be the focal point located in the centre and the service stations or front bar around the back bar. In this type of layout, the under bar will be exposed to customers. Plumbing work needs extra attention in this kind of layout.

2.3.3.1 PLUMBING

A bar should have adequate supply of cold and hot water. Sinks, ice machine, dishwashers, and soda guns need water supply. Without water supply, one cannot imagine running a bar. Proper drainage facility is also essential for sink, dishwasher, refrigerators, ice bins/sinks, ice machines, etc. If drainage system is not provided in the bar, it will be a messy and an unhygienic place where no one will want to have his/her drink. A separate area may be set aside near the bar for washing glasses out of sight of the guests depending on the availability of space. It is advisable to have swiveling type of taps so that they can be pushed aside when not in use. The ice sinks should have drain plugs so as to drain the melting ice.

2.3.3.2 ELECTRICITY

All pieces of equipment right from computer to ice making machines run on electricity. There should be adequate plug points located just above the working areas of each station, below the bar counter, and the back counters depending on the positioning of the equipment. In countries like India, where frequent power shut downs occur, a back-up generator is compulsory. It is ideal to avoid cables running across the work area which may lead to accidents.

2.3.3.3 FLOORING

During the operations, however talented the bartender may be, there will be certain amount of spillage, left over from used glasses, ice cubes, etc., on the floor. They should be easily cleaned. As bartenders stand for long hours, the flooring material should be comfortable and safe. The material chosen for the bar floor should be non-slippery and easily mopped dry. The tiles or concrete covered with rubber or plastic mats will minimize slippage and be comfortable for the feet. However, it must be cleaned frequently to keep the bar hygienic.

2.3.3.4 LIGHTING

Lighting highlights the mood and atmosphere of the bar. A well-designed bar will not get the recognition it deserves if the lighting is poor and it does not blend with the theme of the decor. The lighting must be functional. The bartenders' efficiency is influenced by the quality of lighting under which they work. Bright lighting is necessary over the under bar and back bar. This not only improves the performance of the bar staff but also attracts the attention of the guests. Indirect or diffused lighting may be used over the guests' area. Bright lighting is better for the guests' area as they will be able to appreciate the colour of content in the glass,

behave decently, and will be able to watch their steps under the influence of alcohol. Lighting can be rejuvenating or enervating.

2.4 Establish Control System

A bar is one of the major revenue-generating areas fetching greater margin of profits. It tempts dishonest staff to indulge in malpractices. If proper control system is not established, there will be huge pilferage of revenue and drinks. The objective of the control system is to monitor the actual and potential sales and costs for the bar or each bar if the establishment operates more than one and to take corrective action if the actual is deviating from the standards set. Control is a continuous process calling for close monitoring.

2.4.1 Bar Records and Control

There are many methods of beverage control and the method chosen must be cost-effective and serve the purpose. The control process involves many records that should be properly updated and maintained by the bar staff. The control system must cover all the areas of operation from purchasing, receiving, storing, issuing, preparation of drinks, standard yields, standard recipes,

standard pouring, order taking, and billing. Most bars use computerized system as it is easier to obtain performance report quickly and reduces the labour and numerical error. All receipts and sales should be supported with the documents to ensure strict control as every stock is accounted for. The absence of stock should mean that it is converted to revenue. $(\text{Stock in hand in the beginning of the day}) + (\text{Receipts during the day}) - (\text{Stock at the end of the day})$ should be equivalent to $(\text{sales value of the drinks consumed})$. Any shortage should be investigated. The bar must work out standard cost price for various portions for each drink on offer and its selling price. Table illustrates the standard cost and selling price to earn the gross profit of 70%. The percentage may vary from bar to bar. Gross profit is $\text{sales} - \text{beverage cost}$. It is advisable to work out the standard cost for sizes, such as 10 ml, 15 ml, etc., which are used chiefly in cocktail preparation.

Standard cost and selling price

Drink (1 liter)	Cost Price (\$)	Standard Cost of various portions size(\$)				Selling price for various portion sizes at 30% beverage cost(\$)				SP at 50% cost (\$)
		30	25	15	10	30	25	15	10	Full bottle
Whisky	1200	36	30	18	12	120	100	60	40	2400
Rum	850	26	22	13	09	87	75	45	30	1700
Gin	800	24	20	12	08	80	67	40	27	1600
Vodka	900	27	23	13	09	90	77	45	30	1800
Brandy	1000	30	25	15	10	100	85	50	35	2000

The basic methods and procedures to be followed in beverage control are discussed in the following sections.

2.4.2 Comparing Actual with Standard Cost

In this method, the actual cost of a bar is compared with the standard cost for a set period of time which may be one week, 15 days, or one month. Before implementing this system, it is assumed that all the drinks are poured and made according to the standard established. The number of drinks sold during the period is multiplied by its recipe or standard cost and by its selling price. The actual cost for that period is calculated as follows.

(Opening stock + Requisition + Transfer in) — (Transfer out + Closing stock)= Cost of beverage consumed

The difference between the 'standard' and 'actual' should not be more than 0.5%. Any variance higher than this value should be investigated. The actual cost is normally more than

the standard cost since the standard cost is calculated based on perfect bartending/condition which may not be the same during the busy operations. It should be remembered to adjust the cost and revenue of the full bottle sales before comparing the actual with standard cost as the full bottles are sold at less price than if its contents were sold individually.

It should also be noted that the sales mix will affect the standard cost and for each period the standard cost percentage may vary because of varying sales mix. It will remain the same if the sales mix remained the same, which is practically not possible. illustrates the standard cost calculation and the comparison.

Standard cost control form					
Taj Bar					
Period 8-15 june, 2012					
Drink	Std cost/straight drink (30 ml) in Rs	Selling price in Rs/	Qty sold in Numbers	Total std cost in Rs	Total standard revenue in Rs.
Brandy (house)	30	87	600	18,000	60,000
Gin (house)	24	80	500	12,000	40,000
Whisky (house)	36	120	700	25,200	84,000
vodka (house)	27	90	300	8,100	27,000
rum (house)	26	87	700	18,200	60,900
Total				81,500	2,71,9000
Standard cost percentage = $81,500 \div 2,71,900 \times 100 = 29.97\%$ (though the standard cost percentage is 30, this is ecause of rounding off the figures)					
Actual cost percentage = $81,500 \div 2,71,900 \times 100 = 30.08\%$					
Difference 0.11%					

The difference between the standard and the actual is less than 0.05%; hence, it does not need investigation.

2.4.3 Analyzing Consumption and Cost

The consumption of various liquors should be analysed every day and at the end of a set period. The everyday consumption of all the liquors is monitored and recorded for effective control. Drinks are used in the making of cocktails and straight drinks. At the end of the day's operations, the sales record is analysed to see the consumption of liquors for cocktails and straight drinks and the balance is physically verified. If there is difference between the book record and physical stock, it should be thoroughly verified. For example, according to the

book record, if the balance should be four full bottles, but the physical verification shows five full bottles and vice versa. Both are serious problems which should be taken up for investigation. The requisition for supply is made for next day's operation to maintain the par stock level.

2.4.4 Beverage Control Report

The bar may prepare bar control report which records daily requisitions, transfer ins and outs, closing stock, sales, beverage cost, and cumulative cost percentage for monitoring the daily performance. This helps the management to get into remedial action and investigation if the cost escalates or deviates more than the variance allowance permitted. Figure 45.5 illustrates the calculation of beverage cost, beverage cost percentage, and sales and cumulative cost percentage.

Beverage control report													
Date	Day	OS in 1000s (rs)	Req. in 1000s (rs.)	Total in 1000s (rs.)	TI in 1000s (rs.)	TO in 1000 (rs.)	CS in 1000s (rs.)	COB in 1000s (rs.)	BS in 1000s (rs)	BC %	Cum. COS in 1000s (rs.)	Cum. BS in 1000s (rs.)	BC % as on today
JUNE													
1	M	40	70	110	5	12	43	60	210	28.57	60	210	28.57
2	T	43	75	118	8	11	55	60	209	28.7	120	419	28.64
3	W	55	65	120	10	15	50	65	218	29.81	185	637	29.04
4	T	50	67	117	5	13	47	62	206	30.09	247	843	29.3
5	F	47	75	122	12	14	50	70	234	29.91	317	1077	29.43
6	S	50	75	125	14	12	45	82	274	29.92	399	1351	29.53
7	S	45	70	115	10	10	40	75	249	30.12	474	1600	29.63
Period: 1 week			497		64	87		474	1600		474	1600	29.63

The explanation of columns (from left to right) as in Fig. 45.5 is as follows.

- Date
- Day
- Opening stock at the beginning of the day which is equivalent to the closing stock of the previous day
- Value of supply received from the cellar against the requisition
- It is the total of columns 3 and 4
- Transfer in-records the value of goods received from kitchen and other place against the requisition

- Transfer out-value of goods sent out of bar to other places against the requisition
- Closing stock-value of stock at the end of the day which will be the opening balance for the next day
- It is the cost of beverages sold (5 + 6) (7 + 8)
- Beverage sales of the day
- Beverage cost percentage = $\frac{\text{cost of beverage}}{\text{Beverage sales}} \times 100$
- Running total of beverage cost till date
- Running total of beverage sales till date
- Beverage cost percentage as on date = $\frac{\text{cumulative cost of beverages}}{\text{Cumulative beverage sales}} \times 100$

Verification: (figures in thousand)

	\$
Opening stock	40
Requisitions	497
Transfer in	64
Total	601
Less	
Transfer out	87
Closing stock	40
	127

Cost of beverages sold (601- 127) = 474

Beverage cost percentage at the end of the week = 29.63

It is within the pre-determined percentage.

2.4.5 Record of Consumption for Cocktails

The various kinds of liquors and their quantities used for the preparation of cocktails can be calculated from the sales record and the standard recipes. Figure shows the calculation of liquor consumption for cocktails. The quantity consumed should be incorporated with the daily consumption sheet.

Record of consumption of liquor for cocktails							
Taj Bar							
Date: 15 June 2012							
Drink	Numbers sold	Whisky (ml)	Rum (ml)	Vodka (ml)	Gin (ml)	Vermouth (ml)	Brandy (ml)
Screw driver (60 ml v*)	40			2400			
Orange blossom (50 ml G*)	30				1500		
Alexander (40 ml B*)	25						1000
Cuba libre (30 ml R*)	60		1800				
Rob roy (50 ml SW*, 50 ml SV)	50	2500				25000	
Prepared by:							
* V=vodka, G=gin, B=brandy, R=rum, SW= scotch whisky, SV= sweet vermouth							

2.4.6 Daily Consumption Record

This record shows the daily consumption of liquors offered in the bar. The first column carries names of all the liquors. If the establishment procures bottles of different sizes, the size must be mentioned against it. The second column shows the par stock level for each drink which is pre-determined. The third column reveals consumption of drinks in the preparation of straight drinks and the fourth column shows the consumption in cocktail. The fifth column shows the total consumption of the liquors. The sixth column shows the stock in hand as per the record which is found out by deducting the consumption from the par stock. In the seventh column, the actual stock is recorded after physically verifying. If there is deviation between the stock as per record and the actual stock, investigation should be initiated.

Daily monitoring of stock consumption and verification controls the pilferage to a larger extent.

2.4.7 Potential Sales Value

Fixing up potential sales value (PSV) for each spirit bottle makes the beverage control easier. The PSV of each bottle should be calculated so as to know if the bar has earned the revenue for the stock consumed. The revenue value of each bottle is calculated based on the following:

- Contents of the bottle
- Drink size
- Number of drinks per bottle
- Selling price for each drink

Record of daily consumption of liquor								
Taj Bar								
Date: 15 June, 2012								
Drink (1 lit)	Par stock (bottles)	Straight drinks (dbl=60ml, sgl=30ml)		Cocktails (ml)	Total consumption (ml)	Balance as per record	Physical balance (lit)	Variance
		Sales units	Qty. in ml					
scotch								
Brand 1	15	30 dbl, 60 sgl	3600	2500	6100	8.9	8.9	0
Brand 2	6	5 dbl, 10 sgl	600		600	5.4	5.4	0
Brand 3	5	6 dbl, 15 sgl	810		810	4.19	4.19	
Rum								
Brand 1	5	20 dbl, 35 sgl	2250		2250	4.75	4.75	0
brand 2	15	40 dbl, 10 sgl	2700	1800	4500	10.5	10.5	0
Vodka								
Brand 1	5	5 dbl, 10 sgl	600	600	1200	3.8	3.8	0
Brand 2	5	3 dbl, 8 sgl	420		420	4.58	4.58	0
so on.....								
Prepared by:								
dbl= double, sgl= single								

The sales value is termed as potential sales value. As and when the bottle size or the drink size changes, new PSV should be found out. The PSV can be found out for full spirit bottle and for spirits sold by measures.

2.4.8 PSV for Full Spirit Bottles

It is the selling price of a full bottle of spirits fixed by the management to earn a certain amount of profit percentage which is predetermined. The value will be less than the PSV of spirits sold by measures since the sale of bottles do not involve much of handling and service procedure.

2.4.9 PSV for Spirits Sold by Measures

It is calculated as follows.

PSV of a bottle of Scotch whisky sold by measures, keeping 25ml as a drink size, would be calculated as given in the following:

Size of a bottle	1 litre
Size of a straight drink	25ml
Selling price per drink	\$ 180 number of drinks per bottle 40 (1000ml/25ml)
PSV	= number of drinks x selling price = 40x180 = \$7200

While fixing up the selling price, consider the cost of mixers per drink. \$180 includes the cost of mixers such as soda, tonic water, cola, etc.

Let us assume that the bar has sold 87 scotch drinks. It means the bar has used up two full bottles (87 drinks/40 drinks per bottle) and taken seven drinks from the third bottle.

The revenue should be equivalent to = (2 bottles 7200) + (7 drinks 180) = 14,400 + 1260 \$15,660. Anything less than this value either means pilferage or spillage which calls for investigation. If by accident a bottle is broken, \$7200 goes into drain which is a huge loss.

2.4.10 Weighted Average Value

If all the drinks are sold straight, it will be easy to calculate the PSV. In reality, bartenders will be making cocktails that call for two or more ingredients. The ingredients are used according to the standard recipe established beforehand. In this situation, a weighted average drink size and the sales price are determined. The weighted average sales adjustment for Scotch would be calculated as follows.

Drinks	Qty required (ml)	Numbers sold	Total Qty (ml)
1	20	12	240
2	40	20	800
3	30	16	480
4	50	18	900
Total		66	2420

2420ml divided by 66 drinks= 36.6ml average requirement/drink

Drinks	Price (Z)	Numbers sold	Total sales (Z)
1	150	12	1800
2	300	20	6000
3	230	16	3680
4	360	18	6480
Total		66	17960

\$17960 divided by 66 drinks=\$272 average price/drink

1000ml divided by 36.6ml average drink size=27.3 average drink/1000ml bottle

Adjusted sales value of a bottle =\$272*27.3 drinks=\$7432 per bottle

2.4.11 Par Stock or Bottle Control

Par stock is a useful control device. Par stock refers to stock levels established by the management for various drinks in the bar. At any given point of time, the number of bottles present in the bar should neither be more nor less than the par stock. For example, if the par stock level of Johnnie Walker Black label is 15 bottles, during the day's operation, the bar should have only 15 bottles, out of which some bottles may be empty, few partly empty, and others full. The stock should be taken at the end of the day's operation for making requisition for next day. If the status of the stock of Johnnie Walker is 4 empty, one half full, and 10 full, the head bartender will request for four Johnnie Walker bottles which will be collected the following day from the cellar on returning those four empty bottles. Now the stock will be 14 full bottles and one half full. This system prevents sneaking the personal bottles in. Usually, par stock is $1^{1/2}$ times a normal day's consumption though it may cover several days' consumption depending on the area available for storing the bottles in the bar and volume and frequency with which bars are to be restocked. Par stock will be established for all the bottled drinks, especially alcoholic drinks offered in the bar.

2.5 Requisitions

Beverages should be collected from the cellar against the authorized requisition during the hours specified which is generally in the morning. The bartender should collect all empty

bottles at the end of the day, sort, and keep them ready for returning next day morning. These empty bottles form the basis for requisitioning. For example, if there are 10 empty bottles of VAT 69, and five empty bottles of Remy Martin, the requisition should be made for those empty bottles. All requisitions should be made in triplicate and signed by the head barman or the person in charge of the bar. Empty bottles must be returned to the cellar along with the requisition slip while collecting the full bottles.

2.6 Inter-bar Transfer

In establishments, where there are more bars operating, sometimes, the beverages may be transferred from one bar to another as and when required. Such transfers should be recorded

Inter-bar transfer				
From: _____		To: _____		
Date: _____				
Item	Size	Quantity	Unit cost in Rs.	Total cost in Rs.
mirnoff	bottle	1	1800	1800
VAT 69	bottle	3	2100	6300
ombay sapphire	bottle	3	2000	6000
Ordered by: _____		Bar manager/Bar incharge		

and authorized so that the costs and revenues can be adjusted to arrive at a meaningful result of each bar. The cost of the transfer out must be deducted from the

total cost of the bar transferring and added to the cost of the bar receiving the stock. Format used for inter bar transfer.

When transferring full bottles from one bar to another, the par stock of the issuing bar will be low since the bottles are sent out to some other bar and when this bar wants to collect fresh stock from the cellar it will not be able to return the empty bottles. To avoid this problem, the management may follow any of the following methods.

- The cellar will be using the tamper proof colour stickers at the back of the bottle while issuing the bottles. These stickers not only differentiate the bottles of various bars but also control the unauthorized or illegal movement of bottles from one bar to another. The colour may be decided by the cellar in charge. Let us assume there are three bars—Bar A, Bar B, and Bar C. Bar A bottles may have blue sticker, Bar B bottles red sticker, and Bar C bottles green sticker. In this case, whenever inter-bar transfer occurs, the bottles of the transferring bar can be returned to the bar after some period of time or directly to the cellar since the origin of bottles can be easily known.
- In the place where sticker method is not followed, the bar requesting full bottles from another bar, should request so against the empty bottles which will maintain the par

2.7 Separating Full Bottle Sales

Sometimes, the guests want to order for full bottles from the bar, especially in room service and function catering. The price of the full bottles is normally less than the total price of the drinks of the bottle sold individually. In this case, it is better to separate the revenue generated through sale of full bottles as this will affect overall bar profit, beverage cost, etc. which will affect the performance analysis of the bar.

2.8 Spillage Allowance, Breakage, and Spoilage

Some percentage of allowance is permitted for spillage as it is not practical in a busy bar to expect every drop of a bottle to be made into cash. Sometimes, the drinks are wrongly mixed and thrown away, over poured, etc. To compensate for such losses, a spillage allowance is declared officially. For every bottle, a spillage allowance of 25ml may be given. If a generous spillage is allowed, this may tempt the bartenders to take advantage for personal benefit. However, whether or not the spillage allowance is permitted and if permitted how much is the quantity, should be determined by the management. In a place where electronic dispenser system is used, spillage allowance may not be necessary. The absence of spillage allowance makes the bartenders to be very careful.

If a bottle is broken, the bar in-charge or bar manager should return the neck of the broken bottle to the cellar man together with the authorized requisition with the word 'breakage' clearly marked for fresh supply. Same is the system followed for spoilage.

2.8.1 Function Bar Control

The banquet department that is responsible for function catering may extend alcohol beverage service to the guests depending on the requirements of the guest. The following three situations will occur.

2.8.2 Cash bar

Temporary bar having adequate supply of drinks, mixes, glassware, and ice is set up to serve the guests. The banquet head waiter or the authorized person must collect the drinks required for the function against the requisition from the cellar and return them as soon the function is over. Strict control of stock and cash is essential during the function catering.

The drinks cannot be poured using automated dispensing system and they are always poured by; free hand pouring method. The portion size of the drink and the number of servings per bottle is normally predetermined by the management. Since it is free pouring, some amount

of spillage allowance will be given. For example, in 1 litre bottle, 33 oz is taken leaving approximately 10 ml allowance per bottle.

The cash bar must be operated efficiently as there are chances of over pouring, spillage, and cash theft. To prevent this and to ensure efficiency, the following procedures should be followed.

There should be a separate counter set up away from the bar counter for issuing coupons against the cash for the drinks the guest wants to buy. The guest pays at the 'coupon counter*', collects the coupon, and receives the drinks against the coupon from the 'bar counter'. This eases the pressure on the bartender from handling the cash and allows him/her to concentrate on the pour and tight control. At the end of the event, the number of drinks consumed should match with the token sold and collected.

Function liquor control form

Function liquor control form										
Function hall:			Function:				Date:			
Senator's room			Rotary meet				15 june, 2012			
Item	Bottle size	NO. of bottles received	No. of bottles returned	No. of bottles consumed	Cost/bottle in RS.	Total cost in RS,	No. of drinks/bottle	Total no. of drinks consumed	Selling price/drink in Rs.	Total sales
Whisky	1 lit	15	4.5	10.5	1,100	11,550	33	346	100	34,600
Rum	1 lit	10	6	4	800	3,200	33	132	100	13,200
Gin	1 lit	12	3.2	8.8	800	7,040	33	290	100	29,000
						21,790				76,000
						Total				
						Cost of beverage				
						$\% = 21,790 \div 76,800 \times 100 = 28.73\%$				
Requested by:				Issued by:			Returned by:			
Received by:							Returned to:			

The revenue should be equivalent to the sales value of the drinks consumed. Any cancellation should be authorized by the manager and the reason for cancellation should be recorded. All empty, full, and part bottles should be returned to the cellar and the cash to the accounts department. In some places, the cash counter will be handled by the staff from the control department.

2.8.3 Payment by the host

Sometimes, the host of the function pays for the drinks consumed by his/her guests. In that case, the host is charged for the bottles at the price decided beforehand and, therefore, the need for setting up cash counter does not arise. The consumption of bottles is calculated by

subtracting the closing stock from the opening stock. At the beginning of the event, the host or his/her representative will check the opening balance and again at the end of the function he/she will check the closing balance to know the consumption.

2.8.4 Host's own bottles

Host sometimes brings his/her own bottles of liquor to be served to his/her guest at the function, in that case, the *corkage* charges will be levied for serving the drinks. How much to collect as corkage will be decided beforehand by the management. Supplies, such as mixes, ice, etc. will be offered by the hotel and the snacks will be charged extra. Controlling the bottles is very important in this situation as the bar staff may lay hands on the host's bottles. A dishonest bar staff or banquet staff may replace the host's full bottle with hotel's empty bottle. The banquet manager must ensure that there are not any hotel's empty bottles in the premises before the start of the event and he/she should request the host to mark the label of his/her bottles to identify them to avoid any kind of dispute after the event. Implementation of electronic pouring device, the recording of sales proceeding automatically when drink is poured, and adhering to the procedures established will certainly ensure greater control.

Calculation of bottle consumption and sales value						
Drinks	Opening stock (Qty of bottles)	Closing stock (qty of bottles)	Consumption (qty of bottles)	Cost/bottle in Rs.	Selling price/bottle in rs.	Total amount in Rs
Whisky	10	4	6	1,000	1,500	9,000
Rum	7	3	4	800	1,200	4,800
Gin	5	2.5	2.5	800	1,200	3,000
Brandy	7	2	5	1,000	1,500	7,500
Beer	24	3	21	90	130	2,730
Total sales						27,030

2.8.5 Host's own Bottles

Sometimes, the host brings his/her own bottles of liquor to be served to his/her guest at the function. In such case, the corkage charges will be levied for serving the drinks. The amount to be collected as corkage will be decided beforehand by the management. Supplies, such as mixes, ice, and so on will be offered by the hotel and the snacks will be charged extra. Controlling the bottles is very important in this situation as the bar staff may lay hands on the host's bottles. A dishonest bar staff or banquet staff may replace the host's full bottle with the hotel's empty bottle. The banquet manager must ensure that there are not any empty bottles of the hotel in the premises before the start of the event and he/she should request the host to mark the label of his/her bottles to identify them to avoid any kind of dispute after the event.

