MANAGERIAL ECONOMICS & FINANCIAL ANALYSIS

UNIT -1

INTRODUCTION TO MANAGERIAL ECONOMICS:

The word economics is derived from a Greek term ***"OCIO NOMOS"*** which means house management it explains how different individuals behave while managing their economics activities. Economics teaches us how a person tries to satisfy his unlimited desires with the limited resources at his disposal. In other word it teaches us how to use the available scares resources to meet our unlimited desires. Hear the question of choice comes in the need for choice arises in the context of "Scarcity".

MANAGERAL ECONOMICS:

Economics is concerned with determining the means of achieving given objectives in the most efficient manner. While managerial economics is the application of economic theory and private institutions. It is an extraction from economic theory, particularly micro economics those concepts and techniques which enable the decision Makers to efficiently allocate the resources of the firm. If also enables the decision makers to understand the economic environment and the effect of changes in this on resources allocation within the organization

Definition:

Economics is deals with money or money oriented activities.

According to M N Nair's and Meram "Managerial economics consist of the use of economic modes of thought to analyses business situations"

According to Haynes "Managerial economics is economics applied in decision making".

Nature of managerial economics

The following points specify the nature of managerial economics.

Managerial economics is confined only to a part of business management: Managerial economics is confined only to a part of business management but it is not directly concerned with the managerial problems involving control, implementation, and other management strategies.

Managerial economics mainly relies on the sound framework of traditional economics and decision science: Managerial economics mainly relies on the sound framework of traditional economics and decision science in analyzing the problems in a business. It mainly relies on the application of economic principles and methodologies for business decision making.

Managerial economics is mainly microeconomics in nature: Micro economics is that branch of economics which deals with the individual units or sections of an economy. As managerial economics is mainly concerned with analyzing and finding optimal solution to the problems of decision-making in a business firm, it is essentially micro economic in nature.

Managerial economic is pragmatic: It is a practical subject. It prevents the abstract issues of economic theory and incorporates complications that are not covered by the economic theory in order to analyze the situation in which manager take decisions

Managerial economic falls into normative economics: Economics can be classified into two broad categories namely positive and normative. Positive economics describes 'what is' i.e., observed economic phenomenon. The statement "Poverty in India is very high" is an example of positive economics. Normative economics describes 'what ought to be' or 'what should be' differentiates the ideal from the actual. The statement "people who earns more income should pay more income tax than people who earn low income" is an example of normative economics.

Managerial economics is goal oriented and problem solving in nature: It uses the economics theory and decision science for solving business oriented problems.

Managerial economics integrated theory into practice: It converts the theoretical framework of economics into real business practice.

Nature of managerial economics

Scope of managerial economics:

The following business areas can be considered as the scope of managerial economics:

- **Objective of a business firm or organization:** Managerial economics provide a sound frame work by facilitating a business firm to frame its objectives both in the short-run and long-run.
- **Resource allocation:** Managerial economics provide the methods of effective resource allocation. It mainly aims at achieving high output

through low and proper allocation of resource.

- **Demand analysis and Demand forecasting:** It suggests the methodologies for analyzing the demand of a product. The demand forecasting techniques it provides demand for a product which proven to be quite efficient for meeting the competition.
- **Competitive analysis:** The managerial economics provides competitive techniques for facilitating a firm to withstand or to face in a competitive situation.
- **Strategic planning:** Managerial economics guides a business manager in making strategic decisions.
- **Production management:** Managerial economics plays a vital role in production management. Its effective tools helps to plan the business schedule, regulate the production process and effectively place the output in the market
- **Cost analysis:** Managerial economics provides various cost concepts and cost curves that facilitates in determining cost-output relationship both in short-run and long-run.
- **Pricing strategies:** Managerial economics provides certain pricing strategies that are used in analyzing the price of a product and in determining or setting the price of a product.
- **Investment and capital budgeting decisions:** The concept of opportunity cost provided by managerial economics facilitates in making appropriate investment decisions and choose the best alternative that fits the organizational requirements.

Marketing strategies: Managerial economics provide marketing strategies like

1) Product policy
2) Sales promotions
3) Segmentation, targeting and positioning.

