
UNIT: 01

WINES-I

Structure

- 1.1 Introduction
- 1.2 Objectives
- 1.3 Wine
- 1.4 Classification of Wines
 - 1.4.1 By Colour
 - 1.4.2 By Nature
 - 1.4.3 By Taste
 - 1.4.4 By Year of Production
 - 1.4.5 By Body
 - 1.4.6 Unspecified Wines
- 1.5 Production of Wines
- 1.6 Principle wine regions
 - 1.6.1 France
 - 1.6.2 Germany
 - 1.6.3 Italy
 - 1.6.4 Spain
- 1.7 Summary
- 1.8 Glossary
- 1.9 References/Bibliography
- 1.10 Suggested Readings
- 1.11 Terminal Questions

1.1 INTRODUCTION

Legally defined in most countries, Wine is an alcoholic beverage made from the partial or complete fermentation of grape juice. Now talking about wines, the Wine and spirit association of the Great Britain has sponsored the following definition of Wine —Wine is an alcoholic beverage obtained from the fermentation of the juice of freshly gathered grapes. Fermentation is conducted in the district of origin according to local customs and traditions. To bear the name Wine, the product must come only from grapes. If made from other fruits; the fruit name must be put before the term Wine eg. Blackberry Wine, Apricot Wine, Fig Wine. Only a small part of the world is Wine producing. This is because the grape will only provide juice of the quality required for conversion into consumable Wine where two climatic conditions prevail.

1. Sufficient sun-shine to ripen the grape
2. Winters that are moderate yet sufficiently cool to give the Wine a chance to rest and restore its strength for the growing and fruiting season.

These climatic conditions are found in two main Wine producing zones which lie between the latitudes 30° and 50° north and south of the Equator. Three quarters of the world's Wine is produced in Europe. France produces the world's best Wine while Italy is the largest producer of Wine. The other major Wine producing, countries are Spain,

United States of America, Australia, Argentina, Germany, Portugal, Chile and South Africa.

Wine is known as ‘Vin’ in French, ‘Vino’ in Spanish and Italian ‘Wein’ in German and ‘Vinho’ in Portuguese. After reading this unit about wines you will certainly have a wide knowledge about the wines, making of wine, wines of different countries, different kinds of wine, matching of the wines and food, difference between red, white and rose wines, their care and storage. You will also know about the champagne and sparkling wine. This will be of immense help in the hotels and restaurants as wine and champagne is served in all the good hotels and you can also work in the bar or be a wine sommelier (who deals with the wines services).

1.2 OBJECTIVES

After reading this unit learner will be able to:

- Define Wine
- Know about and explain various types of Wines
- Understand the Production of Wines
- Know about Principle wine regions France
- Know about Principle wine regions Germany
- Know about Principle wine regions Italy
- Know about Principle wine regions Spain

1.3 WINE

There are authentic proofs that suggest that the earliest Wine production took place in Georgia and Iran around 6000 to 5000 B.C. Wine was also produced in Greece about 6500 years ago. Elements of crushed grapes have been discovered which help to set the said date. The Greek and Romans had realized the civilizing influence of vite culture and where ever they went they taught the natives the cultivation of vineyards and the making of Wine. They even dedicated a God to Wine. The Romans ‘Bacchus’ and Greek God ‘Diougsus’ are still known as God of Wine. The Greek and Romans further introduced ‘Vite Culture’ into England & Northern Europe. In Egypt, Wine became part of recorded history playing an important role in ancient ceremonial life. Traces of Wine were also found in China dating from second to first B.C. In medieval Europe the Roman Catholic Church was a staunch supporter of Wine which was considered necessary for the celebration of Mass.

Composition of the Grape Berry: The grape berry contains:

- Stem
- Skin
- Pulp
- Seeds

Stem – Stem or stalk holds the grape in bunches. It contains tannins, minerals, acids and cellulose. It is mostly used in the making of big, flavorsome red wine and is not used for making white and light wines. Tannin is a necessary ingredient as it acts as a preservative and anti-oxidant. Astringency flavor of the wine is due to tannins only.

Skin – It contains tannins, pigments, flavouring materials and cellulose. The skin contains the colouring pigments Anthocyanins that contribute colour to the wine. The outer skin or cuticle has a whitish cloudy coat known as bloom. This waxy substance contains wild yeast and wine yeasts, including *Saccharomyces Ellipsoideus*, which contribute to the fermentation process.

Pulp – It is a soft flesh behind the skin of the grapes. It provides the juice, also known as must, which is essential for fermentation. The must consists of 78 - 80 % of water, 10 - 25 % of sugar and 5 – 6 % of acids.

The acids present in the must are tartaric, malic, tannic and citrus acids. The acids help to preserve wine and keep it fresh and brilliant. These acids react with alcohol and produce esters, which provide bouquet to the wine.

Seeds – They contain tannins, bitter oils and cellulose. Crushed pips impart bitter flavor to the wine.

The composition of the grape berry changes throughout the ripening process. As the berry ripens, the acid level decreases and sugar content increases in it. Flavours and colours also get developed and become complex as the berry ages.

Examples of Wine Grapes: The various varieties of grapes used in wine making are as under:

White Grapes

Chardonnay, Chenin Blanc, Colombard, Folle Blanche, Gewürztraminer, Müller-Thurgau, Muscat, Palomino, Pinot Blanc, Riesling, Saint Emilion, Sauvignon Blanc, Sercial, Trebbiano, Viognier

Black Grapes

Cabernet Franc, Cabernet Sauvignon, Cinsault, Gamay, Grenache, Malbec, Merlot, Nebbiolo, Pinot Noir, Syrah, Zinfandel, Pinot Meunier.

FACTORS AFFECTING QUALITY OF WINES

Type of grapes

- Each type imparts its typical flavour
- Per acre yield
- Different varieties demand different soils

Soil

- Should not be rich and fertile
- Best is with good drainage – gravel, sand, chalk, lime, etc.
- Should have heavy mineral deposits for an aromatic bouquet

Climate

- Cool nights and sunny, warm days → right sugar-acid balance

- Too hot weather → less acid → doesn't age well
- Too little sunshine → less sugar → less alcohol
- Some rain necessary before harvest
- Rains during harvest → sugar diluted, rot encouraged
- Frost/gale/hailstorm can ruin a whole harvest

Slope

- Best on sun-facing slopes → maximum sun and warmth, both directly and reflected

Latitude

- Best between 30° and 50° lines
- Nearer to 50°, better the wine

Viticulture

- Care and cultivation of vines – now a highly technical industry
- Quality and timing of ploughing, pruning, weeding, spraying, harvesting, etc. – each affects the quality of wine

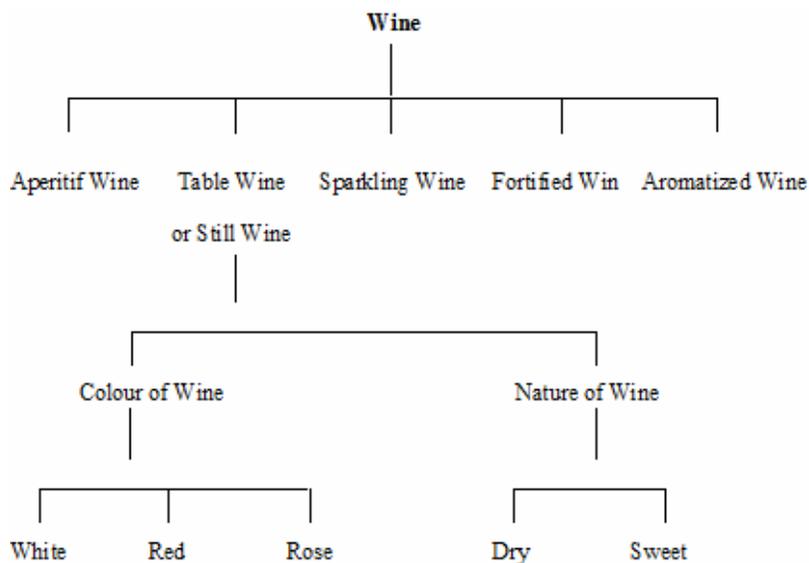
Vinification

- Skills of the vintner
- Local traditions and practice

1.4 CLASSIFICATION OF WINES

The wines are classified on following basis:

- BY COLOUR – Red, White, Rose
- BY NATURE – Still/Table, Sparkling, Fortified, Aromatized
- BY TASTE – Sweet, Dry
- BY YEAR – Vintage, Non-Vintage
- BY BODY – Light, Medium, Heavy bodied wine



1.4.1 By Colour

Table wines are natural wines and are the result of fermentation of grape juice with little or no addition of other substances and made without any diversions from natural processes. Table wines are about half the strength alcoholically of fortified wines. Their alcoholic strength varies from minimum of 8%-14%. It may be red, white or pink according to whether the juice was separated from skin before or after it was allowed to ferment and also according to colour of the grapes used.

White Wine: White wine is made from white grapes, in rare cases also made from red grapes.

Rosé Wine: Rose wine is made from red grapes, never a mixture of red and white grapes, as is commonly thought. The skins are kept in must for only a short time (12-36 Hours) to impart the light pink colour.

Red Wine: Red wine is always made from red grapes. The skins are retained in the must during all or part of fermentation to extract the pigment from grapes giving the wine red colour.

Blush Wine: It is a new style of rosé wine developed in California. Skins of black grapes are allowed to macerate with the must for a very short period which produces a very light pink colour wine. Red and white grapes are used together.

1.4.2 By Nature

On the basis of nature of wines are of following types:

- Sparkling Wine
- Aromatized Wine
- Fortified Wine
- House Wine

Sparkling Wine: These are sparkling in appearance due to presence of CO₂ gas and thus give off bubbles of gas. The best known is “champagne”, it is produced by a complicated process. Sparkling wine is one where natural gas from fermentation is retained in the bottle or one where the wine has been artificially impregnated with gas. A customs definition of sparkling wine is a wine with wired cork. Champagne is blended wine; it is a blend of the product of many vintages and of both red and white grapes, predominantly red but champagne known as “Blanc De Blancs” is made from white grapes. The chief grapes variety used for production of champagne is black and grey “pinots” and in the more ordinary district the “pinot meunier”. The chardonnay predominates in the region of white grapes and chardonnay is the only white grapes from which champagne is made.

Aromatized Wine: Aromatized wine is a fortified wine in which herbs, roots, flowers, barks and other flavouring agents have been steeped in order to change the natural flavours of the wine. Aromatized wines includes both dry (French origin) and sweet (Italian) vermouths and the quinated or apéritif wines of the various countries such as DUBOINET, LILLET, ST. RAPHAEL etc. Vermouth is the name given to those flavoured wines which in theory contained wormwood, which was first used in Germany

in sixteenth century. Wormwood in German is wermuth which was pronounced “vermutt” hence origin of modern name. Some examples of vermouth are:

NOILLY PRAT – French – dry and light in flavor

CINZANO BIANCO – Italy – sweeter version of white vermouth

VOTRIX & DUVAL - England

Fortified Wines: These are the wines which are fortified with spirit like brandy during vinification when fermentation process is going on. If fortification is done in the beginning of fermentation the end product is sweet fortified wine. If fortification is towards the end of fermentation, the resultant wine is dry fortified wine. The addition of spirit increases the alcoholic content; therefore fortified wines have an alcoholic strength of 15% - 24% and also good keeping quality. Fortified wines may be sweet or dry, white, rosé or red. SHERRY, PORT, MADEIRA, MALAGA and MARSALA etc. are the best examples. “HEAVY WINE” is the official term for fortified wine; it is also used to describe wines which have too much alcohol and fruitiness.

House Wines: Any wine which is not too expensive or too cheap and can be used by any restaurant. No particular brand is branded as house wine.

1.4.3 By Taste

On the basis of taste, wines may be classified in two categories:

- Sweet Wines
- Dry Wines

Sweet Wine: Sweet wine produced by grapes having high sugar content, as in these wines even after fermentation a lot of sugar is still left, which is not consumed by yeast, the sugar left renders a very sweet wine.

Dry Wines: Dry wines produced by grapes with less sugar content and the fermentation is allowed to continue till all the sugar is almost or fully consumed.

1.4.4 By Year of Production

By Year of Production wine is classified as Vintage Wines.

Vintage Wines: The French word “vintage” means harvest, although any wine is a vintage wine as any year can be vintage year. However some year’s climate is so good that the government in France declares it as vintage year for particular region. The various climatic factors for the year to be declared vintage years are: Sunshine, Temperature, right amount of snow etc., sugar balance in grapes and its concentration. On the labels of some bottles vintage year printed while on some not. When the vintage year is printed on the bottle it means the wine is from that particular year harvest when the crop was bumper. The bottles not having vintage year printed on them are generally blended to make wine good. Every year two types of wines are produced, one special vintage and other non-vintage. The vintage wines are bottled and sold while non-vintage are kept and improved. “Vintage Port” is wine of one year only, bottled after two years, but not ready for drinking until at least 10 years. “Vintage Port” needs to be carefully

decanted to separate the wine from its sediments. “Late Bottled Vintage Port” is the wine of one year but bottled after about five years and ready for drinking immediately.

1.4.5 By Body

On the basis of body, wines are classified as under:

- Light Bodied Wine
- Medium Bodied Wine
- Full Bodied Wine

Light Bodied Wine: The term light refers to alcoholic content, texture and weight of wine, light also refers to sensation in mouth. These are not matured in casks rather left in stainless steel or glass vats before bottling. The alcoholic content should be less than 12% for example Mâcon Blanc, PouillyFuissé etc.

Medium Bodied Wine: These are wines which are round, fairly fat with good body, texture, flavor for example Rioja (Spanish), Hermitage (French) etc.

Full Bodied Wine: These wines have heavy body, texture and higher alcoholic content, rich taste with forceful flavor.

White: Château Chalon, Australian Chardonnays

Red: Zinfandels (Californian), Shiraz (Australian), Barbera (Italy), Maurud (Bulgarian)

1.4.6 Unspecified Wines

There are several wines which are not in above all categories are termed as unspecified wines they are:

- Varietal Wines
- Generic Wines
- Green Wines
- Organic Wines

Varietal Wines: These are the wines of North America, which are labeled after the main grapes variety in the bottle. Single grape variety is used for making wine, best known examples are:

Red: Zinfandel, Cabernet

White: Sultana, Sauvignon Vert, Cabernet

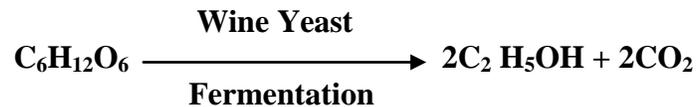
The top quality varietal wines of California are known as premium wines which can be compared with French A.O.C wines, 75% grape variety named on the label.

Generic Wines: Generic wines are those wines which are named after the long established European areas. Many North American and Australian wines are labeled as Claret, Burgundy, Chablis, Graves, Hock and even Champagne. A generic wine should pose the distinctive colour, flavor and aroma of its own.

Green Wines: It is a Portuguese wine comes from vine grown on the granitic soil in the province of Minho. These are acid wines of low alcoholic content, white, rosé and red

Which is split up → Alcohol is formed and Carbon-dioxide is given off which causes the liquid to froth and bubble.

The following chemical equation explains the complete process:



Fermentation normally continues until all the grape sugar has been converted. This natural process can be stopped at any time at the Wine Maker's discretion by adding brandy or any other spirit. However this process will tend to slowdown and stop as soon as 14-15% of alcohol by volume has been attained.

PRODUCTION OF WINE: Production of wine involves following steps:

- Harvesting
- Grading
- Weighing
- De Stalking
- Crushing Or Pressing
- Chaptalisation
- Sulphuring
- Fermentation
- Cellaring
- Second Pressing
- Racking
- Finning
- Filtration
- Blending
- Maturing Wines
- Bottling
- Pasteurisation
- Ageing
- Storage

HARVESTING: Grapes are plucked when the density of the bloom or natural yeast on the skin taken from a number of bunches is constant so that the grape is fully ripened and has nothing to gain more from the plant. Dry weather is chosen for harvesting. Some wines are left on the vines (shrub) a little longer to develop a greater concentration of sugar. From these finest dessert wines are obtained.

GRADING: Grapes are graded according to the quality which segregates ripe mature grapes from spoiled grapes.

WEIGHING: Grapes are weighed, to determine the quantity required for fermentation.

DE STALKING: The ripe grapes are plucked off from the stalks. Modern methodology incorporates a de staking machine. The stalks have a bitter taste due to the presence of tannin, which should not come in contact with the juice.

CRUSHING OR PRESSING: Grapes are traditionally crushed with the feet by wearing special type of shoes called Zapatos di pisar or more conveniently by mechanical presses to extract the juice called must. At this stage the wine maker uses a hydrometer to measure the specific gravity of must, which indicates the sugar content and therefore the projected alcoholic strength.

During the crushing stage, if red wine has to be made, then the skin is allowed to come in contact with juice till it gets color from the skin. In case of White wine, skin is removed immediately (if it is made from red grapes). Rose wine is made by allowing the skin to come in contact for a short while to get the pink color.

CHAPTALISATION: If incase the must shows the insufficient amount of sugar, then the sugar is added to enrich the must. This process is called chaptalisation.

SULPHURING: Sulphur dioxide is added early in the fermentation process to prevent air from oxidizing the juice and converting the alcohol into vinegar. Sulphur dioxide takes up all the oxygen to let the wine yeast which is anaerobic (able to work in absence of oxygen) to convert grape sugar into alcohol. Sulphur dioxide forms a coating on the surface of juice to prevent the air from entering the juice and thereby letting the wine yeast to do its work.

FERMENTATION: Fermentation is the process of adding wine yeast (technically termed as *Saccharomyces Ellipsoideus*) to fresh grape juice to convert the natural sugar in the grape to ethyl alcohol. The fermentation is done in stainless steel vats nowadays against the traditional wooden vats. In this process carbon dioxide is simultaneously released making fermentation violent at first and then slows. The yeast added is 3-5 % of the volume of juice. The fermentation process two days to two weeks. Fermentation occurs only as long as there is sugar to ferment or when the alcohol content rises to 14% because at this point alcohol kills the remaining yeast. If sugar remains with alcohol content then the wine tends to be sweet. A wine is considered sweet when it has 2% sugar content. During the process the temperature is maintained between 64-70 degree F for red wines and 44 degree to 59 degree F for white wines. The wine maker may control the acidity caused by grape acids by adding water acidifying agents such as gypsum.

CELLARING: Once fermentation is complete the ‘running wine’ or vin de goutte is run off into the casks for maturing. The casks are filled to the full to exclude air. The filled casks are put in cellars for the wine to mature. This is called Cellaring. The suspended particles are allowed to settle to the bottom of the cask as sediments or less.

SECOND PRESSING: The residue of pips and skin (called marc) left in the fermentation tank or vat is sent for further pressing and the resultant juice, called vin de presse to which is rich in tannin. The wine maker may decide whether to add vin de presse to vin de goutte. The left over i.e. pips and skins are sent for a third pressing and the juice fermented and distilled to produce eau –de –vie- de- marc. Nothing is wasted and the sugar in the grape is completely utilized.

RACKING: The wine must be separated from the dead yeasts which decompose and give an odd flavor to the wine. The wine is carefully pumped into another cask without disturbing the lees leaving some wine at the bottom. This is sent for distilling into eau-de-vie-de-marc. Racking removes some acidity. The color is brilliant and flavors blend together and smooth out.

FINNING: This is the process of converting cloudy wine into clear fine wine. This may be done with a gelatinous substance such as-

- Ising glass (bladder of sturgeon fish)
- White of egg beaten with salt
- Colloidal silica
- Gelatin or Bentonites

They collect (attract) all the impurities and protein haze in the wine.

FILTRATION: After fining the wine may passed through fine filters to get crystal clear wine. The young wine is pumped to the refrigeration unit to stabilize the wine.

BLENDING: Experienced specialist improve the quality of wine by blending wines of different vineyards and vintage (different years) to produce wine that is consistent in quality.

MATURING WINES: It is natural process by allowing the wine to rest in oak barrels for 1 or 2 years to gain maturity and pick up a soft mellow character from the oak wood. Maturisation can be induced artificially by agitation, heating, refrigeration and electrical impulses. During maturation wine tends to evaporate. Spo the loss of wine during maturation is called Angels share. There is a stopper (usually cork) that fits into the opening at the top of the barrel. The stopper must be opened from time to time to allow the gas to escape.

BOTTLING: Wine is poured into sterilized bottles during cool and dry weather. The bottles are closed with corks and sealed with Spanish wax or foil. The selection of cork is very important as poor quality of cork can spoil the wine. After 40 years the cork tree develops a thick, spongy, semi hard bark, several inches thick. Portugal primarily and then Spain and Italy produces the best cork.

The corks are obtained from bark of tree called ‘Bark oak’.

There are different colors of bottles for different wines.

- | | |
|-----------------------|----------------|
| ○ Green & Transparent | For white wine |
| ○ Brown | red wine |
| ○ Transparent | rose wine |

PASTEURISATION: Pasteurization is the process to free the wine from further fermentation. The wine bottles are immersed upright in double boilers with water, heated to temperatures between 180 degree F & 190 degree F. The immersion is for 1 to 2 minutes.

AGEING: Wine is matured in bottles. The period of maturing may differ from house to house, till it achieves its characteristics, aroma and flavor

STORAGE: Wines are stored in cool conditions at temperatures of 50 degree- 65 degree F. The storage area must be as light can ruin the wine. The wines must be moved as little as possible before they are shipped out.

METHODS OF MAKING SPARKLING WINE: There are 4 methods of making sparkling wine:

- Carbonation or Impregnation Method
- Cuve Close or Charmat-Process or Tank Method
- Transversagé Method or Transfer Method
- La Méthode Champenoise or The Champagne Method

CARBONATION OR IMPREGNATION METHOD: In this method wine is chilled in closed vats, so that frost forms outside. A special apparatus injects CO₂↑ into the still, chilled wine and the wine is then bottled under pressure. The resulting wine resembles fizzy drinks in the glass with large bubbles which do not last long. This is the cheapest and least durable way of making wine sparkle and is used for the cheapest of all sparkling wines.

CUVE CLOSE OR CHARMAT-PROCESS OR TANK METHOD: This method of making sparkling wine was started in France by M. CHARMAT and involves secondary fermentation which takes only 10 days to complete in contrast to the years of waiting required by Méthode Champenoise. In this method the still wine is pumped into tanks together with a measured quantity of yeasts and sugar. Secondary fermentation is allowed under controlled temperature and wine is circulated in closed tanks by propellers. After 10 days of violent and quick fermentation wine is drawn off through filters, still under pressure and bottled. Its advantages are that it is very much cheaper, faster and less labour intensive than the other processes and is better suited to base wines which lack much capacity for aging. This method is not permitted to be used for Appellation Cōntrolée wines; it is permitted for German and Italian wines. The bubbles are little larger in these wines than in those made by Méthode Champenoise and usually do not last as long in the glass. SEKT from Germany and ASTI from Italy are made from this method.

TRANSVERSAGÉ METHOD OR TRANSFER METHOD: In this method secondary fermentation takes places in bottles and the wine is matured or ripened lying down in cellars just as in Méthode Champenoise, but at this the method changes, instead of undergoing the expensive “Remuage” and “Degorgement” processes, the bottles are taken very cold straight to the point of Degorgment. As soon as the corks are removed the sediment rise up in the wine and clouds it. All clouded wine is passed through filter then dosage is added in filtered wine, which is bottled under pressure, corked and muzzled. This method is not preferred as it takes away bouquet and body of the wine.

LA MÉTHODE CHAMPENOISE (MAY-TUD SHAHM-PEN-WAHZ) OR THE CHAMPAGNE METHOD OR MÉTHODE TRADITIONELLE:

- **HARVESTING:** The grapes used for manufacture of Champagne are Pinot Noir, Pinot Meunier and Chardonnay. The normal harvest usually takes place in late September or early October.
- **PRESSING THE GRAPES:** Pressing has to very quick in large shallow presses, especially for red grapes so as to avoid or prevent the wine from being coloured by the skins.
 - 1st Pressing – “Vin De Cuvée” – Superior wines
 - 2nd Pressing – PremièresTaille
 - 3rd Pressing – DeuxièmeTaille
 - 4th pressing – Rebêche

Only two pressing of the grapes are permitted. Prestige Cuvée Champagne is usually made exclusively from the first pressing. The second pressing is generally blended with the CUVÉE to make vintage and non-vintage Champagne and rest are used for making ordinary wines.