We have discussed the methods and procedures to be followed to implement strict and efficient beverage control. The implementation of electronic pouring device, the recording of sales proceeding automatically when drink is poured, and adhering to the procedures established will certainly ensure greater control.

2.9 FRAUDS

If the control system is not established, it may lead to the following frauds by the staff.

Dishonest staff may indulge in fraudulent activities in the bar; some of the typical ones: hereuast follows.

- The staff may bring in their own spirit bottles, sell the contents, and pocket the money without recording the sale.
- The staff may under pour the drinks and sell the drink, thus saved without recording and pocket the cash.
- The staff may use personal measuring device which is smaller than the one officially used in the bar and pocket the revenue of excess drinks.
- The staff may dilute the drink which normally takes place when the guests order their third or. more rounds of drinks when they are less likely to notice the weak drinks and take the cash from the extra sale.
- The staff may not record the revenue from the individual drinks till they reach the normal number of drinks from a bottle and then record as 'full-bottle sale' and pocket the difference.
- The staff may substitute the lower quality drink for a high quality requested by the customer and then pocket the difference.
- The staff may bill for more number of drinks to a group of guests, usually in a function catering than actually served.
- The staff may sell drinks, record them as spillage or complimentary, and pocket the amount.
- If automatic pouring device is in use, the staff may obtain the contents and make the content into more portions and pocket the cash of the extra rink. For example, eight drinks collected from the device will be made into nine drinks and the staff may make the money from the ninth drink. These frauds can be identified when the following are ensured.
- Good beverage control system is in operation
- Changing the shift and duties of the staff frequently
- Taking daily stock of the bar during and at the end of the operations

- Changing the till drawers and checking the cash with the till reading
- Observing the activities of the bar staff by an unknown representative of the management
- Carefully selecting bar employees with many reference checks which is important to prevent such malpractices.

2.10 Equipment's required for Bar operations

Bar is the place of innovative for bartender he/she will prepare the drinks for the guest which remain an one of the remembers for this drink the use of the equipment and making preparation both value the preparation which remain a memories to the guest.

Major equipment's are as follows:

- Ice cube machine
- refrigerator
- glass chill,
- Blender

Minor equipment's are as follows

- Glassware: Tom Collin, margarita, martini etc
- Measurer: peg measurer, pourer
- Cocktail tools: muddler, shaker, bar spoon,
- Cocktail garnish: Tongs, knives
- Ice bucket
- Ice scooper
- Bar cady
- Bar mate

Questions

Short answer question

1. Define bar.
2. Sketch the bar layout
3. Write the average beverage weight value.
4. Identify the par stock used in bar.
5. Write about inter-bar transfer

Long answer question

1. List the types of bar and explain it.
2. Illustrate the parts of bar and explain it.
3. Illustrate the Establish control system in bar.
4. Explain the function of bar control
5. List the frauds in bar operations
6. Identify the equipment's used in the bar.



UNIT

3

FUNCTION CATERING BANQUETS**3.1 Introduction**

Banquet is a major revenue -earning food & beverage operation in a hotel; therefore, banquet department is given a separate status and importance. Banqueting is mainly of two types -one is 'on-premises ' and the other is 'off-premises ' or 'outdoor catering '. Having thorough knowledge of banqueting gives professional approach towards the operations. In this chapter, techniques of organizing and handling a banquet department are discussed.

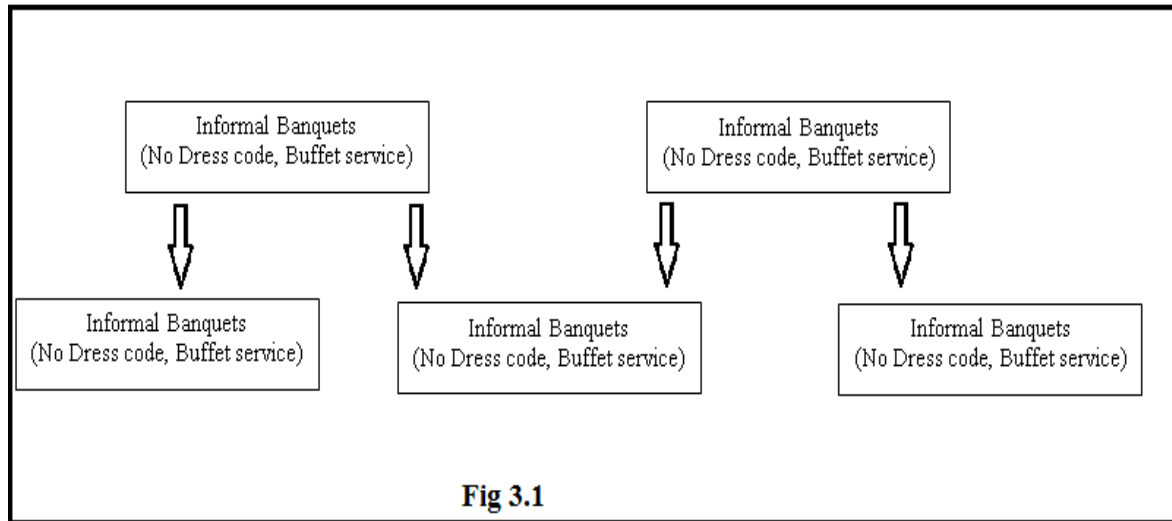
3.2 Definition

The word 'banquet' is from French language and it literally means 'sumptuous feast'. Banquet is a special event may be a gathering, a dignitary's visit, a wedding, or a conference.

3.3 History

It is reported that banqueting began in the middle ages .it is believed that the Greeks and the Romans had the tradition of organizing such events. They were the one who introduced the banquet as feast consisting of 25 courses. But the feast was much unorganized compared with the banquets of the present day. The king and his men used to gather at a large place to celebrate an occasion. Drinks and food were prepared and served by slaves.

The Morden banqueting is said to have organized during the eighteenth and nineteenth centuries. These were much civilized and purpose-oriented events. In those Times, only three primary courses were offered. But each course consisted of multiple dishes as options. After many revision and refinements, the present-day Banquet are arranged with more courses, each featuring a limited choice.



3.4 Types of Banquets

Banquets are broadly divided into two types:

- Formal banquets and
- Informal banquets

As the name suggests, formal banquets have a dress code and a protocol to follow. A tuxedo or a coat and tie for the gentleman and a cocktail gown for the ladies are the suggested dress codes. Black and white are the commonly used colours. In a formal banquet, food is served by stewards at a time, course by course, on the dining tables.

Informal banquets are more casual in service and attire. There is no particular dress code followed, but guests are dressed to the occasion. Food is mostly served from buffet counters. The banquets are further classified into three categories as shown in Fig 5.1.

- Professional Banquets: These are organized by companies or firms for their employees, agents, or dealers. People in such gathering are colleagues or with same professional background or have same common professional interests. Some of the examples are seminars, conferences, meetings, work-shops, exhibitions.
- Social Banquets: The motto of this kind of banqueting is social obligation. Socializing is necessary for human to secure their status in the society. To socialize, people host banquet functions to celebrate special occasions and invite their near and dear ones. So, the group of people attending these functions is that of friends and family members. Some examples of such occasions are wedding, birthdays, receptions, kitty parties, get-togethers, and cocktail parties.

- **State Banquets:** These functions are organized as a gesture of honour. These are arranged by government bodies in the honour of state heads, international heads, or celebrities. Mostly commonly, state banquets are formal government functions where a protocol is followed.

3.5 Staff Organization of Banquet department

The banquet department is one of the largest food and beverage area in a hotel. It occupies more space and generate more revenue, so it requires more manpower. The size of the banquet brigade is directly proportional to the size of the banquet operations. A dedicated sales term and operational staff together make a banquet brigade.

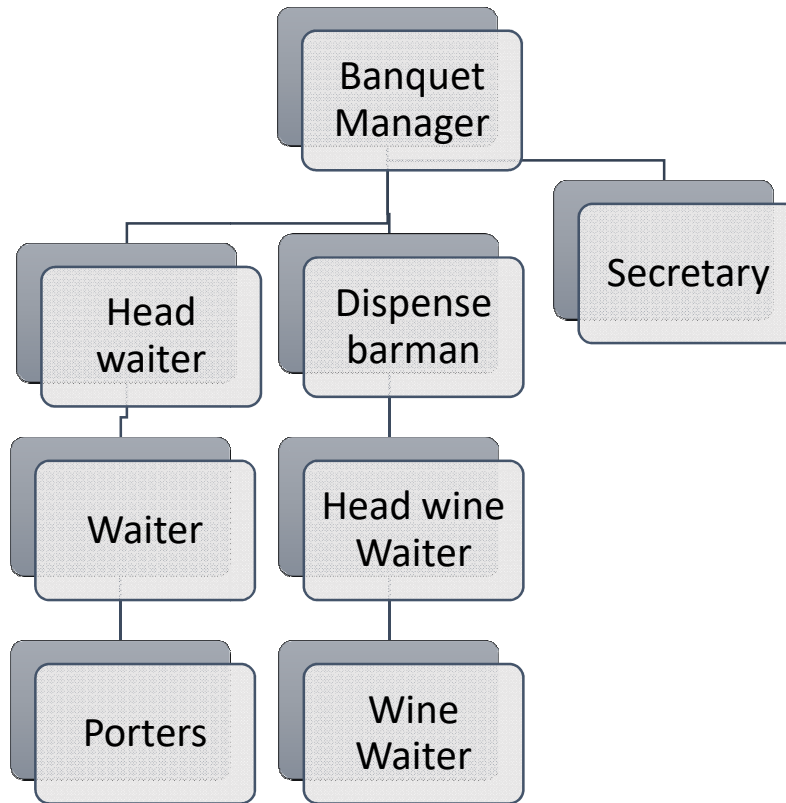
A banquet manager leads the term and sales executives, and the banquet supervisors report to him. Banquet stewards and casuals report to the supervisors. The banquet manager. The hierarchy of banquet barman is not seen in most of the Indian hotels, but it still exists in European hotels, shows a staff organization chart of a banquet department.

Correct staffing is the secret of success in banquet. Perfect staffing can be done with proper forecasting, planning, and experience. But there are guidelines to suggest on how to man a banquet operation. On an average, one steward is required for every 10-12 guests in formal banquets and one steward for every 20 guests in casual banquet.

3.5.1 Banquet Manager

Banquet department function fall under the control of the banquet manager. It is responsible for organizing various types of formal and informal functions within and off the premises. Usually, banquet business is seasonal business, but the hotel must devise a plan to sell its banquet facilities throughout the year. A hotel may either have many banquet halls of different sizes or one large hall, the size of which can be adjusted with temporary partitions to accommodate parties of various sizes. Each hall has a name and is managed by the head banquet waiter. The banquet department has very good potential to generate revenue as functions are organized throughout the year for various reasons such as weddings, anniversaries, birthdays, official get-togethers and so on.

The banquet department is managed with the help of few permanent staff as more service staff can be arrange from either local or other food and beverage service areas.



3.5.2 Banquet Manager

He/she is in-charge of all the functions of the banquet department. He is responsible for the following:

- Discussing function arrangements details with clients concerning menus, table plans, costs, wines, bands, toastmaster, and so on
- Communicating data of function, time, number of guests, and all other necessary details to all the departments concerned
- Briefly the banquet head waiter about function details and getting it organized
- Preparing budget for the department
- Planning menu for the various functions at different price ranges
- Procuring equipment for banquets.
- Devising and implementing sales promotional plan
- Recruiting and training staff

3.5.3 Secretary

The secretary is responsible for the following:

- Attending telephone calls of inquiry
- Noting down any inquiry
- Sending inter-department memos
- Filing of documents concerning functions

3.5.4 Banquet head waiter

He is in-charge of banquet hall and is responsible for the following:

- Engaging staff on casual basis for functions. Casual staff are paid by the hour and are given a meal. Their services are terminated at the end of the function
- Maintaining list of casual staff and their contact numbers
- Executing the function according to the instructions of the banquet manager.
- Briefing banquet waiters.
- Getting the halls(s) set for the function
- Supervising the mise en place
- Allocating duty to the staff
- Maintaining stock
- Maintain logbook

3.5.5 Dispense Barman

A Temporary dispenser bar is set up during the function in banquet premises by the dispense barman. He may be either on the permanent employee roll of the banquet department or temporarily sent by the bar for the function. He is responsible for the following.

- Collecting stock of alcoholic drinks from the main bar against requisition.
- Allocating bar stock to various functions
- Setting up of bar with necessary bar accessories
- Organizing bar staff
- Allotting duties to bar staff
- Controlling of bar stock and cash during the service.

3.5.6 Banqueting head wine waiter

He/she is responsible for the service of alcoholic beverage during the function. He/she assigns duties to the banqueting wine waiters and directs them. At the end of the function, he/she collects the cash, if served on cash basis, from the wine waiter.

3.5.7 Permanent banqueting wait staff

They are responsible for the following:

- Cleaning and wiping cutlery, crockery, and glassware
- Arranging tables for various functions according to instructions of superiors
- Setting up buffet counters
- Setting up covers Fetching dishes from kitchen (main or banquet kitchen)
- Serving guest as per instructions
- Personal grooming
- Attending briefing
- Clearing soiled service equipment for wash
- Clearing and cleaning hall(s) after the function

3.5.8 Casual Staff

They are hired for specific function by the banquet head waiter and are responsible for carrying out any type of banqueting task assigned to them. Great care must be taken while engaging them as their honesty, behavior, service skill and so on, will have a great impact on the goodwill of the hotel. After the function, they are paid and dismissed.

3.5.9 Porters

They do heavy work such as carrying furniture, vessel and so on. They are assigned duties by the stewarding department during functions.

3.5.10 Sales Administration Manager

He is responsible for selling function catering facilities to potential clients. He must have thorough knowledge of the dimensions of various banquet halls, their seating capacities for various table arrangements, facilities available in each hall, sample menus at different price ranges, photos of various table arrangements and so on. He is responsible for retaining existing customer, identifying new markets and for achieving target sales. This designation may come under the control of either the food and beverage manager or the marketing and sales manager.

3.5.11 Banquet Sales

The sales term plays a very important role in the success of any organization. The same is the case with the banquet department. the banquet facilities in most cases the sales team approaches the guest to inform about the banquet availability and facilities offered. All potential bookings should be followed regularly, and the guest be invented to take a tour of the banquet facilities the sales executive should also escort the guest and explain and suggest a suitable hall for the event. The sales executive must have an extensive knowledge of the banquet facilities such as shape, size, light, electrical points, doorways, and maximum capacities. At the first meeting with the client, the salespersons must determine the budget sales executive is to make necessary suggestions to the client in selecting various options to suit the situations. Once the client agrees to confirm the booking all the booking procedures and formalities are completed by the salesperson. The banquet department is also responsible for the maintaining the guest documents and records.

3.6 Banquet Booking Producers

Banquet booking and reservation is a very important part of the banquet operations because of the criticality of the produce, it is divided into three phases for better understanding.

Phase 1: At the initial meetings or contact with the basic and temporary information about the function. This book is placed in the banquet administration office for easy access to banquet personal. Before confirming any banquet booking, the function diary is referred to avoid confusions. This book is also eliminates the change of double bookings and over bookings. Each sheet of the book is allotted to a single calendar date. It contains all the details such as name of the client, contact number, type of the function, time of the functions and number of pax. along with the function information, booking status is also noted in one of the columns (Fig3.2). Each enquiry is followed up until the function is confirmed.

Hotel XYZ	Functional Diary						Date: 21.10.2011 Day: Friday
Venue	Meal	Nature of the Function	Name of the Client	Contact No.	Pax	Status	Remarks

Fig 3.2

Phase 2: The bookings are confirmed only on the receipt of the deposit amount. Usually, 50 per cent of the expected bill amount is taken as deposit. once the bookings is confirmed, the details are taken down in a format called 'contract agreement'. This format contains all the details such as type of the set-up and menu requested by the client amount received, and balance to be paid. This format is used for a mutual and common understanding between the client and the hotel. This also stands as a legal document for the deal. Other than the above information, this format has terms and conditions that are to be accepted by the client. This document is signed by both the parties, that is, the guest and the hotel manager. a simple format of the document is shown in fig:3.3

Hotel XYZ	Contract	Date:
		Day:
Name of the Guest:	Menu	
Contact Details:		
Type of Function		
Date & Time:		
Number of Pax:		
Price per head:		
Table Plan:		
Extra facilities required:		
Deposit Paid: 15,000/- Receipt No: 009993		
Terms & Conditions ----- ----- ----- ----- -----		

Signature of the Guest	Signature of the Hotel Manager
Fig: 3.3	

Once the contact is agreed upon, a deposit amount is taken from the client and a receipt is issued for the same. A copy of the receipt is attached to the contract document.

Phase 3: Just before the function date (approximately a week early) the 'functions sheet' or 'function prospectus' is issued. this is made in multiple copies to distribute to all the departments such as housekeeping to ensure cleaning of area and flower arrangements, to the front office for display on the 'board to read', to the accounts section for processing of bills and cheques, to food and beverage controls to keep a check on the stocks and liquor distribution, and to the engineering department to provide special equipment's, etc.. The functions sheet is a very important format that includes the following information (Fig 3.4)

- Name of the booking party
- Date and time
- Billing address
- Menu details

Function Prospectus				
Banquet Office			Function Date:	12-10-2019
Type of Function	Conferences		Timing	18:05 to 22-20
FP.No	12345 67891		services	
Min Pax:25 Expected Pax:25 Rate:1000.00 (Rs)				
EBCM No.		Day: Wednesday		
Room:	Chamber Lawns			
Booked by:	Mr. Ravi Kumar			
Company	XYZ			
Address	Ps Box No: 1223, Hyderabad			
Billing Instructions:	Instruction	Comment		
	Bill to Company			
Board to Read	Mr. Mrs. J.K. Jafari at Chamber			

	Lawns			
Mobile	111111 11111	Email:		
Contact Person@ Venue: Mr. Harsha				
		Menu		
Special Instruction:			Banquet setup	
			1) Guest Arrival	
			Arrival Timing	19.45Hr
			2) Starters	
			Serve Time	19:45Hr
			3) Beverage	
			As per Consumption	19:45Hr
			4) Dinner	
			Serve Time	20:00 Hrs - Plz check with the Host
			5) Liquor Charges	
			Charges	On actuals
			6) Buffet set-up	
			Timings	At the Corner of the Lawns
			7) Bar set-up	
			Serve Time	In the Lawn Facing Chambers
		8) Chair Coves		
Colour	Black & Gold			
Banquet Manager`s Signature		Banquet Department		
		Prepared By:	Tena	
Seating Plan:	{{Seating Arrangement}}	Date:	11-10-2019	
Fig:3.5				

- Mode of payment
- Price per head
- Nature of the function
- Extra arrangement required and their charges
- Number of Pax (expected and guaranteed)
- Venue of the function

This document is duly signed by the banquet Incharge before sending it to the concerned departments. Copies of the function prospectus should be sent to the banquet operations department, operational departments, kitchen, housekeeping, front office, engineering, food & beverage controls, finance, HR, and training department.

3.7 Banquet Menus

Great care must be taken when compiling a banquet menu, as the functions are booked for the next season. There are various points such as occasion, type of the service required, price per head, time of the service, and guest's choice to be considered while preparing the banquet menu. Usually a four - course menu is offered with limited choice in each course. The menu design also varies formal banquet to informal banquet.

It is always advisable to keep a set of menus at the banquet sales office. These can be offered to a client at a time of booking to choose. also, a few other factors need to be considered when planning a banquet menu.

- **Theme or nature of the function:** The menu should match the occasion. For example, wedding reception menus and business conference menus are different from each other.
- **Budget:** The menu must match the guest's choice and budget. This is, price per Pax should be acceptable and payable by the guest.
- **Clientele:** The menu should be planned based on the class of people attending the function. this factor greatly effects the menu planning.
- **Time:** The length of the menu has direct impact on the duration of the meal served. A menu planned for a lunch buffet is much shorter than the one planned for a reception.

3.8 Banquet Space Requirement

Usually, a large hotel has three to four different banquet halls of different sizes and shapes to meet the requirements to the guest. and the banquet manager always keeps a few standard seating plans or arrangements to advise the organizer prior to booking the organizer select one of the options matching their requirements. these plans help the organizers to know about the doorways, windows, pillars, power points, and low ceiling. these standard plans should be tested by physical set-up or by careful calculation. The plans must show the dimensions of the hall with measurements, the capacity of the hall in different set-ups, and the seating plans.

When making suggestions for selecting a banquet room arrangement, the following factors should be considered:

- space availability for the support staff and entertainer.
- pre- and post-events planned within the same space .
- Limitations of electric supply and noise levels.
- local law and hotel regulations on the number of people occupying a room

3.9 Standard banquet measurement

To calculate the space required for any particular function, one must know some standard measurements of the furniture used in a banquet department. there are some standards guidelines to be followed while doing banquet settings.

- a. Rectangular/buffet table: 3' x 6'
- b. Round table: 5' diameter
- c. Conference table: 1.5 x 6'
- d. Half moon table: 2' radius
- e. Quarter round table: 2' radius
- f. Serpentine table: 3' x 6'
- g. square table: 3' x 3'
- h. banquet chair: 1.5' x 1.5'

Standard guidelines for leaving space while planning a banquet set-up are as follows:

- 1. Aisle: 3'
- 2. Space from the wall to the table: 5'
- 3. space between sprigs: 5'
- 4. space between rows: 1.5'
- 5. space between the head table and the row table: 6'
- 6. space between a table and a chair: 1'

With the help of the above measurements and guidelines, let us see if we can calculate the space required for a formal banquet set-up for total 72 Pax including 12 Pax on the head table.

Of the 72 Pax, 12 Pax on the head table of a combo- shaped set-up, the rest 60 Pax in 3 springs each having 10 Pax on either side.

That calculation can be easier understood from fig:44.6,

The walkway on either side of the head table is 3feet.

the total length of the space is $24+3+3=30$ feet

Each spring consist of three banquet tables. so, the total length of the sprig is $3' \times 6' = 18'$.
space between the wall and the bottom side of the spring is 5'.

Space between the spring and the head table is 3'.

width of the head table is 2.5'.

width of the chair on the head table 1.5'.

Space between the wall and the head table chair is 5'.

Total width of the space is $18+5+3+2.5+1.5+5=35$ feet.

Total area required for the setup is (length x width) $30 \times 35 = 1050$ sq. ft

3.10 Banquet Seating Plans and Set-Up

There are various seating plans and banquet set-ups offered to suit the requirements of a function. The types of arrangement following factors:

- Nature of the function
- Organizer's choice
- Capacity to be accommodated
- Size and shape of the room

The various types of basic banquet setups are described below along with their best user:

- **Class room style:** This is mostly commonly used for seminars and workshops. in these banquets, the participants are required to work on the information given to them. this set-up provides a work table for all the participants in front of their chairs facing towards the head table or screen. for this set-up, the average space required is 14-16sq. ft per person.
- **Boardroom style:** This is also called the ' conference style' set-up. the advantage of this set-up is that each one of the participants can face all other members while addressing them. This style of set-up can also be done a large number of people. But it works for small groups. this kind of set-up is mostly used for discussions meetings and board meetings. in this set-up, all the chairs are arranged around a large rectangular or an oval table. the average space required for the setup is 21-25 sq. ft per person.
- **Theatre Style:** This gets its name from its resemblance to the seating in the movie theatre. this is most commonly used set-up as it accommodates more people in less space. This set-up is used for the presentations, speeches, and family functions such weddings and birthdays. this provides chairs facing towards the head table in an

orderly form leaving walking aisle. average space required for this set-up is 8-10 sq. ft. per person.