- **Economics of sales:** Managerial economics in the long-run helps a firm to enjoy economies and diseconomies of scale.
- **Profit management:** Managerial economics mainly concentrates on the primary goal of a firm i.e., profit maximization. It deals with the activities like profit estimation and profit planning
- **Input and Output analysis:** The concept of production function managerial economics depicts the input and output relationship.
- **Inventory control:** Effective inventory control techniques of managerial economics readily meet the organizational requirements

VARIOUS DEFINITIONS OF ECONOMICS (or) THEORY'S OF ECONOMICS

There are a large no of definitions of economics given by various economists some of the definitions given by some well know economists are discussed here. **ADAM SMITH"S** Definition;-Adam smith the first among the classical economists and the" ***father of economics"*** published a book in **1776** "**WEALTH OF NATION**" in this book he defined economics as a Science of wealth .The other early economists also accepted this definition but this definition received severe criticism as it exclusively paid its attention to wealth as if wealth was everything.

According to Adam's definition everything is related to money/finance, if have the finance we can assume anything, if we don't have the money/ finance we can't assume anything.

Main features of wealth definition

1. Economics is the study of wealth
2. Wealth mean only material things, non material goods like services are not included
3. Human being are guided by self interest

ALFRED MARSHALL'S Definition:-Welfare definition is given by marshal he tried to decreased the defects of wealth definition according to marshal economics is the one side of study of wealth & the other more important side it is a part of study of man When marshal said that economics is a science of ordinary business life that it tells us about a man's way of living that is how he earns his income and how he spends it.

According to marshal economics is human welfare – not the whole of human welfare but only a part of it namely economics. or rendering services to the society.

Main features of welfare definition

1. Economics is a study of mankind in the ordinary business of life
2. Marshal given primary importance to man where wealth is given in secondary position
3. When marshal said that economics is a science of ordinary business life. In spite of all this

marshal definition was also criticized by Robbins has objected to the welfare definition on the

ground that it includes within its preview only material welfare. It ignores are

excludes non
material welfare of human being.

ROBBIN'S Definition:-

Prof. Robbins has advanced his own definition of economics in 1931 in his famous book of an essay on the nature and significance of economics science he introduced scarcity definition of economics According to him Economics is the science which studies human behavior as a relationship between unlimited wants, limited resources which has alternative uses. Main features of scarcity definition

1. Human wants are unlimited we cannot satisfy all our wants.
2. Resource is limited
3. Resources have alternative uses
4. His definition is universal

BRANCHES OF ECONOMICS

Economics is a vast and expanding science for an easier understanding and analysis of these different types of economics activities the subject is classified into two broad divisions.

1. Micro Economics
2. Macro Economics

MICRO ECONOMICS:-The word micro means a" millionth" part or very small the study of individual units are called micro economics. It deals with individuals or single units. The micro economics is called as a ***price*** theory.

Micro economics is based on the assumption of full employment another important assumption is free from trade system in the economy.

Importance of micro economics:-1. It explains how the price mechanism determines the production and distribution

2. it explains how the factor prices product prices are determined
3. It explains how the producer will get maximum product with minimum cost

MACRO ECONOMICS: -

Macro economics is the study of economic system as a whole it studies not the individual economics units like consumer but whole economic system "MACRO" means big it is well developed by J.M.KEYNES. The macro economics is called as an ***income and employment*** theory. This theory deals with aggregates and average of the entire economy for example national income, aggregates demand, aggregates savings, aggregates investment etc.

The scope of a subject will be clearer by way of its relation with other branches of learning. Managerial economics has a link of connection in the basic lines of so many fields of studies such as.

1. Econometrics (or) Statistics
2. Accounting
3. Mathematics
4. Public economics
5. Operation research
6. Decision making

DEMAND

In ordinary language demand means desires. But in economics demand has a separate meaning which is quite differ from above meaning a person has a desire it can't became demand in economics.

A desire which is backed up by ***Having want, Ability to buy, Willingness to pay at the price*** is called demand.

"Thus the quantity of commodity purchased at a given price at a given time in a given market is called demand".

Demand function:-The demand function explain the relationship between the demand for a commodity and its various determinants may be express mathematically is called "Demand function" **Mathematical Equation**:-**Dn = f {P1, P2, I, T, P………n}**

Whereas:
Dn: demand for commodity
F : function
P1 : price of the product
P2 : price of other product
I : Income of the consumer
T : Taste & habits of consumer
P : Population

LAW OF THE DEMAND:-

Law of Demand states that demand varies inversely with price, not necessarily, proportionately; if the price falls demand will extend and rice versa. The law can also be stated as "A rise in the price of a commodity or service is followed by a reduction in demand remain constant i.e., demand is subjected to several influences, the operation of any of those influences may counteract the law".