- **PRIMARY FERMENTATION:** This takes places in casks which may be either traditional oak casks or stainless steel or glass lined cement vats. Fermentation starts about 8 hours after pressing. The first fermentation takes two to three weeks and produces still wines.
- **RACKING:** The wine is then drawn off into new casks leaving behind the sediments (Lees) casts off during the fermentation, this is called Racking.
- **BLENDING:** The most important step in Champagne production is the blending of the still wines. Each of these still wines is made from a single grape variety from a single village of origin. Non-vintage Champagne blends contain on an average 40-50 wines from as many as 10 different years, whereas Vintage Champagne is made almost totally from a blend of just one year. A small quantity of wine is permitted from other years in Vintage Champagne to ensure correct balance is achieved.
- **LIQUEUR DE TIRAGE (LEE-KERR DEH-TEER-AHZH)/ DOSAGE (DOH-SAHZH):** After the blending process the winemaker adds Liqueur De Tirage (a blend of sugar and yeast) which will begin the wine’s second fermentation.
- **SECONDARY FERMENTATION:** The wine is bottled in spring in special strong bottles. The bottlers are temporarily sealed by an Agrafe – a metal clip, which can be adjusted as necessary and laid down. The secondary fermentation takes palce inside the bottles slowly which are placed in the cellars where the temperature is maintained at 50°F. It is during secondary fermentation gas formed builds up a pressure of 5-6 atmosphere (95 pounds per square inch). This is done as pressure inside the bottle will push the cork out.

- **AGING:** These bottles are kept in “MIS SUR LATTE” position (bottles are placed horizontally) and kept in deep caverns (caves). These caverns have constant temperature and are now called wine cellars by wine producers. Fermentation takes place after six months of bottling. The bottles are kept in “MIS SUR LATTE” position for 4-5 years. For non-Vintage wines minimum time is one year, for Vintage ones minimum time is 3 years.
- **RÉMUAGE:** As a result of secondary fermentation sediments are also formed and this must be removed. The process of removing sediments from the bottle by shaking is RÉMUAGE. The object of RÉMUAGE is to remove sediments in the bottle on to the cork. This process was developed by widow Clicquet in 1800. Traditionally bottles are placed in special adjustable wooden racks called “PUPITRES”. Every 3 days they are given a shake by skilled workers called “REMUERS” and angles of Pupitres are altered. As Remuers shakes each bottle every 3 days, he/she tilts it gradually, degree by degree from horizontal up to vertical. The bottle reaches Sur la pointe or mis en masse position. It takes 2-3 months to change the angle from 45° to 90°. Now a day’s mechanical frames called “GYROPALETES” are used to shakes and twist the bottles and gradually turn them upside down but effect is same, the sediment or Lees ends up in the neck of the bottle. The bottles are kept in sur la point position for one year and sometimes are allowed to rest for 10 years.
- **DÉGORGMENT (DAY-GORZH-MOWN):** The necks of bottles are refrigerated, traditionally by being placed in a freezing brine solution, so that a small block of Ice forms in them trapping the sediments. To remove the sediments one has to hold the bottle against stomach and cut the wire, open the cork slowly. The cork with frozen sediments is allowed to push out of the bottle.
- **DOSAGE (ADDITION OF LIQUEUR d’ EXPÉDITION):** Champagne which was lost during Dégorgment is replaced by more similar wine and a sugar solution is added known as Liqueur d’ Expédition if required in final wine. At this point the winemaker can determine whether he/she wants sweeter or drier Champagne.
- **RECORKING:** The bottle is finally re-corked with a new cork and sealed with a wine cage (wired up and dressed in foil). Wine is then stamped and labeled.

CHECK YOUR PROGRESS – II

Q.1 Explain Wine making method?

- Not much export.

Vin de Table

- Bottom-ranked but with certain standards.
- No geographical indication.
- Fully blended.

Vin Ordinaire

- Labeled by alcohol-content.
- Sometimes cheaper than even mineral water!

Wine Producing Regions of France

I) BORDEAUX

- Probably the most prestigious wine-region.
- Produces only 5% of all French wines but 25% of all AOC wines.
- Quantity – x Quality - ✓
- Climate: mild winters & warm summers – ideal.
- Soil: pebbly & stony, not fertile but rich in minerals – ideal.
- Grapes mostly used:

Green Grapes – Sauvignon blanc / Muscatel / Semillon

Black Grapes – Cabernet Sauvignon / Cabernet Franc / Malbec / Petit Verdot / Merlot

- Red wines – delicate, light-bodied & dry – very good accompaniment with food.
- Bordeaux red wines are referred to as claret (French ‘clairet’ – clear coloured).
- White wines – more sweet than dry, often golden coloured.
- A few rosé wines also are produced.
- More than 35 districts but the following five are most notable:
 Médoc, Pomerol, St. Emilion (mainly reds), Graves (both reds & whites), Sauternes (mainly golden-sweet whites)
- Further Crus Classés (classified growth) grading

i) Médoc

Prémier Cru

- Château Lafite-Rothschild – Pauillac
- Château La Tour – Pauillac
- Château Margaux – Margaux
- Château Mouton-Rothschild – Pauillac

Deuxième Cru

- Château Montrose – St. Estéphe
- Château Léoville-Barton – St. Julien
- Château Rauzan-Ségla - Margaux

Troisième Cru

- Château Calon-Ségur – St. Estéphe
- Château Lagrange – St. Julien

Médoc produces some of the best red wines of France.

ii) Pomerol

- Small district.
- Heavy - bodied red wines – known as the Burgundies of Bordeaux.
- No official cru classé.
- Best-known wine: Château Pétrus
- Others: Château Lafleur, Château La Tour-Pomerol, Château Petit-Village

iii) St. Émilion

Prémier Grand Cru

- Château Ausone
- Château Belair
- Château Canon

Grand Cru

- Château Dassault
- Château La Clotte
- Château Corbin

iv) Graves

Prémier Cru

- Château Haut-Brion (red)

Other cru classé wines

- Château Haut-Bailly (red)
- Château Pape-Clément (red)
- Château Olivier (white)
- Château Couhins (white)

v) Sauternes

- Most famous for sweet white wines.
- Frequently attacked by noble rot.

Prémier Grand Cru

- Château d'Yquem (extremely rich & sweet – deep golden)

Prémier Cru

- Château Coutet
- Château Climens

Deuxième Cru

- Château d'Arche
- Château Romer

II) BURGUNDY

- Hard climate: severe winters and hot, unpredictable summers.
- Wines susceptible to weather → rare vintage years.
- Early onslaught of winter → early picking → chaptalisation.
- Too much / too little rain.
- Hails destroy vineyards in 15 minutes flat.
- Red wines: robust, full-bodied but smooth.

- White wines: refined, distinguished, mostly dry.
- Grapes: Almost all reds from Pinot Noir (ripens early), Gamay in some areas (e.g. Beaujolais). Almost all whites from Chardonnay.
- The 5 most notable districts are: Côte d’Or, Chalonais, Mâconnais, Beaujolais, Chablis

i) Côte d’Or

- Supreme Burgundies but only about 15% of all.
- Two parts: Côte de Nuit & Côte de Beaune
- Côte de Nuit is famous for reds:
 - Chambertin, Clos de Tart, Musigny (all Grand Cru)
 - Les Avelets, Clos St. Jacques, Les Porrets (all Première Cru)
- Côte de Beaune is famous for whites but also produces reds:
- Charlemagne (w), Montrachet (w), Le Corton (r) - all Grand Cru. Morgeot (w), Les Clos des Mouche (w), Les Grèves (r), Corton Clos du Roi (r) – all Première Cru

ii) Chalonais

- Not much known outside France. Nevertheless, produces good, balanced wines.
- Givry, Mercurey, Rully (both red & white)
- Bouzeron, Montagny (white)

iii) Mâconnais

- White, red and some rosé.
- Principal grapes: Gamay & Chardonnay
- Best-known wine: Pouilly-Fuissé (pale golden, excellent accompaniment with fish & poultry)
- Others: Pouilly-Loché (w), St. Véran (w), Mâcon (r), Mâcon-Village (r)

iv) Beaujolais

- Vast area, wide varieties.
- Most from Gamay (sandy, granite soil).
- Short vatting → less tannin → less robust
- Popularity from Beaujolais Nouveau in November – “Beaujolais Nouveau est arrivé” – light, fresh, delicate & fruity – served slightly chilled.
- 9 grand cru reds are superb and very famous (the nine sisters of Beaujolais):
 - Brouilly, Chénas, Chiroubles, Côte de Brouilly, Fleurie, Juliéna, Morgon, St. Amour, Moulin-à-Vent

v) Chablis

- North-west of Burgundy.
- Very dry white wines – famous throughout the world. Excellent accompaniments with oysters, fish and white meat.
- Examples:
 - Blanchots, Les Clos, Bougros, Les Crenouilles, Les Preuses, Valmur, Vandésir (all Grand Cru)

Chapelot, Vaucoupin, Vaurent (all Premier Cru)

III) CÔTES-DU-RHÔNE

- Rhône river valley – southeast of France.
- Climate: hot & steady → consistent quality.
- Rich & hearty wines with higher alcohol.
- 90% red. Rest white and rosé.
- Red grapes: Syrah, Grenache Noir, Cinsault
- White grapes: Viognier, Clairette, Piquepoul

IV) VAL DE LOIRE

- West of Burgundy – name from the majestic Loire river – flows westward to Atlantic.
- Probably the most scenic wine region – with historic castles – wine trade is a tourist attraction.
- Crisp white & golden sweet white wines, fine sparklings, superb rosés (light, fruity & slightly sweet) and a few reds.
- White grapes: Muscadet, Chenin Blanc, Sauvignon Blanc
- Black grapes: Cabernet Franc, Cabernet Sauvignon
- Best-known wine: Anjou (w & r – sparkling).
- The best Anjou is rosé (never dry).
- Others:
 - Muscadet (w – dry), PouillyFumé (w – dry), Sancerre (w & rosé), Vouvray (w – still & sparkling)

V) ALSACE

- Very northerly wine region – along the edge of the Alsatian plains where Rhine separates France and Germany.
- Great sunshine, a little rain – good for ripening of grapes.
- German occupation for 50 years (freed in 1918). After the phylloxera disaster Germans planted inferior vines. After 1918, the French replanted better vines.
- Alsace wines are similar to Moselle wines of Germany.
- 95% are white and dry.
- Grapes for better wines: Sylvaner, Riesling, Gewürtztraminer
- Others: Muscat, Pinot, Traminer
- Generally fermented until dry (Moselle wines are a bit sweeter).

VI) JURA

- East of Burgundy – between Beaune and Geneva.
- Not very well-known wines.
- A unique wine: Vin Jaune (yellow wine)
- Colour results from storing in pre-used vats – flavour unlike other French wines – e.g. Château Chalon, Etoile, Arbois, Côtes-du-Jura.
- Another speciality: Vin de Pailles (straw wine).
- Previously grapes were dried on straw for 2 months – now they are hung. Sugar gets concentrated – very sweet.

VII) PROVENCE

- South of Rhône river – stretching east along the Mediterranean.
- Most wines are known as: Côtes de Provence
- Best-known: Cassis (full-flavoured white)

VIII) LANGUEDOC-ROUSSILLON

- From Rhone river to the Spanish border.
- More than 1/3rd of France's all vineyards.
- Some wines are:
Corbières, Fitou, St. Chinion

IX) SOUTHWEST

- Southwest corner of France.
- Some notable wines are:
Bergerac, Cahors, Gaillac, Montravel

X) SAVOIE

- Foothills of the Alps overlooking Lac Lemman.
- Best wine: Crépy (w – dry)
- Another notable: Seyssel (w – sparkling)

1.6.2 Germany**WINE OF GERMANY**

- Not much wine – about 10% of France or Italy.
- National beverage is beer.
- Long history of wines – probably started by the Romans – great fame since Charlemagne's time (800 AD).
- Best vineyards near the 50° line – chances of good wines look slim but when they are good, the style is inimitable.
- In good years the sugar-acid balance is artistic – perfect combination of soil & fruit, of character & interest.
- The finest wines are even enjoyed alone, lest any food should distract them.
- Vineyards are primarily in the valleys of Rhein and Mosel – most northerly in Europe.
- Steep riverbanks → good sunshine and warmth released by river during the night.
- Short summers – early winters – often frost → early picking = chaptalisationis allowed in the poorer years.
- Some best and rare wines are made from over-ripened grapes.
- Degree of ripening, therefore, is a major criterion for grading the wines.
- Labels often name grapes.
- Best wines from the great German grape Riesling.
- Price of quality is quantity – yield of Riesling is half of that of commoner Sylvaner.

- Sylvaner is popular in some areas (e.g. Franconia) but lacks the balance and breed of Riesling.
- Müller-Thurgau is a hybrid of Riesling and Sylvaner.
- Spätburgunder & Portugieser – red wine source – the valley of Ahr is the only specialist area for red wines (of course not comparable to the whites).

WINE LAWS OF GERMANY

- Controlled by a series of laws since 1879 – codified in 1930.
- Govt. published new laws on July 19, 1969 – made effective on July 19, 1971 – aligned old laws with prevailing ones, also promulgated laws of other E.E.C. countries.
- Controls and defines very specifically all better wines by different picking times.
- Previously 50,000 named wines – now less than 3,000.
- 1971 laws fixed the minimum area as 5 hectares (13 acres) for a vineyard. Neighbouring smaller ones had to come under one name – only a few of extraordinary fame allowed to retain individual identity.
- 1971 laws – three basic grades of quality.

Deutscher Tafelwein

- Most ordinary – consumed locally – almost no export – only broad regional names (Rhein, Mosel, etc.)
- If only Tafelwein – most likely to be blended with cheaper wines from abroad.

Qualitätswein bestimmter Anbaugebiete (QbA)

- Usually referred to just as Qualitätswein (a quality wine from a controlled growing district).
- Good quality but natural sugar-content is low (must-weight 65).
- Chaptalisation (for 10% al v/v, minimum must-weight required is 75).
- QbA wines carry a test-number.
- Best had young.

Qualitätswein mit Prädikat (QmP)

- The best wines (a quality wine with special attributes/distinction).
- Chaptalisation not allowed – grapes have to ripen properly – not possible in bad years.
- Minimum must-weight is 75.
- Carries a test-number.
- QmP wines carry degrees of sweetness – previously traditional meanings – now determined by must-weight.

Gradation of QmP wines

- Kabinett: minimum m-w 75 – picked generally in October (later than rest in Europe).
- Spätlese: minimum m-w 80 – 2 to 3 weeks later – sweeter and richer than Kabinett.

- Auslese: minimum m-w 90 – fully ripened grapes handpicked from ripened branches – fuller-bodied and sweeter than Spätlese.
- Beerenauslese: minimum m-w 120 – only in very good years.
- Trockenbeerenauslese: minimum m-w 150 – highest quality – raisin-like grapes with edelfäule – in exceptionally good years only.
- In exceptionally good, sunny years – several pickings from the same vineyard.
- Subsequent pickings are better – each picking costs more = extra labour and higher risks.
- An unusual QmP wine is Eiswein – ripened to fullest extent – partially frozen. Typical German wine speciality – once or twice in a decade – very expensive – highly flavoured, sugary, also high in acid – normally consumed at the end of a meal (like liqueurs).

WINE REGIONS OF GERMANY

- 11 regions fall under Qualitätswein.
- Each region has 2 or more districts (total 34).
- Each district has several villages.
- Each village has several vineyards.
- About 1400 wine-villages (gemeinde).
- About 2600 vineyards (einzellagen).
- Each of these may appear on the label.

Rhein wines (Hock wines)

- 5 of the 11 wine regions: Rheingau, Rheinhessen, Rheinpfaltz, Mittelhein and Nahe – the first three are important.
- Elegantly light & dry – some slightly sweet.
- Liebfraumilch used to be a wine from Rheinhessen, now a generic term for all Rhein wines.
- The English refer to Rhein wines as Hock wines – from Hockheimer, a popular wine.
- Rhein bottles are made of brown glass.
- The better-known wines are:
- Rheingau – Winkeler, Johannesberger, Eltviller
- Rheinhessen– Bingener, Oppenheimer, Nackenheimer
- Rheinpfalz– Wackenheimer, Ungsteiner, Forster

Mosel wines

- Another major region: Mosel-Saar-Ruwer
- The valleys of the Mosel river and its two tributaries.
- Slightly less sweet than Rhein wines – lower strength.
- High natural acidity but with good balance.
- Mosel bottles are made of green glass.
- The better-known wines are:
- Mosel – BernkastlerDoktor, Piesporter, Zeltingener
- Saar – Ockfeler, Wiltengener, Ayler
- Ruwer – Grunhausener, Kaseler, Eitelsbacher

Franken (Franconia) wines

- Much drier – less intense bouquet.
- Referred to as Steinwein.
- Marketed in flagon-shaped bottles – bocksbeutel.
- Some better-known wines: Winterhausener, Kitzingener, Stettener, Randersacker, Eschendorfer

Baden-Württemberg wines

- States of Baden and Württemberg have been merged.
- Baden – rich, fruity & full-bodied whites.
- Württemberg – more reds & rosés but better-known for whites.
- Some better-known wines: Kaiserstuhler, Buehler, Ortenauer
- Other regions (not much important)
- Ahr – main region for reds.
- Bergstrasse – the smallest region.

GERMAN SPARKLING WINES

- Generic term is Schaumwein. Most likely to be made from French/Italian grapes/wines. German grapes are too expensive for making Schaumwein.
- If made from 100% German grapes, its termed as Qualitätsschaumwein.
- If secondary fermentation in bottle, its termed as Sekt.
- German sparkling wines have a stronger bouquet & flavour compared to the French ones.
- More schaumwein is produced than champagne.
Some well-known brands: Rüttgers Club, DeinhardKabinett, Faber Krünung, Kurpferberg Gold
- Crackling wine: Perlwein

GERMAN WINE LABELS

- Seems to be confusing – actually gives very specific and detailed information.
Label Info
- Wine category: QmP, QbA, Tafelwein, etc.
- QmP wines: degree of ripeness.
- Region: Rheingau, Ruwer, etc.
- Village and/or Vineyard: BernkastlerDoktor (village followed by vineyard), BereichBernkastler (collective vineyard), etc.
- Amtliche Prüfungsnummer (AP No.) – indicates year of examination, community number, examination board number, bottler number, etc.
- Vintage year: 85% grapes from the declared vintage year.
- Alcohol-content
- Content
- Bottler: Abfuller
- Bottled by producer/grower: Erzeugerabfüllung
- From the producer's own harvest: AuseigenemLeseget
- Grape name mentioned on most. If not, either an easily recognisable wine from Riesling or the maker does not want attention.

1.6.3 Italy

WINES OF ITALY

- One vast vineyard.
- Some of the oldest in Europe.
- More varieties than any other country.
- Half the size of France but quantity is almost equal.
- Vines in all 20 provinces – tremendous variety at moderate price – some extremely fine.
- 60% reds – probably second only to Bordeaux and Burgundy.
- More like Burgundies – robust, full-bodied, deep red.
- Many of them undergo long ageing in cask = mature taste.

WINE LAWS OF ITALY

- Not as well-classified as in France.
- Names may be confusing – named after village or district or both, some neither, some denote dry/sweet/sparkling, etc., some denote all.
- Small growers have co-operatives: **Consorzio / Cantina Sociale**
- The co-operative seal on the label.
- The co-operatives produce half of Italy's all wines.
- In mid-1960s the Govt. framed stricter rules.
- Known as **DOC (Denominazione di Origine Controllata)**
- Specifies and controls:
- Geographical limits, grape varieties, yield, minimum alcohol content, minimum ageing, etc.

GRADATION OF WINES

Denominazione di Origine Controllata e Garantita (DOCG)

- Controlled and guaranteed naming of origin.

Denominazione di Origine Controllata e Garantita (DOCG)

- Only a few outstanding wines. Some examples:
Albana di Romagna (w), Barbaresco (r), Barolo (r), Brunello di Montalcino (r),
Chianti (r), Vino Nobile di Montepulciano (r)

Denominazione di Origine Controllata (DOC)

- Controlled naming of origin.
- Certifies:
 - Grapes grown in defined areas
 - Certain quality levels
 - Classico (special zone in an area)
 - Superiore (1% higher alcohol – longer ageing)

Vino Tipico

- Similar to Vin de Table of France.
- Established grape varieties.

- Not up to DOC quality standards.

Vino da Tavola

- 4th category in terms of quality.
- Unapproved grape variety.

WINE REGIONS OF ITALY

- Every province/region in Italy has its own identity – customs, traditions, culture, etc.
- The important regions are:

LOMBARDY

- Major wine-province – centre of very north of Italy (capital Milan).
- Better-known wines are:
Valtellina (hardy red), Franciacorta Pinot (white wine),
FranciacortaRosso (red wine), Lugana (delicate white)

TUSCANY

- Located in central Italy (capital Florence).
- Known for one of the most popular and famous Italian red wines –
Chianti – from Sangiovese grapes.
 - Marketed in a straw-wrapped flagon-shaped bottle (**fiasco**).
 - nowadays in Bordeaux-type bottles also.
- Best is Chianti ClassicoReserva – aged longer.
- Other quality wines are:
Brunello di Montalcino, Vino Nobile di Montepulciano ,Tignanello
, Solaia, Galestro

VENETO / VENETIA / VERONA

- Northeastern Italy (capital Venice).
- Best-known for reds: Valpolicella (fresh, light-bodied red), Bardolino (hardy red), Soave (one of the best Italian whites)

PIEDMONT

- Northeastern Italy (capital Turin).
- Italy's best and most varied wines.
- Some better ones are:
Barolo (r), Barbaresco (r), Gattinara (r), Boca (r), Fara (r),
Barberad'Alba (r)
- **AstiSpumante** – a delicate, sweet, sparkling white wine from Moscato (Muscat) grapes.

SICILY

- Large island off the toe of Italy.
- Famous for the fortified dessert wine Marsala – often used in kitchens.
- Also famous for **Etna** (r & w).

ITALIAN SPARKLING WINES

- Labelled Vino Spumante.

- Made from aromatic moscato grapes.
- Most use the Charmat process.
- Most are sweet.
- If dry – brut / brut reserva / brut nature
- MetodoChampenois / FermentazioneNaturale in Bottiglia (bottle-fermented)
- Crackling wine: **Vino Frizzante**
- **Asti Spumante** is the most popular Italian sparkling wine (delicate and sweet -Charmat process – from Piedmont).
- **Lacrima Christi** is another popular one (dry – methodochampenoise – from Campania).

SOME OTHER BETTER-KNOWN WINES

- **Est! Est!! Est!!!** – white wine from Laticum.
- **Falerno** – (red & white) – from Campania.
- **Capri**(more white, some red) – from Campania.

ITALIAN WINE TERMS

- **Abboccato/Amabile** – semi-sweet
- **Seco/Asciutto** – dry
- **Dolce** – sweet
- **Rosso** – red
- **Bianco** – white
- **Roasato**– rosé
- **Annata**– vintage year
- **Vecchio**– old
- **Recioto**– wine made from partially dried grapes.
- **Reserva/ReservaSpeciale**– aged for long and specific period.

1.6.4 Spain

WINE OF SPAIN

- The third largest wine-producing country in the world.
- Bulk are ordinary, some fine ones, and of course . . . Sherry
- New laws in 1970 – modern methods helped raise standards.
- Production and labeling governed by INDO (Instituto Nacional de Denominacione de Origen)
- Wines labeled DO are of guaranteed standard – but not as stringent as AOC.
- There are 28 wine regions.

RIOJA

- Northern Spain, bordering Ebro river.
- Very popular (still made by traditional methods).
- Best are reds but whites also are good.
- Reds often aged for more than 10 years. Whites are had young.
- Grapes/wines are sold to shippers who produce blended brands.
- Some notable brands: Imperial, Ygay, Marques de Riscal

LA MANCHA

- Central Spain, south-east of Madrid.
- Huge concentration of wines.
- The town of Valdepeñas gives its name to many wines.
- Chiefly strong reds.