- **U-shaped Set-up:** As the name suggests, this set-up has tables arranged in 'U' shape and Chairs on the outer side of the U. This style of set-up is used for intense or intimate meetings. This set-up is more suitable for debates and discussions. The required presentation can be done at the open end of the 'U' shape. The average space required for this set-up is 30 sq. ft. per person.
- **Fishbone Shape:** This set-up is very much similar to the classroom style set-up. The only difference is that the tables are arranged at an angle. This style of set-up is mostly used in narrow rooms to maximize the capacity of the room. The average space required for this set-up is 10—12 sq. ft. per person.
- **Hollow Square:** Mostly used for board meetings or political heads meetings. It is an alternative set-up for conference style set-up. The difference is that this set-up can accommodate a large number of people. Many a times, microphones are arranged in front of each member to make his speech audible. Banquet tables are arranged to form a square, leaving the centre hollow. The average space required for this set-up is 30 Sq. ft. per person.
- **Round Table Set-up:** In this set-up, chairs are arranged around a round table. This style of set-up is used when there is a meal served immediately after a short meeting. The same tables can be used for sit-down buffet service. This kind of set-up is most commonly used for formal dining banquets. The average space required for this set-up is 23—25 sq. ft. per person.
- **Comb-shaped Set-up:** In this set-up, a long head table is used for the chief guests. For the rest of the diners, tables are arranged vertical to the head table. These are called 'sprigs'. The head table and sprigs together make the set-up look like a comb. This kind of set-up is most commonly used for state banquets. The average space required for this set-up is 15—16 sq. ft. per person.

3.11 Banquet Service Procedures:

Because a banquet service caters a large number of people, it is quite different from the restaurant service. Although the silver service in banquets is comparatively easier than in restaurants, perfect planning and executing is required for the success of a function.

The service design in banquets varies based In the types of functions

1. Dinner is announced by the toastmaster
2. Waiters pull out the chair the guests to seat them in their respective seats

3. Serviettes are placed across laps. First course is served on the table before the dinner is announced.
4. All waiters line up in pantry to Pick up soup.
5. soup is served on the tables once the starter course is over.
6. All the guests are served together and cleared together.
7. soup course is cleared, and fish course is served in order.
8. Soiled plates are taken out and fresh course is brought in serve.
9. All the dishes are carefully presented and
10. Accompanying potatoes, vegetables, and sauces are duly served.
11. Soiled plates are cleared, and dessert is served.
12. Each time. the top table should be served first.
13. Once coffee is served, all the food waiters should the room.
14. only the wine waiters stay in to fill wine glasses until the last toast is proposed.

The service sequence in casual banquets is as follows:

In functions. guests help themselves from a buffet table. traffic flow of the guests should be considered

when planning a buffet set-up. menu items should be displayed in the sequence of meal consumption.

1. Salads and appetizers to be displayed on the first table
2. Soup in soup kettle should follow the salad counter. This section may have bread display.
3. Chaffing dishes with hot meat and vegetable preparations are placed next.
4. Staple items such as rice and breads are served immediately after the main dishes.
5. Desserts take the last section in buffet sequence

The crockery and cutlery must be stacked next to the corresponding food items. To avoid overcrowding at food Counters, scattered buffet tables. The benchmark is one buffet counter

for every 75 guests. Cleanliness and clearing dirty plates should be constant. Replenishing of food is also an important job which needs supervision

3.12 Toasting

Toasting is a custom of consuming wine in honour of a head person. It is also done to well wish a person in earlier times, the custom was practised during religious ceremonies in the name of the gods and the death. gradually, it became a custom to drink for the living also. in the sixteenth century, according to the evidence. snippets of toasted bread were put in wine glass, for health drinking, probably that is how the term toasting came into existence. Traditionally, toasts were drunk on bended knees. but modern-day toasting is much from traditional toasting. Nowadays, toasting has become a custom in many banquet functions such as wedding, ceremonies, house-warming, honorary guest receptions, and formal or state banquets.

3.12.1 Toastmaster

A toastmaster is a person who organizes the toasting procedure according to the protocol. Toasting and toast mastering is an art and a highly professionalized activity. This activity requires services a specialist quet function. Some of the qualities that a toastmaster should possess include a pleasing personality good command over language, spontaneity, sense of humour, and decision-making power. He should be a of manners and courtesies. His voice should be polite but audible. A toastmaster must have the knowledge of food, wine, and serving procedures. The toastmaster is responsible for the correct toast procedures and ensure the banquet is organized smoothly and efficiently. sometimes he also organizer dance, stage shows, and other entertainment programs.

He coordinates the toasts, speeches, entertainments, and dining services. he acts as a liaison between the manager and the host. He is the overall controller of the function to ensure smooth and timely flow of events.

3.12.2 Toast Procedure In Formal Banquets:

The work of a toastmaster begins at the time of receiving the guests. He announces the names with their respective titles. Titles such as 'Mr, Mrs, Her Highness, His Excellency, and Honourable' should be appropriately used.

With the host's permission the toastmaster rings the bell three times to draw the attention of the guests and announces the dinner service by saying,

'Mr Chairman, My Lords, Ladies, and Gentlemen, dinner is served.'

This is announced in a loud, clear, and formal tone of voice. On some occasions, the chief guests or the top table guests do not enter the banquet hall until all others find their places. On such occasion the toastmaster announces the arrival of the main guests by saying,

'Ladies and Gentlemen please rise to receive our chief guest Mr Xyz'.

After everyone has settled down in their respective places, toasts are announced by saying,

'Mr Chairman, Lords, Ladies, and Gentlemen, pray silence fop Mr Abc'.

Once the toast has been raised by Mr Abc, the meal begins. Speeches and replies follow time to time during the meal each being announced by the toastmaster in the usual manner,

'Mr Chairman, My Lords, Ladies, and Gentlemen, please pray silence for Mr __ _ who will propose the toast who will give the reply'.

All through the meal, wine glasses are refilled by the wine waiters. At the end of the meal, just before coffee is being served, toastmaster announces.

'My Lords, Ladies, and Gentlemen, pray silence for Mr Chairman who will propose the loyal toast'.

Everyone stands for the loyal toast, and no one is allowed to smoke before the toast. Because of this reason the loyal toast may be proposed just before the sorbet course, when the menu elaborate.

Throughout the meal time, the toastmaster coordinates and controls the toast proposals. some entertainment acts in between the meal to break the monotony.

3.12.3 Toast Procedure in state Banquets

At the state banquet, the toast procedure is more formal, and it is in coordination with the protocol of government officials. For example, if our President (President of India) is hosting a banquet honour of the American President on the occasion of his visit to India, of India proposes a toast for the health and well-being of the visiting president of and the peoples of America. then national anthem of America is played. Then the meal is served along with appropriate wines. After completion of the meal, the American President proposes a toast for the hospitality gesture, health, and well-being of

the Indian President and the people of India. After his toast, Indian national anthem is played.

3.13 Industrial Exposure

Nowadays, banquets and banquet departments are given a special status in the hotels because of their huge revenue-generation capability. At the same time, banquet operating procedures are also changing. traditional banqueting is rarely found these days. With the change in the concept of banqueting, even the corporate hotels are investing their funds in enhancing the banquet facilities. In recent days, with the opening standalone convention centre's in the markets, the competition has drastically increased. But the better marketing and management strategies, banquet or convention centre's are prospering in the present scenario.

3.14 Buffet Introduction

A buffet is a system of serving meals in which food is attractively displayed on counters in sequence for the guests to serve themselves. The buffets can range from a simple offering of some hot and cold food items to elaborate presentations including ice or tallow (fat) sculpture, fresh flowers, edible vegetable or fruit centrepieces. Buffet are suitable for serving a large number of people in very short time. For this reason, they are most popular among institution, business conventions, and large social events. The term “buffet” originally referred to the French word ‘sideboard’, where the food was served, but eventually because applied to the present form.

3.15 Factors to be considered while planning buffet

While planning a buffet, a manager should consider the following factors such as location, structure, shape and aesthetics:

- **Location:** The buffet should be located in such a way that soon entering the restaurant or function hall, guests should able to have a full view of it. Buffets should not obstruct the free flow of staff and guest.
- **Structure:** The shape of the function hall and the number of covers the buffet needs to serve should be taken into account before deciding on the structure of the buffet counter. In order to serve food for a large number of people, the buffet counter may need to be quite long. In such cases, it is advisable to split the buffet into many sections, each serving a different course. The tables for the basic structure of the buffet should be chosen keeping in mind their size, strength, stability and ease of transportation.
- **Shape:** Visual impact of the buffet can be created by using different sizes and shapes of tables. Use of square trays, oval flats, glass bowls, various shapes of serving dishes, etc., makes buffet look more attractive and eye appealing.

- **Aesthetics:** The manager should ensure that there is a centrepiece in the buffet to attract the eye of the guest. The centrepiece can be a particular dish, a floral display, an ice sculpture, or a confectionery display. Proper positioning of items on the table adds value to the buffet. Food items displayed on different levels always look more interesting than on flat buffet table. Buffet tables can be decorated with specially designed table cloths and slips to enhance the image of the food display.

3.16 Guidelines for Calculating the Area Required for Buffet

For the smooth progress of buffet service, the manager must calculate the area required, considering the factors such as the minimum area needed for staff flow, the space required for guest flow, and the area required for buffet layout. The following general guidelines help you in calculating the area required for a buffet event:

- The minimum space between the wall and the buffet table should be 3 feet.
- A minimum of 15 per cent area of total space is required for staff flow.
- Approximately 25 per cent area of total space is required for buffet layout.
- A separate buffet counter is required for every 75 guests

3.17 Types of Buffet

1. **Sit Down Buffet/Full Buffet/Fork ‘n’ knife Buffet:** In this type of buffet, the tables are well laid out with the required cutlery and crockery. The food served in this buffet requires both fork and knife to be used at the table, as it usually consists of large pieces of meat. Guests pick up the food from the buffet line and return to the table for dining. Usually soups and rolls are served at the table. Once soup is consumed, guests are directed to the buffet counter to collect the main course. Meanwhile, waiters clear the soup bowl and keep the table ready for guests to consume the main course. In the same way, the main course is cleared and the table is kept ready when guests go to pick up the dessert course. These kinds of buffets are usually offered in state banquet parties and formal gatherings.
2. **Fork Buffet:** It is generally a stand-up buffet where guests collect their cutlery and food from the buffet table. The dishes on the menu are planned in such a way that a knife is not required to consume the food. Waiter staff would be available to fill the drinks or offer any other helps if required. Some occasional tables and chairs are made available usually for senior citizens and children. Fork buffets would be suitable for casual dining.
3. **Finger Buffet:** This buffet offers light meals and snacks on the menu. The food is prepared in small bite-sized pieces so that it requires no cutlery to consume. Canapés,

finger sandwiches, kebabs, tikka and cocktail samosa are some of the examples which are not messy to handle with fingers. Guests pick up the food from the buffet with their hands along with a serviette and consume it on the move. Service staff would refill the food in the buffet, clear empty plates, and fill the drinks as when required. Some occasional tables and chairs are made available usually for senior citizens and children. Fingers buffet is preferred mainly in cocktail parties.

4. cold Buffet: A cold section of the buffet is called cold buffet. The temperature of the buffet should be maintained at 5°C. Generally, the cold selection is displayed on a bed of ice, but in modern buffet restaurants, freezer wells or cold wells are most commonly seen. The choice of items available on a cold buffet ranges from salads, cold meals to fresh fruits. The food that is served here is not suitable for traditional Indian meals, but cold buffet are most common in European countries and they are quite popular. Out of all, the Scandinavian cold buffets (smörgåsboard) is world famous for its selection.
5. The smörgåsboard is a Scandinavian meal served in an elaborate buffet style. The Swedish word smörgåsboard consists of the words smörgås (open-faced sandwich) and bord (table). It is an old Scandinavian tradition, particularly prevalent in Sweden, of having a few appetizers and glass of aquavit before a meal. The food offered is bread and butter, herrings in various marinades, and cheese accompanied by neat spirits.

Although the dishes are traditionally hors d'oeuvres, the Scandinavians have developed them into a well-balanced full meal. In this part of the world, a large variety of marine food is available throughout the year. So, the buffet are dominated by seafood preparation. Usually the smörgåsboard consists of the following:

- Sweet and sour pickled herrings
- Marinated salmon with scrambled eggs
- Processed tongues
- Roast chicken with aspic
- Two to three varieties of strong cheese with accompaniment
- Home-made liver sausages
- Ham and Bacon
- Roast beef with pickled tomatoes
- Bread and butter
- Various salads

The smörgåsboard also consists of small selection of hot food on a warm table called *smagarant*. The selection is meat balls fried in butter, fried sausages, smoked with egg custard, wild mushrooms served with cream sauce served in crust as, omelettes filled with asparagus, spinach, ham, prawns, etc.

3.18 Equipment's required for a Buffet set-up

It is necessary for hotels and catering establishments to keep a stock of buffet equipment's depending on the levels of business, the frequency of buffet service, and the storage space available. Hiring buffet equipment is also a quite common phenomenon because of high capital investment and many other constraints. Buffet equipment's are usually classified into major and minor.

Major equipment's are as follows:

- Buffet tables
- Chafing dishes
- Centrepiece stand, display cascades
- Soup warmers
- Canopies for open air buffet
- Electric or gas cooking ranges

Minor equipment's are as follows

- Chinaware: plates, soup bowls and teacups
- Cutlery: knives, spoons and forks
- Glassware
- Serving ladles and tongs
- Name tags
- Bread baskets
- Jugs for juices and milk
- Platters for salad display
- Glass bowls
- Table appointments

Questions

Short answer question:

1. Write the concept of banquet
2. Identify the types of banquet
3. Write the concepts of banquet menu planning
4. Identify the banquet space requirement
5. Explain the banquet service procedures
6. List the equipment's used in the banquet.

Long answer question:

1. Illustrate the organization chart of banquet and explain it.
2. Explain the banquet booking procedures
3. List the types of banquet seating plan and set-up used in banquet
4. Illustrate the toasting.
5. Identify the factors to be considered while planning buffet.
6. List the types of buffet and explain it.



UNIT

4

FOOD COST CONTROL**4.1 Introduction to Food Cost control**

Importance: As a student of Hotel management it is important for you to know, about the basics of Cost control only then you will be able to understand the concepts of Food costing, Inventory management, portion control etc. It is essential in all manufacturing organizations in order to obtain the desirable cost of production and to maximize the profit. In big hotels they have an F&B controller whose main duty is to monitor the costs of F&B dept including food and beverages and perform control checks in the all the F&B processing units including stores, purchases, issues, production, service and billing.

Cost is defined as the price paid to acquire, produce, accomplish or maintain anything. Costing is simply the process of arithmetic, means of memorandum statements or the methods of integral control. Costing is the technique and process of ascertaining costs. The principles and rules, which govern the procedure of ascertaining costs of products or services, is the technique used in ascertaining costs. With the development and changes in methods, the techniques of costing change. To control the Food Cost; the purchasing, receiving, storing, issuing, food production, food sales, etc. are to be controlled.

There is a chance of wastage in purchasing, storing, issuing and in kitchen in preparation and storage. Also there can be pilferage in stores and kitchen and hence in order to check the loss due to any pilferage also we need to have a standard cost control system for each hotel, only then we can make the desired profit or else even if the sales is high also, if cost is not controlled it may even end up in a loss to the organization.

4. 2 Definition of cost control

Cost control is defined as the process used by managers to regulate costs and guard against excessive costs. “It is an ongoing process and involves every step in the chain of purchasing, receiving, storing, issuing and preparing food and beverage for sale, as well as training and scheduling the personnel involved”. The cost control is of two word lets divided and under stand a little more.

Definition of Cost: “Cost is defined as the expenditure incurred in various operational activities, in order to manufacture or purchase and sell goods and services. Lesser the cost greater the profit and greater the cost lesser the profit”.

Definition of Control: “Control is the process used by managers to direct, regulate & restrain the actions of the people so that the established goals of an enterprise may be achieved”.

4. 3.1 Objective of cost control

1. Main objective is to achieve the established goals of the organization by controlling costs.
2. To maximize profit by controlling overall costs.
3. To meet the operation standards efficiently and effectively.
4. Analysis of income and expenditure of organization.
5. Establishing and maintaining the standard of service of the establishment.
6. Pricing of menu
7. Prevention of waste
8. Prevention of frauds
9. Prevention of theft and pilferage
10. Source of information for management report

4. 3.2 Obstacles to food and beverages Control

There are numerous obstacles which effect on the food and beverage items cost.

- The cost of the basic raw material varies from season to season and depending upon the size of order. In off season the cost of raw material is always more.
- In case a large quantity of goods (raw material) are ordered then the cost of each unit is much less as compare to when a small quantity of goods (raw material) is ordered.
- The price of raw material may always go high during the shortage of goods in the market due to high consumption or low production.

4.4 Advantages and Disadvantages of Food cost control

Advantages of Food Cost Control

1. It helps in achieving the desired profit as per standards.
2. It helps to avoid wasteful expenses.
3. It is useful to find out the reason for any increased costs.
4. It is useful to monitor the effectiveness of the operation.
5. It helps in knowing the mistakes of staff and taking corrective steps.
6. It checks pilferages and wastages at various stages from purchasing to sales.

Disadvantages of Food Cost Control

It looks very simply that if the standard recipe and portion size control is followed then the food cost will be always under control. In actual, in spite of following standard recipe and portion size the food cost may differ.

The following factors affect the food cost:

1. Fluctuation in Raw Material Cost
2. Wrong Purchasing of Raw Material
3. Reduction in Sale
4. Wastage during preparation of Food
5. Pilferage in Food Sale
6. Spoilage due to wrong storage

4.5.1 Basic Costing

Basic costing is including of the following: Fixed cost, variable cost, semi variable cost, controllable and uncontrollable cost and prime cost are the basic cost concepts for any organization.

- **Fixed costs:** Fixed costs are those that are normally un-affected by the changes in sales volume. The rise or fall in the sales volume will not affect these costs. They may rise or fall due to certain external factors which are not related to the production or sales. I.e. they remain constant irrespective of the sales volume E.g. Property taxes, managerial remuneration, insurance premium, License renewal fees etc.
- **Variable costs** are costs clearly relative to production or sales i.e. they are directly affected by increase or decrease in production or sales, such costs increase or decrease in direct proportion to the increase in volume of production or sales. Therefore, these costs are called as " variable costs". For e.g. if the production increases by 10% the variable expenses also will increase by 10 % and similarly if it decreases by 5 % the variable expense will also decrease by 5 %. Material cost (food cost) is the best example for variable cost.
- **Semi-variable costs** are in which one portion is fixed and the other half is variable. There are certain types of costs, which are also related to the volume of production or sales but may not be affected by increase or decrease in production or sales up to a certain level. When the volume increases or decreases beyond a certain level, these costs may feel the effect and increase or decrease, but not in proportion to the increase or decrease in volume. E.g. land line telephone bill- in which there is a fixed rental portion and the other

is variable cost which is according to the usage of the phone, electricity charges, printing and stationery etc.

- **Controllable and uncontrollable costs:** All variable costs-i.e. food materials, advertisement etc are controllable costs and all fixed costs are uncontrollable costs-E.g. rent, salaries and property tax.
- **Unit cost & total cost:** Unit cost is calculated by dividing the total cost by number of portions.

- **Elements of cost are:**

- a) Food cost
- b) labour cost &
- c) overhead cost

a. **Food Cost:** Food cost is nothing but the food cost of purchase of, provisions, meat, vegetables etc purchased for production of variety of food items in the kitchen for sales in the restaurant. More the variety of food prepared, greater will be the need for variety of ingredients used. Following are the operations that influence food cost:

- Purchase of ingredients
- Receipt of ingredients
- Storage of ingredients
- Issue of ingredients
- Production of Food (cooking & processing)

b. Labour cost is the cost of wages and salaries paid to the employees. Ingredients purchased need to be processed and converted into palatable form for which manpower is required. Even machines and computers need an operator. Hence manpower is an essential element of cost. The workers need to be compensated according to their qualification and experience. This additional cost of labour must be recovered from the selling cost of the food.

c. Overhead costs: In order to conduct the activities of preparing and selling of food and services, variety of other expenses must be incurred. Those are neither expenses on purchases of ingredients and material nor on the employment and maintenance of employees. These are operational expenses such as rent, rates & taxes, printing and stationery, postage, electricity, gas, water, advertisement and marketing expenses. These expenses must be incurred and recovered from the selling price of the food.

4. 6.1 Food Costing

For any food outlet food costing is the major concept it will help to understand the costs of the production of the food and tell at how much to sell the food for will help to determine if the food outlet is profitable or not. It also determines FOOD COST as the percentage of the total of food outlet sales on food products. This percentage should come in around 28-35% for food outlet to make a profit.

4.6.2 Factors that can influence your food cost percentage:

- Incorrect opening stock take or closing stock take or stock transfers
- Incorrect purchases
- Incorrect meal portioning
- Wasting food / spoilage
- Short deliveries or stock returns
- Theft of stock
- Sales prices are too low

4.6.3 Formula of food cost: Food costing is essential in all food establishments in order to know the actual cost of production in terms of percentage compared with sales of the food material after processing in the kitchen. Food cost % is calculated by using the following formula:

$$1. FC = \text{COST OF FOOD CONSUMED} - \text{STAFF MEALS}$$

OR

$$2. FC = OS + (P - PR) - CS$$

FC= Food Cost;

OS = Opening Stock;

P= Purchase;

PR= Purchase Return;

CS= Cost of Staff Meal

Total Cost: the total cost of food items is composed of three basic elements known as element of cost. The difference of sales price and total cost of a product is known as net profit. The opening cost may be classified as:

1. Food Cost or Material Cost (MC)
2. Labour cost (LC)
3. Overhead Cost (OH)

$$\text{TOTAL COST} = \text{MC} + \text{LC} + \text{OH}$$

4.6.4 Material Cost: Material cost refers to the basic cost in food and beverage business. The cost of material which enters and become a part of product is known as direct material. For example, use of ingredients in catering i.e. as flour in bread making each of these materials, are classified as direct if the costs can be identified with the product. In the food and beverage business material refers to four basic costs:

1. Food Costs
2. Beverage Costs
3. Cost of Tobacco and Cigarettes
4. Cost of Sunday sales.

4.6.5 Food Cost Sheet or Statement of Food Cost:

Cost sheet is a statement which provides for the assembly of detailed cost in respect of a cost of unit. It is prepared to indicate detail cost of the total output or products. It gives the cost per unit. The main advantages of cost sheet are:

1. It discloses the food cost of a dish and cost per unit.
2. It enables the management to keep a close watch and control over the production
3. It provides a comparative study of the various ingredients.
4. It helps in formulating a usual production policy.
5. It helps in fixing up the selling price of the items produced.

Each establishment requires the calculation of food cost of dishes produced. A list of prepared of all ingredients along with the quality of each ingredient required for preparation of a dish for four covers. It is prepared in food cost sheet. The value of each ingredient is calculated by checking the price from invoice or price list. There may be two types of ingredients used. Firstly, those items purchased, the price of which is obtained from supplier

invoice or price list. Secondly, items which are made up in kitchen such as stock, sauces, pastry etc. It is necessary to prepare a costing of all the ingredients for dish costing purpose.

Once the cost of all the ingredients is calculated, the total will be the food cost for say four covers. Dividing the total food cost by four, we ascertain the cost per cover. These costing sheets are prepared in advance and afterward filed for reference purpose in future. Costing may be done for the particular dish which indicates the quality as so many portions or it may be done for a particular item such as potato chips, which may be expressed in term of its weight. In the later case, if you want to calculate cost per portion, it will be necessary to specify the size of the portions to be costed.

There are some items in the costing sheet which are too small in quantity and cost to value individually. These items are costed at estimation for the whole; such items include parsley, bay leaves etc.

On bottom portion of the cost sheet following information is included:

1. Total food cost.
2. Cost per portion.
3. Gross profit percentage.
4. Selling price or charge per portion.

4.6.6 Cost of Food & Beverage and Cost of Sales:

The total cost of food and beverage in a restaurant is calculated by using the stock take and purchase received. Purchases refer to all credit and cash purchases purchase returns/return outwards refer to any returns that have already been included under the heading of purchases.

When calculating the value of stock the normal practice followed in any establishment is to take the cost or market price whichever is less.