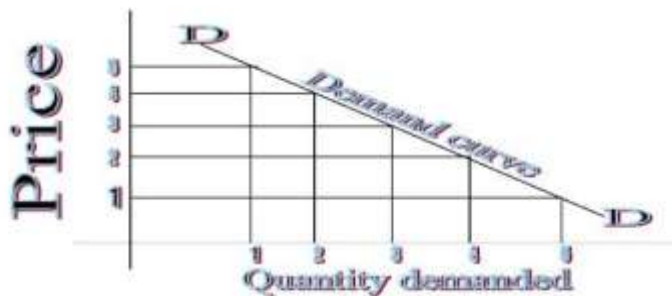
Obviously the law of demand is based on the law of diminishing marginal utility. The law of the demand thus it started as where the remaining all are constant the higher price leads to lower demand for the goods and lower price leads higher demand for the goods (or) where the remaining all are constant there is inverse relation between price and demand .it explains the consumer should purchase high at lower price and low quantity at higher price. In other words **"When price increase demand will decrease""When price decreases demand will increase"** This is called ***inverse relation*** between price and demand because of inverse relation demand curve moves to left to right down forward

Demand schedule:-The law of demand if expressed in the form of a table is called demand schedule. The law of demand if expressed in the form graph called demand curve

Example: the table below is an example of a demand schedule of product x.

Price of commodity x (Rs)	Quantity demanded of commodity x (Kg)
1	5
2	4
3	3
4	2
5	1

Demand curve for above table



DETERMINENTS OF DEMAND:-The demand for a commodity or service depends upon a number of factors. These include:

a. Price of the Commodity

b. Income of the consumer
c. Price of relative goods
d. Taste and habits of the consumer
e. Population
f. Climate condition

a) **Price of commodity**:

The price of a given commodity is an important factor influencing its demand. If the price is very high, only few rich persons can offer to buy it. Hence, the quantity of the commodity bought at this high price will be lowlife; the commodity will have a lower demand. On other hand, if the price is low, it will be within the reach of a large number of people to buy it. Consequently, a greater amount of the commodity will be bought and demand shall be high. Thus the price of commodity or services is an important determinant of the level of its demand.

b) **Income of the consumers**:

When the consumer income increases the demand for goods and services will be increased. If consumer income decreases demand also decreases.

c) **Price of relative goods**:

The demand for a commodity is affected by the prices of relative goods. In the case of substitute goods if "x" commodity prices increases "y" commodity demand will be increased and vice-versa. And in the case of complementary goods if "x" commodity prices increases "y" commodity demand will be decreased and vice-versa.

d) **Tastes and habits of consumers**:

Consumer has the sovereignty power in the economy. Consumer is the king of market economy. Tastes and habits of the consumer differ from person to person, place to place and time to time. So, tastes and habits which in terms influence the demand for the commodity.

e) **Population-**

The quantity of population also determines the demand. If population increases demand will be increased, if the population decreases demand also decreases

f) **Climatic conditions**:

According to the climatic conditions the change will becomes for the different types of goods. Eg:-There will be higher demand for cool drinks in summer and more demand for umbrellas in rainy seasons.

EXCEPTION OF THE DEMAND:

The law of the demand may not be applicable in all cases. In such cases if the price is increasing demand also increases, if the price decreases demand also decreases such cases are called exception of the demand. J L Giffen goods JLVeblengoods IT Population ~1 r Consumer Expectations IT Seasonal business

GIFFEN PARADOX:-

Giffen observed that when the price of the product is decreasing the demand for the product is decreasing. These products are called inferior goods. Similarly when the price of the product is increasing the demand is also increasing. Such types of products are called superior goods. **In this case demand curve moves left to right up forward.**

VEBLEN GOODS:-

Veblen goods are also called prestige goods. Commodities gold diamond etc, are called Veblen goods. Generally rich people purchase these goods for the prestige and greatness .the use of such article increases the prestige of the owners so richer may purchase more when prices increases demand also increases. When price decreases demand also decreases. It is stated by Veblen these goods are called Veblen goods**. In this case demand curve moves left to right up forward.**

POPULATION: -

The quantity of population also determines the demand. If population increases demand will be increased, if the population decreases demand also decreases

COMSUMER EXPECTATIONS:

Whenever the consumer expects a further fall in the price in future he will not purchase the products or goods immediately .when price decreases demand tends to decline. Similarly when the consumer expect a future increase in the piece for the future he will demand the product immediately.