CATALONIA

- North-east, near Barcelona.
- Red, white and rosé.

Penedés

- North-east coastline, between Barcelona and Tarragona.
- Best known for sparkling wines but stills also produced.

Andalucia

- South-west coast – most famous wine-region of Spain.
- Other than the delimited Sherry district, two famous districts are Montilla and Malaga.

Other regions

- Valencia, Las Campañas, Basque, Extremaduro, Aragon, La Nava, Ceberos, Etc.

SHERRY

- Sherry is a complex blend of wines, fortified by the addition of spirits.
- Appeared in England in the early 16th century – immediately popular.
- Fortification for easy travelling.
- The English called it sack - from Spanish sacar (to export).
- Main town: Jerez de la Frontera
- Jerez → Sherris → Sherry
- Andalucia – from Portuguese frontier in the west to Mediterranean in the east.
- Sherry district between Guadalquivir and Guadalete rivers.
- Jerez de la Frontera is the Sherry capital.
- Other towns are: Sanlucar de Barrameda, Cadiz and Puerto da Santa Maria.

Soil

- Albariza (lime, chalk, magnesium & clay)
- Barros (clay)
- Arenas (sandy)

Grapes Used

- Palominos (white) – classic and finest for Sherry – 90% are Palomino vines.
- Others: MantuoCastellano, Mantuo de Pilla, Cañocazo
- Pedro Ximenez – very sweet, used mainly for blending.

MANUFACTURING OF SHERRY

Unusual and unique process.

Fully ripened grapes brought to pressing house



Placed on round, woven esparto grass mats (for 12 to 14 hours)



Juice concentrated = high sugar content



Brought to pressing hall with **lagars**



Men tread with hobnailed shoes.



Gypsum is sprinkled → cream of tartar in grapes breaks down to tartaric acid = higher acidity.



Actual pressing with a screwpost (grape pulp piled evenly, covered with broad esparto ribbon and the post is turned)



Juice gushes forth filtered through the grass ribbon



Received in the waiting **butt**



Butts of **mosto** sent by trucks to **bodegas** in the Sherry towns.



Fermentation is violent in the first week.



Slows down and takes up to 3 months = a completely dry wine.



Racked into new casks

(even at this stage the vintner does not know what type of wine is going to develop)



A white and soft **flor** appears on the wine in some of the casks
(gives distinctive character to dry Sherries).



Two basic categories:

- **Fino** (fine) – thick and heavy flor
- **Oloroso** (rich fragrant) – little or no flor

The wine is incorporated into a **solera** system for maturing and blending with old wines
→ the new wine acquires the characteristics of the older wines.



Never drawn out more than 1/3rd from the solera → continually blending wines →
continuity of style for centuries.

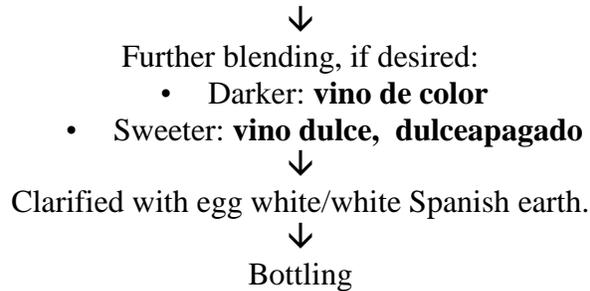


Sometimes wines from more than one soleras are blended to create a brand.



Put into fresh casks and fortified with brandy:

- Fino – 15%
- Oloroso – 18%



TYPES OF SHERRY

The Fino Group

- **Manzanilla:** a very dry, very pale, light-bodied fino that has been developed in the bodegas of Sanlucar de Barrameda, where the salty air of the Atlantic ocean contributes to the fragrance of the wine.
- **Fino:** a very dry, very pale, medium-bodied fino from Jerez.
- **Amontillado:** dry, pale to light gold, fuller-bodied.

The Oloroso Group

- **Oloroso:** usually sweet, deep golden, full-bodied and nutty.
- **Cream:** sweet, deep golden, full-bodied and nutty.
- **Brown:** very sweet, dark brown, full-bodied and nutty.

SOME FAMOUS SHIPPERS

Gonzalez Byass, La Riva, Williams & Humbert, Pedro Domecq, Harvey's

USES OF SHERRY

- A fine drink on its own (before/after dinner).
- Accompaniment with some foods.
- Popular cooking alcohol.

SPANISH SPARKLING WINES

Vino Espumoso

- Lately quite popular.
- Some are good, especially from Penedes.
- Most are sweet.

SOME SPANISH LABEL TERMS

- **Tinto:** Red
- **Blanco:** White
- **Rosado:** Rosé
- **Cepa:** grape variety
- **Reserva:** matured quality
- **Vino de mesa/pasto:** table wine
- **4º Ano / 4 Anos:** bottled at 4 years old.
- **ConsejoRegulador:** organising and controlling co-operative body

1.8 GLOSSARY

- **Ageing:** Keeping the wine in bottles for varying period depending on type of wine.
- **Aromatized Wine:** Wine flavoured with herbs, roots, flowers and barks which are steeped into it and fortified to change its natural flavour.
- **Chaptalisation:** Increasing sugar content of the wine by addition of sugar to the must.
- **Degorgement:** Process of clearing the wine by freezing the segments.
- **Fining:** Process of clearing of cloudy wine into clear wine.
- **Fortified Wine:** Table wine to which brandy or any other spirit is added to increase its alcoholic strength.
- **Isinglass:** Bladder of sturgeon fish used for cleaning of wine.
- **Maturing:** Natural process of allowing the wine to rest in oak barrels to gain maturity and character.
- **Must :** Unfermented grape juice.
- **Noble Rot:** A mould which helps to remove moisture from grapes.
- **Remuage:** Process of cleaning the wine by freezing wine bottles in wooden racks at an angle.
- **Still wine:** Wine which lacks carbonation.
- **Vinification:** The process which converts grapes into wine.
- **Vintage:** Year when the grapes density is constant, hence quality of wine is superior to wine from other year.
- **Wine:** An alcoholic beverage made from partial or complete fermentation of grape juice.

1.9 REFERENCES/BIBLIOGRAPHY

- S.N. Bagchi, Anita Sharma food and Beverage Service, Aman Publications 3rd Edition, 2006.
- Dennis Lilli Crap, John Cousins, Food and Beverage Service, Hodder Education 7th Edition.
- Bobby George, Sandeep Chatterjee, Jaico, 2007.
- Michael M. Coltman, Beverage Management Product Knowledge and Cost Control, Van Nastrand Reinhold

1.10 SUGGESTED READINGS

- Financial & Cost control techniques in hotel & Catering Industry – Dr J.M.S. Negi
- Food & Beverage Control By: Richard Kotas and Bernard Davis
- Food & Beverage Cost Control- Lea R Dopson, Wiley Publishers.
- Food & Beverage Management By: Bernard Davis & Stone

- Food & Beverage Service- Dennis R. Lillicrap. & John.A. Cousins. Publisher: ELBS
- Food & Beverage Service Management- Brian Vargese
- Food & Beverage Service Training Manual- Sudhir Andrews, Tata Mc Graw Hill.
- Hotel & Catering Costing & Budgets, RD. Boardman, Heinemann
- Introduction F & B Service- Brown, Heppner & Deegan
- The Bar and Beverage Book, 5th Edition - Costas Katsigris, Chris Thomas, Wiley Publications
- Principles and Practices of Bar and Beverage Management – James Murphy; Goodfellow Publishers

1.11 TERMINAL QUESTIONS

1. Define Wine and explain the term so as to bring out the difference between wine and sprits.
2. Classify Wines into different categories and explain each type in 2-3 lines.
3. What is the role of fermentation in Vinification. List the factors affecting quality of wine.
4. Discuss the steps in making of Rosé Wine.
5. Differentiate between sparkling wine and champagne and discuss the method of making of both wines.
6. Enlist the correct procedure involved in service of champagne.
7. Give 5 names of the following
 - a. Black grapes
 - b. White grapes
 - c. Red wine glass
 - d. White wine glass
8. As sommelier of a famous bar what rules will you follow during the service of wine?
9. Explain the following in 3-4 lines
 - a. Vintage
 - b. Chaptalisation
 - c. Charmat process/tank method
 - d. Wine storage
10. Short notes
 - a. Rosé wine
 - b. Aromatised wine
 - c. La Methode Champenoise
 - d. Vine species

UNIT: 02

WINES –II

Structure

- 2.1 Introduction
- 2.2 Objectives
- 2.3 Wine
- 2.4 Principle Wine Regions
 - 2.4.1 Portugal
 - 2.4.2 USA
 - 2.4.3 Australia
- 2.5 New World Wine
 - 2.5.1 India
 - 2.5.2 Chile
 - 2.5.3 South Africa
 - 2.5.4 Algeria
 - 2.5.5 New Zealand
- 2.6 Food and Wine Harmony
- 2.7 Storage of Wines
- 2.8 Wine Terminology (English & French)
- 2.9 Summary
- 2.10 Glossary
- 2.11 References/Bibliography
- 2.12 Suggested Readings
- 2.13 Terminal Questions

2.1 INTRODUCTION

After reading this unit about wines you will certainly have a wide knowledge about the wines, making of wine, wines of different countries, different kinds of wine, matching of the wines and food, difference between red, white and rose wines, their care and storage. You will also know about the champagne and sparkling wine. This will be of immense help in the hotels and restaurants as wine and champagne is served in all the good hotels and you can also work in the bar or be a wine sommelier (who deals with the wines services).

2.2 OBJECTIVES

After reading this unit the learners will be able to:

- Know about Principle wine regions of Portugal, USA and Australia
- Know about Principle wine regions New World
- Pair wine with food (Food & Wine Harmony)
- Understand Storage of wines
- know Wine terminology (English & French)

2.3 WINE

The word wine derives from the Proto Germanic winam, an early borrowing from the Latin vinum, wine or vine (grape). Wine is an alcoholic beverage made from the fermentation of grape juice. Wine is produced by fermenting crushed grapes using various types of yeast which consume the sugars found in the grapes & convert them into alcohol.

Fermentation is the process through which the juice gets converted into alcohol with the help of yeast. Yeast – *Saccharomyces Apiculatus* and *Saccharomyces Ellipsoideus*. Various varieties of grapes & strains of yeast have been used to do the fermentation. The natural chemical balance of grapes is such that they can ferment without the addition of sugars, acids, enzymes or other nutrients. Although other fruits such as apples & berries can also be fermented, the resultant wines are normally named after the fruit from which they are produced & are generically known as fruit or country wine.

2.4 PRINCIPLE WINE REGIONS

The present unit will discuss the remaining region of wine in following order:

- Portugal
- USA
- Australia

2.4.1 PORTUGAL

PORTUGAL

- Climate not quite conducive for viticulture.
- Even then, great variety and sufficient quantity.
- 15% of the populace is involved in wine trade.
- Some excellent reds, whites and rosés.
- Govt. has introduced standards of designating wines.
- Best wines are labeled Designacio de Origen (DO).
- Majority are small-scale growers.
- Most of them are members of co-operatives.

MAJOR WINE-PRODUCING AREAS

Entre Douro o Minho

- Northerly region, south of Spain.
- 25% of all Portuguese wines.
- Vinho Verde (green wines)
 - For the youth of the wines, not colour.
 - enjoyed quite young.
 - Both reds and whites.

Douro & Dão

- In the northern mountains lies the Douro region.
- Famous for Port wines.
- Also much table wines (both red & white).
- Dão is in north-central Portugal.

- Best are the reds.

OTHER REGIONS

- Bairrada (mostly reds)
- Bucelas (mostly whites)
- Colares (reds & whites)
- Carcavelos (fortified sweet wines)
- Sétubal (famous for the dessert wine Moscatel de Sétubal).

PORT

- Only 5% of all wines.
- Shipped to England since the 14th century.
- Trade flourished from 1703 with Queen Anne's decree.

Grapes

- Rich in sugar at the time of harvest.
- Two types of grapes:
 - Turiga, Mourisco, Bastardo (with a fruity finesse but lack in colour and body)
 - Cao, Tinta Francisca, Souza (for red colour and body)

MANUFACTURING PROCESS OF PORT

- Grapes, with the skin and the pips, are placed in oblong lagars.
- Men and women tread with stockinged feet (traditional).
- Fermentation begins at once.
- Allowed to continue for two to three days.
- When desired sugar is left (about 5% by weight), the must is run off into pipes containing brandy (alcohol-content just below 20%).
- Very strong, takes time to mature.
- New wine remains in quintatill spring.
- Racked repeatedly in fresh pipes.
- Shipped by sailing boats on Douro river.
- Taken to the wine lodges (owned by shippers) in the towns of Oporto and Villa Nova de Gaia.
- Carefully stored in the wine lodges till the type(s) are decided upon.

TYPES OF PORT

Vintage Port

- In exceptional years only (twice or thrice in a decade).
- Bottled 2 to 3 years after vintage.
- Upward of 20 years in bottle to reach the prime.
- Two dates on label: vintage & bottling.
- Heavy deposit on the side of the bottle.
- Solid crust sticks to the side.
- Careless handling may break the crust and render the wine cloudy (irreversible).
- Deep colour, fruity bouquet, heaviest-bodied.

Crusted Port

- One notch down than vintage port.
- Usually of a single year (or blended).
- No date on label.
- Aged in wood for a few years (longer than vintage port) – faster maturation.
- Then matured in the bottle.
- Crust in the bottle – careful decantation.

Wood Ports (Ruby & Tawny)

- Always blended.
- Fully matured in cask.
- Spends short time in bottle before consumption.
- Named after the colour they acquire:
 - ✓ Ruby – bright, ruby-coloured, generally fruitier and rougher than tawny.
 - ✓ Tawny – brownish, softer than vintage, crusted or ruby.
- Tawny most exported, with Ruby second.

White Port

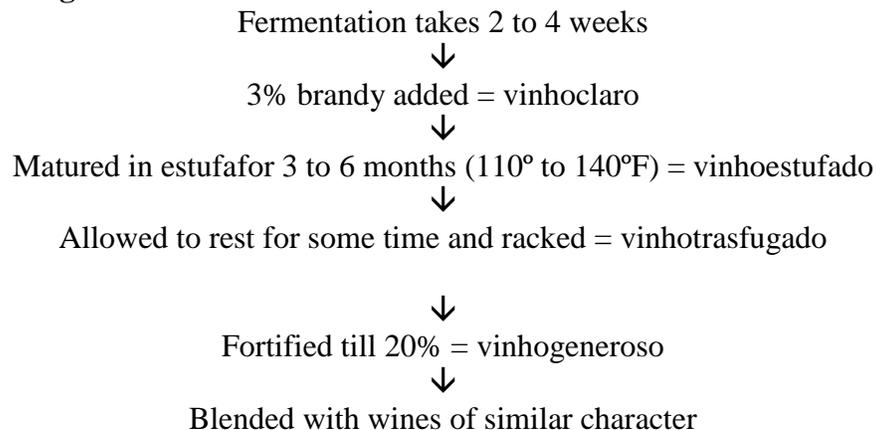
- Same process.
- Generally soft and pleasant.
- Very popular apéritif in France.

USES OF PORT

- Essentially a dessert wine.
- Popular after-dinner drink.
- Goes well with fruits and cheese.
- Kitchen – sauces, jellies, fruit cups, etc.

MADEIRA

- A famous dessert wine from Portugal.
- From the Atlantic island of Madeira.
- A subtle acid undertone (tang) due to volcanic soil.

Manufacturing Process



Matured for a number of years

Types & Brands

- Made from entirely one grape – Grape-name.
- Made from a mixture of grapes – Trade name.

Grape Varieties

- Malmsey: full-bodied, dark brown, very sweet.
- Bual: golden, fragrant, slightly less sweet than Malmsey.
- Verdelho: medium-rich, golden, dry – taken before/after meals.
- Sercial: driest madeira, pale golden, good body.

USES OF MADEIRA

- Good apéritif.
- Goes well with soup.
- Excellent dessert wine.
- Best served in the afternoon/evening with biscuits as a tonic wine.
- Kitchen – soups, sauces, desserts and substitutes sherry.

SOME PORTUGUESE LABEL TERMS

- Branco: white
- Tinto: red
- Rosado: rosé
- Clarete: light red wine
- Seco: dry
- Dolce: sweet
- Maduro: any wine that is not a vino verde.
- Quinta: estate
- Espumante: sparkling wine
- Vinho de mesa: table wine
- Quinta: estate/firm
- Vinha: vineyard
- Engarrafadona Origen: estate bottled

Best names in Madeira

- BLANDY
- HENRIQUES
- BARBEITO
- COSSART GORDON
- RUTHERFORD&MILES
- LEACOCK
- JOSE MARIA DA FONESCA
- PERIQUITA

2.4.2 USA

WINES OF USA

- The 5th largest wine-producing country.
- Quality is also commendable.
- Wine production started after the arrival of the European settlers in the 17th century.
- Grapevines introduced in California by Spanish missionaries in the mid-1600s.
- Original American vines were wild and unsuitable for making wines.
- The practice of grafting started in the 1870s after the phylloxera disaster.
- Since then, remarkable improvement in both quality and quantity.
- In 1918, production and consumption of alcoholic beverage was banned through an amendment of constitution.
- Wine vines were converted to table-grape varieties.
- One whole generation missed the taste of wine.
- The amendment was repealed in 1933.
- Wine industry started all over again.
- Vines were replaced.
- Equipments were replaced.
- Skilled labour had to be trained.
- Public awareness took decades.
- Californian wine industry is only about half a century old, whereas its European counterparts have a history of a few centuries.
- Some good wines were made in the late 1930s.
- Rapid progress after WW II.
- 1960s – countless new vineyards in California.
- 1970s – vinifera spread to other states.
- Microclimatic California – huge variety – attracted the world’s attention.
- Still a young industry – yet to produce its best.
- Major scientific developments.
- Temperature-controlled stainless steel tanks for fermentation:
 - white wines slowly at lower temperature (= more fruity and delicate).
 - red wines faster at higher temperature (= more pronounced aroma and robust).
- Micro filtration for clarification resulting in ‘cleaner’ wines.

WINE LAWS OF USA

- Vintners enjoy more freedom than their European counterparts:
 - where to grow, what to grow, what to graft, where to buy grapes from, what to blend with what, how long to age, which cask, how to clarify, etc.
- Growers produce according to customers’ choice. Unlike Europe, no restrictions by tradition.

A BROAD CLASSIFICATION

Generic wines

- Names of European types – Burgundy, Chianti, Sherry, Port, etc.
-

- Attempt to imitate European wines – slight resemblance but, nevertheless, of acceptable quality.
- Referred to as jug wines as these are often sold in large containers.

Varietal wines

- Sold by the name of the grape-variety.
- Minimum 75% has to be from a single grape.
- Examples: chardonnay, pinot noir, riesling, cabernet sauvignon, zinfandel, etc.

Brand-name wines

- Also referred to as proprietary wines.
- Generally the best wines of USA.
- The name refers to a particular vineyard and/or shipper who guarantees quality.
- Example: Robert Peppi, a Sauvignon Blanc from Napa Valley.

WINE LAWS OF USA

- Traditionally referred to by county names.
- Now more specific geographical areas – AVA (American Viticultural Area).
- Administered by the government through BATF (Bureau of Alcohol, Tobacco and Firearms).
- Just ‘California’ = 100% grapes from California.
- AVA (e.g. Sonoma county) = minimum 75% grapes from that AVA.
- Varietal name = minimum 75% from the named grape.
- Estate bottled = 100% grapes harvested and bottled by the winery.
- Produced & Bottled by = minimum 75% grapes harvested by the winery.
- Made & Bottled by = 10% to 75% grapes harvested by the winery.
- Perfected & Bottled by / Cellared & Bottled by / Vinted & Bottled by = the bottler need not make the wine at all.
- Alcohol content = 1.5% variation allowed on either side.
- Vintage date generally does not appear.
- However, if mentioned, 95% of the grapes have to be from the mentioned year.
- Rosé wines are referred to as blush wines.

The Northeast

- Centered in the state of New York.
- Spreads as far as Ohio, Indiana, Michigan, Wisconsin and Oklahoma.
- Rugged climate.
- Sturdy and robust wines.

The Pacific Northwest

- States of Oregon, Washington and Idaho.
- Wine-making is relatively new.
- Climate is like that of northerly wine regions of Europe.
- Light, crisp and somewhat tart wines like those of Germany and Alsace.

California

- About 2/3rd of all wines consumed in USA is produced here.
- Microclimatic regions result in a wide variety of wines.
- The notable AVAs are:
 - Sonoma, Napa valley, Livermore, Santa Clara, Cucamonga, Lodi-Sacramento, Ontario, Fresno-San Joaquin valley, Escalon-Modesto and San Diego-Escondido.

2.4.3 Australia**WINES OF AUSTRALIA**

- A prolific wine-producing country.
- Most consumed domestically.
- Some exported to North America, England, and now to more countries.
- Captain Arthur Phillip brought vine cuttings when he landed in Australia on 26. 01. 1788 (He, in fact, founded the colony of New South Wales).
- Now there are more than four hundred wineries.
- Initially most of the wines were fortified (Port, Sherry, etc.).
- Table wines are also very popular now.
- Many rival the best of European wines but are much cheaper.
- A wide range of climates and soils.
- Vineyards are as much as 2500 miles apart.
- Major districts are on the eastern coast, such as the Hunter River valley (north of Sydney).
- Hunter valley produces only 5% of all wines, but the highest quality.
- Other areas:
 - Barossa valley, Clare valley and Coonawara in South Australia.
 - Swan valley on the distant west coast (near Perth).
- Most have generic names (sometimes even without any proper likeness). For example – Claret, Burgundy, Chablis, Sherry, etc.
- Many marketed by district names. For example – Barossa, Hunter valley, Coonawara, etc.
- Some are sold by varietal names. For example – Cabernet Sauvignon, Pinot Noir, Riesling, etc.
- Some have combinations of the district and the grape names.
- Better to buy by shipper's name.
- All classes and types are produced:
 - table wines (many of them vintage).
 - dessert wines
 - most sparkling wines are made by méthode champenoise.
 - a few by Charmat and impregnation methods also.
- Strict government and industry regulations exist.
- Very rigidly controlled by PFDR (Pure Food & Drug Regulations).
- Appellation system varies from state to state.
- Some regulations are standard.
- For example:
 - Varietal – 80% from the specified grape.

2.5 New World Wine

The new world region of wine is described in following order:

- India
- Chile
- South Africa
- Algeria
- New Zealand

2.5.1 INDIA

INDIAN WINES REGIONS

Four major regions of vineyard: NASIK REGION, SANGALI REGION, BANGALORE REGION, HIMACHAL REGION

Nasik Region

- Located in the state of Maharashtra.
- Region include Pune, Nasik, Ahmed Nagar.
- Above 800 meter from sea level.
- Several top wineries are located here.
- Chateau Indage, Sula wines.

Sangali Region

- Also located in Maharashtra.
- Nearly 750 meter above sea level.
- This region includes places like
-solapur,sangali,satara and latur.

Bangalore Region

- Nandi Hills located about around 45 kilometer North of Bangalore City.
- Grover Vineyards is located in Nandi Hills.It is above 800 meter sea level.

Himachal Region

- Located in northern India.
- It is upcoming state for the wine in India.
- Temperature varies from 20 C to 40 C.
- Unique Climate of this region attracts the wine makers to produce delicate wine grapes.

Viticulture of India

- Vines are often trained on bamboo and wire in a pergola to increase canopy cover and to get the grapes off the ground where they would be more prone to fungal diseases
- Irrigation is essential in many of India's wine regions and since the 1980s, drip irrigation has been widely used. The tropical conditions often promote high yields which requires frequent pruning throughout the year.
- Harvest normally takes place in September and is usually done by hand

Grape Varieties

- India is home several indigenous table grape varieties that can also be used in wine production with Anabeshahi, Arkavati and Arkashyam being the most common
- Popular non-native grapes include the Bangalore Blue (Isabella) and Gulabi (Black Muscat)
- The Turkish grape Sultana is the most widely planted grape in India, cover more than half of the 148,000 acres planted in the country.
- In addition to the imported French varieties that Chateau Indage planted, Sauvignon blanc, Zinfandel, Cheninblanc and Clairette have started to establish a presence in the Indian wine industry.