Costing sheet is a very useful record of food cost covering the entire range of dishes. These could be referred to for rechecking where there is any material change in the price of the ingredients. Let us assume that the price of an ingredient has increased, the cost of other ingredients being the same. In such situation both the total cost per portion and the food per portion will increase and gross profit percentage will decrease. To obtain the same amount of gross profit percentage it will be necessary to review the cost sheet and revise the selling price. Once again the food cost will be 40% of the selling price.

4.6.7 A cost sheet is a statement including the following:

1. Date
2. Name of the dishes
3. Number of portions
4. Quantity of each ingredient
5. Name of each ingredient
6. Cost of each unit
7. Total food cost
8. Cost per portion

4.6.8 The method of preparation of food cost sheet given below:

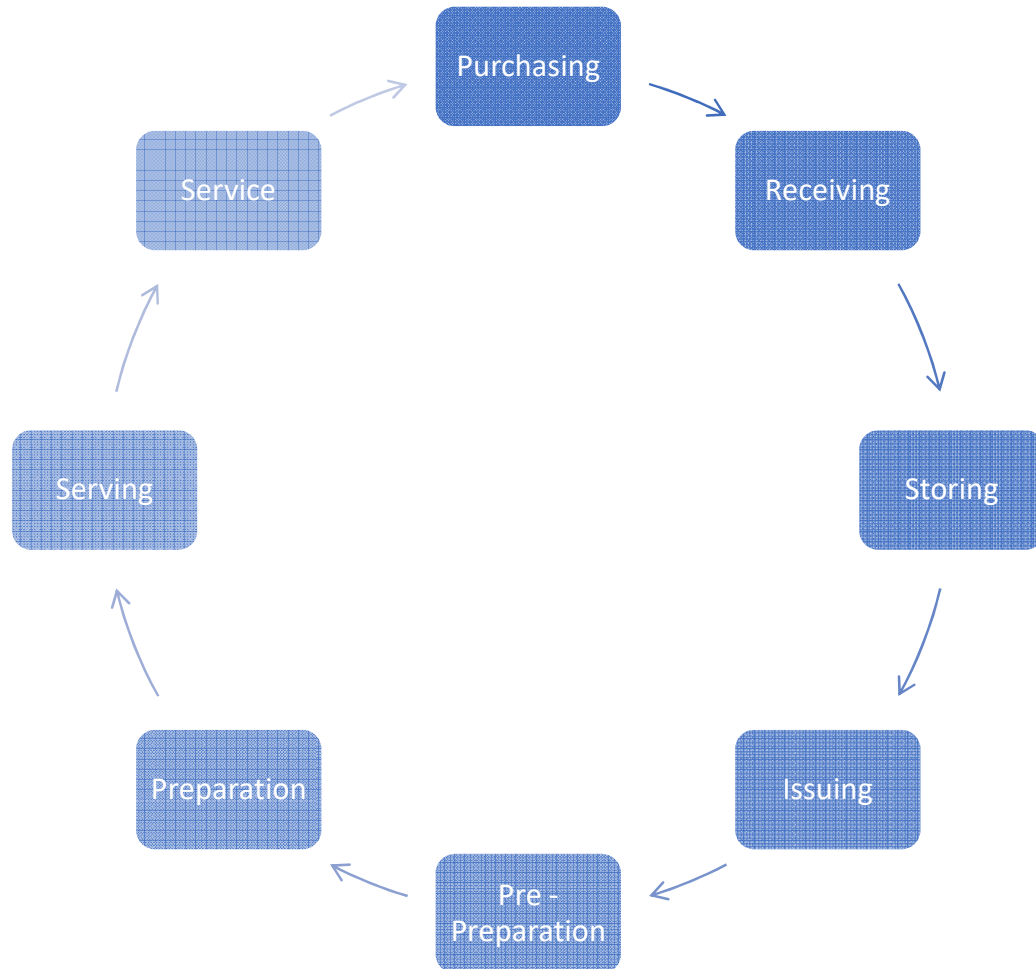
- Calculate the cost of each menu. A list of all ingredients required to prepare each dish must be drawn up.
- Obtain the prices of all ingredients from invoice.
- Prepare the cost sheet.
- To determine the overall gross profit required, the individual selling price of all dishes be calculated.
- A certain percentage of gross profit / kitchen profit is added to the food cost of each dish in order to determine the selling price. Overall percentage that is the lower kitchen percentage; while sweet, soup, teas, may have lower food cost percentage. 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.

4.7 Food Control Cycle

Food control cycle tells us the follow and operation in background which make the work easier as well as simple for day today activity in hotel industry.

STEP 1: PURCHASING

- Develop purchase specification
- Identify the perfect supplier
- Purchasing correct quantities
- No collusion between property and supplier
- Evaluation of purchasing process



STEP 2: RECEIVING

- Development of receiving procedures
- Completion of necessary receiving reports (e.g., addressing financial and security concerns)
- Checking the quantity, quality and price as per the received quotation

STEP 3: STORING

- Effective use of nonetual & nhysical inventory svstems

- Control of product quality
- Securing products from theft
- Location of products within storage areas with proper label

STEP 4: ISSUING

- Issuing of the product will be based on inventory
- Product rotation concerns with FIRST IN FIRST OUT (F.I.F.O)
- Matching issues (issue & usage)
- Purchasing as inventory is depleted
- Issuing of product will be based on authorised signature only

STEP 5: PRE - PREPARATION

- Mis-en-place
- Minimizing food waste / maximizing nutrient retention

STEP 6: PREPARATION

- Use of standardized recipes
- Use of portion control
- Requirements for food and employee safety

STEP 7: SERVING

- Timing of incoming F&B orders
- Portion control
- Revenue management concerns
- Food can collect from kitchen with KOT only.

STEP 8: SERVICE

- Revenue control concerns
- Serving alcoholic beverage responsibly
- Sanitation and cleanliness
- F&B server productivity

Methodology and Phases of Cost Control

1. **Purchasing:** The purchase department must ensure that the right quality of food, at competitive price and right quantity of raw material should be procured to keep the cost control.
2. **Receiving and Storing Of Raw Material:** The raw material received by stores must be inspected for the quality and the quantity desired, and in case found not up to requirement should be returned to supplier for replacement. All stores received must be stored at a proper place. It is saying that in stores there should, 'a place for everything and everything is place'. The store keeper must ensure that no food item should get spoiled and if it happens then it is charged to store keeper.
3. **Issuing:** All goods should be issued after a proper requisition. The store keeper must follow the rule of 'FIRST IN FIRST OUT (F.I.F.O.)', which means the goods received first are issued first.
4. **Wastage:** The wastage, at all levels, i.e. Portioning, Cooking, Storing, etc. should be as minimum as possible. The wastage of food should be avoided. All trimmings of vegetables, bones, and other raw material wastes should be used to cook stock, soups, gravies, sauces, etc.
5. **Proper Storing of Cooked Food:** In case the cooked food is left at the end of the day then it must be stored at a proper temperature so that it can be used on the following day, if so required.
6. **Spoilage:** The cooks must ensure that there should be as far as possible no spoilage of food in the kitchen.
7. **Ensure No Food Is Served Without Bill:** In case food is allowed to be picked up without proper bill then this will increase the food cost.
8. **Portion Control:** The chef must ensure that dish is as per the standard portion, as both the larger portion and smaller portion is harmful to the hotel / restaurant. A large portion will increase the food cost and a small portion will dissatisfy the guest.
9. **Standard Recipe:** The Chef must ensure that always standard recipe should be followed, or otherwise, the guest may not always find similar standard of the dish and this will dissatisfy him.

Purposes of Food Cost Accounting

1. **To Know Cost:** It is through the mechanism of cost accounting that costs of products or services are ascertained. Any of the method may be used to know the cost but it should be near to the actual costs.

2. To Fix the Selling Price: Only if one knows the total cost than one can fix the selling price of a dish. The selling price is fixed in Restaurants, keeping in view the food cost. More the luxury restaurant, low is the food cost and vice versa. A small road side restaurant may have as high as 45 – 50% food cost and a speciality restaurant may have as low as 20 – 25% food cost.
3. Cost Controlling: The Chef / Restaurant Manager / Cost Accountant while fixing the selling price of a dish must know its exact recipe. He must also keep in mind the labour cost, the overheads while fixing the food cost and its variances.
4. Preparation of Account and Control of Food Cost: He will regularly review the production, sales and operating results, stocks of raw material and finished food and other items are valued at cost price or market price, whichever is lower. The stock inventory is taken by physically verifying each item. After ascertaining the stocks and taking a note of costs and sales, he can control the food cost.
5. Operating Policies: The Food Cost Accounting helps management in formulating operating policies like what should be the food cost, whether to bake bakery products in house or out source. Even desserts can be bought from outside if the sale of the same is not enough to keep a dessert chef.

Questions

Short answer question:

1. Define the food cost control.
2. Write the objectives of food cost control
3. Write about food costing
4. List the factors that can influence your food cost percentage

Long answer question:

1. Write the advantages and disadvantages of food cost control.
2. Identify the basic costing used in the hotel industry and explain it.
3. Illustrate the food control cycle



UNIT 5

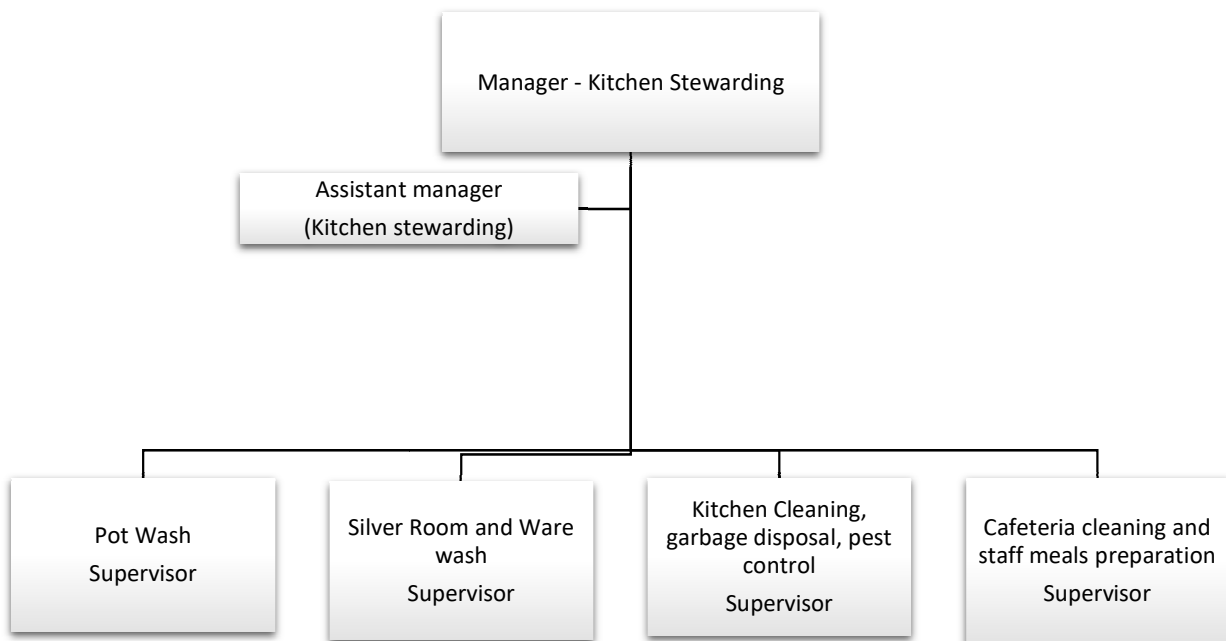
Kitchen Stewarding

5.1 Introduction

A kitchen stewarding department plays an important role in the functioning of both food production and food and beverage service departments. Although the operations of the kitchen stewarding department are mainly in the back area, it is still one of the most important department. This department performs many important tasks such as supply of gas and coal to the kitchen, cleaning and maintenance of food and beverage equipment's, cleanliness of kitchen and other areas, and handling staff cafeteria.

5.2 Organization chart

Kitchen stewarding is headed by the executive kitchen steward. Served shift supervisors work under the executive kitchen steward and all of them are responsible for carrying out the assigned tasks. Each supervisor has a team of utility workers who must be trained and supervised effectively to ensure that they do their assigned jobs properly. This is one of the most important support departments of the F&B department. Kitchen stewarding contributes to the successful operations of the F&B department. The person in charge of kitchen stewarding is manager, kitchen stewarding, who reports directly to the general manager or the food and beverage manager or the executive chef depending on the size of the hotel.



Reporting to the chef de cuisine would be more effective as most of the work of this

department is related to the kitchen area. This department works round the clock and the staff of this department is given straight shifts.

5.2.1 Manager – Kitchen Stewarding

- He/she controls all the functions of the kitchen stewarding department. He/she is responsible for the following
- Recruiting and training the kitchen stewarding staff (it is a challenging job as bulk of the staff in this department of small and budget hotels are uneducated)
- Preparing duty rota for his staff
- Supervising the work of kitchen stewards
- Ensuring continuous supply of well maintained, cleaned and polished pans and pots, large cooking vessels and serving equipment's for production and service departments
- Ensuring kitchen hygiene
- Keeping washing area and staff cafeteria neat and tidy
- Cleaning filters of kitchen exhaust system and kitchen equipment
- Sending worn – out electroplated nickel silver (EPNS) for plating and keeping a record of the same
- Controlling movement of stock of all food production and service equipment
- Maintaining stock of silver/plate room
- Maintaining stock report
- Procuring equipment and other cleaning materials and agents
- Controlling labour, materials and overhead cost
- Exploring effective methods of carrying out kitchen stewarding tasks
- Maintaining washing machine, burnishing machine and other equipment used in the department
- Pest control
- Garbage disposal by adhering to local body regulations and policy of the hotel
- He is assisted by the kitchen stewarding supervisors. In a large hotel, there may be assistant managers also. The supervisors get the work done through kitchen stewards.

5.2.2 Kitchen stewards

They engage themselves in scullery (pot wash), ware wash (service equipment washing), garbage disposal, kitchen cleaning, pest control, cafeteria cleaning and in the preparation of staff meals in small hotels. These tasks are assigned to stewards in rotation and are supervised by supervisors.

The following tasks are carried out in the kitchen stewarding department:

5.2.3 Pot wash (scullery)

Pot washing is carried out either manually or by machines. Most hotels use washing machines for scullery work. The kitchen stewards must carefully follow the manufacturer's instruction while operating them. Pot wash is carried out in the main kitchen and satellite kitchens. The pot wash kitchen stewards report to the pot wash supervisor.

5.2.4 Ware Wash and Maintenance of Silver room

Ware washing, polishing of silver and maintaining of silver/plate room are carried out by a separate team of kitchen stewards. The main kitchen's ware wash may be done by dishwashing machines, while the speciality restaurant's ware wash may be done manually. The term is also responsible for cleaning and polishing the silver and maintaining a stock of all service equipment. Ware wash is done in the main kitchen and satellite kitchen areas. In the main kitchen, soiled silver ware from room service department and coffee shop are cleaned and in satellite kitchens, soiled silver wares from speciality restaurants are washed. The kitchen stewards of this section report to the kitchen stewarding supervisor assigned for this section.

5.2.5 Garbage disposal, kitchen cleaning and pest control

Garbage disposal is an important activity and it should be done according to regulations of the local governing body. In most hotels, food waste disposer, an electric machine is used to dispose garbage. Late night, after all the production activities, the kitchen is thoroughly cleaned with hot water and cleaning agents. The floor and tiles are scrubbed clean and so on are cleaned and pest control measures are undertaken by the kitchen stewards. All these activities are monitored by the kitchen stewarding supervisor. A pest control schedule is also made by the supervisor.

5.2.6 Cafeteria cleaning and staff meals preparation

Kitchen stewards are assigned to clean the Cafeteria premises and in some hotels, they prepare staff meals. They work under the instructions of the kitchen stewarding supervisor. The indent for staff meals is made by the chef de partie and approved by the chef de cuisine. The kitchen stewards collect ingredients from stores, prepare ingredients and cook and serve to the staff.

It is the responsibility of the kitchen stewarding supervisors to provide kitchen stewards with necessary tools, cleaning agents, protective clothing, adequate training to handle equipment and to rotate stewards to various sections to motivate them.

5.3 Important tasks of kitchen stewarding

Kitchen stewarding is involved in many food and beverage operations. This department is supporting department and it has great impact on smooth flow of hotel operations. It mainly coordinates with kitchen and service department. The following are some of its primary tasks to perform:

5.3.1 Enhances the Efficiency of Food and Beverage Service production

It keeps all working area clean and free from dirt and grease. It also keeps kitchen equipment's clean and maintains high standards of hygienic and sanitation. It ensures proper garbage disposal to prevent cross-contamination. It provides clean pots and pans for production of food. It also provides equipment required for food preparation and help in stores pickup and inventory.

5.3.2 Enhance the efficiency of food and beverage service

It provides all service equipment's in clean and hygienic condition according to the requirement. It provides efficient work area so that there are no bottlenecks in operations. It also helps in banquet operations by providing required buffet equipment. It maintains a count of breakages and replaces broken cutlery and glassware.

5.3.3 Maintains high standards of sanitation

Kitchen stewarding keeps all working and functional area clean. Like in Europe where public health and sanitation is major concern, this department's role is very important. Kitchen stewarding ensure that all the food preparation and service area are sanitized and maintained in high standards. Failure to adhere these laws will result in closure of establishment.

5.3.4 Helps in Cost Control

Kitchen stewarding provides proper serving equipment, such as correct portion bowls and equipment. It saves cost by recycling portion packs which are not contaminated. It checks garbage bins for pilferage and wastage. This department is also responsible for checking on equipment for proper condition and periodic servicing. By conducting error proof checks on equipment, it saves a lot of repair cost.

5.3.5 Operating and Upkeeping of Employee Cafeteria

In coordination with the kitchen, kitchen stewarding checks daily requirements of the cafeteria and makes sure food is served on time and keeps the cafeteria clean.

5.3.6 Maintains Safe Workplace

Kitchen stewarding follows all safety procedures to avoid accidents. It ensures there are no gas leaks in kitchen area. It maintains storage of fuel away from hotel building. It also ensures fire extinguishers are properly placed and refilled immediately after use. This department keeps a note of all safety hazard area and constantly monitors. It keeps working area clean and free from grease and hurdles to avoid accidents and injuries.

5.3.7 Record Maintenance

Kitchen stewarding maintains some important records relating to stocks. Some of them are stock purchasing record. Periodical inventory record, accidents and investigation reports, preventive maintenance record, fire extinguisher record and breakage record. These records are updated and maintained in KST office.

5.4 Dishwashing Methods

The objective of dishwashing or cleaning utensils is to remove any dirty material from them on which micro-organisms can develop. Usually dishwashing is of two types:

1. Manual dishwashing
2. Mechanical dishwashing

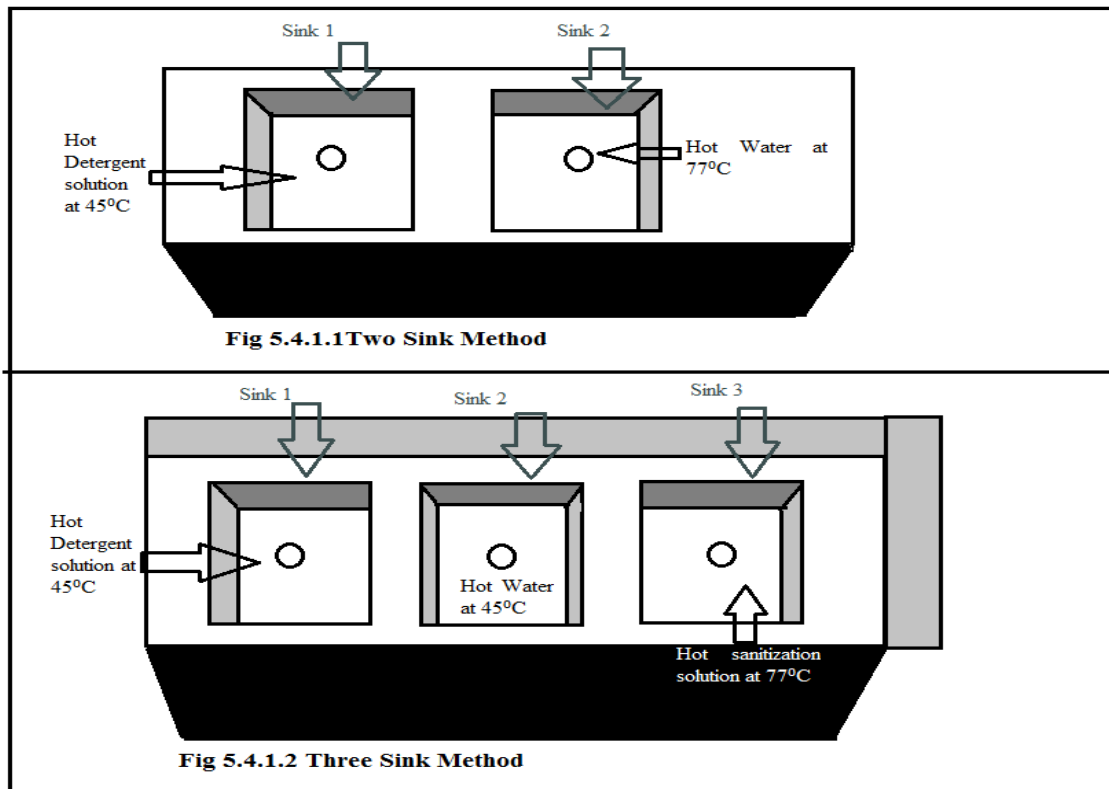
5.1.1 Manual method

Dishwashing by hand can be done in the two-sink method or in the three-sink method. In both these methods, the dirt is removed from the utensils by scraping and then rinsing under the forced water stream.

5.1.1.1 Two-sink Method: the simplest way of having germ-free cutlery and utensils is the two-sink method. Washing and rinsing of service ware is done in the first sink that contains hot water at 45°C. Rinsed service ware is then sanitized in the second sink containing hot water at 77°C and above with sanitizing solution. (Fig 5.4.1.1)

5.1.1.2 Three-sink Method: After the dishes have been sorted out and the debris has been removed, the utensils are washed in warm detergent solution in the first compartment, and then rinsed in the second compartment at the temperature of 45°C. service ware is then transferred to the third sink for sanitization at 77°C and above. (Fig 5.4.1.2)

The other method of sterilizing service equipment is treated them with chemical solution prepared with lukewarm water and chlorine or iodine solution or tablets.



5.1.2 Machine Method

After removing the debris, the plates are stacked into wooden or wire racks and then they are passed through the dishwashing machine. The chinaware is washed, rinsed and sterilized in the washing machine. After passing through the machine, the china is left to drain for 2-3 minutes and is then stacked on respective shelves.

This method saves a lot of time and labour, ensuring a good supply of cleaned sterilized crockery all the time. Dishwashing machines are of three types: Spray type, brush type and agitator water machine type.

- **Spray Type:** the dishes are placed in racks, which slide into machine where they are subjected to a spray of detergents and hot water at 48-60°C. The rack then moves to the next section where they are rinsed by fresh hot water shower 80°C. At this temperature they are sterilized and on passing out into the open dry off quickly.
- **Brush Type:** Revolving brushes are used for the scrubbing of each article in hot detergent water. The articles are then rinsed and sterilized in another compartment.

- Agitator water Machine: A basket of dishes is immersed in hot water and cleaned by the mechanical agitation method. The loaded basket is then given a sterilizing rinse in another compartment.

5.5 Dish wash Machine (conveyor-Type)

The dish washing machine usually consist of conveyor belt that assist in transporting the tableware through the machine. In the dishwashing machine, washing happens in four stages: pre-wash stage, wash stage, pre-rinse stage and final rinse.

In the pre-wash chamber, sprays of hot water circulated by the pump remove most of soil from the dishes. The soil, mostly greasy in nature, floats to the top of solution in the machine and is removed through an overflow pipe. In the wash stage, the dishes are washed with detergent solution. Here, all the soil and stains are completely removed. The conveyor then passes through the pre-rinse stage, where hot water is sprayed to remove most of the washing solution.