ELASTICITY OF DEMAND:

ELASTICITY OF DEMAND INTRODUCTION:

There is inverse relationship between quantity demand and the price of the commodity as per the law of demand. This law does not state the degree of change in demand due t6o change in price. There are commodities whose demand is more responsive and others less responsive to change in the price. Responsiveness' of

the demand to change in price of commodity is known as elasticity of demand. In other words the concept of elasticity of demand explains the definite relationship between changes in demand and price of the commodity. In simple words "the change in quantity demanded due to change in price" is termed as elasticity of demand. In other words when we measure the proportionate change in the quantity demanded of a commodity due to change in its price it is known as elasticity of demand. It is a qualitative statement. Demand elasticity is the percent change in the sales that accompanies percent changes in any demand determined is called elasticity.

Types of Elasticity of demand

There are four major types of elasticities of demand. They are

- Price elasticity demand
- Income elasticity demand
- Cross elasticity demand
- Advertising elasticity of demand

♦ **Price elasticity of demand Definition:**

It is defined as the extent of response of demand for a commodity to a given change in price with other demand determinants being constant.

In simple terms:

The ratio of proportionate change in the quantity demanded of a commodity to proportionate change in its price. It is re-presented as.

$$Ep = \frac{\text{Proportionate change in quantity demanded of a commodity}}{\text{Proportionate change in the price of the commodity}}$$

AP = Proportionate change in the price

P = Actual or original price

Types of price elasticity of demand

Conceptually the price elasticity of demand is classified into five different categories. They are

- Perfectly elastic demand
- Perfectly inelastic demand
- Unitary elastic demand
- Relatively elastic demand
- Relatively inelastic demand

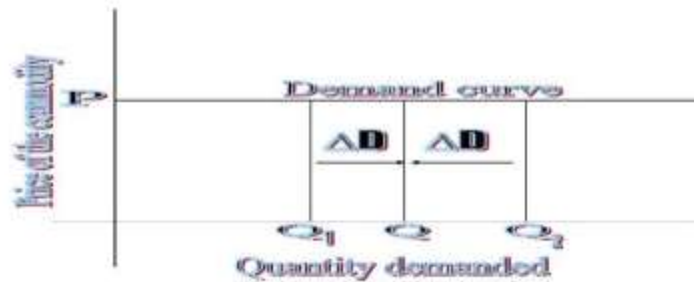
Perfectly elastic demand:

A commodity is said to have perfectly elastic demand. When no reduction in price

is required to cause an increase in the quantity demanded. The elasticity co-efficient for perfectly elastic demand is Ep=q

The shape of the demand curve for perfectly elastic demand is horizontal as shown in the below

figure.



- **Perfectly inelastic demand:**

A commodity is said to have perfectly inelastic demand. When even a large change in price of the commodity causes no change in the quantity demanded. The elastic co-efficient of perfectly inelast5ic demand is Ep=0 . The shape of demand curve for perfectly inelastic is vertical as shown

below.

- **Unitary elastic demand:**

When a proportionate change in the price of the product causes an equally proportionate change in its quantity demanded then the commodity is said to have unitary elastic demand. The elastic coefficient of unitary elastic demand is Ep=1

The shape of the demand curve for unitary elastic is a regular hyperbola as shown below.

- **Relatively elastic demand:**

A commodity is said to have relatively elastic demand when a change in its price causes more than proportionate change in its quantity demanded. The elasticity co-efficient of relatively elastic demand is

Ep>1

The demand curve takes the shape as shown in the below graph.