Indian Wine Law

The following particulars shall be marked legibly and indelibly on the label / crown / body of the container.

- Name and type of the material;
- Ethyl alcohol contents , in percent, by volume;
- Batch or code number;
- Month and year of Packing;
- Name and address of the producer
- Net volume in ml.
- Geographical region from where the grapes are produced

2.5.2 CHILE

WINES OF CHILE

- A strip of land 4,300 km long and 200 km wide.
- A country defined to the north by the hot, dry Atacama desert, to the south by ice and snow, to the east by the Andes Mountains and to the west by the Pacific Ocean.
- Average annual growth in excess of 6%.
- First vines introduced in the mid-16th century by Catholic missionaries who had accompanied the Spanish conquistadores.
- 1840 : Chile becomes the biggest wine producer in Latin America.
- The vines adapt particularly well, paving the way for production of the first Chilean fine wines.
- 1865 : Phylloxera invades Europe.
- 1986 : Major high-prestige investor stake an interest in Chile, generating a real technology transfer.
- Modern methods are introduced : stainlesssteel vats, low temperature fermentation, new oak casks, etc.
- Top Chileane states direct their production towards fine wines for export.

The 3 wine-growing regions are divided into sub-regions and zones.

REGION	SUB-REGION	ZONE
Aconcagua	Aconcagua Valley	
	Casablanca Valley	
Central Valley	Maipo Valley	Cachapoal Valley Colchagua Valley
	Rapel Valley	
	Curico Valley	Teno Valley Lontue Valley
	Maule Valley	Claro Valley Loncomilla Valley Tutuven Valley
Southern Region	Itata Valley	
	Bio-Bio Valley	

IDEAL SOIL AND CLIMATE

- Climate subject to a dual influence:
During the day, sea breezes are warmed by contact with the coastal range and penetrate the valleys; at night, cold air blows down from the Andes mountains.
- Hot days and cool nights help to ensure optimum maturity.

THE HEALTHIEST VINES IN THE WORLD

- The only country in the world unaffected by phylloxera, protected by the natural barriers of desert to the north, the Andes to the east and the Pacific Ocean to the west.
- Little need for treatments (one or two against oidium during the year).
- Total absence of mildew.
- Vines grown without root stock or grafting.

Geography and Climate

The two greatest influences on Chile's climate are the huge mass of the Pacific Ocean to the west and, most importantly, the spectacular mountain range of the Andes which runs as a boundary down the entire eastern edge of the country.

These two monumental forces serve to cool the air. In the Andes case, they also provide a supply of irrigating water which drains down off the mountain and is channeled to the sea via an ancient system of canals built by the Incas.

There has been much investment in Chile's wine industry over the past decade or so, and a massive swing towards cleaner, new technology winemaking. Traditionally, ancient wooden vats were used for vinification, made from a local wood called *raulí*, a species of evergreen birch. In general, standards of winemaking and hygiene were in decline through the middle of the last century, but the old vats are now relegated to the poorest wines for cheap local consumption. They have been replaced by high-tech temples full of shining stainless steel and new French or American oak.

Chile has attracted many foreign collaborators and investors including Robert Mondavi of California (Caliterra), The Rothschilds of Bordeaux's Château Lafite (Los Vacos) and Miguel Torres of Spain (Torres). These estates have either set up operations in Chile, or have formed partnerships with the best Chilean houses.

Demarcated Wine Regions

Traditionally wineries sourced their grapes from all over the country, but in recent years Chile has begun to demarcate its vineyard regions into a system of controlled viticultural areas. Thus, the labelling of modern Chilean wines will carry the name of one of these areas. Basically, these named areas are the valleys formed by rivers flowing east from the Andes to the sea Aconcagua. This northerly, hot and generally arid region is best suited to red wine production. Some quality Cabernet Sauvignon is produced. The Errázuriz estate is the area's only really significant name, where Californian wine maker Ed Flaherty is turning out very serious Chardonnays from hillside vineyards, as well as excellent reds.

Casablanca

One of the new quality regions that has really put Chile on the global map, Casablanca is a relatively cool and largely coastal region producing classy Chardonnay and world class Sauvignon Blanc. It is also being planted with Pinot Noir in an attempt to exploit its cool climate conditions with one of the *sexiest* grape varieties amongst knowledgeable wine consumers. Some of Chile's top wines come from this small region, including the *Cuvée Alexandre* Chardonnay of Casa Lapostolle and the Casablanca Chardonnays made by Ignacio Recabarren, one of the leading lights of the Chilean industry.

Maipó

The Maipó region, just south of Santiago, is one of Chile's best-known and longest established quality wine regions. Here also are some of the biggest names of the Chilean industry such as the giant Concha y Toro and Santa Rita. Cabernet Sauvignon is the mainstay of the region and quality is high. A fine example is *Antiguas Reservas* from Cousiño Macul, a long-lived and classy wine at a bargain price.

Rapel

The largest of the fine wine areas, the Rapel valley features a range of climatic conditions and soil types which makes generalising about the wines difficult. Merlot is one of the stars here, from producers like Carmen (whose base is in Maipó) and Mont Gras. You will see the name *Colchagua* valley on Rapel bottlings, a small high-quality sub-region towards the coast. Cono Sur is one of the most interesting producers in the region, constantly experimenting with Pinot Noir, Viognier and Gewürztraminer amongst others, to very good and moderately priced effect.

Curicó and Maule

The Maule Valley is separated in the northern Curicó region, and the southerly Maule. A lot of pretty ordinary wine is produced in this region, but then there are numerous exceptions where the best soils and cooler microclimates lend class in wines from producers like San Pedro, Miguel Torres, Domaine Oriental and Montes. Another sub-regional name you will see on labels is *Lontué*, Valdeveso being one of its biggest and best producers.

BíoBío

This large region (not shown on map) lies south of the Maule Valley. Though larger given over to inexpensive 'jug' wines, there is investment in the area. With its cooler southern climate it is an area to watch over coming years.

Premium Wines

It was inevitable given the quality of Chile's raw materials and the growing confidence brought about through investment in the wine industry that they would not be content with supplying a mass market of budget to medium-priced wines. Perhaps with one eye on the drive towards premium pricing in Australia, perhaps with a view of the crazy prices obtained by California's cult wines, several houses have begun to release super-Chilean Bordeaux blends.

Valdevieso was one of the earliest, its Caballo Loco being launched on the market in 1997 as a deliberate move to create the first Chilean superstar wine. Many others are now on the market, several breaching the £20/\$35 barrier, taking them firmly into the arena of prestige wines. Amongst the best examples are reckoned to be CousiñoMacul's Finis Terrae, Montes "M", Errázuriz's Señal and, with a brand new state of the art winery, Almaviva, a collaboration between Mouton-Rothschild and Concha y Toro.

2.5.3 SOUTH AFRICA

WINES OF SOUTH AFRICA

- The establishment by the Dutch East India Company of a refreshment station at the Cape in 1652
- Jan van Riebeeck, the first governor of the Cape, planted a vineyard in 1655
- On 2 February 1659, the first wine was made from Cape grapes.
- Things improved when Van Riebeeck was succeeded in 1679 by Simon van der Stel.
- French Huguenots settled at the Cape between 1680 and 1690 that the wine industry began to flourish.

Cape wines before the 20th century

- The 18th century was a difficult phase for the wine industry.
- The first half of the 19th century brought prosperity to the industry.
- 1861 brought disaster.
- 1886, the disease phylloxera was discovered at the Cape and decimation of the vineyards followed.
- Charles Kohler 1918 - Ko-operatieve Wijnbouwers Vereniging van Zuid-Afrika Beperkt (KWV).

Soil

Granite

Found against the mountain slopes, with good water retention (Clovelly, Hutton)

Shale

Bokkeveld shale is fertile alluvial soil, situated in the warm river valleys. Malmesbury shale is crumbly, with good water retention.

Table Mountain Sandstone

Sandy with adequate water retention (Estcourt, Fernwood, Longlands).

Climate

- In South Africa, viticulture mainly takes place at a latitude of 34° south in an area with a mild Mediterranean climate.
- Rain falls mainly between May and August.
- The icy Benguela current which flows northwards up the west coast of Africa from the Antarctica - moderates the summer warmth.
- Cooling breezes blow in from the sea during the day, fog and moisture-laden breezes are prevalent at night.

South Africa Main Grape Varieties

White wine represents 2/3rd of the vineyard

Main white grapes

21.38% is Chenin Blanc

Colombard

Chardonnay

Sauvignon Blanc

Main red grapes

Cabernet Sauvignon 8.36% comprises the majority of red varieties

Pinotage (Cinsault/Pinot Noir crossing)

Shiraz

South African Legislation

- Wine Classification in South Africa is based on the Wine of Origin system Established in 1973.
- A numbered seal on the bottle, indicating its origin and history, but not necessarily a reflection of quality
- Wines qualify for 'varietal' status provided they contain at least 75% of the listed varietal

Demarcation of areas of origin

- The first and smallest demarcated production unit is an- ESTATE
- Estate wines must come from a single demarcated property
- The second demarcated production unit is a combination of different farms and is known as WARD, e.g. Franschhoek or Constantia.
- The third demarcated production unit is a DISTRICT, such as Paarl, Stellenbosch and Robertson.
- The fourth demarcated production unit is a REGION, e.g. the Little Karoo or the Coastal Region.

Geographical Unit

On 2 April 1993, the Wine of Origin Scheme was amended to make provision for the defining of a geographical unit. Currently two geographical units have been demarcated namely Western Cape and Northern Cape. Wine from a geographical unit may not claim 'Wine of Origin' status.

South Africa Main Wine growing Regions

Stellenbosch

Just a short distance east of Cape Town, this is the country's leading wine area, and is home to many of the country's leading estates.

Vineyards fringed by mountains

Cabernet sauvignon, merlot, pinotage and cheninblanc are the stars here

Paarl

Well known region north-west of Cape Town, and home to several leading producers

Mediterranean climate and “*terroirs*”

Hotter than Stellenbosch so the very best wines come from the more elevated vineyards

Traditionally a white wine region now focusing more on reds

Cape Town

Historical region (this is where the first vineyards were planted in South Africa),

Vineyards are ideally sited on the slopes of Constantia Mountain, where they are cooled by the sea breezes.

On premium *terroir* , superb sauvignon blanc and semillon wines

Tulbagh

Surrounded on three sides by the great Winterhoek Mountains, the vineyards of the Tulbagh district grow alongside orchards and fields of wheat. Soils in the valley are extremely variable, from sandy soils on the valley floor to very stony soils on the mountain slopes.

Worcester

The Worcester District, with 19 co-operatives, annually contributes a quarter of South Africa's total wine production. It is also the most important brandy producing area and home of the KWV Brandy Cellar, the largest of its kind in the world.

MAJOR WINERIES

Boschendal is one of the oldest wine producers in the New World with a viticultural heritage dating back to 1685. The farm "Bossendaal" (wood and dale) was granted in 1685 to French Huguenots émigré Jean le Long by the governor of the Cape, Simon van der Stel.

Kanonkop is a fourth generation family estate, which was purchased by JW Sauer. Kanonkop derives its name from a kopje (hillock) from which a cannon was fired in the 17th century to alert farmers in outlying areas of the Boland that sailing ships plying the waters between Europe and the Far East had entered Table Bay for a stopover at Cape Town.

With origins dating back to the late 1700's, Klein Constantia can reasonably lay claim to be the most historical winery in the Southern Hemisphere. The Klein Constantia estate lies some 12 miles south of Cape Town in the beautifully green and cool Constantia Mountain slopes.

Meerlust, one of the Cape's most historic wine estates, was originally granted in 1693. Meerlust is situated 15km from Stellenbosch and at only five km from the Indian Ocean, the cool sea breezes allow the grapes to ripen slowly, thus enabling them to develop their rich varietal bouquet.

Rupert & Rothschild Vignerons is a partnership in wine production on the historic French Huguenot farm Fredericksburg, between the Rupert family of South Africa and Baron Benjamin de Rothschild, son of the late Baron Edmond de Rothschild of France.

2.5.4 Algeria

WINE OF ALGERIA

Algeria is a relatively large country in the Maghreb geographical region of north-west Africa. Spanning more than 1300 miles (2000km) from east to west and roughly the same north to south, it forms an uneven square in the western half of the Sahara desert. Morocco lies to the west (the Atlantic Ocean, and the Madeira and Canary Islands beyond that) and Tunisia and Libya are to the east, confirming Algeria's place at the heart of Arabic northern Africa.

Despite being an Islamic nation, and therefore one which does not officially produce or consume alcohol, Algeria has a remarkably extensive area under vine. This vast acreage is mostly the product of Algeria's colonial occupation by France in the latter half of the 19th century and the first half of the 20th century. France's conquest of Algeria was slow, beginning with the occupation of the capital Algiers in 1830 and ending only when the last of the Toureg tribes were overrun in the 1920s. During this period of bloodshed and political turmoil the famous French Foreign Legion was created, a robust fighting force to support France's colonial aspirations.

In the 1870s, another robust invader influenced Algeria's vinous history: phylloxera. It had arrived in Europe via the Americas, laying waste to millions of vines in mainland France. For a nation with such a comprehensive vinous history and culture as France, this blow was crucial. The answer was to plant vines in the phylloxera-free sandy soils of Algeria. Such was the impact and success of this move that Algeria's vineyard grew by almost 1000% between 1870 and 1900, though Algeria was at one stage affected by the bug too. The majority of this increase was carried out by *pieds-noirs* (French nationals who had settled in Algeria) whose French vineyards had been wiped out by phylloxera.

When France ceded control of Algeria in 1962, almost one million acres (404,680ha) of the country was under vine and was generating a vast quantity of cheap, blended red wine to quell the thirst of the French people and their colonies. Once the French had officially left Algeria, the quantity of wine they imported across the Mediterranean halved, leaving Algeria with a massive surplus of wine and vines. Finding a crop which could match wine grapes for profitability and employment proved to be a struggle, so a huge area of vineyard was ripped up rather than replaced.

Today the majority of Algerian vineyards produce table grapes rather than wine grapes, leaving wine as an impressive, if brief, entry in Algerian history.

2.5.5 NEW ZEALAND

New Zealand wine is produced in several mostly maritime, cool climate wine growing regions of New Zealand, an island country in the South Pacific Ocean. Like many other New World wines, it is usually produced and labeled as single varietal wines, or if blended the varietal components are listed on the label.

The origins and early history of the wine industry in New Zealand are obscure. It is known, however, that Marsden introduced the grape vine in 1819, and that Busby produced wine on his Waitaki estate in 1833.

- MARLBOROUGH
- HAWKE'S BAY
- GISBORNE
- WAIRARAPA
- NELSON
- CENTRAL OTAGO
- AUCKLAND
- CANTERBURY & NORTH CANTERBURY
- WAITAKI VALLEY, NORTH OTAG
- NORTHLAND
- WAIKATO
- BAY OF PLENTY

Red Wine: Akarua Rua Central Otago Pinot Noir, Ata Rangi Martinborough Pinot Noir

White Wine: Church Road Hawke's Bay Chardonnay, Church Road Hawke's Bay Merlot/Cabernet/Malbec

SERVICE OF WHITE WINE

Materials Required: White Wine Bottle, White Wine Glass, Ice Bucket, Waiter's friend, Napkin, Quarter Plate

Service Procedure:

- Place the white wine glass on the right-hand side just above the knife.
- Collect the wine bottle and check if the temperature is chilled.
- Carry it to the table in an Ice bucket along with the stand.
- Take the bottle out of the ice bucket and wipe it with a Napkin.
- Present the bottle to the host from his/her right-hand side with label facing him/her so that the label can be read easily. The *sommelier* must announce the name of the wine, Vintage year if any. This is done to inform the host that the correct wine is presented.
- When the host has confirmed the wine is correct, place the bottle in the ice bucket or on the edge of the table with the label facing the host.
- Using the waiter's friend knife we cut the foil just above the raised ridge just about ¼ inch below the top of the bottle.
- This foil cap we keep in the pocket and close the knife.

- We then wipe the bottle again and then open the cork-screw and insert the sharp tip of the cork-screw into the center of the cork. Slowly turn the cork-screw in a clockwise direction until the last turn of the cork-screw is visible.
- Tilt the arm of the waiter's friend so that the lever rests on the lip of the bottle and gently extract the cork out by raising the opposite end of the waiter's friend.
- Un-screw the cork and place it on a quarter plate for inspection.
- Close the cork-screw and place it back in the pocket and wipe the mouth of the bottle with the napkin.
- Fold the napkin in a "collar" and grip the bottle along with it so that the label should be facing the guest. Pour a minimum of one ounce of wine into the host's glass for tasting and approval from the right hand side.
- The wine should be poured into the center of the glass without touching the wine glass. Slightly twist the wine bottle before lifting it away from the glass to avoid drops from the bottle neck.
- After receiving approval from the host, start serving the ladies first moving clock-wise around the table, then the men and finally the host.
- Do not overfill the wine glasses. White wine should be served to the maximum of 2/3rd of the glass.
- Place the wine bottle back in the ice-bucket.
- Re-fill if necessary.

Service of Red Wine

Materials Required: Red Wine Bottle, Red Wine Glass, Waiter's friend, Cradle (Optional), Napkin, Quarter Plate

Service Procedure:

- Place the red wine glass on the right-hand side just above the knife.
- Collect the wine bottle on the left hand with a napkin or on a "cradle".
- Present the bottle to the host from his/her right-hand side with label facing him/her so that the label can be read easily. The *sommelier* must announce the name of the wine, Vintage year if any. This is done to inform the host that the correct wine is presented.
- When the host has confirmed the wine is correct, place the bottle in the ice bucket or on the edge of the table with the label facing the host.
- Using the waiter's friend knife we cut the foil just above the raised ridge just about ¼ inch below the top of the bottle.
- This foil cap we keep in the pocket and close the knife.
- We then open the cork-screw and insert the sharp tip of the cork-screw into the center of the cork. Slowly turn the cork-screw in a clockwise direction until the last turn of the cork-screw is visible.
- Tilt the arm of the waiter's friend so that the lever rests on the lip of the bottle and gently extract the cork out by raising the opposite end of the waiter's friend.

- Un-screw the cork and place it on a quarter plate pierced with a small fork for inspection.
- Close the cork-screw and place it back in the pocket and wipe the mouth of the bottle with the napkin.
- Fold the napkin in a “collar” and grip the bottle along with it so that the label should be facing the guest. Pour a minimum of one ounce of wine into the host’s glass for tasting and approval from the right hand side.
- The wine should be poured into the center of the glass without touching the wine glass. Slightly twist the wine bottle before lifting it away from the glass to avoid drops from the bottle neck.
- After receiving approval from the host, start serving the ladies first moving clock-wise around the table, then the men and finally the host.
- Do not overfill the wine glasses. White wine should be served to the maximum of one half of the glass.
- Place the wine bottle back on the “cradle” or place it on the table with the label facing the host.
- Re-fill if necessary.

DECANTING

It is the process of separating wine from its sediments by transferring wine from its bottle to a fresh glass container.

Red wines are decanted for the following purposes:

- To separate the clear wines from the sediments
 - To allow the wine to ‘breathe’
 - To transfer the wine from the bottle to get it to room temperature
 - To promote or merchandise the wine
- Before decanting the wine, the permission of the host should be obtained.
- Materials required for decanting: Red wine bottle, decanter, candle, matches, waiter’s friend, napkin, quarter plate
 - Procedure – open the bottle first but carefully so that the bottle is not agitated much and the sediments get dislodged.
 - Present the cork on the quarter plate and then wipe the mouth of the bottle.
 - Light the candle with the matches and place on candle holder.
 - Hold the bottle in the right hand and neck of the decanter with the other hand.
 - Position the neck of the bottle 4 to 6 inches above the candle and gently transfer the wine from the bottle to the decanter without resting the bottle on the decanter.
 - Pour the wine steadily keeping close watch on the shoulder of the bottle to ensure the sediments are not getting in the decanter. The candle light helps in observing the movement of sediments clearly.
 - As the sediments approach the shoulder of the bottle, raise the bottle gently to stop the flow.
 - Place the bottle which has sediments on the table.
 - Serve the wine to the host from the decanter for his/her approval.

- After receiving approval from the host, start serving the ladies first moving clock-wise around the table, then the men and finally the host.
 - Place the decanter on the table within the reach of the host.
- ❖ Many guests prefer decanting even young wines, as the bouquet improves when the wine is exposed to air. Old red wine bottles may be allowed to stand overnight before decanting. This makes the decanting process easier. Old wine should be decanted just before service as the bouquet will fade if the wine is exposed to air for a long time. Vintage Ports are also decanted as they have sediments in them.

Service of Champagnes and other Sparkling Wines

Champagne and Sparkling Wines are served chilled. One should never make an attempt to open a non-chilled bottle as it will explosively foam over.

While opening the Champagne bottle, it should be remembered that the pressure behind the cork is enormous and hence, it should not be shaken. Remember the following safety points while opening a Champagne bottle:

- Hold the bottle at an angle of 45° to reduce the pressure on the cork, away from the guest and furniture.
- Handle the bottle gently and carefully. Do not shake the bottle, otherwise the pressure will build up and cause accident.

The materials required for service of Champagne include:

Champagne/Sparkling wine bottle, Champagne cooler, Flute or Tulip, Napkin, Quarter Plate

Service Procedure:

- Place the Tulip or Flute on the right-hand side just above the knife.
- Collect the bottle and check if the temperature is chilled.
- Carry it to the table in the Champagne Chiller containing crushed ice and salt along with the stand.
- Take the bottle out of the chiller and wipe it with a napkin.
- Present the bottle to the host from his/her right-hand side with label facing him/her so that the label can be read easily. The *sommelier* must announce the name of the Champagne/Sparkling Wine. This is done to inform the host that the correct wine is presented.
- When the host has confirmed the wine is correct, hold the bottle firmly with the left hand at an angle of 45° at waist height. Make sure it is not facing any guests or electrical fittings.
- With the right hand peel the fancy foil from the top of the bottle. Next untwist the *agraffe* (metal wire cage) gently.
- Firmly hold the cork down with the right hand while holding the base of the bottle in the left hand.
- Slowly twist the cork with the right hand in a circular motion so as to release it, while the left hand is firmly holding the bottle along with a napkin.
- Due to the pressure built up in the bottle the cork comes out smoothly. Do not make a 'Popping' sound if possible.

2.6 Food & Wine Harmony

The following is a guide to partnering Wine and Food:

- White Wine with White Meat
- Red Wine with Red Meat
- Sweet Wine with Sweet Food
- Bitter Wine with Bitter Meat
- Acidic Wine with Salty Food

Aperitif:

- Dry sparkling wine such as dry champagne
- Dry fortified wine such as dry sherry or dry Madeira
- Dry vermouth such as Martine or C inzame
- Aperitif wines such as dubonnet or lillet.

Horsd'oeuvre:

- Dry White Wine such as Chablis or Muscadet
- Dry sparkling wine such as Dry Champagne
- Fry fortified wine such as Dry Sherry or Dry Madeira

Potage:

- Dry fortified wines such as Dry Sherry, Dry Madeira
- Dry fortified wines such as Dry Oloroso, Dry Madeira

Farinaceous:

- Red table wine such as Chianti, Baralo, Sauvignon Blanc

Poisson:

- Dry white wine such as Chablis, Muscadet, Chardonnay.

Entire and Releve:

- Red Table Wine such as Bordeaux, Burgundy, Moselle, Chianti.

Roast:

- Red Table Wine such as Piont Noir, Cabernet Savignon.
- Chardonnay.

Legumes:

- White Wines such as Merlot, Dry Riesling, Chardonnay

Salade:

- Light Dry White Wines such as Samur Brut, Dry Rose and mostly Dry Champagne.