In the final rinse stage, the dishes are rinsed with hot water to remove any detergent that is remaining. The water at this stage is hot enough to act as a sterilized. A rinse additive is injected into the final rinse water to provide a sheeting effect for quick drying and to prevent water spotting.

Dish washing machines of different efficiencies, size and cost are available in the market allowing operators to select according to their need and budget. While selecting the machine, capacity of the machine, area required, installation cost, and operating cost have to be considered. A dishwashing machine is a long-term investment. Managers should consider the business volume before purchasing a machine.

The dishwashing machine`s operational efficiency is usually based on five elements:

1. Time: obviously, the longer a dish is exposed to wash and rinse sprays, the most certain it comes out clean. However, for maximum production, the higher feasible conveyor speed is desired commensurate with getting good results. The average time for dish/basket to remove the length of the cycle is approximately 2 ½ minutes. If production warrants a faster cycle, temperature can be increased with consistent results, but this will increase costs.
2. Temperature: Hot water is expensive, but cold water can cost more if the dishes are badly washed. With every degree of added heat, the cleaning efficiency of a detergent

solution is increased. Tank heaters may be an maintain temperature of water at peak periods.

3. Pressure: the actual impact of the spray against the dish is vital part of the cleaning process. Normally, the machine pump can produce the required pressure. However, the protein soils in the wash solution combine with detergent chemicals to cause foam, which strangles the water pump reducing its efficiency and leaving foam on the dish, making rinsing difficult. Scraping plates before processing through the machine helps prevent excessive foaming.
4. Detergent: it is important to follow manufacturer's instructions with regard to the use of specific detergent solution. The use of right detergent plays a vital role in achieving the operational efficiency. The same detergent cannot be equally efficient or economical in soft water and in very hard water, or on lightly soiled dishes as on very dirty dishes.
5. Rinse additive: There is no such thing as all-purpose rinse additive and the selection should be made on the basis of a chemical analysis of the water supply and an inspection of operating conditions.

5.6 Inventory and Control

The term 'inventory' refers to the stocks of purchased operating supplies, equipment and other items held for future use in food and beverage operations. Although the food and beverage manager is responsible for monitoring food and beverage stock, the kitchen stewarding department maintains and controls the inventory in the department.

In a busy luxury hotel, over a hundred of meals are served every day in various food and beverage outlets such as speciality restaurant, coffee shop bar, room service and banquets. To serve those hundreds of meals a day, all the outlets should be well equipped with a lot of small and large equipment's. The conservation of such small items and continuous supply is the quite important task of the kitchen stewarding department.

A lot of small equipment's used in food service outlets are liable to be missing due to various reasons, which leads to enormous revenue losses. The cause of missing of cutlery are manifold and may be summarized as follows:

- Pilferage by staff, guest or organized group
- Misplaced and kept at dumping places; underneath cupboards and spread all around the hotel due to casual attitude, can be retrieved back to the restaurants from various departments.
- Taken on loan by other departments and for outdoor catering and never brought back.

- Casually putting them in garbage and lost forever.
- Broken and destroyed due to mishandling of service equipment by staff members.

The methods used for controlling of pilferage are frequent search and retrieval process from all other departments, strong security at the gates, training the service and washing personnel and scanning the garbage dump through magic eye or metal detectors. To reduce the loss of revenue and to ensure proper maintenance, the equipment's are physically counted at periodic intervals. The kitchen stewarding department carries out the stocktaking of food and beverage departments. Inventory control or stocktaking brings great results in controlling all those disrupted activities.

5.7 Par levels

'Par' refers to the standard quantity of each inventoried item that must be on hand to support daily, routine food service operations. Inventory levels for food service items are measured in terms of par number. A par number is a multiple of the standard quantity of a particular inventory item that must be on hand to support day-to-day functions. Food service operations must maintain par levels for common supplies such as china, flatware, glasses and other beverage containers and napkins.

If par levels are set too high and supplies are overstocked, problems with cash flow, theft and pilferage or wasted storages space can occur. In contrast, if par levels are set too low and there are not enough supplies on hand, guest and staff members frustration and dissatisfaction can result. Hence, the managers must identify the operation's specific needs based on the type of operations, the number of covers, the hours of operation, availability of supplies, the frequency and style of dishwashing and the availability of on-site laundry.

- Par levels for Chinaware: An operation's chinaware inventory should permit one complete set in the dining room, one complete set in dish wash and another set-in storage.
- Glassware and flatware: The rule of thumb for flatware is 1 ½ to 1 1/3 per seat, for glassware, food service operations should maintain a par of three for each of the most frequently used kinds of glasses, such as water glasses and wine glasses.

5.8 Industrial Exposure

In Indian hotels, the kitchen stewarding manager reports to the executive chef. But with the change in working cultures, you may find the stewarding manager reporting to the food and beverage director as well in some organizations. Irrespective of reporting authority, the tasks of the department are quite similar in many organizations. When it comes to smaller establishments, we may not find a separate department called KST. In this case, KST

personnel directly report to the owner or food and beverage manager. With rising demand for multi-tasking personnel, kitchen stewarding has also started arranging buffets in banquets.

Questions

Short answer question:

1. Write the importance of kitchen stewarding in the hotel industry.
2. Explain the inventory and control system followed in kitchen stewarding department.
3. Define the par stock and explain it.

Long answer question:

1. Draw the organisation chart of kitchen stewarding department and explain it.
2. Identify the importance tasks of kitchen stewarding.
3. List the types of dishwashing methods and explain it.



ACCOMMODATION OPERATIONS-II

PAPER – III

SECOND YEAR

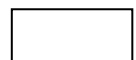


HOTEL OPERATIONS

PAPER – III ACCOMMODATIONS OPERATIONS

INDEX

Unit 1: REGISTRATION	333
Unit 2: RESPONSIBILITIES DURING GUEST STAY	342
Unit 3: CHECK OUT AND SETTLEMENT OF BILLS	350
Unit 4: INTRODUCTION OF GUEST ACCOUNTING	355
Unit 5: CLEANING ROUTINES OF HOUSEKEEPING	361
Unit 6: HOUSE KEEPING SUPERVISION	371
Unit 7: DIFFERENT SURFACES AND FABRICS USED IN HOTELS AND THEIR CARE	377
Unit 8: SAFETY AND SECURITY.	389



UNIT

1

Registration

Structure

- 1.1 Introduction
- 1.2 Formats used in Front Office Hotel
- 1.3 Pre registration
- 1.4 Relation Between Reservation & Registration
- 1.5 Check in procedure

Learning Objectives

After studying this unit students should be able to

- Able to identify and fill up various forms used in reception
- Differentiate between various types of check in
- Understand various types of bill payment by the guest

1.1 Introduction

Define Registration:

Registration is one of the steps in the check in process of a guest in a hotel. It is a legal procedure to be followed. Registration document is an agreement between the guest and the hotel.

The guest by signing the registration form agrees to follow the rules of the agreement and pay for the services received and the hotel agrees to provide the services. By clearly entering all the details on the registration form it helps the receptionist to follow up with the guest during the stay and also while the guest checks out.

Registration Form

NAME	Forwarding Address
Occupation	Payment Mode: Cash - Credit Card - Co. Acc - Travellers Check - Vouchers
Name of Organisation & Address	Passport No
Designation	Date of Issue
Residential Address	Place of Issue
Nationality	Date of Birth
Date of Arrival Time	Date of Arrival in Country (<i>For Foreign Nationals</i>)
Expected Date of Departure	Port of disembarkation (<i>For Foreign Nationals</i>)
Purpose of Visit	No. of Persons
Arrived From Mode Of Travel	Room No
Next Destination	Room Rate
The Management does not Assume Responsibility for the Loss of Guest Valuables. Lockers are Available with the Cashier.	I have gone through the Terms and Conditions of my Stay in the Hotel and I Agree to Abide by the same
Guest Signature	

Registration Card

Fig 2.2 Registration form used in hotel room registration

1.3 Pre Registration

- Pre registration is an activity that takes place before the guest arrives at The location. The following process takes place during pre registration
 - **Pre registration of guests:** This is done for reserved guests. With the help of the details of the guest available from the reservations, the reception prepares the registration cards by printing the details on the registration card. This saves the time of the guest at the time of check in and will make the process easy for the receptionist
 - **VIP blocks: Very Important Person** Every hotel places some importance to the guest based on their status, business orientation and importance. When a reservation is received for such a person, the best rooms available in the hotel are selected and blocked, specially decorated, amenities placed and the staff will be ready to receive the guest.

- **VIP Amenities:** Fruit Basket, Flower Arrangement, Cookies, Chocolates & Nuts (Amenities may vary hotel to hotel).

- **Room's inventory:** The total number of rooms available in a hotel for sale is called the room inventory. Based on the reservations received, rooms occupied the status of the rooms can be discussed as under. As soon as a receptionist takes over the shift he/she should know the hotel position. Accordingly the shift can be planned.

- i. **Hotel position negative:** It means hotel's rooms are in high demand and the hotel has received more number of reservations than the actual number of rooms available for sale.

- ii. **Hotels position Positive:** This means the numbers of reservations received are less than the actual number of rooms available.

- **Flight Schedule:** The information on the flight is required for the guests of the hotel who are travelling by various flights. Based on the information received on the arrival of the guest by a particular flight, arrangements can be made to receive and transfer the guest to the hotel. Flight schedules are to be known in advance so that the car pick up can be arranged according to the time of arrival of the flight.

1.4 Relations between reservations and registration

Reservation: It is to make sure that a particular service is available on a confirmed basis. Reservation is required when a service or a facility is in high demand. In the hotel, rooms are on high demand and a guest visiting a hotel without prior reservation stands less chance of availing a room. Hence in order to avoid problems, guests always reserve rooms in advance while making their travel plans.

Registration: Registration is a legal procedure (enforced by the law), which seeks the details of the guest to be recorded at the reception at the time of check in. After registration formalities a guest can be allotted a room and be roomed.

As it is seen that reservation precedes registration all the activities have to be done keeping in mind that both the processes sync with each other. Reservation is taken in order to confirm a request for a room. During reservation all the details of the guest are taken such as name, address, contact number, date of arrival, date of departure, mode of settlement of bills, and any other requests are also asked and recorded so that necessary arrangements are made.

Reservation details are recorded in the system so that they can be retrieved at any point of time. Thus reservation record gives the expected list of arrivals for a particular day.

Registration succeeds reservation. By referring to the expected arrivals; receptionist can plan the day and arrival procedures. During registration all the details of the guest have to be filled on the registration form. In a reservation check in the details of the reserved guest are already available in the system, thus these details are printed on the registration form and kept ready for the guest signature during the check in. These registration forms are called (pre rag cards). At the end of the day no of guest arrivals can be tallied with the expected arrivals and the total arrivals for the day can be calculated. If any reserved guest fails to check in, it is called as no show and such reservation forms are filed in the no show file.

Based on the number of no shows and cancellations of reservations, Hotels generally book more number of rooms than actual available rooms. This is called over booking. During over booking the receptionist is aware of the situation and in case all the guests who booked the rooms turn up, there will not be any room to be offered to the guest. In such cases the receptionist will be prepared to tackle the situation by pre planning the remedies'

1.5 Checks-in Procedure

Check in of a guest in a hotel involves, receiving the guest, ascertaining the requirement, registering the guest, allotting the room and rooming the guest. Depending on the nature of the reservation the different check in procedures are followed

(a) FIT The abbreviation stands for Free independent/individual traveler. Generally people who wish to travel will buy a package from a travel agent. The package consists of travel tickets, accommodation, food, sightseeing, guide etc. The traveler need not bother about booking these services independently as all these services are available together in package. However there are some travelers who do not wish to go by the travel packages and arrange their own services, such people are known as free independent traveler.

Check in Procedure of an unreserved guest (walk in check in)

The following procedure is followed while check in of walk in guest, DFIT

1. Receive the guest
2. Enquire on how many guests would be staying in the hotel.
3. Present the tariff card and explain the tariff of different types of rooms
4. Present the registration form and request the guest to fill in the details (alternately ask the guest for his business card and fill in the details to help the guest).

5. Confirm the room category, number of rooms the rate and enter on the registration card.
6. As a matter of precaution request the guest for a room advance (at least 2 times the tariff).
7. Prepare the room key card holder and activate the room key.
8. Convey the room number to the guest and guide the guest to his room, alternately the bell boy can escort the guest to his room.
7. Provide the guest with any necessary information on the facilities and services available in the hotel.
8. Wish the guest a pleasant stay.

Group check in

In the hotel industry if 10 or more than people travel together it is considered as group. People travel in groups for several reasons which include tourist, conference, sports, concerts, etc.

As groups include large number of people checking in and occupy many rooms some caution and planning is required in order to have a smooth process of check in.

The following procedure is followed for group check in

1. The group names list and rooming list is obtained from the reservations by the receptionist the previous evening of the group arrival.
2. According to the rooming list rooms are kept ready and blocked.
3. Room key cards and meal coupons are also prepared and kept ready.
4. A separate group check in counter is set up in the lobby for the group; this is done to prevent interference of the group with the routine activity at the reception.
5. The group arrives in a coach and it is parked in the portico.
6. The group leader is received by the front office manager, guest relations executive.
7. The bell boys offload the baggage of the guest and place them in the luggage area in the lobby.
8. The group leader signs on the group registration form and confirms the rooming list.

9. All the guests hand over their passport and visa information.
10. The room keys are handed over to the group leader.
11. Bell boys tag all the baggage with luggage tags.
12. The group leader distributes the room keys to the group members along with the meal coupons.
13. The guests are being asked to identify their baggage and their room numbers are written on the tags.
14. The guests are escorted to their rooms respectively.
15. By observing the room number on the tags, the baggage is transferred to the respective rooms.
16. Check in is shown in the system.
17. Copy of the group details is circulated to the housekeeping and Room service department

Crew

The crew members are generally from airlines. Airlines will have a contract for a long period with the Hotel.

It is for the Flights which are parked in the airport for the night and which intend to depart in the early morning. For such flights the crew member who consists of pilots and cabin crew are accommodated in a nearby hotel. As the flight arrives every night the crew will have to be accommodated every night. Hence the Hotels keep aside few rooms for the crew which will be allotted to them on their arrival.

Crew check in is very simple procedure and consists of the following steps

1. The pre registration card will be prepared on the name of the airline and kept ready.
2. On the arrival of the crew registration card will be presented to the crew and the names are entered on it.
3. The pre allotted room keys are handed over to the crew and are guided to their rooms.

FIT are further classified into two types based on their origin

FIT – Free Independent Traveler

i. **DFIT:** The abbreviation stands for **domestic free independent traveler**. If the traveler travels within the boundaries of the country of his origin, he is known as a domestic traveler. A Domestic traveler who makes his own travel arrangements is called as DFIT.

Check in of DFIT (Check in of reserved guest)

The following procedure is followed while check in of a reserved guest, DFIT

1. Receive the guest
2. Ascertain that the guest holds a reservation by asking the reservation confirmation number or just the name of the guest.
3. Present the pre registration form and obtain the signature of the guest.
4. Once again reconfirm the mode so settlement of the bills.
5. Prepare the room key card holder and activate the room key.
6. Convey the room number to the guest and guide the guest to his room, alternately the bell boy can escort the guest to his room.
7. Provide the guest with any necessary information on the facilities and services available in the hotel.
8. Wish the guest a pleasant stay.

ii. FFIT: The abbreviation stands for foreign free independent traveler. Traveler who travels out of his country of origin is called as foreign traveler. A foreign traveler who makes his own arrangements of travel is called as FFIT.

The procedure to check in foreign independent traveler

1. Receive the guest
2. Ascertain that the guest holds a reservation by asking the reservation confirmation number or just the name of the guest.
3. Present the pre registration form and obtain the signature of the guest.
4. Ask the guest for passport and visa , fill up the details on the C form
5. Once again reconfirm the mode of settlement of the bills.
6. Prepare the room key card holder and activate the room key.
7. Convey the room number to the guest and guide the guest to his room, alternately the bell boy can escort the guest to his room.
8. Provide the guest with any necessary information on the facilities and services available in the hotel.

9. Wish the guest a pleasant stay.

The various steps followed up during check in are

1. Registration form
2. C form- for foreign guest only. Diplomats, ambassador of various countries, citizens of Bhutan, Bangladesh and people under the age of 16 are exempted from filling up C Form.
3. Mode of Payment – Cash, Credit Card, Bill to Company, Travelers Cheque, Travel Agent Voucher.

Key handling: Now a day's electronic key cards are being used. The keys are activate at the time of guest check in and are handed over t o the guest. The keys are activated to the departure date and precise time of departure.

Advance payment policy: Guests who make a reservation in a hotel will be asked to guarantee the reservation by paying the entire of part of the amount in advance. If the guest cancels the reservation closer to the date of arrival or fails to check in, the advance paid is not returned and it is called room forfeiting charges.

Room allotment: During the time of check in the guests are asked their preference of room, rooms differ in terms of their facing and some specialties. The various rooms based on facing are swimming pool facing room, lawn facing room, garden view, road view, lake view, etc. Other specialties include Non smoking rooms, adjoining rooms, and rooms for physically challenged. Hence the receptionist should be aware of the room numbers which have specific specialty so that rooms can be allotted as per the preference of the guests.

Summary

- Registration is an important legal formality followed during check in of guest in a hotel.
- The best available rooms in the hotel are blocked for VIP's before they arrive
- Taking advance payment is most necessary for walk in check in.
- The various modes of bill payment are cash, traveler's cheque, travel agents voucher, credit card etc.
- Advance paid by the guest to guarantee a reservation, if cancelled is called as forfeiting charges.

Short Answer Type Questions

1. What is Registration Form?
2. Define the term registration.
3. What is the importance of flight schedule of the guest to the front office staff?
4. What is FIT?
5. Expand DFIT & FFIT.
6. What is crew?
7. What is walk in?
8. What is Hotel Position Negative?
9. What is Group Check-in?
10. What is Check-in?
11. Define the term no show.
12. What are VIP amenities?

Long Answer Type Questions

1. Explain the steps involved in walk in check in.
2. Draw the format of Registration Form & Explain the Procedure of Check-in.
3. Mention the procedure of Group Check-in.
4. Write the Procedure of Check-in DFIT & FFIT.
5. Explain the various steps followed up during check-in.
6. Describe the relation between registration & Reservation.

Responsibilities During Guest Stay

Structure

- 2.1 Introduction
- 2.2 Message handling
- 2.3 Paging
- 2.4 Mail handling
- 2.5 Complaint handling
- 2.6 Change of Room

Learning objectives

After studying this unit, students should be able to

- Learn handling message for the guests
- Paging the guest
- Understand the procedure of handling guest complaints
- How to make change of room

2.1 Introduction

The stay of the guest is the most important phase in the guest cycle in a hotel. It is during the stay that the guest experiences the maximum services of the hotel. Again it is the room component that creates maximum satisfaction to the guest. Other important aspects are handling mails for the guest and taking messages. Handling complaints on priority and solving them at the earliest will create a more satisfied and loyal guest.

2.2 Message Handling

Messages are very important for the guest and every care has to be taken in receiving the message clearly, properly and has to be delivered in time to the guest. Message is received for a registered guest of the hotel who is not in the hotel at the time a person calls on him or would like to leave a message on the phone.

The following procedure is followed to take message on the phone

1. Receive the call
2. Check if the guest whom the caller intends to speak is in the room, this can be checked by looking for the room keys, now a day as the guest does not leave the keys at the reception, the call is connected directly to the room.
3. If there is no response from the room, it means the guest is not in the room, then proceeds and takes the message for the guest.
4. The message is taken on a message format.
5. The following details are noted on the message form— name of the person calling, the company and mobile number, the main message to be conveyed, The name of the guest for whom the message is, room number, date and time of the message received, finally the staff who receives the message signs it.
6. The message is written in triplicate.
7. Two copies are torn from the message booklet – one message is sent to the guest room, the second is retained at the reception desk. The 3rd copy lies in the booklet.
8. On seeing the guest returning from outside the message copy can be handed over to the guest, if it is missed the guest finds a copy in the room.

MESSAGE SLIP

TO	HOTEL
DATE	ROOM
	TIME
DURING YOUR ABSENCE	
Mr./Mrs./Miss	
of.....	
Called by Tel	Please call him
Came to see you	Will Return
Wants to see you	Urgent
MESSAGE.....	
RECEIVED BY	

Fig 2.2 Message Slip

2.3 Paging

Define the term Paging.

Paging is used to locate a guest in a hotel. Guest may require this paging service during their stay in the hotel.

Procedure of Paging: Sometimes a guest is expecting a guest visiting him/her or a phone call, but the guest does not want to wait in the room, he may be somewhere in the hotel (restaurant, bar, swimming pool etc), in such cases he leaves a message with the reception on the same. When a visitor calls upon such guest or a phone is received for the guest, the bell boy moves around in all the public areas with the paging board. Paging board consists of a stand with a board and bell. The entire equipment is loaded on a trolley which has wheels and can be just moved around. The name of the guest to be located is written on the board and the ringing of the bell will draw the attention of the guest and on approaching the bell boy will escort the guest to the visitor or the phone call.

Paging Service
Guest Name:

Fig 2.3 Paging board

2.4 Mail handling

Handling of mail is as important as serving a guest. The guest who visit commercial hotels generally carry on with the business activity where ever they are, hence Hotels also should also support the guests in carrying on their work during their stay. Mails can be received for the guest in three different instances

(a) Before the guest arrives: A mail may be received by the hotel for an expected guest. This will be known by the staff by checking the reservations. Hence any mail/parcel received for a guest who is expected to check in is received and stored safely and it is delivered to the guest on his arrival at the hotel during check in.

(b) During the guest stay: During the guest's stay in the hotel if a mail/parcel is received for the guest the following procedure is followed.

- i. Receive the parcel
- ii. Enter the details of the parcel in the parcel register.
- iii. Stamp the parcel as received, the date and time of receiving the parcel are entered on it.
- iv. The parcel along with the register is carried to the guest room by the bell boy.
- v. The parcel is delivered to the guest and a signature of acknowledgement is taken.

Parcel Register: The Details of all incoming mail and couriers are tracked on the register

REGISTERED MAIL RECORD										
S.No.	Room No.	Name of the guest	From	Description of the mail (parcel, letter, telegram, etc.)	Date & Time of receiving	Received by	Date & Time of Delivery	Delivery To	Sign of Guest	Remarks

Fig 2.4 Paging board

2.5 Complaint handling

Though complaints are considered as defects of a hotel, no Hotel in the world exists which operates on zero percent guest complaints? Though complaints are deemed as failures of the hotel, a well handled complaint can be strength of the hotel. Complaints arise in the following cases

- (a) When the guest is not satisfied with the product (room, Food, Etc).
- (b) When the service is delayed.
- (c) If the guest is ignored.
- (d) When there is a defect in the facility in a room.

The procedure to handle complaints is

1. Listen to the guest with empathy.
2. Apologies for the inconvenience.
3. Try and collect as many details as possible on the nature of the complaint.
4. Act immediately, if the problem is due to engineering, inform the engineering and maintenance department.
5. Follow up with the engineering department after a while on the complaint.
6. After the engineering has cleared the problem, call up the guest to reconfirm on the complaint.
7. After getting assurance from the guest close the complaint. It has been observed that it is not the complaint but the time in which it is attended makes the guest happy and more loyal towards the hotel.

2.6 CHANGE OF ROOM:

Change of Room: It is a process when a guest is moved from one room to another, due to some reasons or the other.

Possible Reasons for Change of Room

1. Guest wants the change of room

The guest may want change because of the following reasons.

- i) Initially the room was not assigned to him as per his choice or requirement (may be due to non-availability)
- ii) Someone joins him during his stay and now the guest wants a double room instead of a single room or vice versa.
- iii) One or more of the gadgets or appliances such as TV, air conditioner or telephone etc. of the room is out of order or not working satisfactorily.
- iv) The guest does not like room (view, color scheme, location etc.)