- **Relatively inelastic demand:**

When a change in the price of the commodity causes a less proportionate change in the quantity demanded, then the commodity said to have relatively inelastic demand. The elastic co-efficient of relatively inelastic demand is |Ep<1

Income Elasticity of Demand Income elasticity of demand is the ratio of percentage change in the quantity demanded of a commodity to the percentage change in consumer's income. Mathematically it is represented as

$$Ei = \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in income of consumers}}$$

$$E_I = \frac{\Delta Q / Q_1}{\Delta I / I_1}$$

OR

$$E_I = \frac{\Delta Q}{\Delta I} \times \frac{I_1}{Q_1}$$

Where as

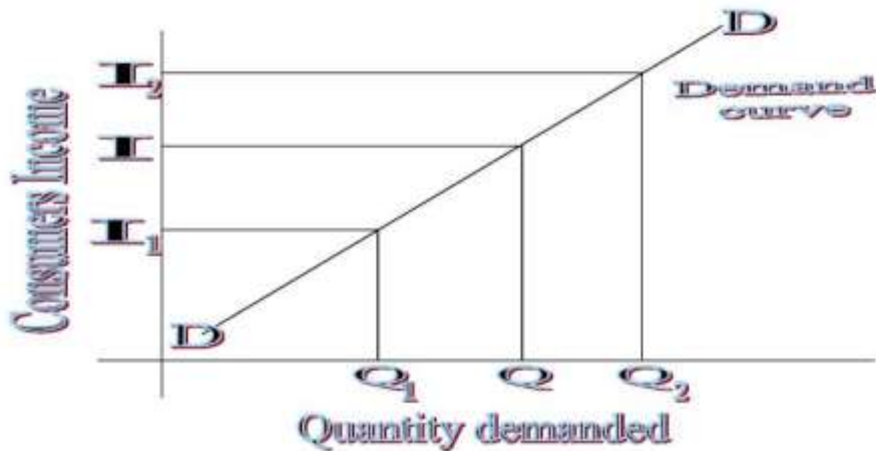
Ei = Income elasticity of demand

AQ = Proportionate change in quantity demanded

Q1 = Actual demand

AI = Proportionate change in consumers income

I1 = Actual income of the consumers The demand curve for income elasticity is as shown in the below graph.



- **Cross elasticity of demand:**

Cross elasticity of demand refers to the quantity demanded of a commodity in response of a change in the price of a related good, which may be substitute or complementary. It is measured as follows

Cross elasticity = Proportionate change in quantity demanded for product x

Proportionate change in price of product y The same expressed as

Whereas, Q1 = Quantity demanded before change Q2 = Quantity

demanded after change P1y = Price before change P2y = Price after

change in the case of product y

- **Advertising elasticity of demand**

It refers to increase in the sales revenue because of change in the advertising expenditure. In other words there is a direct relationship between the amount of money spent on advertising and its impact on sales. Advertising elasticity is always positive.

Advertising elasticity = Proportionate change in quantity demanded for product x Proportionate change in price of product y The same expressed as Q1 = Quantity demanded before change

Q2 = Quantity demanded after change

A2 = Amount spent on advertisement after change

A1 = Amount spent on advertisement before change

METHODS OF FORECASTING:

1. **Survey method**: The survey method is most extensively used method in India. Under this method surveys are conducted to collect information about the future plans of the potential consumers. The survey method is generally used for short-term forecasting.
2. **Collective opinion method**:- Under this method the opinions of those who have the feel of the market, like salesmen, professional experts, and market consultants etc; are collected.
3. **Expert opinion (Delphi) method**: This technique of forecasting is based on the opinions of the experts in the business world. This method is used for demand forecasting and manpower planning. It is also widely used in the areas of technological and environmental forecasting, defense strategies but urology, foreign affairs etc. This technique is usually applied in uncertain areas where past data (or) future data cannot be used much.