Entremet:

- Champagne goes well with sweet course, Sauternes, Tokay, Muscats Fruit Beer, Colden Ale also go well with sweet course.

Fromage:

- Full bodied white, light Red and Rose such as Rusling, Piont Noir, Burgundy, Cabernet Savignon.

Dessert:

- Sweet Fortified Wines such as Sherry, Port, Marsala
- Sweet White Wine such as Sweet Sauternes.

Cafe:

- Brandy such as Cognac, Armagnac, Liguers, Calvados, Ports.

2.7 Storage of wines

Wine storage can create some problems, particularly for quality wines. Red wine should be stored at 55°F (13°C) and white wines at 40°F (5°C). If cold storage cannot be provided for white wines, it should be stored with red wine and then cooled just before serving.

If wine bottles are cork stopper they should be stored on their side, as this will keep the cork moist and prevent air from making contract through the cork with the wine and possible spoiling it. With corked wines, avoid very dry storage, as this encourages corks to dry out, in other words humid atmosphere is desirable. Consider using proper wine racks that allow correct storage of bottles on their sides. Wine space is often wasted when proper storage racks are not used.

Fortified wines do not need to be stored on their sides, as they have had distilled spirit added to them, which helps prevent spoilage.

It is important to handle high quality aged red wines carefully, as they often develop sediment that will cloud the wine if it is roughly handled. Storing such bottles on their sides also allows any sediment to gather in such a way that pouring is made easier once bottles are opened. Even those quality wines that do improve in the bottle should be used before the quality begins to deteriorate. Red wines generally last longer than white wines. In wine handling, one thing must be remembered that the wine is living thing and as such it is liable to have its illness and it can also recover its health. If it is left too long in the bottle, it will suffer from old age and will eventually die. The ideal conditions for storing wines are as follows:

- The wines should be laid down so that the cork is always in contact with the wine and does not dry out.
- The bottle should be completely still, there should be no vibration of the floor.
- Wines should be stored in darkness as the light will affect the colour and darken the white wines.
- Wines should never be subjected to any draught (current of air) or sudden change of temperature.

2.8 Wine terminology (English & French)

ENGLISH:

Acidity — the liveliness and crispness in wine that activates our salivary glands

Aeration — the deliberate addition of oxygen to round out and soften a wine

Aging — holding wine in barrels, tanks, and bottles to advance them to a more desirable state

Alcohol — ethanol (*ethyl alcohol*), the product of fermentation of sugars by yeast

Anosmia — the loss of smell

Appellation — a delineated wine producing region particular to France

Aroma — the smell of wine, especially young wine (different than “bouquet”)

Astringent — tasting term noting the harsh, bitter, and drying sensations in the mouth caused by high levels of tannin

Balance — a term for when the elements of wine – acids, sugars, tannins, and alcohol – come together in a harmonious way

Barrel — the oak container used for fermenting and aging wine

Barrique — a 225-litre oak barrel used originally for storing and aging wines, originating in Bordeaux

Bitter — a taste sensation that is sensed on the back of the tongue and caused by tannins

Blend — a wine made from more than one grape varietal

Body — a tactile sensation describing the weight and fullness of wine in the mouth. A wine can be light, medium, or full bodied.

Bordeaux — the area in Southwest France considered one of the greatest wine-producing regions in the world

Botrytis — a beneficial mold that pierces the skin of grapes and causes dehydration, resulting in natural grape juice exceptionally high in sugar. Botrytis is largely responsible for the world’s finest dessert wines. (see “noble rot”)

Bouquet — a term that refers to the complex aromas in aged wines

Breathing — exposing wine to oxygen to improve its flavors (see “aeration”)

Brettanomyce — a wine-spoiling yeast that produces barnyard, mousy, metallic, or bandaid-ish aromas

Brilliant — a tasting note for wines that appear sparkling clear

Brut — french term denoting dry champagnes or sparkling wines

Bung — the plug used to seal a wine barrel

Bung hole — the opening in a cask in which wine can be put in or taken out

Chaptalization — adding sugar to wine before or during fermentation to increase alcohol levels. Chaptalization is illegal in some parts of the world, and highly controlled in others.

Citric acid — one of the three predominate acids in wine

Claret — the name the English use when referring to the red wines of Bordeaux

Class growth — see *cru classe*

Closed — term describing underdeveloped and young wines whose flavors are not exhibiting well

Complex — a wine exhibiting numerous odors, nuances, and flavors

Cork taint — undesirable aromas and flavors in wine often associated with wet cardboard or moldy basements

Corked — a term that denotes a wine that has suffered cork taint (not wine with cork particles floating about)

Cruclassé — a top-ranking vineyard designated in the Bordeaux Classification of 1855

Crush — the English term for harvest

Cuvée — in Champagne, a blended batch of wine

Demi-sec — french term meaning “half-dry” used to describe a sweet sparkling wine

Dry — a taste sensation often attributed to tannins and causing puckering sensations in the mouth; the opposite of sweet

Earthy — an odor or flavor reminiscent of damp soil

Enology — the science of wine and winemaking (see “oenology”)

Fermentation — the conversion of grape sugars to alcohol by yeast

Fining — the addition of egg whites or gelatin (among other things) to clear the wine of unwanted particles

Finish — the impression of textures and flavors lingering in the mouth after swallowing wine

Flavors — odors perceived in the mouth

Foxy — a term that describes the musty odor and flavor of wines made from *vitislabrusca*, a common North American varietal

Fruity — a tasting term for wines that exhibit strong smells and flavors of fresh fruit

Full-bodied — a wine high in alcohol and flavors, often described as “big”

Herbaceous — a tasting term denoting odors and flavors of fresh herbs (e.g., basil, oregano, rosemary, etc.)

Hot — a description for wine that is high in alcohol

Lees — sediment consisting of dead yeast cells, grape pulp, seed, and other grape matter that accumulates during fermentation

Leesy — a tasting term for the rich aromas and smells that results from wine resting on its lees

Length — the amount of time that flavors persist in the mouth after swallowing wine; a lingering sensation

Malic acid — one of the three predominate acids in grapes. Tart-tasting malic acid occurs naturally in a number of fruits, including, apples, cherries, plums, and tomatoes.

Malolactic fermentation — a secondary fermentation in which the tartness of malic acid in wine is changed into a smooth, lactic sensation. Wines described as “buttery” or “creamy” have gone through “malo”.

Mature — ready to drink

Mouth-feel — how a wine feels on the palate; it can be rough, smooth, velvety, or furry

Must — unfermented grape juice including seeds, skins, and stems

Negociant — French word describing a wholesale merchant, blender, or shipper of wine

Noble rot — the layman’s term for botrytis

Nose — a tasting term describing the aromas and bouquets of a wine

Oak/oaky — tasting term denoting smells and flavors of vanilla, baking spices, coconut, mocha or dill caused by barrel-aging

Oenology — the science of wine and winemaking (see “enology”)

Open — tasting term signifying a wine that is ready to drink

Oxidation — wine exposed to air that has undergone a chemical change

Phenolic compounds — natural compounds present in grape skins and seeds

Phylloxera — a microscopic insect that kills grape vines by attacking their roots

Plonk — British slang for inexpensive wine; also used to describe very low-quality wines

Rough — the tactile “coarse” sensation one experiences with very astringent wines

Sec — French word for “dry”

Sommelier — A wine butler; also used to denote a certified wine professional. For a full overview go here:

Spicy — a tasting term used for odors and flavors reminiscent of black pepper, bay leaf, curry powder, baking spices, oregano, rosemary, thyme, saffron or paprika found in certain wines

Structure — an ambiguous tasting term that implies harmony of fruit, alcohol, acidity, and tannins

Sweet — wines with perceptible sugar contents on the nose and in the mouth

Tannins — the phenolic compounds in wines that leave a bitter, dry, and puckery feeling in the mouth

Tartaric acid — the principal acid in grapes, tartaric acid promotes flavor and aging in wine

Terroir — French for geographical characteristics unique to a given vineyard

Texture — a tasting term describing how wine feels on the palate

Typicity — a tasting term that describes how well a wine expresses the characteristics inherent to the variety of grape

Ullage — the empty space left in bottles and barrels as a wine evaporates

Vegetal — tasting term describing characteristics of fresh or cooked vegetables detected on the nose and in the flavors of the wine. Bell peppers, grass, and asparagus are common “vegetal” descriptors.

Vinification — the process of making wine

Vinology — the scientific study of wines and winemaking. Also, the website for the Wine School of Philadelphia.

Vitisvinifera — the species of wine that comprises over 99% of the world’s wine

Vintage — the year a wine is bottled. Also, the yield of wine from a vineyard during a single season.

Weight — similar to “body”, the sensation when a wine feels thick or rich on the palate

Wine — fermented juice from grapes

Yeast — a microorganism endemic to vineyards and produced commercially that converts grape sugars into alcohol

Yield — the productivity of a vineyard

Young — an immature wine that is usually bottled and sold within a year of its vintage. Wines meant to be drunk “young” are noted for their fresh and crisp flavors.

FRENCH

AOC (Appellation d’OrigineControlée) : Controlled Designation of Origin, equivalent of AVA (American Viticultural Area) in the States. This classification acts as a consumer guarantee that a wine is of a particular quality and generally of a particular style.

AOP (Appellation d’OrigineProtégée) : the European equivalent of the French AOC.

Blanc : White.

Brut : Dry.

Cave : Wine cellar.

Cépage : Varietal / Grape.

Château : Estate. Literally castle, but mostly refers to large country houses.

Coopérative : A cooperative or more likely, a syndicate of wine growers.

Côte/Coteaux : Slope of a hill/hillsides.

Crémant : A style of sparkling wine other than Champagne.

Cru : Growth, denotes status of a winery or vineyard.

Cru Classé : Classified vineyard.

Cuvéespéciale : Special blend or batch, AKA “reserve wine”. Term derived from the French word “*cuve*”, meaning vat or tank. Generally indicates a higher quality wine.

Demi sec : Medium dry.

Domaine : Estate.

Doux : Sweet.

Grand cru : Great growth. Highest possible classification for a French wine.

Grappe : Cluster.

IGP (Indication GeographiqueProtégée) : the European equivalent of the French VDP.

Mélange : Blend.

MéthodeTraditionnelle : Traditional method of sparkling winemaking.

Millésime : Vintage.

Mis en bouteille au château/domaine : Bottled at the chateau/estate.

Mousseux : Generic term for sparkling.

Négociant : A merchant who buys grapes, juice or wine from growers and sells the wines under his own label.

Premier cru : First growth. Denotes land of superior quality, but falls short of a grand cru status.

Propriétaire : Estate or vineyard owner.

Raisin : Grape.

Récoltant : Grape grower. May also refer to the person harvesting the grapes.

Récolte : Harvest (may also refers to vintage).

Rouge : Red.

SGN (Sélection de Grains Nobles) : Selection of noble berries. Refers to wines made from grapes affected by noble rot, or botrytized. SGN wines are sweet dessert wines with rich, concentrated flavors. Some of the finest botrytized wines are literally picked berry by berry in successive “*tries*” (French for “selections”).

Supérieur : Wine with higher (superior) alcohol content as a result of being made from riper grapes.

value of wine and wine drinking has become popular among the young crowd as can be determined by number of exclusive wine bars in the country.

2.10 Glossary

- **Ageing:** Keeping the wine in bottles for varying period depending on type of wine.
- **AOC (Appellation d’Origine Contrôlée) :** Controlled Designation of Origin, equivalent of AVA (American Viticultural Area) in the States. This classification acts as a consumer guarantee that a wine is of a particular quality and generally of a particular style.
- **AOP (Appellation d’Origine Protégée) :** the European equivalent of the French AOC.
- **Aromatized Wine :** Wine flavoured with herbs, roots, flowers and barks which are steeped into it and fortified to change its natural flavour.
- **Binning :** The wines should be laid down horizontally so that the cork is always in contact with wine and so does not dry out.
- **Blanc :** White.
- **Brut :** Dry.
- **Cave :** Wine cellar.
- **Cépage :** Varietal / Grape.
- **Chaptalisation :** Increasing sugar content of the wine by addition of sugar to the must.
- **Château :** Estate. Literally castle, but mostly refers to large country houses.
- **Coopérative :** A cooperative or more likely, a syndicate of wine growers.
- **Côte/Coteaux :** Slope of a hill/hillsides.
- **Crémant :** A style of sparkling wine other than Champagne.
- **Cru Classé :** Classified vineyard.
- **Cru :** Growth, denotes status of a winery or vineyard.
- **Cuvéespéciale :** Special blend or batch, AKA “reserve wine”. Term derived from the French word “cuve”, meaning vat or tank. Generally indicates a higher quality wine.
- **Degorgement :** Process of clearing the wine by freezing the segments.
- **Demi sec :** Medium dry.
- **Domaine :** Estate.
- **Doux :** Sweet.
- **Fining :** Process of clearing of cloudy wine into clear wine.
- **Fortified Wine :** Table wine to which brandy or any other spirit is added to increase its alcoholic strength.
- **Grand cru :** Great growth. Highest possible classification for a French wine.
- **Grappe :** Cluster.
- **IGP (Indication Geographique Protégée) :** the European equivalent of the French VDP.
- **Isinglass :** Bladder of sturgeon fish used for cleaning of wine.
- **Light :** The wines should be stored in darkness as the light will affect the colour and darken the White Wine

- **Maturing** : Natural process of allowing the wine to rest in oak barrels to gain maturity and character.
- **Mélange** : Blend.
- **Méthode Traditionnelle** : Traditional method of sparkling winemaking.
- **Millésime** : Vintage.
- **Mis en bouteille au château/domaine** : Bottled at the chateau/estate.
- **Mousseux** : Generic term for sparkling.
- **Must** : Unfermented grape juice.
- **Négociant** : A merchant who buys grapes, juice or wine from growers and sells the wines under his own label.
- **Noble Rot** ; A mould which helps to remove moisture from grapes.
- **Premier cru** : First growth. Denotes land of superior quality, but falls short of a grand cru status.
- **Propriétaire** : Estate or vineyard owner.
- **Raisin** : Grape.
- **Récoltant** : Grape grower. May also refer to the person harvesting the grapes.
- **Récolte** : Harvest (may also refers to vintage).
- **Remuage** : Process of cleaning the wine by freezing wine bottles in wooden racks at an angle.
- **Rouge** : Red.
- **SGN (Sélection de Grains Nobles)** : Selection of noble berries. Refers to wines made from grapes affected by noble rot, or botrytized. SGN wines are sweet dessert wines with rich, concentrated flavors. Some of the finest botrytized wines are literally picked berry by berry in successive “*tries*” (French for “selections”).
- **Still wine** : Wine which lacks carbonation.
- **Supérieur** : Wine with higher (superior) alcohol content as a result of being made from riper grapes.
- **Vibration** : The wines should be permitted to sleep peacefully without agitation. The bottles should be completely still. There should be no vibrations of the floor.
- **Vinification** : The process which converts grapes into wine.
- **Vintage** : Year when the grapes density is constant, hence quality of wine is superior to wine from other year.
- **Wine** : An alcoholic beverage made from partial or complete fermentation of grape juice.

2.11 References/Bibliography

- S.N. Bagchi, Anita Sharma food and Beverage Service, Aman Publications 3rd Edition, 2006.
- Dennis Lilli Crap, John Cousins, Food and Beverage Service, Hodder Education 7th Edition.
- Bobby George, Sandeep Chatterjee, Jaico, 2007.
- Michael M. Coltman, Beverage Management Product Knowledge and Cost Control, Van Nastrand Reinhold

2.12 Suggested Readings

- Financial & Cost control techniques in hotel & Catering Industry – Dr J.M.S. Negi
- Food & Beverage Control By: Richard Kotas and Bernard Davis
- Food & Beverage Cost Control- Lea R Dopson, Wiley Publishers.
- Food & Beverage Management By: Bernard Davis & Stone
- Food & Beverage Service- Dennis R. Lillicrap. & John.A. Cousins. Publisher: ELBS
- Food & Beverage Service Management- Brian Vargese
- Food & Beverage Service Training Manual- Sudhir Andrews, Tata Mc Graw Hill.
- Hotel & Catering Costing & Budgets, RD. Boardman, Heinemann
- Introduction F & B Service- Brown, Heppner & Deegan
- The Bar and Beverage Book, 5th Edition - Costas Katsigris, Chris Thomas, Wiley Publications
- Principles and Practices of Bar and Beverage Management – James Murphy; Goodfellow Publishers

2.13 TERMINAL QUESTIONS

1. Describe Principle Wine Regions of
 - Portugal
 - USA
 - Australia
2. Describe New World Wine of following region:
 - India
 - Chile
 - South Africa
 - Algeria
 - New Zealand
3. Write a note on Food and Wine Harmony.
4. Write a note on storage of wines.
5. Explain following wine terminologies:

Millésime

Mis en bouteille au
château/domaine

Mousseux

Must

Négociant

Noble Rot

Premier cru

Propriétaire

Raisin

Récoltant

Récolte

Remwage

Madira

UNIT: 03

THE BEVERAGE INDUSTRY

Structure

- 3.1 Introduction
- 3.2 Objectives
- 3.3 The Beverage Industry Yesterday and Today
- 3.4 Responsible Alcohol Service
- 3.5 Creating and Maintaining Bar Business
- 3.6 Sanitation and Bar Setup
- 3.7 Legal Aspects
- 3.8 Professional Service
 - 3.8.1 The procedure of serving White wine
 - 3.8.1 The procedure of serving Red Wine
 - 3.8.1 The procedure of serving Champagne / Sparkling wine
 - 3.8.1 The procedure of serving Spirits
 - 3.8.1 The procedure of serving Liqueurs
 - 3.8.1 The procedure of serving Beer
- 3.9 Summary
- 3.10 Glossary
- 3.11 References and Bibliography
- 3.12 Suggested Reading
- 3.13 Terminal Questions

3.1 INTRODUCTION

The power of beverage industry is indicated by Coca-Cola #3 after IBM and Microsoft. In USA carbonated beverages are (#1),Milk(#3),Beer(#5).The beverage industry is mature sector and includes companies that market non-alcoholic and alcoholic beverages.

Historically two large entities have dominated the non-alcoholic beverages industry- Pepsi-Coca cola. They distribute their well-known carbonated and non- carbonated drinks internationally. These industries spends millions dollar in Advertising, create new products, and improve existing offerings. Sales are seasonal, peaking during warm summer's months. Most notably greater awareness of the causes of common health issue e.g. Obesity and diabetes ,has increased demand for bottled water or other low-sugar or sugar –substitute drinks.

In response beverage companies have capitalized the popularity of energy drinks and ready to drink coffee. However energy drinks have come under scrutiny due to high levels of caffeine, as regulators attempt to size up the associated drinks. The BRIC Nations (Brazil, Russia, India and China) key markets in the global arena have gotten much attention. Beverage companies have spent heavily to open new bottling plants and develop distribution network in these counties.

The range of wine, beer and distilled spirits offered by brand is wide in demand. Thus more and consumers are becoming attracted to the around the globe. Premium alcoholic beverages are gaining popularity particularly flavoured beverages.

3.2 OBJECTIVES

After reading this unit the learner will be able to:

- Assess the Beverage Industry Yesterday and Today
- Understand Responsible Alcohol Service
- Know about Creating and Maintaining Bar Business
- Know Sanitation and Bar Setup
- Understand Legal Aspects
- Know the Professional Service of wine

3.3 BEVERAGE INDUSTRY YESTERDAY AND TODAY

Beverage industry is continuously growing sector in all over the world. The global beverage industry is supposed to touch the mark of \$1.9 trillion by 2020.

Although many of these beverages including Beer, Wine & Tea have been around for thousand s year, the industry has developed only over the past few centuries. This is evident by number of manufacturers, methods of packaging, production processes and final products.

Since early 1900s beverage companies has evolved from regional firms that mainly produced goods for local markets, to today's corporate giants that make products for international markets. This change began when companies in manufacturing sector adopted mass production techniques that let them expand. Advancement in product packaging and processes that increased the shelf life. Air tight containers for tea prevented absorption for moisture, which is the principle cause of loss of *flavour*. Nutritional profile. Such juices are high consumer demand.

Cold sterilization by membrane-based system has initiated a new technique of juice preservation. Juice can have long shelf life without any preservative and additives, maintaining its natural taste and, flavour and nutritional profile. Such juice is in high consumer demand. Refrigeration equipment's enabled lager beers to be brewed during summer months. The beverage industry employs several million people worldwide, and each beverage earns billions of dollars each year.

The process of harvesting raw materials for e.g. coffee beans,barley,hops, grapes,employs ,low income, unskilled individual and families. In addition to being their main source of income, the harvest determines large part of their culture and lifestyle.

The largest global players are:

1. AB in Bev
2. The Coca Cola Company
3. PepsiCo

4. Nestle SA
5. Suntory Holdings Limited
- 6 Heineken NV
7. Starbucks Corporation
8. SAB Miller
9. Diego
10. Unilever

3.4 RESPONSIBLE SERVICE OF ALCOHOL (RSA)

The consumption of alcohol dates back many centuries, and in many cultures throughout the world, is a part of social rituals associated with significant occasions and celebrations. The majority of adults who choose to drink do not abuse alcohol and are aware that responsible drinking is key to their own enjoyment, health, and safety, as well as that of others, particularly when driving. Be a responsible drinker, and if you are under legal drinking age, our non-alcoholic drinks are the only one for you.

The responsible Service of alcohol is important for legal, health and social reasons. Drinking in excess has become one of the society's most serious problem. Alcohol is depressant or a downer that reduces the activity in the central nervous system. Being aware of the impacts and effects of alcohol abuse help us to understand what strategies we need to adopt to ensure we operate are responsible business.

Responsible service of alcohol (RSA) is about providing rules and strategies for all type of businesses and organization that sell alcohol with the aim to:

- Minimize alcohol related problems ,including anti-social behaviour
- Problems associated with excessive consumption.
- Handling difficult customers.
- Facts about alcohol
- Improving the atmosphere of your premises.
- The question that's responsible of RSA.
- Whom not to serve alcohol?(minors, drunk customer)

Most of the developed countries have offline and online certification programmes for RSA. Managers, bar employees, owners have to go through this training and receive certificate.

IMPACTS OF ALCHOL: To be certified Responsible service of alcohol, you need to understand how alcohol works in the human body .You need to understand how body functions and how human behaviour changes when alcohol enters the body. As more alcohol is consumed, the reduction a person's capacity to control their behaviour often leads to inappropriate behaviour. Drinking heavily in short period of time results in a hangover-headache, nausea, shaking and vomiting.

What is BAC?: Blood alcohol concentration (BAC) is a measure of amount of alcohol in the bloodstream. It can be used asa indication of how intoxicated a person is. It is measured by a number of grams of alcohol I ml of blood. For example, a BAC of .05

means .05 grams of alcohol I 100 ml of blood. The legal limit for BAC for fully licensed car drivers is below 0.05(gram/100ml)

A BAC in excess of 15% can cause considerable depression of the central nervous system, unconsciousness ,breathing problem and cause death.

The effects of any drug (alcohol)vary from person to person. The rate at which you're BAC depends on various factors and they are as follows:

- **Gender-** Female bodies contain a higher fat to water ratio than males. With less water to dilute alcohol
- **Size-**A larger person will have more water in the body to dilute the alcohol than a smaller person. So the larger person will have less signs of intoxication than smaller person
- **Fitness-**Muscles process alcohol whereas fat does not.
- **Health-**Being tired, ill or stressed or tolerance (people not used to drinking).
- **Food-**Presence of food in the stomach slows the rate at which alcohol absorbed in the body.
- **Rate of drinking-**If liquor is consumed at a rate faster than one standard drink per hour.

For example: one standard drink means

- **Sparkling wine**=100ml (13% alc/vol)
- **Wine**=100ml (13% alc/vol)
- **Regular Beer**=285ml (4.9 alc/vol)
- **Fortified wine**=60ml (20% alc/vol)
- **Spirits**=30ml (40% alc/vol)

When entertaining at home, these are the steps you can take to encourage responsible drinking. For example, always provide plenty of food and non-alcoholic beverages don't push drinks on your guest, and don't insist in refilling a drink .And if friends had too much drink, call them a cab. If you are a professional bartender, take advantage of responsible server-training programme that are widely available.