2. Hotel wants the change of room

Various reasons may be there. Some of them are:

- i) Because initially the room was not assigned to guest as per his requirement due to non-availability.
- ii) Guest has overstayed in a particular room which has been pre-committed to some other arriving guest.

Condition of Change of Room

Both guest and hotel agree to change mutually.

Procedure for Change of Room

The housekeeping department is informed about the requested change to as to prepare the room. Once the room is readied by the housekeeper under the supervision of lobby manager / housekeeper, the luggage of the guest is moved from the first room to the new room by the bellboys. This may be done either in the presence of the guest (called 'live move') or in the absence of guest (called 'dead move'). Front office prepares a slip called as change of room slip/move slip/movement slip/transfer slip and removal notification slip (please refer to the layout given below) and all concerned sections such as telephones, food and beverages department, bill section, housekeeping etc are informed. Necessary adjustments in records (room rack and information rack) etc. are also done.

CHANGE OF ROOM SLIP

S.No.	Date.....
Time.....	
From Room No.	To Room No.
From Rate	To Rate
Name of the Guest	
Reasons for change	
Changed authorized by	
Signature.....	
c.c.: Bills, H.K., Tel., F & B (Room Service) etc.	

Fig 2.6 Room Change Slip

Summary

- Message is a service offered to the hotel guest , by receiving, recording and delivering to the guest on time.
- Paging is done to locate a guest in the hotel when a he has a visitor or a call holding for him.
- Mils and parcels are received for the guest even before the guest arrives, during his stay and even after the guest departs.
- Handling complaints professionally will make the guest more satisfied than a guest who never suffered any service failure.
- Room Change Slip

Short Answer Type Questions

1. What is guest message?
2. What is parcel register?
3. Define the term paging.
4. What is Complaint Handling?
5. What is Mail Handling?
6. What is Change of Room?
7. Write any two reasons for change of room.

Long Answer Type Questions

1. Write the procedure to take a message for the guest, explain with a format.
2. Explain the procedure of paging in a hotel.
3. What are the points to be taken care while handling a guest complaint in a hotel?
4. How are guest mails handled in a hotel, explain.
5. Write the procedure of change of room.

Check out and settlement of Bills

Structure

- 3.1 Introduction
- 3.2 Standard Guest check out procedure
- 3.3 Check out formalities by Housekeeping
- 3.4 Role of Front Office Cashier
- 3.5 Handling various methods' of payment

Learning objectives

After studying this unit, students should be able to

- Understand the standard check out procedure of a guest in a hotel.
- The role of Housekeeping during guest checks out.
- To understand role of cashier.
- Understand and handle various types of bill payment.

3.1 Introduction

Check out of the guest is the last point of guest contact with the Hotel. It is at this stage that the bill is presented to the guest and the guest settles. There are various modes of settlement of the bills; depending on the convenience of the guest he/she settles the bills. Front office cashier must be aware and update his knowledge on the latest procedures of bill settlement.

3.2 Standard Guest check out procedure

The following steps are followed during a guest check out

- i. The guest who intends to check out informs the reception.
- ii. Receptionist will send the bell boy for getting the baggage's down.
- iii. Reception will inform the housekeeping and the room service on the guest intended check out and request them to send any pending bills pertaining to that particular guest room.
- iv. If any bills are received the cashier posts the bills to the room bill.
- v. Room service will check the room for any mini bar consumption, if any it is notified to the front office cashier.
- vi. The bell boy while getting the baggage's down takes a look at the contents of the room and gets the baggage down.
- vii. The cashier prepares the final bill of the guest and presents it to the guest for payment.
- viii. The guest goes through the bill signs it and pays for it.
- ix. The original copy of the bill is issued to the guest and the duplicate is retained by the hotel.
- x. The cashier approves the bills settlement and authorizes the bell boy to move the guest baggage.
- xi. The bell boy loads the baggage of the guest on to his vehicle.
- xii. The guest leaves the hotel.

3.3 Check out formalities by Housekeeping

Housekeeping has to closely coordinate with front office for every movement of the guest whether it is check in or check out. At the time of guest check out the housekeeping performs the following.

Actions

- i. In hotels where mini bar is handled by the housekeeping department, housekeeping staff will inspect the mini bar and update the cashier on any unbilled consumptions.
- ii. Housekeeping will inspect the room for any missing supplies & breakages and informs the cashier.

- iii. After the guest departs, Housekeeping takes over the room and starts cleaning and makes it ready for sale.

3.4 CASHIER

Cashier is a person who works at Front Office looking after bills & payments, collecting the cash while staying & departure of the guest.

DUTIES OF A FRONT OFFICER CASHIER

- Requisition and maintenance of a cash bank for shift transactions.
- Post guest charges and credits into respective guest folios
- Settle all guest bills upon departure
- Exchange foreign currency as per regulations.
- Disburse Allowances
- Issue Paid-Outs upon instructions
- Control Safety Deposit lockers
- Operate the accounting machine (software)
- Receive and hold in safe custody all cash payments by guests and revenue departments till they are audited
- Ensure internal controls of all transactions
- Prepare reports as specified by management.

CASH BANK

At the beginning of a shift, the cashier requisitions an amount specified by the Chief Accountant, from the General Cashier for any cash transactions required during the shift. This amount comes in various cash denominations for the ease of providing change to guests.

The cashier is required to account for this money at the end of the shift when he/she returns the balance. There are three types of situations at the end of the shift;

1. **Overage** – when cash, cheques, negotiable instruments and paid-outs from the cash bank are greater than receipts into the cash bank.
2. **Shortage** – when the amount paid out from the bank is less than receipts into the cash bank; and

3. **Par** – when the amount requisitioned is equal to the amount deposited. Amounts not accounted for is treated as a negligence of the cashier and can be debited to his personal salary. Many hotels have now insured such transactions but any amount accounted for money certainly goes negatively in the cashier's performance report.

3.5 Handling various methods of payment

The bills in a hotel can be settled by various methods as under

1. **Cash:** It is the most simple and widely used mode of payment, the guest pays the cash against the final bill and it is settled.
2. **Credit card:** In the recent past usage of credit cards has gained more prominence. On producing the final bill to the guest, he issues the credit card, it is swiped on the credit card swiping machine and the transaction amount is entered. The authorization is obtained and the transaction details are printed. The print out is in duplicate and the signature is obtained on the slip. The original is retained by the cashier and the duplicate copy is issued to the guest.
3. **Travelers' cheque:** Travelers cheques resemble currency notes, but for the fact that the signature of the person obtaining them is present on them and only he/she can utilize it. Major authorized banks and travel agents issue travelers cheques. The customer intending to purchase travelers cheques pays the equivalent amount and a transaction fee to the bank and obtains the cheques. The cheques when being issued have to be signed in front of the issuer. The customer can carry the cheques without the fear of theft and when settling the bills the guest produces the cheques and has to sign on the reverse of the cheques similar to him one done during issue of cheques. The cheques equivalent to the bill amount is received by the cashier and the bill is settled.
4. **Bill To Company:** Hotels enter into contract with corporate companies for long term mutual benefit. The companies give regular business to the hotel and the hotel offers discounted rates. In this type of billing, after the guest stays in the hotel, he/she signs the bill and leaves the hotel. These bills are accumulated and sent once in a fortnight for settlement.
5. **Travel agent voucher (TAV):** A travel agent while planning the tour books the rooms in various hotels and prepares a voucher as per the agreement. A copy of the voucher is seen to the hotel to confirm the booking, later a copy of the voucher is submitted by the group leader at the time of check out.

Summary

- The guest check out is an important aspect and has to be handled with utmost care, as the front office has to coordinate with various other departments for the final bill posting.
- There are various modes of settlement of guest bills and the cashier has to be conversant with all the procedures of bill settlement.

Short Answer Type Questions

1. What is check out?
2. What is a guest bill?
3. Who is bell boy?
- 4/ what is mini bar?
5. What is the meaning of Tav?

Long Answer Type Questions

1. Explain the various methods of Payment.
2. Write the guest checkout procedure.
3. Mention the checkout formalities by housekeeping.
4. Write the duties of a front office cashier.
5. What is cash bank? And explain about
 - 1) Overage 2) Shortage 3) PAR

Introduction of Guest Accounting

Structure

- Introduction
- Vouchers
- Folios
- Ledgers
- Visitors tabular ledger (VTL)

Learning Objectives

After studying this unit, the student will be able to

- Understand about guest accounting
- Different vouchers and Folios used in accounting
- How to maintain the visitors tabular ledger

4.1 Introduction

Guest accounting is an integral and important aspect of Front office cashiering. Various documents are maintained in order to account for the transactions. The several vouchers and receipts are a proof for a particular transaction and based on the vouchers amount is posted of returned to the guest. Hence a thorough knowledge of raising the vouchers and filing them is very important.

4.2 Vouchers

A voucher is an accounts slip which is prepared to record a transaction. Each voucher details a single transaction to be posted to a front office account. This document lists detailed transaction information gathered at the source of the transaction. The voucher is then sent to the front office for posting onto the guest folio. Usually any service or goods brought on credit by the guest has to be supported by a voucher.

Types of vouchers

Cash Vouchers: These are vouchers which are treated equivalent to cash. These vouchers are issued to the guest for the convenience of settlement, or as a part of the promotional schemes. The cash vouchers can be used by the guest for bill settlement.

Cash advance/Paid out voucher: This is a voucher which is being raised by the front office cashier. If the hotel makes a payment on the behalf of the guest, a paid out voucher is raised on the name of the guest and after obtaining the signature of the guest amount is paid by the cashier.

HOTEL ABC		PAID OUT VOUCHER	
Date	Time		
Guest's name			
Room no	Account folio no		
Detailed explanation			
.....			
Rs. (In words			
.....)			
Prepared by			
Authorised by			
Audited by			
Signature of the guest			

Fig 4.1 paid out voucher

Ex : A guest arrives from the airport in a cab, he does not have change to pay the driver, the hotel will pay for the cab and raise paid out voucher and the same amount is debited to the guest account.

Allowance vouchers and Correction vouchers: The allowance voucher is used when some amount has to be returned to the guest. This happens in situations when the cashier debits a wrong room number for a particular posting, also when the advance received is more than the guest bill, difference amount is returned to the guest. This voucher is also raised when a discount has to be passed to the guest.

ALLOWANCE VOUCHER		
No: _____		
Date: _____		
Name: _____		Room A/C No : _____
Detailed explanation	Amount	
	Rs.	Rs.
Rupees in words Total Rs.		

Fig 4.2 Allowance voucher

Charge vouchers such as Restaurant/ bar check

This is a voucher which is raised, when an in house guest avails some service and does not pay at the moment of the sale but will settle all the bills together at the time of check out. When such guest's order for any services is rendered and the signature of the guest is obtained on the voucher. This voucher is further sent to the front office cashier, the front office cashier posts these amounts to the respective rooms.

Credit card voucher

This voucher is raised when the guest settles the bill by credit card. It is a voucher (print out) , that is raised which contains all the details of the sale, after obtaining the signature of the guest a duplicate copy is returned to the guest and the original is kept with the hotel. This voucher is further sent to the bank for payment.

4.3 Folios

A folio is a statement of all transactions (i.e. debits & credits) affecting the balance of a single account. At Checkout, any guest folio should be balanced to 0 through full cash payment, credit card transfer, personal check transfer, special program transfer, and direct billing transfer...

The way of maintaining folios starts with proper posting, which is the process of recording transactions on a folio (i.e. proper folio, proper location and proper amount)

Under the manual, semi automated and fully automated systems, folios are called hand-written folios, machine-posted folios, and computer-based electronic folios respectively. Moreover, all folios shall have a unique serial number for internal control and storing purposes.

Types of folios used in front office department

There are four types of Folios, they are

- (a) **Guest folios :** Accounts assigned to individual persons or guestrooms
- (b) **Master Folios :** Accounts assigned to more than one person or guest room; usually reserved for guest groups
- (c) **Non-Guest (or semi-permanent) folios:** Accounts assigned to non-guest businesses or agencies with hotel charge purchase privileges.
- (d) **Employee Folios :** Accounts assigned to employees with charge Purchase privileges.

4.4 Ledgers

Hotel ABC			
Guest Ledger High Balance Report			
Date: _____		Reviewed by: _____	
Auditor: _____			
Room No.	Guest Name	Amount	Action Taken
103	Ms. Sonia	8000/-	Contacted, paid Rs.4000, address & credit verified
122	Mr. Amit Prakash	5000/-	Left 3 messages. No contact, action necessary
301	Mr. Vaseem	7000/-	Direct billing

Fig 4.3 Ledgers

Ledger

A Ledger is a book in which the accounts of resident and non-resident guests are entered. In simple words, it's a grouping of guest accounts. This ledger aids in preparing the Profit and Loss account and Balance Sheet of a hotel.

(a) City Ledger: The City ledger is also known as the Non-guest ledger. It is the collection of non-guest accounts. If a guest account is not settled in full by cash payment at checkout, the guest's folio balance is transferred from the guest ledger to the city ledger in the accounting division for collection.

i. City Ledger could also include accounts held by: Local business people who are not resident in the hotel but who use the hotel facilities and services for entertainment or business meetings.

ii. Guests who walk out of the hotel without settling the outstanding balance. Walkouts are no longer resident so their account is transferred to the city ledger, till the account is settled or closed by writing off as bad debt, if the amount is overdue and not forthcoming for a long period.

iii. Guests who have sent prepayments to guarantee their bookings, but have not arrived or checked in. This amount is recorded in the city ledger and the account needs to be closed as per the terms of the reservation.

iv. Even a skipper's outstanding balance is transferred to city ledger with a hope that the amount may come through. Eventually if there was no trace of the guest the amount will be written off as a Bad Debt.

v. Guest ledger: Guest Ledger is a type of ledger that has the accounts of all the guests residing in a hotel. After the registration process of the guest is over, a guest folio is opened on his/her name to record all the purchases which he/she is making from the hotel. This ledger is also known as Transient or Room Ledger.

Guests who make appropriate credit arrangements at registration may be extended privileges to charge purchases to their individual account folios. Guests may also pay against their outstanding balance at any time during occupancy. Guest's financial transactions are recorded in guest ledger accounts to track guest account balances.

Some of the accounts of the resident guests may be settled by their company, travel agency or Airline Company. In this case, at the time of the guest's check-out, his signature is taken and the guest account is transferred from the Guest Ledger to City Ledger.

4.5 Visitor's Tabular Ledger (VTL)

VTL is a loose large sheet used in small hotels in which the daily guest transactions are entered. Whenever a guest is purchasing, the entry is made against each guest account in a VTL. Guest bill is made on the basis of VTL and hence it should be update.

Short Answer Type Question

1. What is a voucher?
2. What is a folio?
3. Expand is VTL?
4. What is Cash voucher?
5. What is Ledger?
6. What is Guest Ledger?
7. What is Master Folio?

Long Answer Type Question

1. Explain the use of paid out voucher with the help of a diagram of the format.
2. What are allowance vouchers? Explain with format.
3. What is folio? Explain various types of folio.
4. Define city ledger. What are the various types of accounts used in city ledger?
5. Explain the various types of Ledger
6. Write the various types of vouchers.

Cleaning Routines

OF HOUSE KEEPING

Structure

- 5.1 Introduction
- 5.2 Guest Room Cleaning
- 5.3 Maid's Cart
- 5.4 Public area cleaning

Learning Objectives

Are completing this unit, student should be able to

- Understand the procedure for cleaning an occupied, departure and vacant rooms.
- To understand about the maid's cart and supplies placed in.
- Plan the cleaning of public areas and execute the cleaning.

5.1 Introduction

Though a five star hotel looks elegant, luxurious and esthetic, it is the housekeeping department that is responsible for it. This department is not visible as the staff does not directly interact with the guest. The housekeeping department takes pride in maintaining the entire hotel spic and span, it is not only the rooms but also the public areas. Hence presenting a beautiful hotel to the guest is the motto of housekeeping.

5.2 Guest Room Cleaning

Cleaning of occupied rooms: Occupied rooms means cleaning the rooms which are held by the guest, the guest may or may not be in the room when the cleaning takes place. The following steps are followed while cleaning an occupied room

1. Be careful not to treat as rubbish something the guest may want again, e.g., a re-sealed, half-finished container of drink. If a bathroom glass is part filled with a dental solution, leave it.
2. Clean under all guest belongings and replace.
3. Tidy guest clothing, footwear as necessary: follow workplace guidelines and your own judgment of how much tidying to do.
4. Do not open drawers as guest would have kept his personal belongings.
5. In some hotels, beds are remade with clean linen each day; otherwise this is done every 2 to 7 days of a long stay (depending on prices charged/policy).
6. Clean the bathroom. Replace damp or soiled towels.
7. Top up supplies of soap, drink sachets, etc. Follow hotel policy on whether to replace partly-used soap.
8. Excuse yourself if guest returns and tell them that you shall return later to complete the room. Respect the fact that this room is the guest's temporary 'Home'.

9. Report to your supervisor if

- The guest is ill
 - The "Do not disturb" sign is still displayed in the afternoon.
10. Anticipate guest's needs like if you note that they have placed the spread on their bed-leave extra blanket etc

Some of the Don'ts

- Open drawers
- Touch money or valuables (if in doubt-ask your supervisor)
- Dispose of any newspapers or other items unless they are in the waste bin.

- Try on guest's clothing or experiment with perfumes etc.
- Answer the telephone (according to house policy)
- Use the guest room facilities, e.g. Toilet

Cleaning of Departure Room:

- Open the door as per opening procedure.
- Wide open the door. Park the trolley in front of door.
- Draw the curtains wide and switch off the lights in the Room.
- Check the lost and found entire room (if any) intimate to control desk and floor supervisor.
- Inform to the Room service to clear soiled food trays from the room.
- Check the job order in the room & bathroom intimate to control desk for maintenance work.
- Clear the soiled dustbins in the room.
- Do the bed making with fresh linen (bed sheets).
- Clean the bathroom as per procedure (with caddy basket)
- Replace the necessary room supplies.
- Do the dusting on end of the other end (entire room)
- Use the vacuum cleaner (or) dry top to clean the floor.
- Use semi wet mop and clean the floor.
- Have a last look and close the door firmly.

Cleaning a Vacant Room: A vacant room is one in which is clean and ready for sale.

A bedroom vacant for one or two nights: Checks dust, and flush toilets. If long term treat as for checkout and carry out the cleaning routine.

Cleaning a check out room: A check out or a departure room is a room from where the guest has checked out. It is dirty and not ready for sale. The following procedure is followed.

- Check the condition of the room.
- Check for pilferage and damage to hotel property.

- Check if the guest has left behind any of his belongings. This must be done as quickly as possible, so that possible action can be taken before the guest check outs.
- The room is thoroughly cleaned for the next guest. All used linen and supplies are removed and replenished.
- The W.C. is disinfected and a band indicating that it has been disinfected is slipped on to the W.C. seat.

CHAMBER MAID

A housekeeping staff normally responsible for cleaning of rooms and bed making.

Content of Guest Room

What are Fixtures?

In a room lighting, plumbing, book cases etc. that are attached to a real property in a manner that it becomes a part of property.

Furnishings and fixtures

Alarm clock radios	Draperies	Pillows
Armoires	Drapes	Signs
Ashtrays	Dressers	Roll-a-ways
Baby cribs	Hangers	Shower Curtains
Bed bolts	Headboards	Signage
Bed frames	Ice buckets	Sofas
Bedspreads	Ironing boards	Standing Lamps

Blankets	Irons	Table lamps
Carpet	Lamp shades	Televisions
Carpet pads	Luggage racks	Upholstery
Casters	Mattresses	Wastebaskets
Chairs	Mirrors	
Desks	Pictures	

Amenities and guest room and bathroom supplies

Bath mats	Laundry bags	Sheets
Body lotion	Laundry slips	Shoe mitts
Conditioner	Magazines	Shower curtains
Cotton balls	Matches	Slippers
Cotton-tip swabs	Mattress pads	Soap
Electric light bulbs	Notepads	Stationery
Glass ware	Paper coasters	Tissue dispensers
Guest directories	Pens	Tissue paper
Guest keys	Pillow cases	Toilet paper
Guest questionnaires	Postcards	Tooth brushes
Hairnets	Razors	Towels
Hangers	Robes	Tub mats
Ironing board pads	Sewing kits	Wash cloths
Key folders	Shampoo	Wastebasket liners

ROOM CHECKLIST:

An inspection checklist (or) a preprinted room inspection document for Hotel staff to set of standards and it is maintained by room supervisors.

MAID'S CART: INTRODUCTION

The maid's cart is a trolley meant to stock a given number of linen, supplies and equipment to service an allotted number of rooms. Each maid, after receiving her room assignment, should check her supplies against a standard checklist to avoid needless trips. The maid is responsible for the condition, cleanliness and appearance of her cart.

DESIGN OF A MAID'S CART

The lower shelf of the cart is used to carry heavier items like mattress protectors, bed sheets and night spreads. The middle and top shelves stock pillow slips and bath linen. Linen will include:

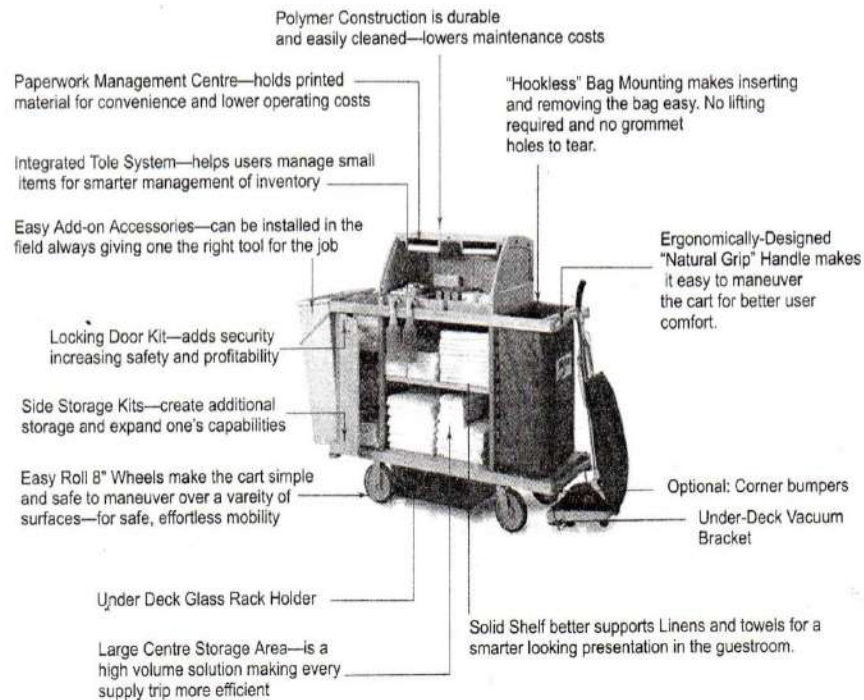
<i>Linen Items</i>	<i>Stocking Standards</i>	<i>Standard Dimensions</i>
Night spreads	1 per bed	24" x 108"
Bed Sheets	2 per bed	24" x 108"
Pillow Cases	2 per bed	24" x 32"
Bath towels	1 for each guest	25" x 45"
Face towels	1 for each guest	9 ½" x 10 ½"
Hand towels	1 for each guest	6" x 7 ½"
Bath mats	1 for each bathroom	24" x 42"
Mattress protectors	Few to replace as necessary	

These items should be arranged in neat stacks. The top tray should be arranged with the following **guest supplies**:

<i>Rooms</i>	<i>Bathroom</i>
Water tumblers	Gargle tumblers
Service Directory	Shoe mitts
"D-not-Disturb" cards	Soaps/Soap dish
Guest Stationery	Toilet rolls
Ball Point Pens	Toilet tissues
Bibles / Gita Koran	Shower Caps
Ashtrays	Soap Suds
Match boxes	Shampoo bottles
Laundry Forms	Disposables bags
Clothes hangers	Vanity Kits
Candle stands	Vanity display
Scribble Pads	Baskets
Guest house rules	Water tumblers
Guest comment forms	Tent cards for the bathroom
Sewing kits	
Breakfast knob cards	
Plastic shirt bags	
"Polish-my-shoe" cards	
Yellow Pages Directory	
Tent cards for promotions	
Room service menus	
Room service Beverage List	

These supplies are procured by the room attendant from the floor linen room. After stocking the cart, the room attendant proceeds to the section of rooms on the floor that are assigned to her. Maid's carts are placed along the wall of the corridor on the side of the room to be serviced. The cart should be positioned so as to service a minimum number of two rooms without much movement of the room attendant. This would minimize trips of the room attendant to the cart thereby reducing the fatigue factor.