4. **Statistical method**: Trend projection method is a statistical technique which makes use of sometime will be having sales data pertaining to different periods. These data, when arranged chronologically, give a "time series". This time series reveals the past demand pattern of the product. Based on this demand pattern a sales trend is extrapolated into the future.
5. **Controlled experiments method**: Here studies and experiments in consumers' behavior are carried out under actual market conditions. Some three (or) four cities having similarity in population, income levels, cultural and social background, occupational distribution, taste etc; are chosen for study. The various demand determinants like price, advertisement, expenditure etc; are changed one by one .The effects of these changes on demand in these cities are observed. These observations are made use to find out the elasticity Co-efficient. These elasticity help to determine the demand for the product.
6. **Judgmental approach: -**Management will have to use its own judgmental when analysis of trend projection is not feasible due to wide fluctuation in sales and analysis of economics indicator is not possible because of lack of historical data even when statistical methods are used might be desirable to supplement them by use of judgment.
7. Correlation and regression methods: Correlation and regression methods are statistical techniques. Correlation describes the degree of association between variables such as sales and advertisement expenditure, when the 2 variables tend to change together then they are said to be correlated. The extent to which they are correlated can be measured by correlation coefficient. In regression analysis an equation is estimated which best fits in the sets of observations of dependent variables and independent variables. The main advantage of this method is that it provides the values of independent variables from within the model itself. Thus it frees the forecaster from the difficulty of estimating them exogenously.
8. Test marketing method: This method includes providing token money to a set of consumer and asking them to shop around in a simulation market. The prices of various goods, their quality packaging etc. vary during the experiments to observe consumers reaction to such changes. This generates information which could be sufficient to estimate the demand function.

FACTORS GOVERNING ELASTICITY OF DEMAND:

Elasticity of governed by a number of factors change in any one of these factors is likely to affect the elasticity of demand. The factors are:

- **Nature of the Product**:

The products and services are classified into necessities, comforts & Luxuries. Necessaries imply the absolute or basic necessities such food, clothing, shelter comforts refer to T.V. Refrigerator etc. luxuries we mean sofa sets marble flooring in a house and such others. Based on the requirement goods will get demand for necessities comforts and luxuries.

- **Number of Alternative Uses:**

If the numbers of alternatives uses are more the demand is said to be highly in elastic and vice versa. Take the case of power or electricity it is used for a number of alternative uses such as running of machines in industries, offices, households, trains etc.

- **Tastes and Preferences of the Consumers:**

Where the customers is particular about his taste and preferences the product is said to be inelastic for the customers who are particular or total to certain brands such as Colgate, Tata tea etc, prices increases do not matter they tend to buy that brand in spite of the price changes.

- **Price of the Products:**

If the price of a product is expensive or very cheap then the product is likely to have or inelastic demand. If the price is too high a fall in it will not increase the demand much similarly if the price is too low a further fall in its price is not likely to result in more demand. The demand of the relatively poor people is more sensitive to price changes. In order to derive maximum satisfaction from their limited income they try to plan their purchases in response to changes in prices the rich may not bother about price changes.

- **Disability of the product:**

Where the product is durable in case of consumer durable such as T.V. the demand is elastic. In the case of possible goods such as milk the demand is inelastic.

- **Government Policy:**

The important aspect to get more demand for a product is Govt policy. If the Govt policy is liberal the product it likely to have elastic demand (More demand for the product).

- **Availability of Subsidies:**

Subsidy refers to money paid by a Government or other public authority in order to help a company financially or to make something cheaper for the public. There is need for subsidies in case of goods with inelastic demand such as LPG, Sugar, and Wheat are so on.

- **Change of Income**:

The demand for various commodities are affected in different degrees due to change in income in case of increase in the income of consumers the demand for luxuries will fall. As such demand for luxuries is more elastic in relation to change in income in care of

comforts it is less elastic and in case of necessaries it is probably inelastic

- **Selecting a proper method of forecasting:**

Another step is to select is to select suitable methods of forecasting in view of the objectives, availability of data, etc. For example, if the data shows cyclic fluctuations, the use of linear trend will be suitable. Similarly, general trend may be more useful for long term forecasting, while seasonal patterns will be more important for the short-term forecast.

UNIT – II: THEORY OF PRODUCTION & COST ANALYSIS

THEORY OF PRODUCTION

The Production is the process of transforming the various inputs land, labour, capital & organization into output production theory speaks of the relation between inputs and outputs sales minus cost is profit can be minimized by increasing selling price or by reducing cost price. Selling price is fixed by the interaction of market forces viz, demand & supply. Hence the entire manager is confronted with the problem of reducing cost and thereby achieving the objectives of minimizing profit. Production theory studies the relationship between various possible input and output combinations. The factors of production are nothing but inputs of production. Factor of production mean Land, Labour, Capital & Organization.