CHECK YOUR PROGRESS –I

Q.1 Write a note on Beverage industry?

TYPE OF CUSTOMERS

Diners at restaurant where drinks are served:

- These diners come to enjoy a good meal and drink in form of cocktail, wine and after drink, or all of three.
- Although food is primary focus, people often want to drink alcoholic beverage too.
- **Drop-in customers:** Typically they are customers who want refreshment, a quick pick-me-up or a stress reliever after a day's work. People, who are waiting to board the train, plane or are meeting someone belong here.
- **Meet –and –go customers:** These individuals are looking for a relationship connection, whether a date for the evening or longer term plan. They go to single bars or “meet” bars.
- **Entertainment lovers** looking for relaxation, or change of place-Bars, Lounges, Clubs and restaurants where entertainment is offered in form of live music, games and or dancing. They may visit several places or spend whole evening in one place. These individuals want to meet new people or keep up with social trends.
- **Sports/Cigar & Cognac Bars:** Sports/cigar & Cognac bars where people interacts with individuals who shares common sport interest. In almost every major city you 'll find at least one sports bar ,featuring big-screen television viewing from every angle and special promotion for championship games. Connoisseurs of Cigars and premium cognacs.

DECORE REQUIREMENTS: The kind of décor for the facility will be the visual expression of its mood. Décor includes the furniture and it's placement; the wall coverings; the artwork; floor, ceiling, and a window treatment; plants and other accessories; displays; and the front and back bar itself.

Each element should be planned in relation to the plan and total concept. While establishing a bar the mood, sense of spacious, relaxation, restfulness or people are in search of noisy, crowded ,stimulating atmosphere. Other requirements may be to convey elegance, opulence, and luxury, or modest comfort or terrific value for the price of food & drink.

LUXURY REQUIREMENTS:

- Expensive fabrics, teakwood furniture's & accessories
- Art objects, Pieces from museum
- Effects (Waterfall, landscapes, murals accomplished by artists)
- Flower arrangement
- Ice sculptures
- An elaborate wine, cocktail, pre-meal, Digestive list.
- Highly professional service.
- Expensive food & drinks.

LATEST TRENDS IN BAR DESIGN: They are as under:

Eco-friendly

Eco-friendly design will rule the interior design all over the world. For bars and restaurants, the main focus is on modern furniture that not only comes from renewable sources but that also serves multiple functions.

Warmer colour palettes

Warmer colours are trending in interior design as a whole. Dark greens and mustard hues ,while pewter shades are providing some much needed depth and an alternative to all-pervasive white walls that have dominated all trends in past.

Natural textures

Return of more natural, earthy take on exteriors and touch of 1970 is trending.

Cozy atmosphere

Bars are attempting to make their spaces feel more cosy and inviting by using candle, warm, rustic elements and comfortable furniture.

Other trends

- Participatory bars-Customers are the part of action, whether they pool or video games or singing in karaoke.
- Concept bar-the goal of the décor is to whisk patrons away to new or exotic locals and become popular in 1990.
- Gastro Pubs- a bar that offers world class lunch and dinner offering gourmet menu with crystal stemware, expensive linen, fireplace etc.

BASIC ELEMENTS OF LAYOUT

Universal facets of bar set up are:

- The amount of space available
- The activities taking place in that space
- Number of seats
- The size of the bar
- Relationship of the bar area to other aspects of larger facility, such as restaurant, hotel or club.

A bar is made of three parts:

- Front Bar
- Back Bar
- Under Bar

THE FRONT BAR: The customer area where drinks are ordered and served .It is the meeting point for customers and bartenders where customers place order for their drinks and are served by bartenders. The height of the bar is normally 42-48 inches. The width of the



bar is 16-18 inches. Most of the bar are plastic laminated or made of high quality granite.

A footrest runs the length of the counter on the customer side from the floor of about 9-12 inches. High stools, tall enough to convert the bar to table and each stool will have space of two- feet length of bar.

THE BACK BAR: It has dual functions; as an decorative area, storage space and space for coffee machine. It is also a soul of the bar .It conveys the image of the establishment and showcase the kind of beverages an establishment can expect to serve them. The shiny images of bottles and glassware's are usually reflected on the mirror, tradition of back bar.

In most bars, the overhead slotted racks are fitted to store the stemware which makes the bar very attractive. The base of the bar functions as storage space and the of it may be 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's such as bottle cooler, glass froster, espresso machine, cash register and so on. The design must harmonize with overall décor of the bar.

THE UNDER BAR: The under bar is where the most equipment's ,ice well, speed rail, hot and cold water facilities, Space for juices and mixers are arranged compactly and efficiently to

facilitate the speed of service. The under bar may be divided into many workstations.

According to the volume of business and the length of the counter. Each station



will have its own supply of fast moving liquor, mixers, 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 the brand of the liquor. They may just order scotch, bourbon, rye whisky, gin, vodka etc. Call brands are the brands requested by the guest by name. Some examples are Johnnie walker black lable, Absolute, Glenfiddich, Glenlivet, Bombar sapphire, Canadian club, Jack Daniels etc. Glasses for serving drinks are stored in the shelves near the station. Storage area should be provided for storing reserve stock of spirits, wines, liqueuers, beer, and kitchen supplies. The under bar should also have provision for garbage disposal and hand wash facility with hot and cold water supply.

PLUMBING: A bar should have adequate supply of hot and cold water, sinks, ice machine, Coffee machine, Glass washing machine, Soda syphon’s needs continuous supply of water. Proper drainage facility for sinks, refrigeraters Glass washing machine, ice bins, ice making machines etc. If proper drainage system is not provided, then bar will always be unhygienic and messy.

ELECTRICITY: All equipment’s such as micro, POS,ice making machines, coffee machine, refrigerators etc. runs on electricity. Therefore there should adequate plug points located just above the working areas of each station, below the bar counter, and the back counter depending on the position of the equipment. Avoid cables running across the work area which may lead to an accident.

FLOORING: As the bar staff working inside the bar stand for long hours, the floor material should be comfortable, safe and easy to clean. The material chosen for the bar should be non-slippery and easily mopped dry.

TIPS FOR MAINTAINING A PERFECT BAR: Following are essential for maintaining a perfect bar:

- Keep the labels of the bottles facing out at all the times.
- Replace the bottles with torn or crooked labels.
- Group the bottles by category-Scotch with scotch, bourbon with bourbon, liqueur with liqueur. etc, so that it is easier to take inventories and makes bartenders more productive.
- Check inventory on regular basis.
- Highlight special selection, such a collection of single malts, expensive Cognacs, premium spirits and liqueurs etc.
- Make sure that signages, promotional materials and knick-knacks that is displayed are all fit according to the décor and the image.
- Keep the back bar clean .Wipe down the bottles, shelves, registers and other equipment’s according to schedule.
- Make sure all the pourers are clean.
- Clean ice well before closing the bar.
- Clean drainage on regular basis.
- Take temperature of refrigerators and glass washing machines at least twice a day. Make sure to record it.
- Maintain par stocks (spirits, beers ,wines, sparkling wines, liqueuers , juices, aerated drinks, straws, cocktail napkins, fruit picks etc)

3.6 SANITATION AND BAR SET-UP

Hygiene-A condition or practice conducive for the preservation of health, as cleanliness.

Sanitation-A state of being clean, health promoting free from disease-producing agents, visible dirt.

Hazards-any agent (biological, Chemical and physical)that has potential of causing an adverse effect on health.

Maintaining Safety and sanitation in Bar:

- Present a clean Glass.
- Storing garnishes safely.
- Prepare garnish safely.
- Store food in Food safe Containers.
- Clean spills immediately
- Thorough cleaning at the end of the shift.
- Store garnishes, juices, liqueur with proper lids and covers.
- Monitor safe temperature at least twice a day.
- Colour-code chemicals and tools.
- Staff hygiene
- Cleaning and sanitizing the area inside as well as outside the bar.

GUIDELINES ON HYGEINE AND SAFETY IN BAR

- Always be clean, tidy and diplomatic.
- Always rinse/wash bar equipment's, like cocktail shakers, muddlers, and strainers after use.
- Wash hands often, especially after contact with citrus juice/juices, handling soiled glass, garbage etc.
- Keep fingernails short.
- Never fill the glass to the brim.
- Clean and sanitize ice-making machine as per schedule.
- Clean & sanitize glass washing machine after each shift.
- Do not use naked hands or glass for picking the ice.

BAR SET –UP: A restaurant bar set up can be found in all shapes and sizes. Full service bar set where people can sit at the bar and enjoy the drink or, a service bar where bartenders can prepare a drink and servers can deliver it to the tables.

CHECK YOUR PROGRESS –II

Q.1 Write a note on Bar?

LEGAL DRINKING AGE

- Andaman and Nicobar islands, Goa, Himachal Pradesh, Jammu and Kashmir, Karnataka, Poducherry, Rajasthan, Sikkim-**18 YEARS**
- Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Jharkhand, Madhya Pradesh, Meghalaya, Mizoram, Odisha, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand, West Bengal-**21 YEARS**
- Chandigarh, Dadar and Nagar Haveli, Daman and Diu, Delhi, Haryana, Maharashtra, Punjab-**25 YEARS**

DRINK DRIVE: The blood alcohol content (BAC) legal limit is 0.03% or 30mg alcohol in 100ml of blood. According to new law, drunken driving penalty has been increased to 6 months imprisonment and/or Rs.10000 fine for the first offence and/or fine of Rs 15000 for second offence. Previous penalty was Rs.2000.

DRY DAYS: Dry days are the specific days when the sale of alcohol is not permitted. Most of the Indian states observe these days on major National festivals/occasions such as Republic Day(26 January), Independence Day(15 August) and Gandhi Jayanti (2 October). Dry Days are also observed during elections in India.

TYPES OF LIQUOR LICENCES

- **L1**-It is granted to company or a society or a partnership firm or proprietorship firm having licensed manufacturing units (distillery/brewery/winery/bottling plant)
- **L3/L5**-Such licenses can be granted for hotels, which are holding star classification and approval from Tourism department of government of India which is taken in account necessary for grant of licence in form **L-3** licences authorizes the hotel for offering foreign liquor to customers in their room.
- **L-5** license is for serving liquor in exclusive bars and therefore the restaurants within the hotel premises.
- **L-19**-For clubs registered with registrar of firms or co-operative societies for service of foreign liquor to its member.
- **L-49A**-Marriages, parties etc., this license can be obtained on payment of rupees 3000/-for serving liquor
- **L-6**-It is liquor licence issued to the retail vendor of Indian liquor or beer .For ex-licence given to Liquor shop.
- **L-7**- Retail vendor of Indian liquor in private.
- **L-7FG**-Retail vendor of foreign liquor in private.
- **L-8**-Retail vendor of country liquor in public.
- **L-10**-Retail vendor of Indian and Foreign Liquor in Shopping mall.
- **L-11**-retail vendor of beer, manufactured by microbrewery.
- **L-12**-Retail vendor of beer and wine in departmental store.
- **L-15**-Service of Indian liquor in a Hotel to residents in their rooms.
- **L-15F**-Service of foreign liquor in a Hotel to residents in their rooms .
- **L-16**-Service of Indian liquor in a bar/Restaurant attached to a Hotel.
- **L-16F**-Service of Foreign liquor in a bar/Restaurant attached to a hotel

- L-17-Service of Indian liquor in a independent restaurant
- L-17F-Service of foreign liquor in independent restaurant.

3.8 PROFESSIONAL SERVICE

Service of alcoholic drinks involves a sequence of tasks and the staff involved in the service of alcoholic beverages should be able to serve the drinks correctly.

Service of Wine

The person associated with wine service is called as Sommelier. While serving wines, he is expected to take care of:

- Right Glassware
- Right Temperature
- Proper handling of bottle.
- Right Quantity

3.8.1 The Procedure of Serving White Wine

Ordering of wine – The wine waiter should present the wine list to the host, so that he can order for the wine. The wine waiter should write a BOT in triplicate. The top copy goes to the dispense bar in order to obtain the bottle, duplicate copy goes to the cashier for bill and third copy is retained in the book itself for the future reference.

Placing the wine glass – Wine glass is placed just near the water goblet depending upon the policy of the establishment, whether to place the glass at the top or below, the water goblet. Place the wine glass which should be chilled.

Present the bottle of wine to the guest – With your hand cupped under the bottle’s “punt”, or base, and the neck resting in your forearm with label facing out, present the bottle to the “host,” or customer who ordered the bottle. Announce the vintage, name, and varietal of the wine to the host and table at this time.

Open the bottle of wine – Open bottle with a corkscrew and offer the cork to the guest. It is an old tradition which allows the customer to examine the cork or sniff the cork, to ensure the wine has not been damaged in any way. Some customers will decline, so simply set the cork on the edge of the table.

Pour wine for tasting - The host is poured a small amount to “taste” and, when the host has approved the wine, the guests at the table are served the wine first and then the Host’s glass is filled last.

Serve the wine - In a clockwise pattern, move around the table pouring for ladies first, as always. Then move around the table again pouring for the men. To properly pour the wine, hold the bottle by the punt and gently tip the neck down to the glass. Do not overfill glasses: 2/3rd for white wine is an acceptable industry average.

Place white wine in an ice bucket near the table. When the bottle is empty, the Host is asked if they wish another bottle of the same wine or if they wish to see the wine list. Don't forget to top up and refill guest's glasses as required.

Type of Wine	Glassware	Serving Temperature	Quantity
Young Whites	White Wine Glass	10-12 °C (50-54 °F)	2/3rd of the glass
Dry White Wines		07-10 °C (45-50 °F)	
Heavier White Wines		10-12 °C (50-54 °F)	
Sweet White Wines		4.5-10 °C (40-50 °F)	
Mature Whites		12-14 °C (54-57 °F)	
Young And Light Rosé	Flute or medium sized wine glass	10-13 °C (50-55 °F)	2/3rd of the glass
Mature And Bodied Rosé		12-14 °C (54-57 °F)	
Light Fruity Red Wine	Red Wine Glass	10-13 °C (50-55 °F)	1/2 of the glass
Light Bodied Red		16-17 °C (60-63 °F)	
Medium Bodied Red		16-18 °C (60-65 °F)	
Full Bodied Red		17-18 °C (63-65 °F)	
Sweet Red Wines		07-10 °C (45-50 °F)	
Sparkling Red Wines		07-10 °C (45-50 °F)	
Dry Fortified Wines	Copita, Elgin or Port Glass	09-11 °C (48-52 °F)	2/3rd of the glass
Medium Bodied Fortified		10-12 °C (50-54 °F)	
Sweet Fortified Wines		16-18 °C (60-65 °F)	
Tannic Sparkling Wines	Champagne Flute, Champagne Tulip, Champagne Saucer	12-14 °C (54-57 °F)	2/3rd of the glass
Dry Sparkling Wines		08-10 °C (46-50 °F)	
Champagne		07-10 °C (45-50 °F)	
Vintage Sparkling Wines		10-12 °C (50-54 °F)	
Non Vintage Sparkling Wines		04-06 °C (39-43 °F)	

Wine Type, Glassware, Temperature and Quantity

3.8.2 The Procedure of Serving Red Wine

Ordering of wine – The wine waiter should present the wine list to the host, so that he can order for the wine. The wine waiter should write a BOT in triplicate. The top copy goes to the dispense bar in order to obtain the bottle, duplicate copy goes to the cashier for bill and third copy is retained in the book itself for the future reference.

Placing the wine glass – Wine glass is placed just near the water goblet depending upon the policy of the establishment, whether to place the glass at the top or below, the water goblet. Place the wine glass in which red wine is to be served. The glass in which red wine is served should be at room temperature and not chilled. Generally red wine glass wine is kept below the white wine glass.

Taking wine to the table – The wine bottle is brought to the table in a wine cradle or basket or in a bare hand.

Presenting the wine bottle – The wine waiter should present the wine bottle to the host from right at a suitable angle, showing the label. The wine waiter should also mention the name of the wine and vintage wine.

Opening wine bottle – Due to the crust in old bottle certain varieties of wine have to be decanted before they are served. It is a very delicate process and need a very steady hand. The proper method suggest, standing of bottle at least 24 hours before decanting.

Tasting the wine – The wine waiter should pour a little sip into the host's glass for tasting and approval. The host should acknowledge that the wine is in good condition and suitable to be consumed.

Sequence of service – When the host has approved the wine, change his glass with a fresh one and proceed to serve the other guests from the right hand side, ladies first and then the gentlemen, lastly the host.

Leave red wine on the table with the label facing outwards towards the dining room. When the bottle is empty, the Host is asked if they wish another bottle of the same wine or if they wish to see the wine list. Don't forget to top up and refill guests glasses as required.

3.8.3 The Procedure of Serving Champagne / Sparkling Wine

Ordering of wine – The wine waiter should present the wine list to the host, so that he can order for the wine. The wine waiter should write a BOT in triplicate. The top copy goes to the dispense bar in order to obtain the bottle, duplicate copy goes to the cashier for bill and third copy is retained in the book itself for the future reference.

Placing the wine glass – Wine glass is placed just near the water goblet depending upon the policy of the establishment, whether to place the glass at the top or below, the water goblet. Place the wine glass (Champagne Tulip, Champagne Flute and Champagne Saucer) in which sparkling wine is to be served.

Taking wine to the table – Champagne is to be served chilled. So remember to wrap it with a napkin and then cover it with another one (called as Baby Wrap). The wine bottle is brought to the table in a champagne bucket in a stand with ice. Place it on the right of the host.

Presenting the wine bottle – The wine waiter should present the wine bottle to the host from right at a suitable angle, showing the label. The wine waiter should also mention the name of the wine and vintage wine.

Opening wine bottle – After presentation, keep the bottle in the wine cooler. The neck of the bottle should be kept pointed towards the roof so that if cork is accidentally released, then no one gets hurt. To open the bottle correctly, first cut and remove the foil cover and tourniquet. Then place your thumb on the cork and at the same time remove the cork, harness and hood by twisting the bottle to loosen the cork. This is the best possible way to avoid the bottle pressure growing. Keep the angle of the bottle at 45 degrees and must be pointed towards ceiling.

Sequence of service – After opening, proceed to serve the guests clockwise. Serve ladies first, then to others and at last to the host. Pour 1/3rd of the glass and refill the glasses periodically.

After pouring sufficient amount of champagne, re-cork with a temporary bottle stopper and place in the ice bucket or chiller with a napkin wrapped on it.

3.8.4 The Procedure of Serving Spirits

Spirits are generally served as per the request of the customer in the following patterns:

- Neat: It means that nothing should be added to the drink.
- On the Rocks: It means that the drink should be served on the ice.
- With Mixes: It means some mixers should be added to the drinks such as lemonade, tonic water, dry ginger ale etc.

The standard serve of spirits is 30 ml or 60 ml in India. Light spirits (Gin, Vodka, Tequila etc) are usually garnished with a slice of lemon; whereas dark spirits (Brandy, Whiskey, Dark Rum etc) are not usually garnished. Neat and on the rocks are served in the Old Fashioned glass or Rock glass (Gin, Whisky, Rum and Vodka) while Brandy or Cognac are served neat in Brandy Balloon or Brandy Snifter. Spirits with the mixes is served in Highball or Collins. The drinks may either be served over the bar counter or at the table in the bar, restaurant or lounge and should be carried on a tray and placed on a drip mat on the right hand side of the guest. If the drink is to be served with mixes, it should be taken in a carafe and poured over the spirit in front of the customer.

3.8.5 The Procedure of Serving Liqueurs

Liqueurs are served in several different ways:

- neat
- with cream
- as a Frappé
- in a Pousse Café

Liqueur served neat - Straight liqueurs are served in small glasses of between 20 to 30 ml capacity with 30 ml being the ‘normal’ amount served. These glasses are filled to the brim, but as liqueurs have a high sugar content their viscosity is high and they don’t easily spill over the side of the glass. Examples are Bénédictine, Cherry Brandy, Amaretto, etc.

Liqueur served with cream - These liqueurs, usually coffee or chocolate based, are served in a liqueur glass and topped with fresh cream (unwhipped). The cream is poured onto the liqueur and floats. Examples include Tia Maria and cream, Kahlúa and cream, Crème de Menthe and cream, etc.

Frappé - A frappé is a drink (usually a liqueur) served on crushed ice. It may be served in a cocktail glass and is accompanied by two straws and an appropriate garnish. Examples are Crème de Menthe Frappé, Baileys Frappé, Cointreau Frappé, etc.

Pousse café / shooters - A Pousse Café/Shooter comprises of different liqueurs that are layered on top of each other in the order of the recipe. This ensures that the heaviest items are poured in turn to provide a base for the next ingredient.

3.8.6 The Procedure of Serving Beer

Beer Glasses: Beer must be served in the right glasses irrespective of its type, at the correct temperature, and be poured using the correct technique. Beer glasses must be clean and preferably cold. The slightest residue the previous drink can destroy the head that should be part of every beer. The washed beer glasses should not be dried with a tea-towel as the lint may cause the beer to appear flat but should be taken from the glass washer to drip-dry in the refrigerator. The beer glass should be washed after each use and must not be refilled. Normally, the serving temperature of beer is 13° – 15° C. Bottled / Canned beer is normally served in Beer Mugs or Beer Goblets whereas Draught Beer is served in Tankards. Lager glasses are generally used for Lager Beer.

Beer Presentation: The presentation of a glass of beer is very important to beer drinkers. The beer should form a head of approximately 1 cm. The head should last as long as possible and as such should be composed of fine, small bubbles. As it is drunk the head should leave a fine ‘lace’ on the side of the glass.

Pouring Bottled / Canned Beer: In case of customer willing to be served bottled or canned beer in a glass, then the procedure should include:

- Hold the glass by the stem or by the base. Do not touch the rim of the glass.
- Tilt the glass and pour the beer slowly onto the side of the glass.
- Straighten the glass, continue pouring until approximately a 1cm head forms, but do not overfill.
- If leaving the can or bottle with the customer, place the can/bottle with the label facing the customer, next to the glass.

Pouring Draught Beer: Pouring procedure of draught beer is as under:

- Hold the glass by the stem or by the base. Do not touch the rim of the glass.
- Hold the glass at a slight angle, with the tap near the inside of the glass.
- Turn the tap to ‘full on’ in one quick action.
- After approximately 30 ml of beer has hit the bottom of the glass, the glass should be straightened and the remainder filled, creating approximately a 1cm head on the beer.
- Turn the tap quickly to ‘full off’ when the glass is full.

Important note:

- If the tap is half open, or turned on or off slowly, beer will squirt out, making it frothy.
- If the beer is pouring flat, it may be necessary to lower the glass away from the tap to create the desired head. Alternatively if the beer is pouring heady, keep the side of the glass as close to the tap as possible to minimise the head.
- If the beer pours excessively heady, do not continue pouring and overflow the glass. Instead, stop pouring, leave the glass to allow the head to settle, then fill the remainder.

- Always pour beer drinks last when serving a mixed round of drinks.

Pouring Stout: Stout is a very ‘heady’ beer, and for this reason draught stout is dispensed using a mix of nitrogen and carbon dioxide (as opposed to carbon dioxide as used for ‘normal’ beers). Nitrogen forms smaller bubbles and helps to prevent the stout from being too heady. Draught stout is poured in a similar way to draught beer except that only approximately $\frac{3}{4}$ of the glass is filled, then the stout is allowed to settle. The fine bubbles rise to the top of the stout forming a creamy head. Once the stout has settled, the remainder of the glass is filled.

3.9 SUMMARY

The bartender and other staff responsible for serving various types of beverages in the licensed premises have to be perfect in their job as the guests visiting the bar expects a high level of service with absolute perfection. Minute details like serving temperature, usage of correct glassware and garnishes used makes the difference. At the same time, the laws related to sales of alcoholic beverages should be kept in mind so as to abide by them. Alcohol should be served responsibly so as to prevent guests from over consumption, intoxication and drunk driving. A good barman should always stock his bar with various varieties of drinks which can largely suffice the broad requirements of its guests.

3.10 GLOSSARY

Call: Spirits used when patrons do name— or “call”—a specific spirit brand in a drink order. (Example: Tanqueray and tonic.) ‘Call’ bottles tend to be your more popular brands, but are generally not the most expensive.