When selecting maid's carts, consideration is given to it being lightweight to ensure easy mobility by the maid. Heavy carts also pucker corridor carpets. The wheels of the cart must be of sturdy construction and should be oiled well periodically to ensure smooth movement. The diagram below gives some of the consideration shown by the designers to make the room attendant's job easier.



5.3 Public Area Cleaning

Public areas in a hotel are those areas that are common to all the guests' whether staying at the hotel or visitors to the hotel. Nothing says more about a hotel's standards than the quality of cleanliness of public areas. As most of the guests spend their time in the hotel in public areas it is more appealing to see attractive and beautiful surroundings.

Public areas consist of Lobby, Restaurants, bar, elevators, stairs, swimming pool, gym, banquet halls, lawns, corridors etc.

Public area cleaning

1. Food and Beverage cleaning
2. Lobby and other Public Areas cleaning
3. Front Entrance cleaning
4. Pest control
5. Public Toilets cleaning

Weekly Cleaning Procedures



Fig 5.1 Spot cleaning the carpeting will keep it looking nice until the next full cleaning



Fig 5.2 Scrubbing and polishing the hard floor surfaces should be done monthly or semi-annually, depending on traffic

1. Food and Beverage outlets cleaning

The cleaning of food and beverage areas is mostly a partnership between housekeeping and food service personnel, with the managers of each section agreeing on their cleaning responsibilities areas like coffee shop, bar, banquets & restaurants.

For example, perhaps within a lounge bar the food and beverage personnel would be responsible for maintaining the lounge tables, cushions, sofas and bar area, whereby the housekeeping personnel would vacuum, polish brass fixtures, clean windows and maintain plants. The importance is not who does what as long as one department is given responsibility.

Most food and beverage cleaning is carried out at off peak or night time, when there is least demand for service. It's important for the executive housekeeper to monitor special events around the hotel (conferences and functions, as this creates more demand for cleaning.

2. Lobby and other Public Areas cleaning

Within these areas duties include vacuuming, polishing floors, organizing cushions, wiping tables, polishing mirrors, cleaning plants, emptying bins and ashtrays and polishing brass fittings, elevators and staircase should clean every time because guest movement is more on these areas.

3. Front Entrance cleaning

This area is 'the first impression and the last impression for most visitors and so it is imperative that it is clean and presentable at all times. The appearance of the approach and entrance is also important and so wiping hand smudges from doors, sweeping leaves and removing debris are some of the tasks required to be carried out.

4. Pest control

An ongoing, proactive pest control program is imperative in order to maintain customer satisfaction and a healthy reputation."The biggest pest threats to hotel accommodation areas are bedbugs and other biting insects. "

5. Public Toilets (or) rest room cleaning

Customers can have a lovely meal in the restaurant but if the toilet they have to use is unclean it can have a negative impact on the whole visit. Refilling toilet rolls, paper hand towels and soap dispensers, emptying bins, cleaning of toilets, hand basins and mirrors and regular mopping are just some of the checks required throughout the day.

Short Answer Type Questions

1. What is departure room?
2. What is vacant room?
3. What is rest room?
4. What is occupied room?
5. What is housekeeper's trolley?
6. Who is chambermaid?
7. What is room check list?
8. What are fixtures?
9. Mention any 4 supplies placed in guest room.
10. Write about pest control.

Long Answer Type Questions

1. How do you clean a vacant room, explain the steps.
2. What is the procedure to clean a departure room?
3. List the various areas in public areas and explain the procedure to clean them.
4. Write the cleaning procedure of occupied room.
5. Mention the types of amenities and guest room supplies.
6. List the various types of fixtures and furnishings are placed in guest room.
7. Draw the format of Maid's cart and supplies placed in the trolley.
- 8.

UNIT

6

Housekeeping Supervision

Structure

Introduction

Role of housekeeping supervisor

Duties and responsibilities of Housekeeping supervisor

Learning objectives

After studying this unit, students should be able to

- Understand the role played by housekeeping supervisor
- Understand the duties and responsibilities of supervisor in housekeeping

6.1 Introduction

Housekeeping department is responsible for cleanliness and esthetic upkeep of the hotel. Supervisor in housekeeping should have high degree of eye for detail. It is the unique quality of the supervisor which helps him/her deliver a good hotel to the guest. More ever a supervisor should have a strong control over the housemen, should be able to motivate the staff and get the work done and meet the deadlines on time.

6.2 Role of Housekeeping supervisor

A housekeeping supervisor plays a vital role as he/she heads a team of housemen. The supervisor should be a good leader and team player. It is the efficiency with which the supervisor plans and executes the work which helps him achievesuccess.

The nature of housekeeping job is physical, most of the housemen get tired and if consistently being pressurized to complete the task will feel dejected and leave the job, hence a high rate of employee turnover is seen in housekeeping department. The supervisor should exhibit good amount of tact, responsibility, camaraderie, goal orientation in leading a team of housemen.

6.3 Qualities and Responsibilities of Housekeeping

The housekeeping supervisor shoulders great responsibilities to showcase the activities of the department and plays a great role in successful functioning of the department.

Qualities: Team Leader Role, Attitude, Initiative, Cooperation, Honesty.

There are 4 supervisors in housekeeping based on the responsibility they handle

- Floor supervisor
- Public area supervisor
- Control desk supervisor
- Linen room supervisor
- Night supervisor

Floor supervisor

Floor supervisor will be responsible for inspection of rooms, working areas and hotel premises and also maintains the room attendants.

- Checks staff on duty
- Redeployment
- Supervision of staff
- Checks section/floor of rooms by filling in the room inspection list
- Conducts induction and general training
- Orders and issues cleaning materials
- Linen checks
- Maintenance checks
- Liaises with reception on guest arrivals and departures

Floor Pantry: Each floor will have a floor pantry to keep the par supplies, linen, stationeries & supplies to place in guest rooms.

Public area supervisor

- Inspects public areas cleaned to see whether cleaning is adequate, supplies in public areas meet the standard and needs for immediate repair is reported.
- Makes maintenance report for restaurant or item in need of repair and follows up to make sure work is completed satisfactorily.
- Supervises cleaning of public areas, corridors and offices
- Trains cleaners, advises executive housekeeper if performance is not satisfactory.
- Liaises with other departments such as food and beverage department regarding the cleaning schedule.

Control desk: It is central nervous system of housekeeping department.

All the information is received and sent to the various areas in the hotel.

1. The role of the housekeeping control desk is to facilitate communication to various parts of hotel. This role can be exercised in many forms which are as follows.
2. The control desks receive messages from in house guests over the telephone apart from maintaining the intra and inter –departmental channels of communication. Hotel room directories provide the control desk extension number to the guests which they can use if they require housekeeping services.
3. The control desk attendant receives all the message of the guests such as a request for extra blankets, baby-sitter services, which she transmit to the concerned floor supervisor for further action.
4. Front office also alerts the desk attendant about the expected and existing crews in the house. So that the rooms can be make ready for the new arriving crew after the departure of existing crew in a very short period of time.
5. In most of the hotels, this is the area where housekeeping employees; report for work; collect keys and signing for them; pursue the log book get their briefing and at the end of their shift, report back to.
6. It is the control room attendants who receives departure room numbers from the front office and transmits them to the appropriate floor supervisor.
7. The floor supervisor informs the desk attendant once rooms are cleaned and ready for sale and this is updated in the computer so that front office can easily obtain the information of the status of room.

8. The main physical feature visible in most control desk is the key cabinet. On the wall, where all floor masters keys and store keys are kept under lock and key themselves.

Linen room supervisor

Receive records and sort out clean uniform from laundry and arrange them properly on the shelves and racks

- Issue linen to Food & Beverage outlets as per requisitions
- Issue uniform to all employees and maintain uniform records
- Check all uniform for any loose buttons and hems and give to the tailor for mending
- Ensure a clean and tidy linen room at all times and report if any items have been damaged (linen as well as uniforms)
- Ensure that linen and uniforms are properly stored and recorded
- Report to Superiors in case any uniforms need to be discarded or replenished
- Ensure that the proper procedure is followed when linen or uniform needs to be discarded
- Ensure that all uniforms are ready for special events as well as for any seasonal events

Floor Linen: Bed Sheets, Pillow Covers, Bath Towels, Face Towel & Bath Mat

Night Supervisor:

The night supervisor is solely responsible and accountable at night for smooth housekeeping through her night shift and has larger decision-making authority than other supervisors as she is the housekeeper for the night. The night supervisor duties are special in a manner that would require him or her to be able to handle any aspect of housekeeping at night which includes

- Desk control operations,
- Issue of linen and uniform in an emergency,
- Activity includes guest rooms, public areas,
- Linen and uniform rooms.

Summary

The housekeeping supervisor is the whole and sole of the housekeeping department. As the supervisors are directly in contact with the room boys, they exercise greater control, motivation, guidance, direction on the boys. The supervisors they themselves are highly confident, motivated and goal oriented, hence the department will be able to achieve high standards for the hotel.

Short Answer Type Questions

1. Who is floor supervisor?
2. What is control desk?
3. What items come under floor linen?
4. What is floor pantry?
5. Who is Night Supervisor?
6. What is Linen room?

Long Answer Type Questions

1. What is the role of supervisor in housekeeping department?
2. Write the duties of floor supervisor.
3. Mention the duties and responsibilities of public area supervisor.
4. List and describe the various duties performed by linen room supervisor.
5. Explain the various duties of control desk supervisor
6. List and explain the important qualities required for Housekeeping supervisors.

Different surfaces & fabrics used in Hotels

Structure

- 7.1 Introduction
- 7.2 Wood and laminates
- 7.3 Stone and ceramics
- 7.4 Leather, rubber and Rexene
- 7.5 Metals and glass
- 7.6 Constructions of Cloth
- 7.7 Uniforms
- 7.8 Upholstery
- 7.9 Soft Furnishing
- 7.10 Laundry Process

Learning Objectives

After studying this unit, the student will be able to

Understand about various types of surfaces

Different types of leather, rubber, Rexene, metals and glasses used in hotel.

To understand about construction of cloth, uniforms, upholstery, Soft Furnishing & laundry process.

7.1 Introduction

There are various types of surfaces that are used in a hotel, some surfaces give a rough appeal, some are very smooth, and some are delicate and fragile. Based on the type of surface used for a particular purpose the care and cleaning methods are being deployed. The chapter details on the cleaning procedures adopted for various surfaces and to know about different fabrics used in hotel.

7.2 Wood and laminates

Laminated wood floors do not use any real wood during the manufacturing process. They are topped with a photographic simulation of real wood to mimic different types of wood floors.

Laminated wood floors require different care than other hard floors, including real wood floors. While they are generally tough, you can still unintentionally damage them with scratches and marks, or by cleaning them improperly.

Dust mop or vacuum with hardwood- floor/soft-brush attachment Cloth or mop Dust mop the floor or vacuum using a soft-brush or hardwood-floor attachment.

There are many types of dust mops available, including microfiber dust mops that collect and attract dust, hair and other debris from your laminate floors.

Mop the floor with a damp — not wet — cloth or mop for areas that do not need cleaner. General damp mopping without a cleaner often wipes away dirt and other items from your floor.

Use a laminate-wood-floor cleaner with the cloth or mop only when necessary. Wipe up liquid spills immediately with a cloth.

7.3 Stone and ceramics (Hard Floors)

Ceramic Tiles

Ceramic tiles are made of clay and fired at high temperature. They are hand or machine made, glazed and unglazed. Shapes of the tiles may be square, rectangular or hexagonal. Tiles are waterproof and impervious to cleaning liquid. They are commonly used in bathrooms, kitchens, laundry, canteens, bars etc. These floors are hard, noisy and tire the feet. Ceramic floors should not be polished since that would make it dangerously slippery.

Mosaic

They are made of glass, silica and clay. They may be set directly on the floor or made as tiles and laid on a sub floor unaffected by pests or fungi and the glass can be retained for a long time.

Terrazzo

It is made up of small chips of marble and bound to give an attractive look.

Marble

Marble, Terrazzo and granite come in many colors and give a grand finish to surfaces. They are, therefore, preferred for counter tops, decorative walls, and select lobby floors. They come in glossy finish or mat finish to suit the décor style. They need less care to retain their gloss. They are however, expensive as they have to be quarried and finished in size and face for commercial use.

7.4 Leather, rubber and Rexene

Rubber floors are usually made by combination of natural and synthetic rubber. They may be laid in sheets or tile form. They may be colored and mottled with inlaid patterns. The floor is hard wearing, resilient, quiet and waterproof. It is non-slip and may be grease resistant. Damage may occur due to alkalis, acids and spirits. They are not affected by mould, bacteria and pest infestation. It is commonly used in kitchens, bathrooms, health clubs, near swimming pool etc., in hotels.

Cleaning Instructions

1. Vacuum the piece of furniture thoroughly, being sure to use the soft brush attachment (leather scratches easily). If the suction on your vacuum is too strong, consider using a smaller hand held vacuum with less power to prevent leaving marks on the leather.
2. Mix a few drops of liquid soap with about a quart of distilled water, mixing until suds form.
3. Test a small, inconspicuous area of the furniture first.
4. Dip one of the rags in the soapy water and wring out thoroughly.
5. Working one section at a time, wipe the surface of the furniture with the damp rag.
6. Dip a separate rag in clean distilled water (no soap), wring thoroughly, and wipe away the soap residue.
7. Dry thoroughly with the third rag.
8. Buff the surface with the fourth clean rag to restore luster.
9. Treat the surface with leather protector/conditioner as per product instructions.

Leather Furniture Stain Removal

For leather Remember to Always test a small, inconspicuous area of the furniture first before using any of these methods.

Ink stains: Dip a cotton swab in rubbing (Isopropyl) alcohol and rub over the ink stain. Dry with a blow dryer set on its lowest setting.

Dark stains (i.e. food, blood, etc.): Make a paste of one part cream of tartar with 1 part lemon juice. Rub this paste on the stain and leave it set for 10 minutes. Remove the paste with a damp rag and moisturizing soap, as described above for general cleaning. Buff the leather dry with a soft cloth.

Grease stains: Simply wipe stain from the leather using a dry cloth. Do not apply water to the grease stain.

Newsprint: Newspapers left on leather furniture can cause a newsprint ink stain. Spray the stain lightly with aerosol hair spray and then wipe with a soft cloth.

7.5 Metal and glass

Metals are hard and can sustain pressure while cleaning but glass being fragile gives up on being trusted upon. Hence depending on the surface to be cleaned the pressure tactics applied change.

All these metals are used in various surfaces in hotels.

Metals: Metals mostly used in the hotel are aluminum, steel, brass and copper.

Aluminum surfaces have to be dry dusted, if badly stained the dust has to be removed with a damp cloth. The surface has to be dried and metal polish can be used to add shine.

Steel if left for a long time exposed to water or even damp weather, will rust and crumble down to powder. This can be prevented by routine checks. Always ensure that steel surfaces are painted preventing oxidation and rusting.

Brass surfaces tend to oxidize and develop black texture on the surface. This can be prevented by proper care. Brass surfaces have to be regularly cleaned and a coat of brass (Bras cleaning agent) has to be applied and when rubbed the surface will shine.

Copper, of late the use of copper as a surface has almost stopped. Copper surfaces have to be away from dust and dry heat. Direct exposure to sunlight will make the surface dull and the luster is lost.

Glass: Glass is one of the best and most widely used surfaces in a hotel. The best character of glass is that being transparent and translucent. Glasses are mostly used for windows, doors, table top, decorative pieces etc. As glass is fragile utmost care has to be taken in cleaning the glass. The following procedure is adopted in cleaning glass surface

- i. Dry dust to remove superficial dust.
- ii. Any hard stains can be removed with detergent and slight scrubbing.
- iii. After the surface is dry, clean the surface with glass cleaners such as Prill or Colin and finish up with a paper. Paper is used as cloth leaves lint.

7.6 Construction of cloth

Cloth is a very important material which is used for various purposes. In a hotel linen is mostly used for bed sheets, curtains, towels, table cloths, napkins etc.

Textiles are important for everyone. It is used for covering body, for warmth or coolness, personality enhancement and sometimes to display one's status in the society. From the wholesale textile manufacturer and merchant to the retailer and the end- user, the customer, everyone consumes textile. Not only those who are in this direct trade are related to this product but there are certain industries which are indirectly associated with textile. Automobile industry is a good example of this type of industry which uses textile in various forms. Others who use textile in one or the other form may include designers, interior decorators, craftsperson's, advertisers using hoardings and banners, painters etc.



Fig 7.7 Uniform

7.7 Uniforms

Uniforms are very important in hotels. Uniforms are issued to the staff based on the department and the nature of work and job title. Uniforms are worn for the following reasons

- Uniforms represent a particular department and the nature of job. Ex: chef coat, chef cap for kitchen staff. White shirt, black trouser, and a black bow for stewards in the restaurant.
- Uniforms facilitate the staff while performing their duty and protect them during work.
- Well laundered and crisp uniform makes the staff look more bright and confident.
- Uniforms create a sense of professionalism among the staff.

Care of uniforms

- Uniforms should be tailored and fit exactly the person wearing it.
- Uniforms are maintained by the uniform department, which in turn is a part of linen room.

- At the beginning of the shift uniforms are issued to the staff which are crisp and clean by the uniform room.
- At the end of the shift the uniforms are returned to the uniform room, if the uniform is soiled it is sent to the laundry, if not it is stored properly so that it can be reissued to the staff.
- Uniforms are checked from time to time for damages, tear, missing of buttons, hooks etc.

The types of Linen is used in Hotels are staff uniforms.

1. Room Linen: Bed sheets, Pillow Covers, Towels.
2. F & B Linen: Restaurant, Bar, Banquets and Room Service Linen

7.8 Upholstery

What is Upholstery?

Means Soft padded textile covering that is fixed to furniture and sofas.

Upholstered armchairs and sofas are comfortable and attractive additions to any hotel. When neglected, however, upholstery can quickly turn into next year's yard sale's featured item. Help the upholstered furniture in your dining room, living room, family room and bedroom last for years and years, by getting to know the ABC's of upholstery preventative and corrective care.

Stop Damage before it Occurs

Protect Upholstery from: Sunlight, News paper Ink, Fabric Dyes, and Paints & Polishes.

Allow common sense to dictate what you should keep from harming your upholstered furniture. Sunlight will fade upholstery, so keep your upholstered couches, armchairs and ottomans away from the window, or else well-shaded. Put your newspaper on a coffee table or side table, to avoid ink damage to your upholstered furniture.

Other items that can cause permanent damage include dark-colored sheets and blankets, for when damp or wet; the dark dyes on these fabrics can rub off and ruin your upholstery. Finally, paints and polishes, such as nail or shoe polish, should never be used on upholstery. Make sure to cover your upholstered furniture when painting your living room, dining room, or bedrooms!

7.9 Soft Furnishing

Soft furnishings include fibers that are used for curtains, loose covers, cushions, bedspreads and quilts. They contribute greatly to the appearance of the room by bringing to it color, pattern and texture. Some articles in addition provide warmth and comfort. Each article is subjected to variable amount of wear and tear.

Curtains

Windows dressing is essential to enhance or obscure the shape of the window and improve the style and décor of the window and room. It provides privacy and thermal insulation, controls light, and helps in sound reduction. This can be achieved by the use of curtains. The line, color, pattern and texture contribute to character and atmosphere of the room. Selection of fiber should be done with regard to its resistance to fading, abrasion, drape, dimensional stability and flame resistance. The exposure to sunlight and airborne soiling should be considered. Lining of curtains helps to reduce damage of fading and rotting. Curtains are subjected to abrasion by being pulled and drawn, brush against, rub along a floor or window frames and being laundered. The abrasion resistance depends upon the type of fiber selected and fabric construction. Loosely woven material tends to lose drape and constant hand drawing may cause loss of shape.

Cushions

It may be used to increase the comfort of chairs and sofas and provide color pattern and texture to the room. They may be fitted to form a seat or a back; or may be used loosely as scatter cushions. Shapes may vary from square, rectangular, circular, triangular, and semi-circular to bolsters, which are elongated pillows. They will be filled with down, feathers, kappa, rubber, polyfills, urethane foam, thermo coal ball, silk cotton, foam plastic etc.

Care and maintenance

Cushions require constant attention

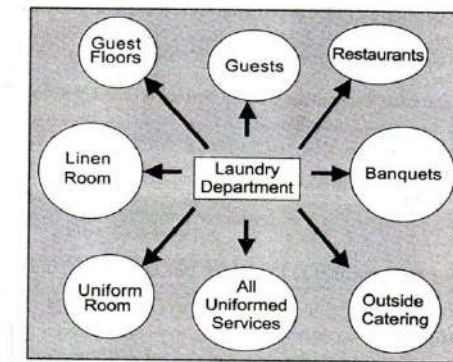
1. Shake and tidy frequently
2. Repair when necessary
3. Brush and suction clean regularly
4. Remove covers and wash or dry clean.

7.10 LAUNDRY WASHING PROCESS

INTRODUCTION

The Laundry Department is critical to the success of the Housekeeping Department. It is responsible for washing the tons of soiled linen and uniforms that are generated daily. The supply of fresh linen is crucial to be able to make rooms available for sale or for food and banquet outlets to be ready to sell their food and beverage services. In other words, the revenue generating capacity is greatly enhanced or impaired by the efficiency of the laundry services.

Figure 27.1 gives an idea of what all depends on the Laundry:



Functions Dependent on the Laundry

ORGANISATION STRUCTURE

The Laundry Department reports to the Executive Housekeeper administratively. For technical purposes, it is headed by a Laundry Manager supported by specialist supervisors. The department has the following specializations.

Sorting, Marking, Packing Section

This is where guest garments are received and sorted according to the laundry treatments required:

1. Dry cleaning and washings;
2. Degree of soil;
3. Type of fabric and
4. Urgency of delivery.

They are labeled for identification before laundering and later packed and delivered to guest rooms.

Washing and Dry Cleaning Section

This is where linen and clothes are dried. There is a specialized machine of towel – like Laundry to retain their softness. Most washing machines nowadays have drying cycles too.

Tumbler Operation Section

This is where linen and clothes are dried. There is a specialized machine for towel-like Laundry to retain their softness. Most washing machines nowadays have drying cycles too.

Ironing Section

This is area where linen and clothes are ironed. Specialized presses are used for different types of clothes, such as:

Hot-Head Press

This is where two flat surfaces press the garments. The top has a hot metal surface while the bottom is padded to absorb the heat and press.

Steam Press

It adopts the same principle as the hot head press except that the top surface is perforated through which steam passes out.

Shirt Press

These are special presses to give men's shirts their proper contours and creases-especially sleeves, shoulders and collars.

Hand press

They are like domestic presses used for light garments. Laundries can have heavy duty presses for stubborn creases and materials.

Flat Irons or Calendar Machines

They are used for sheets, pillow cases and towels. A flat iron consists of cylindrical padded rollers through which steam is passed and linen pieces are roll ironed.

ORGANISATION STRUCTURE

The Laundry Department reports to the Executive Housekeeper administratively. For technical purposes, it is headed by a Laundry Manager supported by specialist supervisors. The department has the following specialisations:

Sorting, Marking, Packing Section

This is where guest garments are received and sorted according to the laundry treatments required:

1. Dry cleaning and washing;
2. Degree of soil;
3. Type of fabric; and
4. Urgency of delivery.

They are labelled for identification before laundering and later packed and delivered to guest rooms.

Washing and Dry Cleaning Section

This is the section that washes linen, uniforms, and guest garments.

Tumbler Operation Section

This is where linen and clothes are dried. There is a specialised machine for towel-like Laundry to retain their softness. Most washing machines nowadays have drying cycles too.

Ironing Section

This is the area where linen and clothes are ironed. Specialised presses are used for different types of clothes, such as:

Hot-Head Press

This is where two flat surfaces press the garments. The top has a hot metal surface while the bottom is padded to absorb the heat and press.

Steam Press

It adopts the same principle as the hot head press except that the top surface is perforated through which steam passes out.

Shirt Press

These are special presses to give men's shirts their proper contours and creases—especially sleeves, shoulders and collars.

Hand Press

They are like domestic presses used for light garments. Laundries can have heavy duty presses for stubborn creases and materials.

Flat Irons or Calendar Machines

They are used for sheets, pillow cases and towels. A flat iron consists of cylindrical padded rollers through which steam is passed and linen pieces are roll ironed.

Summary

Hotels use different surfaces in different places. As different surfaces exhibit various levels of luxury, wood, ceramic tiles, metal and glass surfaces are used. The cleaning of these surfaces is a big challenge as the characteristics of these materials is different. Hence by understanding the maker of the surface a perfect cleaning agent can be used. The best way of maintaining surfaces is to prevent damage, rather than rectifying a spoilt surface.

Short Answer Type Questions

1. What are Dark Stains?
2. Mention 2 characteristics of ceramic floor.
3. What are the don'ts in leather cleaning?
4. List four areas where glass is used as a surface.
5. What is the use of rubber in hotels?
6. What is Terrazzo Floor?
7. What is Upholstery?
8. Define Linen.
9. Define the Term Soft Furnishings
10. What are the types of Linen used in Hotels

Long Answer Type Questions

1. Explain the care for wood laminates.
2. Explain about the various types of metals used in hotels.
3. Write about the hard floors.
4. Explain the cleaning procedure of Glass.
5. Write the cleaning procedure of Leather surface.
6. Write about the washing processes of Laundry.
7. List and Explain about the soft furnishings.
8. What are uniforms and describe the care of uniforms.

UNIT 8

Safety and Security

Structure

- 8.1 Introduction
- 8.2 Theft by employees of the hotel
- 8.3 Procedure followed during fire in the hotel.
- 8.4 Bomb Threat
- 8.5 Types of keys used in hotels
- 8.6 First aid

Learning Objectives

After studying the unit, students should be able to

- Define the various emergency procedures in hotels
- Understand the importance of training to handle fire, theft etc.
- Relate the illness of the guest and take immediate measures (first aid) before taking the guest to the doctor.

8.1 Introduction

Safety and security are the most important aspects that the guest considers while choosing a hotel to stay. Hence hotels now days have raised the security level of the hotels, this in turn builds confidence among the guests and also the employees feel safe to work. The chapter discusses some of the

Important precautionary measures adapted by the hotels in order to carry on safe business.

Safety and Security

Theft

Theft of articles is a huge threat to the hotel. It may be guest belongings or hotel belongings. The people involved in theft may be the hotel staff, guest staying in the hotel or outside people entering into the hotel.

8.2 Theft by employees of the hotel

1. Great amount of care is taken to see that the staff do not steal anything from the hotel, but it is human tendency to take chance. For the same reason hotels have stepped up security to safeguard the hotel property. Some of the measures taken by the hotels to prevent theft are

- (a) Check the credentials of the staff during recruitment.
- (b) Train the staff towards being loyal and honest.
- (c) Awarding and rewarding honest employees.
- (d) Maintain registers and surveillance cameras to record movement of staff in the hotel.
- (e) Provide safe deposit locker for all the guests in their rooms to secure their valuables.
- (f) Preventing hotel staff from carrying large amount of cash on them while on duty.
- (g) Restricting the issue of room key cards to the employees.
- (h) Check and frisk the hotel staff while they leave the hotel after the duty.

2. **Theft by the guests:** it may be the guest staying in a hotel who indulges in theft, a great care and observation on the part of the hotel security is required to prevent such acts by the guest.

Some of the precautions taken by hotel to prevent theft by guests are

- (a) All the guests staying in the hotel are requested for their personal identity.
- (b) Any suspicious movements of the house guest are observed and immediate action taken.

- (c) Any unauthorized movement is severely condemned and auctioned upon.

8.3 Procedure to Be Followed During Fire in the Hotel

It is very uncertain that high rise buildings and complexes have a threat of fire accidents. Several precautionary measures will be taken to see that fire does not happen, but due to obvious reasons sometimes hotels experience fire accidents. Fire accidents prove fatal if not attended immediately, not only property but also life of guests and staff can be at stake. Every staff working in the hotel is trained in fire fighting.

The following is the procedure followed during fire accident in a hotel

1. As soon as a fire is noticed the staff should not panic, he/she should inform the immediate senior.
2. The telephone operator is informed about the fire, so that the operator will inform the required managers and further action on their guidance.
3. The general manager should be in the lobby and very much reachable for all the people required for any guidance.
4. Strictly, elevators should not be used during the fire, as it can be more disastrous if the lift gets stuck with the people inside.
5. If evacuation is ordered, the same should be informed to the guest promptly.
6. The staff should reach the guest and help them in guiding the way during evacuation.
7. The priority should be in the following manner while saving:
 - (a) The guest in the hotel
 - (b) Staff of the hotel
 - (c) The hotel property.

8.4 Bomb Threat

Define Bomb Threat:

A threat to detonate an explosive (or) incendiary Device to cause property damage, death (or) injuries, whether (or) not such a device actually exists.

When faced with a bomb threat, the primary concern must always be the safety of personnel. A comprehensive threat response policy is required to ensure the maximum margin of safety of all persons. This section has been prepared with this most essential criterion in mind.

In the event of a bomb threat, if evacuation is initiated, the exit routes and assembly areas should be searched prior to vacating the premises. Personnel cannot safely re-occupy the building and resume normal activities until a search has been conducted. These processes require a procedure with logical, chronological steps.

Bomb Threat Reception

Bomb Threat Check List

Instruction:

Be courteous, listen, and do not interrupt the caller's message. Do not hang up. Signal to someone (by a prearranged signal) to **call 911 and *General Services Division (GSD) at 444-3060. After caller hangs up, do not put handset back on the receiver.** Gather as much information as possible then bring this form with you when you evacuate the building.

DATE: ____/____/____ CALLBEGAN: ____ a.m. /p.m. CALL ENDED: ____ a.m. /p.m.

Caller's Exact Words:

Questions To Ask Caller:

- When is the bomb going to explode?
- Where is the bomb now?
- What type of bomb is it?
- What does it look like?
- Did you place the bomb & why?
- What is your name and call back number?
- Where are you?

Try to Determine the Following

Caller Is: _Male_Female_Adult_Juvenile_Child (age/years):

Voice: _Loud_Soft_Low_High_Raspy_Pleasant_Intoxicated.

Familiar Voice: _____

Other (describe): _____

Accent: __Local__ Regional (describe): _____

Foreign (country/region): _____

Speech: _Fast_Slow_Distinct_Distorted_Stutter_Nasal_Lisp

___Excellent_Good_Fair_Poor_Foul

___Other (describe): _____

Manner: _Calm_Angry_Rational_Irrational_Coherent_Incoherent

___Deliberate_Emotional_Righteous_Laughing

___Other (describe): _____

Background

Noises:

___Traffic_Trains_Planes_Street_Voices_Music_Party_Bedlam

___Animals_Office Machines_Factory Machines_Quiet

___Other (describe): _____

IMMEDIATELY AFTER CALL IS TERMINATED:

- ▶ Do not put handset back on the receiver. Use another phone to call 911 & *GSD (444-3060).
- ▶ If you have a display phone, write down what is displayed for the incoming call.
- ▶ Initiate your agency's Emergency Action Plan and Bomb Threat Guidelines.
- ▶ Your name (print): _____
- Contact Number: _____ Position/Title: _____
- ▶ Phone number where call was taken: _____
- ▶ Location where call was taken (address, building name, room number, etc.): _____

Bomb threats are often transmitted by phone. The person receiving the call should be prepared to obtain precise information, including.

- The time the call was received and on which telephone number or extension.
- The exact words of the person making the threat
- Indicate whether it was a male or female voice and an approximate age.
- Note any accent or speech impediment or slurring of speech which could indicate intoxication or an unbalanced condition.

- Listen for the presence of any background noises such as traffic, music, or other voices indicate if the voice is familiar.

The person receiving the threatening call should be prepared to ask the caller certain questions if the information has not been volunteered.

- Where is the bomb?
- When is it going to explode?
- What does it look like?
- What kind of bomb is it?
- Why did you place the bomb?
- What is your name?

The caller may provide specific information by answering these questions.

Often the type of person making a threat of this nature becomes so involved that they will answer questions impulsively. Any additional information obtained will be helpful to police and explosive technicians. The Bomb Threat Checklist Report should be kept near your phone to assist you in recording this information.

Action to be Taken

The employee receiving the call will notify his/her manager/supervisor immediately and provide a completed Bomb Threat Checklist Report to him/her, if their manager/supervisor is not available, contact the first available manager.

Senior Management will

- Proceed to emergency Response Room, or other Designated Area, to co-ordinate emergency efforts
- Notify the police - Call 102
- Uniform Police Officer(s) will be dispatched to the scene
- Initiate the search procedure on direction of police
- Initiate evacuation on direction of police (evacuation will be in accordance with the Fire Plan)

Notification to police should be prompt, and include as much detail as possible. The person who received the threatening call should be available immediately for police interviewing.

Search Procedure

Police cannot conduct a proper search of your premises. Co-ordination of employee's response is essential. Management staff and volunteer personnel will be designated responsibility for searching a specific area including washrooms and meeting rooms, etc. The Emergency Response Room (General Managers Office) will be specified as the control centre. A printed floor plan should be available to assist the search coordinator. As each area is searched, it must be reported to the designated Emergency Response Room and crossed off the floor plan. Senior Management in the designated Emergency Response Room will then determine if the search has been completed.

Areas that are accessible to the public require special attention during a search, and may be vitally important if an evacuation is to be conducted.

During the search procedure the question often arises, "What am I looking for?" The basic rule is look for something that does not belong, or is out of the ordinary, or out of place. Conduct the search quickly, yet thoroughly, keeping the search time to a maximum of 15 to 20 minutes. Both the interior and exterior of the building should be searched. If an unidentified or suspicious object is found, **do not touch it.**

8.5 Types of Keys used in hotels

1. Guest Room Key's
2. Master Keys
3. Grand Master
4. Floor Supervisor Key
5. Housekeeping Staff Key

Guest Room Key

The hotel guest room key is normally issued to open only one room for which it was intended, viz. individualized key for each lock. If the guest room lock is in shut-out mode the guest room key can neither open it nor lock from outside of the room.

Master Key

A master key is designed to open a set of several locks. These locks also have keys which are specific to each one (the change key) and cannot open any of the others in the set. Locks which have master keys have a second set of the mechanism used to open them which is identical to all of the others in the set of locks.

For example, master keyed pin tumbler locks will have two shear points at each pin position, one for the change key and one for the master key.

Grand Master

Key operates all locks in the Hotel including laundry and linen rooms.

The emergency key opens all guestroom doors, even when they are double locked. It can be used, for example, to enter a room when the guest needs help and is unable to reach or open the door. The emergency key should be highly protected and its use strictly controlled and recorded; it should never leave the property. One procedure for emergency keys is to have them locked in a safe or safe deposit box and signed out by the individual needing one. The log should be dated and signed by the individual taking the key.

Floor (Supervisors) Master Key

Key operates all sections on the floor/ floors supervised by the particular supervisor.

Housekeeping Staff Key (section key)

Key operates all rooms serviced by particular room maid or housekeeping staff.

Important Key Control Procedures:

- Security of keys is essential from the moment they arrive on site.
- Keys should be stored separately and securely.
- No unauthorized person should be allowed access to any key, either to examine or handle it, since a photograph or impression can be taken in few seconds and duplicate subsequently made.
- Keep a log book of all keys signed out.
- Establish protocol for distribution of keys.
- Use keys that do not identify the property's name, address, logo, or room number.
- Perform an annual key audit
- When keys are lost or stolen, the locks should be changed or rotated to another part of the property.
- Authorized employees should remind guests to return keys at check-out.

- The loss or suspected compromise of a key should be reported immediately and, after due investigation, a decision be made as to whether or not the lock should be changed.
- Place well-secured key return boxes in the lobby, at exit points of the property, and in courtesy vehicles.

8.6 First aid

What is First Aid?

Is the first and immediate assistance given to any person suffering a serious illness (or) injury, with care provided to preserve life, prevent the condition from worsening or to promote recovery?

(a) Breathing difficulties - first aid

Breathing difficulties can range from being short of breath, unable to take a deep breath, gasping for air, or feel like you are not getting enough air.

This article discusses first aid for someone who is having breathing problems.

Considerations

Breathing difficulty is almost always a medical emergency (other than feeling slightly winded from normal activity such as exercise).

Causes

There are many different causes for breathing problems. Common causes include

- Asthma
- Being at a high altitude
- Blood clot in the lung
- Chronic obstructive pulmonary disease (COPD)
- Collapsed lung
- Heart attack
- Heart disease or heart failure
- Injury to the neck, chest wall, or lungs
- Life-threatening allergic reaction
- Respiratory infections, including pneumonia, acute bronchitis, whooping cough, croup, and others

(b) First aid for burns

First aid advice for burns and scalds caused by heat, such as flames, is outlined below.

- Stop the burning process as soon as possible. This may mean removing the person from the area, dousing flames with water or smothering flames with a blanket. Do not put yourself at risk of getting burnt as well.
- Remove any clothing or jewelry near the burnt area of skin, but do not attempt to remove anything that is stuck to the burnt skin because this could cause more damage.
- Cool the burn with cool or lukewarm water for 10-30 minutes, ideally within 20 minutes of the injury occurring. Never use ice, iced water or any creams or greasy substances, such as butter.
- Make sure that the person keeps warm, using a blanket or layers of clothing (avoiding the injured area). This is to prevent hypothermia occurring, when a person's body temperature drops below 35°C (95°F). This is a risk if you are cooling a large burnt area, particularly in children and the elderly.
- Cover the burn with cling film in a layer over the burn, rather than by wrapping it around a limb. A clean, clear plastic bag can be used for burns on your hand.
- The pain from a burn can be treated with paracetamol or ibuprofen. Always check the manufacturer's instructions when using over-the-counter (OTC) medication. Children under 16 years of age should not be given aspirin.
- Once you have taken these steps, you will need to decide whether further medical treatment is necessary (see box, right).
See Recovery for advice about what to do next.

(c) Electrical burns

Electrical burns may not look serious, but they can be very damaging. Someone who has an electrical burn should seek immediate medical attention at an accident and emergency department.

If the person has been injured by a low-voltage source, up to 220-240 volts (such as a domestic electricity supply), safely switch off the power supply or remove the person from the electrical source using a non-conductive material. This is a material that does not conduct electricity, such as a wooden stick or a wooden chair.

Do not approach a person who is connected to a high-voltage source (1,000 volts or more).

Chemical burns

As with electrical burns, chemical burns can be very damaging and immediate medical attention should be sought at an emergency department. If possible, find out what chemical caused the burn so that you can inform the healthcare professionals when receiving medical assistance.

If you are assisting someone else, where appropriate protective clothing, then.

- Remove any affected clothing from the person who has been burnt
- If the chemical is in a dry form, brush it off the skin
- Use running water to remove any traces of the chemical from the burnt area

Sunburn

In cases of sunburn, follow the advice below.

- If you notice any signs of sunburn, such as hot, red and painful skin, move into the shade or preferably inside.
- Take a cool bath or shower to cool down the burnt area of skin.
- Apply after-sun lotion to the affected area to moisturize, cool and soothe it. Do not use greasy or oily products.
- If you experience any pain, paracetamol or ibuprofen should help to relieve it. Always read the manufacturer's instructions and do not give aspirin to children under 16 years of age.
- Stay hydrated by drinking plenty of water.
- Watch out for signs of heat exhaustion or heatstroke, when the temperature inside your body rises to 37-40°C (98.6-104°F) or above. These include dizziness, a rapid pulse or vomiting.
- Seek medical advice if you experience any of the symptoms of heat exhaustion or heatstroke. See Complications for more information.

(d) Scald

A scald is a burn that is caused by hot liquid or steam. Scalds are managed in the same way as burns.

Fainting: Fainting is a medical emergency, till proven otherwise. When a person feels faint- Make them sit down or lie down. If sitting, position head between knees. When a person faints, position him on his back. Check to see if

airways are clear Restore blood flow by loosening clothing/belts/collars Elevate feet above head level Patient should become normal within a minute If not, seek medical help Check if breathing/pulse is normal If not, perform Cardio-pulmonary resuscitation (CPR).

Cardiac Arrest:

- Do not move person from the room.
- Clear all the people.
- If critical, try artificial respiration by mouth to mouth method.
- Call your local emergency number
- Chew and swallow an aspirin, unless you are allergic to aspirin (or) have been told by the doctor.
- Take Nitroglycerin, if prescribed.

Short Answer Type Questions

1. Define bombthreat.
2. What is floor key?
3. What is first aid?
4. Why should one avoid elevator during fire in a hotel.
5. Write about scald.
6. What is meant by fainting?

Long Answer Type Questions

1. What is the first aid given during a guest suffering from cardiac arrest?
2. List and explain the different types of keys used in hotels.
3. What is the procedure followed during fire in a hotel?
4. Explain the procedure followed during theft in a hotel.
5. Write the causes for breathing problems.
6. Explain the procedure to Control the keys.
7. Describe about the sunburns.

MODEL QUESTION PAPER

Hotel Operations

2nd Year

Accommodation Operations – II

Time: 3 hrs

Max Marks:

50

SECTION-A

Note: (I) answer all the questions 10x2=20

(ii) Each question carries 2 marks

1. Define the term registration
2. What are VIP Amenities?
3. Write any two reasons for change of room
4. Who is Bell Boy?
5. Expand VTL?
6. Who is Chamber Maid?
7. What is Floor Pantry?
8. Define the Term Linen
9. What are the types of Linen used in hotels
10. Write about scald.

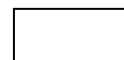
SECTION-B

Note: (I) answer any 5 questions

5x6=30

(ii) Each question carries 6 marks

11. Mention the procedure of group check-in
12. What are the points to be taken care while handling a guest complaint?
13. Explain the various methods of payment
14. What is Folio? Explain various types of Folio
15. Draw the format of Maid's cart and supplies placed in the trolley.
16. Mention the duties and responsibilities of Public Area Supervisor.
17. Write about the laundry washing process
18. List and explain the different types of key used in hotels.



HOTEL OPERATIONS

II YEAR

PART-B, VOCATIONAL COURSE

PAPER-I THEORY

Food Production II

Periods/Week :04

Periods/Year:110

Time Schedule Weightage And Blue Print

S.No	Name of Unit	No.Of Periods	Weightage In Marks	Short Answer Questions	Essay type Questions
1	Indian Cuisine	30	16	2	2
2	International Cuisines	20	10	2	1
3	Kitchen Hygiene and Sanitation	20	16	2	2
4	Introduction to Bakery & Confectionery	20	16	2	2
5	Advanced Bakery	20	10	2	1

HOTEL OPERATIONS
II YEAR
PART-B, VOCATIONAL COURSE
PAPER-II THEORY
Food and Beverage Service II

Periods/Week :04

Periods/Year:110

Time Schedule Weightage And Blue Print

S.No	Name of Unit	No.Of Periods	Weightage In Marks	Short Answer Questions	Essay type Questions
1.	Alcoholic Beverage	30	16	2	2
2	Dispense & Cocktail Bars	20	16	2	2
3	Function Catering Banquets	20	10	2	1
4	Food Cost Control	20	16	2	2
5	Kitchen Stewarding	20	10	2	1

HOTEL OPERATIONS

II YEAR

PART-B, VOCATIONAL COURSE

PAPER-III THEORY

Accommodation Operation II

Periods/Week :04

Periods/Year:110

Time Schedule Weightage And Blue Print

S.No	Name of Unit	No.Of Periods	Weightage In Marks	Short Answer Questions	Essay type Questions
1	Registration	12	14	1	2
2	Responsibilities During Guest Stay	10	8	1	1
3	Check out and Settlement of Bills	20	8	1	1
4	Cleaning Routines	20	14	2	1
5	Linen & Laundry	20	10	2	1
6	Safety & Security	10	8	1	1
7	Information – General Knowledge	10	4	2	0

HOTEL OPERATIONS
II YEAR
PAPER I Food Production II

TIME: 3 Hours

Max. Marks: 50

SECTION-A

Note : (i) Answer all questions.
(ii) Each question carries 2 marks

10x2=20

1. What is potali masala?
2. Name five famous dishes from Hyderabadi cuisine.
3. Differentiate between 'spices' and 'condiments'.
4. Name four food adulterants.
5. Define "icing" and 'Choux paste'.
6. Differentiate between 'Mousse' and 'Soufflé'.
7. Define 'Pasta' with at least four examples.
8. What is the 'Danger Zone' in food preparation?
9. Write the laws prevent food adulteration in India
10. Name the states these dishes are from:
a. Dodal b. Sukto c. DalBhatiChurma d. Aapam

SECTION-B

Note : (i) Answer any 5 questions.
(ii) Each question carries 6 marks

5x6=30

11. Enlist all basic Indian gravies. Give recipe of any two.
12. Define 'Oriental Cuisine', also discuss any one cuisine falls under Oriental Cuisine.
13. Write five course menus from Awadhi and Hyderabadi cuisines
14. How 'Flaky Pastry' is made? Give recipe of any two dishes made with flaky pastry.
15. What are the different types of cakes?
16. What is Food Borne Illness? How it can be prevented?
17. Write the process of bread making.
18. Explain the role of various ingredients in the cookery.



HOTEL OPERATIONS
II YEAR
PAPER II Food and Beverage Service II

TIME: 3 Hours

Max. Marks:50

SECTION-A

Note: (i) Answer all questions.
(ii) Each question carries 2 marks

2x10=20

1. Explain fermentation.
2. Explain distillation.
3. Differentiate between table wine & sparkling wine
4. Write 4 international brand names of beer.
5. What is under-bar?
6. Define champagne and give 2 examples.
7. What is a function prospectus?
8. Define banquets & buffet.
9. What is toasting?
10. List all the stages of Food Control Cycle, in proper sequence.

SECTION-B

Note : (i) Answer any 5 questions.
(ii) Each question carries 6 marks

5x6=30

11. Classify alcoholic beverages and explain each in one line.
12. Enlist the rules of matching food & wine.
13. Explain production of whisky with the help of a flow diagram.
14. Differentiate between dispense bar & cocktail bar in detail.
15. Explain all the stages of banquet booking procedure.
16. What are different types of buffet? Write factors to be considered while planning a buffet.
17. What are the objectives & advantages of cost control?
18. Write duties & responsibilities of kitchen stewarding department in a 5star hote



HOTEL OPERATIONS

II YEAR

PAPER III Accommodation Operation II

TIME:3 Hours

Max. Marks:50

SECTION-A

Note : (i) Answer all questions.

(ii) Each question carries 2 marks

2x10=20

1. What is Registration?
2. Expand the following a) FIT b) CIP
3. Who is Cashier?
4. Define the term PAGING.
5. List the types of Linen used in Housekeeping.
6. Mention the cleaning areas of housekeeping department in a hotel.
7. What is First Aid?
8. Name any two countries and their capitals in Asia.
9. Write the famous hill stations and pilgrim places in India.
10. What are the types of surfaces used in hotels?

SECTION-B

Note : (i) Answer any 5 questions.

(ii) Each question carries 6 marks

5x6=30

11. Explain the check – in procedure of a guest.
12. Draw the format of C-Form and explain its uses.
13. Describe about message handling procedure with a format.
14. List the modes of payment at reception
15. What is lost & found and describe about lost & found.
16. Write the cleaning method of a departure room.
17. Explain the laundry washing process.
18. What are the steps to be taken while fire in hotel?