House Brand: A brand of liquor a restaurant uses when guests orders cocktails without specifying the use of any particular brand.

Pour Cost: Pour cost is calculated by simply adding up the cost of the product used and dividing it by the cost of the product sold.

Premium: Also known as top-shelf, these items are usually the most expensive and carry a more refined reputation. These bottles are often on display on your back bar or in display cases to pique customers’ interest.

Suggestive Selling: A sales technique used by servers to increase guest satisfaction and sales by encouraging guests to order extras like appetizers, cocktails, mocktails, desserts etc.

Well: Spirits used when patrons don’t name a spirit brand in a drink order. (Example: Gin and tonic). Your well bottles are often the best deal for both the bar and the customer.

3.11 REFERENCES/BIBLIOGRAPHY

- Lillicrap, D. and Cousins, J.; Food and Beverage Service; Eighth Edition, Hodder Education, London, 2010.
- Davis, B., Lockwood, A. and Stone, S.; Food and Beverage Management; Third Edition, Elsevier, New Delhi, 2008.
- Bhatnagar, S., K.; Managing Food & Beverage Operations, First Edition, Frank Brothers & Co., New Delhi, 2009.
- Bagchi, S., N. and Sharma, A.; Text Book of Food & Beverage Service, Third Edition, Aman Publications, New Delhi, 2012.
- Singaravelavan, R.; Food and Beverage Service; First Edition, Oxford University Press, New Delhi, 2012.

3.12 SUGGESTED READING

- Financial & Cost control techniques in hotel & Catering Industry – Dr J.M.S. Negi
- Food & Beverage Control By: Richard Kotas and Bernard Davis
- Food & Beverage Cost Control- Lea R Dopson, Wiley Publishers.
- Food & Beverage Management By: Bernard Davis & Stone
- Food & Beverage Service- Dennis R. Lillicrap. & John.A. Cousins. Publisher: ELBS
- Food & Beverage Service Management- Brian Vargese
- Food & Beverage Service Training Manual- Sudhir Andrews, Tata Mc Graw Hill.
- Hotel & Catering Costing & Budgets, RD. Boardman, Heinemann
- Introduction F & B Service- Brown, Heppner & Deegan
- The Bar and Beverage Book, 5th Edition - Costas Katsigris, Chris Thomas, Wiley Publications
- Principles and Practices of Bar and Beverage Management – James Murphy; Goodfellow Publishers

3.13 TERMINAL QUESTIONS

1. Write the detailed procedure of serving various types of wines.
2. Draw a neat chart explaining the type of beverages and their corresponding serving temperature, glassware and quantity.
3. Write the procedure for serving different types of spirits.
4. What is the process of serving Stout beer?
5. Write a self explanatory note on the basic principles of bar and beverage management.

UNIT: 04

BAR MANAGEMENT

Structure

- 4.1 Introduction
- 4.2 Objectives
- 4.3 Purchasing of Beverage
- 4.4 Receiving of Beverage
- 4.5 Storing of Beverage
- 4.6 Issuing of Beverage
- 4.7 Controlling of Beverage
- 4.8 Marketing Beverage Products Responsibly
- 4.9 Employee Management
- 4.10 Art of Mixology
- 4.11 Planning for Profits
- 4.12 Bar Menus
- 4.13 Summary
- 4.14 Glossary
- 4.15 References/Bibliography
- 4.16 Suggested Readings
- 4.17 Terminal Questions

4.1 Introduction

Bar management involves operating and running an establishment that serves alcoholic beverages. As a in charge of bar management we need to oversee variety of staff members, bartenders, bouncers, and servers. Bar Management are also tasked with keeping their bars running smoothly by handling day-to-day operations ,as well as managing resources, and creating a safe ,on brand environment for staff and guest. Entertainment is an important part of bar management as well. Potential entertainment options include televised sports games and live entertainments featuring bands and comedians. If a bar serves food, a bar manager also might have to make a menu selections and supervise the bar kitchen.

Bar management includes inventory management, keep files in order. Managing schedules and checklist of daily duties, employee records, and training, and keeping tabs on every aspect of business, plan of action for daily tasks as well as emergency situations. Getting employees involved in organization is a good way to make job simpler and go much faster. Assign employees to specific tasks(cleaning, stocking, file sorting etc.) and the job will be done quicker and more efficiently. In addition to the time-saving aspects of assigning organizational task to employees, it also helps them feel like a bigger and more important part of the team. Other bar management duties includes to monitor Purchasing, Issuing, Receiving, marketing, employee management etc.

4.2 Objectives

After reading this unit the learner will be able to:

- understand the procedure of purchasing, receiving, starting and issuing beverage
- know the procedure of beverage control
- understand the process of marketing beverage products responsibly
- develop skills of mixology
- understand the various types of bar menus

4.3 Purchasing of Beverage

A beverage is a liquid which is intended for drinking. It is broadly classified into alcoholic and non-alcoholic beverages. The purchase of beverage control is to ensure that there is a continuous supply of ingredients for producing beverage products, the quality purchased is suitable and price of the items is at an optimum price.

Beverages are not perishable as compared to food but some items have shelf life. But following points are to be kept in mind before purchasing them:

- Storage space
- Frequency of placing order
- Capital available
- Delivery time
- Minimum order requirement set by vendor
- Stock levels are fixed by the organization for stock replacement. It might be requisitioned by the cellar man or authorized member such as bar manager
- Selection of supplier is finalized with the contract. The contract mentions the details regarding price, the item to be supplied, delivery time, and place of delivery.
- The order could be placed by various means such as telephone or fax, e-mail, or in a written form.

METHODS OF PURCHASING: There are various methods for purchasing beverages depending upon location, size, type of beverages being purchased.

CONTRACT OR TENDER-Purchasing is done through contract or tender when the beverage requirement is in bulk. There are two types of contracts

- **Specific period contract-**In this there is specified start date and has a fixed date until the contract is valid; it may be extended up to three or six months. The procurement of all goods at the mentioned rates is valid till the mentioned date which lapses after the contract lapses. Items such as milk, bread, butter usually have a stable price.
- **Quantity Contract-** In this contract there is an agreement between buyer and the seller that buyer will buy certain quantity during specific period of time.

CASH AND CARRY: Medium and small establishments prefer to buy from cash and carry warehouses situated in selected big cities. The cash and carry ware houses are like a

huge supermarket for traders who can purchase goods at competitive prices. The disadvantage of cash and carry is that the items are not delivered to the establishments.

MARKET PURCHASE: Purchasing goods directly from local market or nearby store the market in emergency for guest’s needs and cannot wait for supplier to deliver. The rates of the goods are higher as compared to the regular supplier.

CREDIT PURCHASE: This type of purchasing is most popular as it is not always possible to pay immediately for the goods delivered to the establishments. The goods are sent to the establishment with the copy of purchase order with the bill or invoice mentioning the items, quantity, rates, and the total amount. The items are received and the bill is signed. The amount is later paid to the vendor as per payment condition laid down by the establishment and negotiated with the vendor.

PURCHASE ORDER: Items are a purchased daily, weekly, or monthly depending on their consumption and need. The purchase manager usually prepares the purchase order, prepared in triplicate. One copy is sent to the receiving section so that the receiving clerk knows what has been ordered. The original copy is sent to the vendor and book copy is kept as reference for the management. Purchase order contains the following details

- Item
- Specification
- Quantity ordered
- Quoted price
- Purchase order number
- Order date
- Delivery date
- Ordered by
- Received by
- Comments

Computerization has helped in getting all the information about stock received, pending, or expiry details of the product.

The software also helps us determine the status of each item in the purchase order. It includes the items, which have already been received or the items that are pending as per the purchase order generated.

The image shows a sample purchase order form. At the top right, it says 'PURCHASE ORDER'. Below this, there are fields for 'Company Name', 'Company Address', 'City, ST, ZIP', 'Phone', and 'Fax'. To the right, there are fields for 'DATE', 'PO #', and 'Customer'. Below these are sections for 'VENDOR' and 'SHIP TO' with their respective details. A table follows with columns for 'ITEM #', 'DESCRIPTION', 'QTY', 'UNIT PRICE', and 'TOTAL'. The table contains two rows: 'Product XYZ' with a quantity of 15 and a unit price of 150.00, and 'Product ABC' with a quantity of 1 and a unit price of 75.00. Below the table, there are fields for 'Comments or Special Instructions' and a summary section with 'SUBTOTAL', 'TAX RATE', 'TAX', 'S & H', 'OTHER', and 'TOTAL'. At the bottom, there are fields for 'Authorized by' and 'Date', and a note: 'If you have any questions about this purchase order, please contact (Name, Phone #, E-mail, Phone, Fax)'.

Sample format of Purchase order

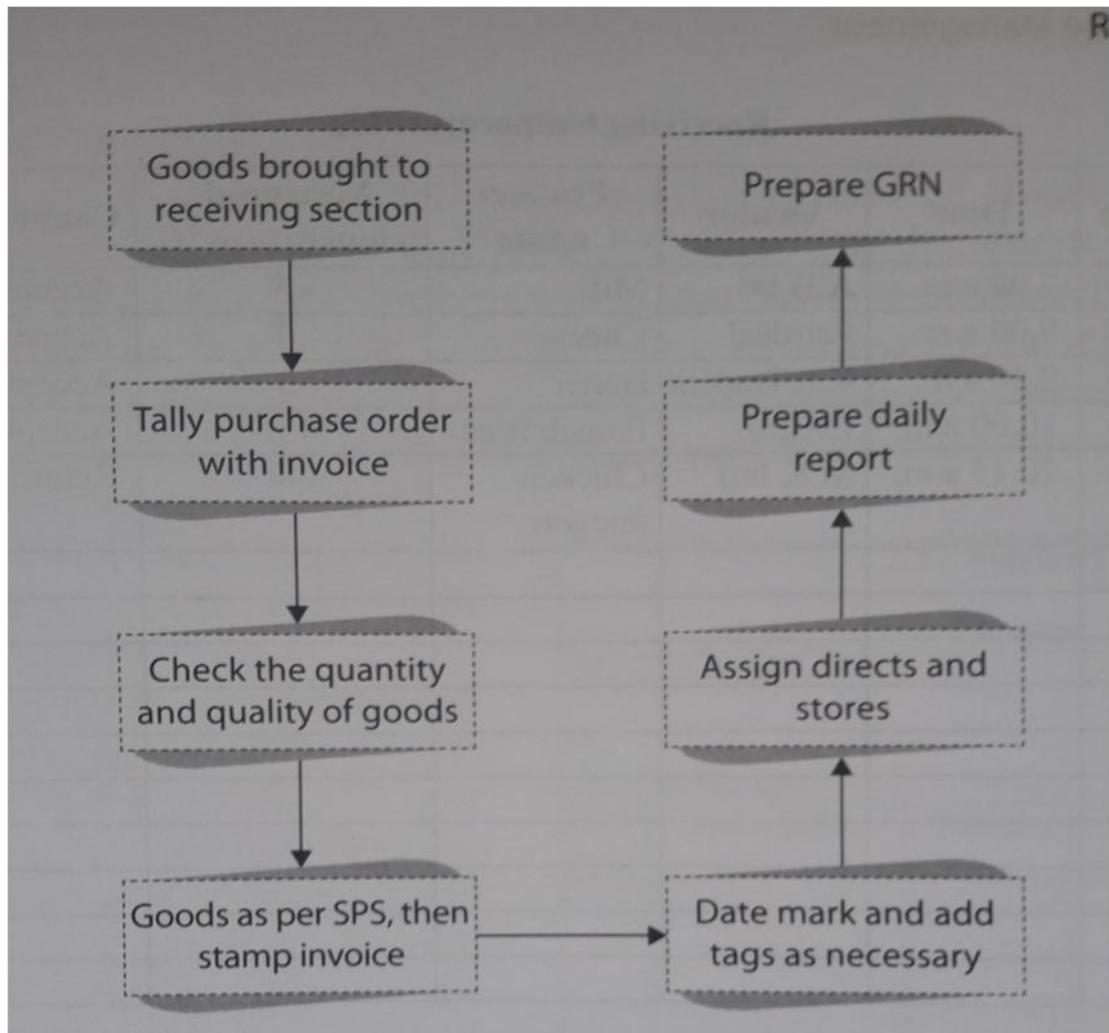
4.4 Receiving of Beverage

RECEIVING: The function of the receiving section for food and beverages are different.

BEVERAGES RECEIVING: Beverages receiving include some crucial points and that must be checked carefully.

- Check the bottles to ensure that they are filled and sealed properly. Count the cases. Thoroughly weigh the beer kegs, check it should not be damaged
- The quality of the item ordered and the brand should be the same as the one that is delivered. In wines vintage year may also be checked.
- The price in the case or the bottle should match with the invoice and tally with the same when ordered.
- Any broken bottle or leaking cans, any bottle with broken seal, or missing labels should be informed to the management.
- On receipt of goods ,sign the invoice to acknowledge the same.
- After the invoice is recorded in the beverage receipt report,notify the concerned person regarding storage.

FLOW CHART OF RECEIVING



RECEIVING RECORDS: Invoice or bill-An invoice is a business document issued by a vendor to a purchaser. In this invoice the quantity, approved prices for the product and the services is mentioned. Invoice also states that if payment is not made in advance, then it is due by the purchaser to the vendor as per the decided terms. An invoice is always

prepared in duplicate and is presented to the receiving clerk sign and return second copy to the delivery person. The original copy is sent to the accounts department.

A bill is a document which is generated for claiming the payment for goods either already supplied or just delivered. It provides the total price for services and goods delivered to client, but for which no amount is paid and is presented in anticipation that payment would be made full. On receipt of the bill, the receiving clerk should rubber stamp the bill and verifies the information such as date, name of the receiving person, signature, price, and mention that bill is verified for the payment.

ACCEPTING PRODUCTS: The delivery invoice should be signed to note acceptance of the product. Typically, beverage products become the property of the beverage operation at this point. Sometimes delivery personnel exert pressure on receiving process. It does take time to count and complete proper product inspection. However, receiving staff must invest the time necessary to do their jobs well. It is for this reason the deliveries are to be made during specific time period.

MOVING TO STORAGE AREA(S): After completing the receiving process, staff should move products to the proper storage area(s). At this stage, manager should enforce several important storage principals.

- Movement of product to inventory area should be undertaken by beverage employees, not by delivery personal in order to avoid theft.
- Spoilage becomes less of an issue when products are moved from delivery area to storage areas maintained at a storage temperature.
- Selected staff members should be trained to receive and should always perform the task.
- Product delivery should be made at non busy times so that receiving personal have opportunity to complete all required task.
- Deliveries should be made to a specified area of the beverage operation.
- Products should be immediately moved to the storage after the receiving process is complete.
- The outside door to storage areas should be kept locked when not in use.

4.5 STORING OF BEVERAGE

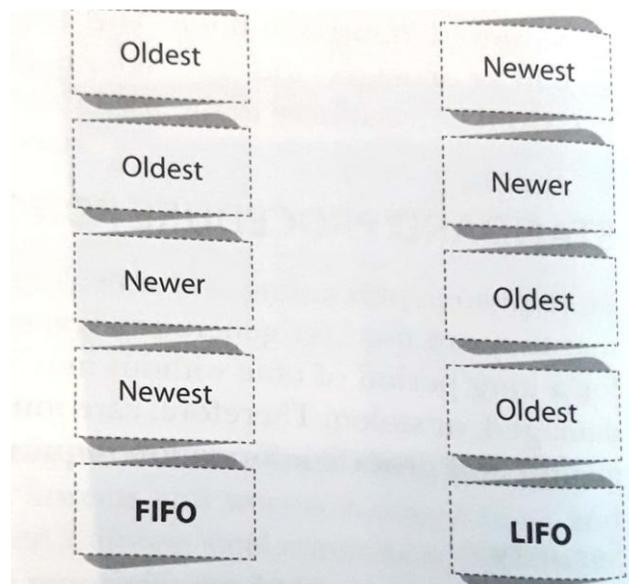
After purchasing and receiving beverage products, managers most often must store products until the products are issued to the bar area.

Storage practices directly affect financial operations. If products are stored correctly, all of the products that are Purchas and produced will be used to generate revenue. However, if the products are not stored properly stored they can be broken, damaged, or stolen. Any of those outcomes will result in increased costs.

Most beverage products are relatively non-perishable. Unlike perishable food products such as dairy items and products, most properly stored beverages can be held for long periods of time without this concern.

RETAINING PRODUCT QUALITY: Beverage products should remain in storage areas for the shortest reasonable amount of time possible. The practices helpful in maintaining product quality are :

- Put the date of delivery on cases or bottles.
- Keep storage areas clean. Regular pest control, effective lighting so that the cleaning programs can be easily inspected.
- Maintain temperature for beers, wine and spirits.
- Follow FIFO. This refers to first in , first out. This method is preferred for both perishable and non-perishable items as it is common to issue oldest stock first. If FIFO method is not followed, it could result in loss of product by spoilage , shrinkage, and deterioration of quality.
- LIFO system. This refers to last in ,first out .In this system ,the storekeeper tends to issue the recently issued products first followed by the earlier receive products. This system is used except if prices of products just received have dropped. It is also in some food outlets where the freshest food is offered to the guest, followed by remaining food.



BEER STORAGE: Beer has the shortest storage life of any alcoholic beverages.

- Canned and bottled beer may be generally be stored at temperature between 40°F and 70°F (4.5°C and 21°C)
- Beer kept in storage for too long will lose their flavour and their aroma.
- Unpasteurized beer should be refrigerated at all times and all beer should be kept away from direct sunlight.
- Beer bottles should be stored be stored upright to avoid leakage.
- Beer cans packaged in cases may be stacked.
- All bottles and cans be stored in a way that minimizes the chance for dirt and dust to come into contact with the beer containers.
- Keg beers should be stored in a manner that allows for easy keg movement and taking inventory.

WINE STORAGE: Store wine bottles horizontally. Keeping wine on its side helps keep the cork moist, as a dried out cork can cause seepage and premature aging.

- Protect wine from Light and vibration, UV rays from direct sunlight can damage wine's flavours and aromas. Keep wines away from sources of vibration, such as washer and dryer, exercise area, or stereo system. Vibration can disturb sediments in the bottle.
- Store wine at the proper humidity because lower humidity can dry out corks, leaving the wine vulnerable to the effects of oxygen, while higher humidity can cause labels to peel of the bottles. In general, wine cellar humidity should be between 60-68 percent.
- Store wine in wine fridge not a regular fridge. A wine fridge keeps wine between 50-60°F(10-15°C) and at the proper humidity. Keeping wine in a separate wine fridge also helps prevent cross –contamination from food odours' good fridge also as cooler setting for Champagne.
- White wines may be stored under refrigeration temperatures of approximately 41°F(5°C) for several months with no loss of quality.

SPIRITS STORAGE: In general spirits may be stored for several years at common dry storage temperature between 50°F and 70°F(10°C and 21°C).Bottles should be stored upright with their labels facing out for ease of taking inventory. Storage area should always be kept clean.

4.6 Issuing of Beverage

It is the process of giving out F&B products for usage from the stores. In a large establishment, requisition has to be made by different outlets and signed by the authority; this is then sent to the issue clerk who issues the product after verifying the availability of the product in the stores. It is recommended to send the requisition to a issuing section a day in advance so that the same can be arranged.

Each department should be allocated the pick-up time to avoid confusion. Proper precautionary measures have to be taken while issuing beverages as high cost is involved and pilferage may occur. When liquor is issued from the store it should be marked so that it is not duplicated; otherwise bartender would bring his/her own bottle, sell it, and take all the revenue.

The liquor room should always be locked and the key should be signed with the time mentioned on issue so that the check is maintained about person accessing the storeroom for a particular time period.

4.7 Controlling of Beverage

Inventory is defined as stores. The inventory control takes storage, handling, and use of inventories into account to ensure that all goods are available whenever requested for, after considering the maximum 'stock of goods'. In F&B establishment, inventory is the stock of finished, partly finished goods, and raw materials which are present in the saving and minimizing wastage and loss. The inventory cost includes not only the cost of the stocks but also the cost incurred in storing the goods.

PHYSICAL INVENTORY: Physical inventory is an individual counts and records the amount of each product present in the store. After physical inventory F&B department knows the amount and value of the product on hand. This information helps in determining if any new goods have to be ordered. The inventory is taken on the last day of the month as it helps to prepare the cost of F&B and the profit and loss statement for a particular period.

PERPETUAL INVENTORY: In Perpetual inventory, the total inventory is counted and recorded and any additions and deletions are later added to the total inventory. The cost of the goods sold is continuously updated on each transaction of sales and purchases. The purchase made are debited to the inventory account ,whereas for each sale ,two general entries are prepared –the first one to record the sale value of inventory and the second to record the cost of goods sold. The purchase account is not used in a perpetual inventory system.

Beverages such as wine and liquor are maintained in a separate inventory sheet .The perpetual inventory card are used to maintain perpetual inventory; similar to bin cards but have additional information and are used differently. Additional information

Item: Boiled rice (Grade A)		Cost ₹110 per kg		
Supplier: ABC Co., 14/20 S.P. St., Kolkata 15		Par stock: 100		
		Reorder point: 60		
		Reorder quantity: 70		
Date	Order no.	In	Out	Balance
March 1	454-58			60
March 2			20	40
March 3			10	30
March 4		70	10	90
March 5			10	80
March 6			15	65

includes the name and address of the supplier, recent purchase price, reorder point, recorder quantity, par stock.

The reorder point is the point at which supply on hand should decrease after which additional order are placed.

PERIODIC INVENTORY: In periodic inventory, the actual physical count is taken along with the valuation of the amount which is present in the inventory for a particular time period. The purchase made is recorded in the purchase account and every sale transaction is recorded in a single journal entry. This is no cost of goods sold account as it is determined at the end of the accounting period with a closing entry.

COMPUTERIZED INVENTORY: Inventory management software with a perpetual inventory control system may have different modules for procurement, purchasing, storing, issuing, and physical stock verification, which can prevent malpractice and corruption. The system also supports physical stock taking and keeps a strong check by providing inventory discrepancy reports to enhance checks and balances. The inventory

common term used to define the key aspects of marketing is the ‘marketing mix’ which is made up of “4 P’s” Product, Price, Place and Promotion.

OBJECTIVES

- Manager’s primary goal in marketing a beverage operation.
- Purpose of marketing plan.
- A business website that would target the market of bar and beverage establishment.

MANAGER’S GOAL

- Inform customers about products and get products into customer
- Inform customers about products and get products into customer’s hands.
- A marketing plan should expand upon the marketing section of a business plan

GENERAL PRINCIPLES

- All marketing communications must be truthful and not misleading.
- To communicate how brands and products fit into a healthy diet and healthy lifestyle.
- Nutritional and health benefit claims included in any marketing communications should have a sound scientific basis.
- Marketing communications should not encourage excess consumption and portion size should be appropriate.
- Beverage products not intended to be substitute for meals should not be represented as such.

MARKETING RESEARCH

Marketing research is a systematic collection, storage and analysis of information about the market. Different market segments are

- Geographic
- Demographics and
- Psycho graphics

4.9 EMPLOYEE MANAGEMENT

Food and beverage service employees are the frontline staff who meet, greet and seat guest, hand them menus, explain and suggest ,and take food and beverage order .They are also responsible for keeping the area clean and hygienic. Bartenders prepares the order directly from patrons at the bar or through waiters and waitresses .Bartenders should be responsible to serve the drinks to those customers who meet minimum age requirement for purchase of alcohol and tobacco as per government rules.

Bartenders must have the knowledge of various classic and innovative cocktail recipes, able to mix drinks as per standard. Besides mixing and serving drinks, bartenders are also responsible for bar set up, preparing garnish for drinks, stock check, bar supplies, ice, glasses .They also may collect payment, operate the cash register, POS or micros system, wash glassware and serve snacks to the customers seated at the bar counter.

Bartenders are also responsible for the requisition and inventory of liquor and non-alcoholic beverages. Bartenders directly serve and interact with the guest so they should be friendly with the customers. Bartenders working in service bar have less contact with the customers, waiters and waitresses from different outlets place their order in this bar.

Larger establishments use hi-tech equipment's such as bar guns, electronic pourers to dispense drinks. Bartenders who use this equipment, however, still must work quickly to handle a large volume of drink orders and be familiar with the ingredients for special drink requests. Much of bartender's work still must be done by hand to fill each individual order.

Bartenders must be at least 21 years of age, but employers prefer to hire people who are 25 or older. Bartenders should be familiar with State and local laws concerning the sale of alcoholic beverages. Most food and beverage serving and related workers pick up their skills on the job observing and working with more experienced workers. Some of the bartenders acquire their skills by attending a bartending or vocational and training school. These programmes often include instruction on State and local laws and regulations, cocktail recipes, attire and conduct, and stocking a bar. Some of these schools help their graduates find jobs. Employees are trained for food handling and legal issues regarding serving alcoholic beverages and tobacco. Employers are more likely to hire and promote based on people skills and personal qualities rather than education.

JOB OPPURTUNITIES: There are abundant job opportunities for food and beverage serving related employees. Overall employment of these employees is expected to grow at faster pace, stemming from increase in population, personal income, and leisure time. While employment growth will account for many new jobs, the overwhelming majority of new openings will arise. As in this job education and training requirements are minimum, so the part-time jobs attracts people for short term source of income rather than a career. However, keen competition is expected for bartender, waiter and waitress, and other food and beverage service jobs in popular restaurant and fine dining establishments, where potential earnings from tips are greatest.

WORKING SITUATIONS: Food and beverage service employees are on their feet most of the time and often carry heavy trays of food, dishes, and glassware. During busy hours, they are under pressure to serve customers quickly and efficiently. The work is relatively safe, but care must be taken to avoid slips, falls, and burns.

As per international standards bar boys, bartenders, bar waiters/waitresses should be provided safety belt, safety shoes and use them strictly during duty hours in order to avoid back problem. Hair covering and gloves and other similar equipment's.

Food and beverage employees are often exposed to very hot or very cold temperatures. They often work near large freezers and ovens. They are often exposed to distracting sounds and noisy conditions that may be uncomfortable. Bars, Pubs, Restaurant may be noisy due to loud music.

Sometimes they are exposed to hazardous situations and equipment that may produce cuts and minor burns. This is because they handle knives and work near hot surfaces such as stoves and ovens.

INTERPERSONAL RELATIONSHIP (MANAGERS)

- Have a high level of contact. They work closely with the staff and supervise.
- Communicate with employees and customers by telephone and in person on daily basis.
- They may occasionally communicate using e-mail, letter, memos.
- Deal with customers who are unpleasant, impolite, or angry.
- Work in a group or as a part of a team.
- Are responsible for the work outcomes of those they supervise.
- Are greatly responsible for the health and safety of customers and other workers.

WORKING HOURS

- Generally work a set schedule .They may work “split shifts”. For example, they might work from 11a.m to 3p.m and 7p.m to 11p.m with time off in between.
- May work part time or full time .Most work full time, about 40 hours a week.
- May work evening, weekends or holidays.
- May work conventional hours if employed in institutional food service facilities, such as hotel management schools.

RESPONSIBILITIES OF A BAR MANAGER

- Manage the bar team for success
- Work closely with the kitchen team and front office team, interact with guest, give direction to the staff members.
- Oversee day –to-day operations of the bar.
- Maintain written recipes and accurate menu information.
- Have excellent mixology skills and experience in high-volume venues.
- Keep bar sales growing, meet sales target, and implement sales promotion at the bar.
- Develop weekly bar specials and seasonal new bar menu items to create customer excitement.
- Maintain a clean, well organized and fully stocked bar.
- Conduct daily briefings.
- Attend meeting with food and beverage manager.
- Prepare bar menus.

4.10 ART OF MIXOLOGY

In the modern cocktail scene, the terms “mixology” and “ mixologist” are a regular part of vocabulary. They are used more and more to describe a style of mixing cocktails and people who practice it. Mixology is another term of mixing drinks or bartending and mixologist is another term for bartender or bar chef. However, mixology is generally accepted as a refined and in-depth study of the art and craft of mixing drinks. In other

words it can also be said chemistry of drinks, and mixologist as the professional who studies and practice that.

Merriam –Webster’s dictionary dates “mixology” to 1872 and defines it as ,”the art or skill of preparing mixed drinks “It defines “bartender “as “a person who serves drink at bar” and notes the term was first documented in 1825.

Mixology’s definition and its use are topics of debate in the professional bartending community. This usually leaves the impression that a *mixologist* is better and more skilled than a bartender. But this is not true as each requires both the same and a different set of skill.

The mixologist is someone who:

- Studies and attempts to contribute to the evolution of the field of bartending.
- Creates innovative cocktails, often using unique, housemade or historical ingredients and combining those to create unusual tastes in drinks.
- Revels in and refines the techniques and drinks of the bartenders.

Mixologists are also known for making name for themselves in cocktail literature. Many mixologists also take on consulting jobs, working with distilled spirit companies. They help develop cocktails and promote the brand in at public events. Some mixologists work behind a bar regularly and others do not. Still they put years as a bartender before moving onto a career path that one might better define as mixology.

A bartender needs to have variety of skills which are very important and some that that the mixologist may not develop or use on regular basis .In general bartender need to:

- Know lot of common and popular cocktails.
- Serve many people at once.
- Handle cash and manage bar stock.
- Maintain crowd control
- Be the ultimate “people person “and think quickly.

Career bartenders spend so much time behind the bar gives them the idea of consumer tastes and keep up with trends .Additionally ,many of the most impressive cocktail recipes are developed by these talented bartenders.

DEVELOPING A NEW COCKTAIL: A bartender may be encouraged to develop his/her own cocktail recipe .Most of the bars has a list of classic cocktails and innovative cocktails developed by the bar. Every organization has a manual that clearly mentions the name of the cocktail, ingredients, quantity, method of preparation, garnish used, and the glassware. The bartender must have a clear understanding on the flavour profile of various spirits, liqueurs, aromatized wines, juices, flavouring ingredients, garnishes etc. And their relationship with other ingredients.

The following should be standardized for every new cocktail and other cocktails served in a bar:

- The size of the cocktail is normally between 100ml and 120ml

- Alcoholic base used may be 25ml, 30ml, 40ml, 45ml, etc. The amount decided should be the size of the measure for the cocktail.
- The modifiers and their proportions should be decided. If the modifier is alcoholic drink, it should be smaller than the base ingredients.
- The flavouring and sweetening ingredients and the method of addition (when and how) to be established.
- Method of making cocktails-building, shaking, stirring, blending, and layering-should be decided according to the modifier and other ingredients.
- The size and type of glass to be used.
- The quantity and the type of ice should be standardized-the type(cubes, cubes, crushed, cracked or flakes) and quantity of ice to be used. Too much ice dilutes the drink.
- The garnish should be standardized

The cocktail must satisfy the eyes, nose, and palate which means that it must have perfect combination of colour, flavour and texture. The ingredients should not clash with each other.

Newer fruit juices, carbonated drink, pre-mixers and other new ingredients available in present day market should be explored to try out a new recipe. After developing the recipe, it should be appropriately named.

EQUIPMENT: The right tool makes the job easier. For a home or professional bar following equipment's are required:

1. Can and bottle openers
2. Easy-to-use corkscrew
3. Waiter's corkscrew
4. Glass stirring rod or bar spoon
5. Coil-rimmed bar strainer
6. A tall heavy duty mixing glass or shaker.
7. Small, sharp stainless-steel paring knife for cutting fruit or for shearing of rind.
8. Wooden muddler or the back of a large wooden spoon for mashing herbs,fruit,etc.
9. Large pitcher
10. Fruit juice extractor
11. Set of measuring spoon
12. A jigger measure with easy-to-read half-quarter-ounce measures.
13. Ice bucket and ice tong.

An electric blender is essential for mixing frozen drinks. Bar should also have an assortment of straws, swizzle stick, toothpicks ,coasters, and cocktail napkins.

GLASSWARE: The best glasses should be thin lipped, transparent. Clean, sparkling glasses show off good drinks to great advantage. The proper glass enhances the drink. In the bar we might also need a coffee cup, coffee mug, or punch cup for some of the recipes,

GLASS NAME

1. Collins

10.Red wine

- | | |
|-----------------------|---------------------|
| 2. Shot | 11. White wine |
| 3. Highball | 12. Sherry |
| 4. Old-Fashioned | 13. Champagne flute |
| 5. Beer Mug | 14. Brandy snifter |
| 6. Beer pilsner | 15. Cocktail |
| 7. Irish coffee Glass | 16. Cordial or Pony |
| 8. Pousse café | 17. Whisky sour |
| 9. Parfait | |

STOCKING A BAR: If you keep 750-milliliter bottle each of the spirits mentioned ,you’ll be able to create just any combination of drinks and that should satisfy just about everybody

Spirits, Wines, and Beer

- Bourbon
- Brandy and Cognac
- Gin
- Rum(White and Gold)
- Scotch
- Tequila(White or Gold)
- Vodka
- Whisky(Blended, Irish, Canadian, American)
- Liqueurs
- Vermouths(Sweet and dry)
- Red and white wine(Dry)
- Fruit-flavoured Brandies
- Beer(Lager, Ale, and stout)
- Champagne



MIXERS

- Cola
- Club soda
- Ginger Ale
- Lemon-Lime soda
- Tonic Water
- Water
- Fresh Lemon juice
- Fresh Lime Juice
- Fresh orange juice
- Grapefruit juice



- Cranberry juice
- Pineapple juice
- Tomato juice
- Coconut cream

CONDIMENTS

- Bitters
- Grenadine
- Powdered sugar
- Granulated sugar
- Coarse salt
- Ground black pepper
- Tabasco sauce
- Worcestershire sauce
- Orgeat syrup(almond-flavoured syrup)
- Horseradish
- Cinnamon sticks
- Ground nutmeg
- Light cream
- Whipped cream
- Passion fruit syrup
- Simple syrup
- milk



GARNISH

- Stuffed Olives
- Cocktail onions
- Lemons
- Limes
- Oranges
- Maraschino Cherries
- Strawberries
- Celery
- Pineapple
- Bananas
- Cucumber
- Fresh Mint.



ICE: Bar ice must be clean and fresh and free of any flavour save water. If necessary, use bottled spring water. Ice goes in the cocktail glass first .That way the spirits get cooled on the way in without any unnecessary splashing. Ice can be crushed,shaved,cracked,or cubed ,depending on the drink.Mosthighballs,old-fashioned, and on the rocks drinks call for ice cubes.Use cracked or cubed ice for stirring and shaking; crushed or shaved ice for special tall drinks,frappes,and other drinks to be sipped through straws. Both manual and electric ice crushers are available, but you can also crush ice by putting cubes in a tightly

closed plastic bags, wrapping the bag in towel, and smashing the ice with a rolling pin or hammer.

TECHNIQUES

HOW TO CHILL A GLASS: Always chill before you fill. There are three ways to make cocktail glass cold

1. Put the glasses in the refrigerator or freezer a couple of hours before using them
2. Fill the glasses with crushed ice just before using.
3. Fill the glasses with cracked ice and stir it around before pouring in the drink.
4. If refrigerator is not available for pre-chilling fill each glass with ice before mixing. When the drink is ready, empty the glass, shakes out all of the melted ice, and then pours in the drink.

HOW TO FROST A GLASS: There are two types of “frosted” glass. For “frosted” drinks, glasses should be stored in the refrigerator or buried in shaved ice long enough to give each glass a white, frosted, ice cold look and feel. For “sugar –frosted” glass, moisten the rim of a pre-chilled glass with a slice of lime or lemon and then dip the rim into powdered sugar. For Margaritas, rub the rim of the glass with lime, invert glass, and dip into coarse salt.

HOW TO MUDDLE: Muddling is a simple mashing technique for grinding herbs such as mint smooth in the bottom of glass. Wooden or plastic muddler crushes the herbs, much as the back of the spoon might, without scarring your glassware.

TO STIR OR NOT TO STIR: Pitchers of cocktails need at least ten seconds of stirring to mix properly. Carbonated mixers in drink do much of their own stirring just by natural bubbling. Two stirs will complete the job.

WHEN TO SHAKE: Shake any drink made with juices, sugar, or cream, or use an electric blender. Strain cocktails from shaker or blender. Strain cocktails from shaker or blender to a glass through a coil-rimmed strainer.

POURING: Pour drinks as soon as you make them or they will wilt. Leftovers should be discarded or they will be too diluted by the time you get to “seconds”. When making a batch of drinks at once, set up the glasses in a row. Pour until each glass is half full, then backtrack until the shaker is empty. The way everyone gets the same amount, thoroughly mixed.

FLOATING LIQUEUERS: Creating a rainbow effect in a glass with different coloured cordials requires a special pouring technique. Simply pour each liqueur slowly over an inverted spoon (rounded side up) into a glass: Start with the the heaviest liqueurs first. Pour slowly. The rounded surface of the spoon will spread each liqueurs over the one beneath without mixing them.

THE SECRET OF FLAMING: The secret of setting brandy (or other high alcohol spirits) aflame is first to warm it and its glass until almost hot. Warm a glass by holding it by its stem above the flame or electric coil on the stove until the glass feels warm.

is to set a standard. One method is based upon guest checks. A second method relies on unit sales information entered into electronic register equipment before menu items are produced.

GUEST CHECK SYSTEM: In some bar and beverage operations, a guest check system is the heart of revenue control. The standard amount of revenue is represented by total of all amounts recorded on individual guest checks for a meal period (periods) after all check has been accounted for. The reliability of this standard depends upon servers following strict procedures when processing individual guest checks.

MANUAL GUEST CHECK SYSTEM: Alcohol and beverage orders are neatly written on guest checks written with pen not pencils, and mistakes must be crossed out rather than erased. The server must have supervisor initial a guest check that has items crossed out or voided. Before initialing, the supervisor makes sure that the deleted items are not prepared by the bar staff.

Before alcohol and beverage items are produced, server must provide appropriate BOT (Bar order ticket) to the bartender. The server list items on a BOT and also records his/her name (or waiter's id) and serial number of guest check. The server turns in the duplicate, copy to the bar and keeps the original copy for presentation to the guest. When guest is ready to pay, the guest check is tallied.

At the end of the meal period the manager match BOT's (or duplicate copies guest checks) turned in to the bar with the corresponding guest checks for which revenue has been collected. The procedure identifies difference between what was produced and what was served from the bar. Routine audits of guest checks may also reveals mistake made by the servers in pricing items on guest checks or in calculating totals. These routine audits guest checks, management indicates to employees its concern about effective controlling system.

Guest checks should be numbered and record kept of which checks are given to employees. BOT or duplicate checks are helpful when a check is unaccounted for BOT's (or the duplicate copy) corresponding to missing checks have been turned into the bar, management knows that the missing guest check has been used, that items listed on it have been served, and that revenue due from the server

COMPUTERIZED SYSTEM: In today's business operations, computer has become an integral part and is used in all areas of operations. In food and beverage operations it is extensively used. Software for checking and billing are available in different price ranges and the operator can select according to the funds available and the need. This system is based on either triplicate or duplicate method. The order taker passes an order to the system operator and takes out two copies of bar order ticket (BOT) with all the necessary information entered. One copy is given to the bar and second copy is used by the waiter for reference during service. At the end of the service, he/she gets the bill printed from the system operator who makes the bill referring to the BOT number. On entering the BOT number, the system prints out the bill without any overwriting and mistakes.

In advanced system, each service staff is provided with a hand-held device. The waiter orders the food and beverage order directly on his/her device which gets printed in the

bar. The bartender prepares the drink according to the order. Once the drink is ready, the waiter gets signal on his/her device and he/she collects the drink .At the end of the service the bill is printed.

The advantages of the computerized system are as follows:

- Clarity and no overwriting
- Saves time as the time needed to process is less.
- Bills can be printed out quickly without any arithmetic error
- Provides the necessary management information on fast moving dishes, least preferred dishes. Maximum revenue generated by salesperson, cash and card settlement, sales contributed by residential and non-residential guest,etc.
- Ensures good control
- Avoids duplication of work
- Keeps the area neat and tidy.

POINT-OF-SALE SYSTEM: Most of the restaurants are switching to the point –of-sale (POS) systems from the traditional system of order taking and billing as such systems are faster, easier, accurate and error-free. This system is not limited to order taking and billing, but have many more applications. They provide essential information on menu analysis, sales and cost analysis, time management, work scheduling, understand the restaurant’s customer profile, cash card sales, and so on.

It reduces manpower and improves efficiency. He/She can take the order from the guest and touch the menu selection on the screen, and order gets printed at the bar or where orders are to be collected from. Once the orders are ready, the server collects them and serves to the guest.

POS has many features as follows:

- The POS has ability to modify the menu items and create a customized menu. It allows guest to select their own toppings for pizza, filling for the burgers, portion size, quantity of cheese, etc. And the bill will be generated automatically.
- The bills can be generated as and when required, and can be settled at the table itself through debit or credit cards by guest.
- Split checks can be easily prepared .in a party of 10 guests, if two guest want to pay their bill ,it is possible to split the bill for them.
- Mobile and cloud POS helps restaurateurs know their customers, how much they spend, their favourite dishes, where they come from, and the time they visited last. It helps to develop relationship.
- Points can be added to the guests account based on the sales and the gifts and vouchers may be extended according to the point’s accumulated.

4.12 BAR MENUS

Bar menus might not be as prominent as food menu, but it’s just as important and contributes to the sales. The beverage in the hospitality business has many challenges and opportunities to make the venue more profitable.

Sales growth and profitability are two pieces of the puzzle. To design bar menu requires a concerted effort to control costs and enhance sales. Here are some of the tips to design bar menu

Ensure your menu is visible: Menu should be easily visible to your customers. It should be displayed on the bar and on the tables. The same applies online, menu should be on your website and available on your social media channels. The menu should be easily left behind after guests have placed their original order. Leaving the menu behind (as opposed to the servers collecting it immediately) helps with upselling and can lead to repeated orders, it's an easy sales opportunity. Always bring the beverage menu together with your food menu. Customers are likely to order their drinks with their food and not always separately.

Simplify the bar menu: Long menus with too many items are not customer friendly, so have a separate drink menu so have a separate drink menu for the cocktails to enhance sales. Keep the content specific but but light so that it highlights interesting options without being overwhelming for customers.

Use POS data: To increase sales or control costs, get a product sales report from POS (Point of sale) system to see the top selling drinks, and the least popular ones. It will help to beef the bar menu to improve sales. Create a cocktail menu with more premium products and a better profit margin. With the data obtained the organization can think about customer preferences to keep them interested and motivated to try new drinks, and as a result, improve the sales with higher margin.

Keep it focused: Determine the current focus (campaign) for the bar menu will be beer, wine or cocktails? Whatever the campaign is, keep it clear and simple. Feature a drinks menu with about a dozen of each category *i.e.* beer, wine and cocktails. It helps maintain focus and makes it easier to upsell and ensure customers aren't lost in an endless long menu. Plus, if there have too many drinks to choose from, then staff can't effectively upsell them.

Use creative descriptions: A drinks menu should have descriptions as for the food menu with all kinds of adjectives as it helps to sell. Same logic is there for bar menu, especially cocktails where we have to do a little more than just listing the ingredients. Use punchy words such as 'tangy', 'fresh', 'smooth' and 'robust' - it keeps the customers interested and makes it easier for the servers to sell the menu. Interesting names also work. Include some creative cocktails on theme nights with intriguing names to match. When done right this can effectively build up demand and on-going customer interest, which can then encourage sales.

Find the right design fit: Design the menu to match the venue style. If it has a more casual, pub feel, the menu should reflect that. Try more playful designs (with reason) as an experiment. Remember to print on high quality paper that is easy and inexpensive to replace and reprint. Keep the message clear; don't mix up by being something that is not in the business.

Use boxes to highlight key items: It attracts attention and identifies best sellers. To make high-profit items more noticeable, create space around them by placing them in a box or

separating them from other menu items. For a familiar effect, make use of text larger than the regular font of the menu. Bold text, graphics, or illustrations will help as well. Choose only a few drinks per category(e.g signature drinks) to ensure the method remains effective and gives the customers more options.

Group beverages for better cost control: Alcoholic beverages are regularly divided into groups; liquor, wine, beer, and draught beer. The reason is simple, each of these groups have very different costs of sales within the total beverage category. Depending on pricing strategies, liquor may have a cost of sales of around 23%, wine 50%,beer 33%and draught beer around 27%..If all beverage items are grouped together and total cost of sales on beverage is 37%, then there would be no idea why or where to look for problems or opportunities.

Group beverages for better sales analysis: Grouping beverages into liquor, wine, beer we can analyse and plan beverage menu to manipulate sales. This is called sales mix. Knowing that liquor accounts for 20% of beverage sales, wine 25%,beer 15% and draft beer the remaining 40%provides with profound insights on what directions we can explore in the sales campaign while helping with cost control.

What not to do:

- Type or fonts that are too small and hard to read
- A menu that lacks descriptions- customers want to know what they are ordering.
- Spelling mistakes! Ensure the menu showcases the venue in a professional way.
- Ineffective, limited and unattractive design-ask a professional graphic designer for help.



this system should be supported by an internal system of bar books to control all the products, services and functions of bar.

4.14 GLOSSARY

Beverage Cost: It refers to the cost of beverages sold.

Bin Card: It is a storeroom card for each drink with bin number showing stock in hand, maximum stock level, minimum stock level and reorder level of the stock.

Cellar: It is a storage space for alcoholic drinks.

Standard Cost: This is the cost of a product worked out for a standard portion.

Ullage: It is the space between the cork and the top of the wine. It is also referred as weeping wine.

4.15 REFERENCES/BIBLIOGRAPHY

- Singaravelavan, R.; Food and Beverage Service, First Edition, Oxford University Press, New Delhi, 2012.
- <https://www.bevspot.com/2016/04/27/11-tips-control-beverage-cost/>
- <https://www.thecaterer.com/articles/300749/food-and-beverage-control-systems>
- <https://www.irishpubsglobal.com/wp-content/uploads/2012/06/TrainingManualStock Management.doc>
- Davis, B., Lockwood, A. and Stone, S.; Food and Beverage Management; Third Edition, Elsevier, New Delhi, 2008
- Murphy, J; Responsible sale and service of alcohol for the tourism, hospitality and retail industries, Goodfellow Publishing Ltd, Oxford, England; 2015.
- Murphy, J.; Principles and Practices of Bar and Beverage Management, Goodfellow Publishing Ltd, Oxford, England; 2013.
- Murphy, J.; Principles and Practices of Bar and Beverage Management – The Drinks Handbook, Goodfellow Publishing Ltd, Oxford, England; 2013.
- Ojugo C.; Practical Food & Beverage Cost Control; 2nd Edition; Cengage, United Kingdom, 2010.

4.16 SUGGESTED READINGS

- Financial & Cost control techniques in hotel & Catering Industry – Dr J.M.S. Negi
- Food & Beverage Control By: Richard Kotas and Bernard Davis
- Food & Beverage Cost Control- Lea R Dopson, Wiley Publishers.
- Food & Beverage Management By: Bernard Davis & Stone
- Food & Beverage Service- Dennis R. Lillicrap. & John.A. Cousins. Publisher: ELBS
- Food & Beverage Service Management- Brian Vargese

- Food & Beverage Service Training Manual- Sudhir Andrews, Tata Mc Graw Hill.
- Hotel & Catering Costing & Budgets, RD. Boardman, Heinemann
- Introduction F & B Service- Brown, Heppner & Deegan
- The Bar and Beverage Book, 5th Edition - Costas Katsigris, Chris Thomas, Wiley Publications
- Principles and Practices of Bar and Beverage Management – James Murphy; Goodfellow Publishers

4.17 TERMINAL QUESTIONS

1. How can stock control improve profitability?
2. What are the limitations of beverage control?
3. Write the ground rules for F&B Control.
4. What points are to be considered while doing the pricing?
5. Write the procedure involved in receiving controls.
6. Write the procedures to be followed during issuing of beverage.
7. Write the points to be considered while designing a cellar.
8. Enlist the various measures used in control of possible losses in the bar.