OBJECTIVES OF PRODUCTION:

The term firm refers to an establishment which performs all the entrepreneurial functions. With reference to a unit of production therefore it may be defined as a unit of production {enterprise}. A firm may own and manage one factory of more than one factory manufacturing the same reduction or even different products. We already familiar with the term 'micro' in economic analysis it refers to the analysis of a small part of component of the whole economy such as a study pertaining to an individual consumer's beerier or that of an individual firm are a particulars industry. It is erodent then that the study of a firm's behavior forms. A part of analysis. Analysis of a firm may be better appreciated if we look at its objectives.

1. The owners of a firm may aim at some objectives which are non-monetary in nature. Such as personal ego. To satisfy them the firm may seek to produce goods or services even though that may not be able to gain any monetary gain.
2. It may desire to acquire economic power and therefore, enter into productive activity. This implies control on the market.
3. It may want to engage itself in some occupation and therefore may undertake producing
4. It may seek to maximize output so that the economy grows at a desired rate
5. It may produce goods and on humanitarian grounds distribute them to the public freely or no profit no loss basis.

PRODUCTION FUNCTION-

Production is the result of combined efforts of the various factors-land-labour-capitals

and entrepreneur production is the transformation of inputs or resources in to output. The rate of output of any commodity functionally depends on the quantity of inputs. Used per unit of time.

The technological relationship between physical output and physical quantities of inputs is referred to as production function. It shows the relation between quantity of output and the quantity of various inputs used in production. Here the price factor is not considered. Production is the transformation of physical inputs into physical outputs. A change in the present production technology will result in a change in the production function. An improved technology helps to produce a given out put with a less or quantity of inputs. In algebraic from the production function may be stated as:- **P = F {L,L,C,O,T)** P= Output F=Functional relation Input (Labour, Land,, Capital, Organiser, Technology)

Production Function Assumptions:

Production function has the following assumptions:-1) The production function is related to a particular period of time

2) There is no change in technology.
3) The procedure is using the best technique available.
4) The factors of production are divisible.
5) Production function can be fitted to a short run or to a long run.

COBB-DOUGLAS PRODUCTION FUNCTIONS:

Cobb-Douglas production function was given by Cobb and Douglas indicating production quantity to find out the relation between the physical rate of input and physical rate of output as a function of labour and capital inputs. The following formula was used relating to output in manufacturing industries from **1899** to**1922.** In algebraic from the production function may be stated as:-

P = F{C, L}

Whereas:

P – Production output

F- Function

C - Capital

L – Labour

Isoquants

Iso means equal, quant means quantity. Isoquant means that the quantities throughout a given Isoquant are equal. Isoquants are also called as isoproducts curves. An Isoquant curves shows various combination of two input factors such as capital and labour, which yield the same level of output.

As an Isoquant curve represents all such combinations which yield equal quantity of output, any or every combination is a good combination for the manufacturer.

Features of an Isoquant

- **Downward sloping:** Isoquants are downward sloping curves because, if one input increases, the other one reduces. There is no question of increase in both the inputs to yield a given output. A degree of substitution is assumed between the factors of production. Isoquant slope form left to right
- **Convex to origin:** Isoquants are convex to origin. It is because the inputs factors are not perfect substitutes. One factor can be substituted by other input factor in a diminishing marginal rate. If the input factors were perfect substitutes, the Isoquant would be a falling straight line. When the inputs are used in fixed Proportions and substitutions of one input for the other cannot take place. The Isoquant will be L shaped
- **Do not intersect:** Two Isoproducts do not intersect with each other. It is because, each of these denote a particular level of output. If the manufacturer wants to operate at a higher level of output he has to switch over to another Isoquant with a higher level of output and vice-versa. > **Do not touches axes:** the Isoquant touches neither X-axis and Y-axis, as both inputs are required to produce a given product.

Marginal rate of technical substitution (MRTS)

The marginal rate of technical substitution (MRTS) refers tot eh rate at which one input factor is substituted with the other to attain a given level of output. In other words, the lesser units of one input must be compensated by increasing amounts of another input to produce the same level of output. The below table presents the rate of Marginal rate of technical substitution (MRTS) between the two inputs factors, say capital and labour.

Combination	Capital (Rs. In lakhs)	Labour	Marginal rate of technical substitution
A	1	20	-
B	2	15	5:1
C	3	11	4:1
D	4	8	3:1
E	5	6	2:1
F	6	5	1:1

MRTS = Change in one input

Change in another input

MRTS $= \frac{\Delta K}{\Delta L}$ Where as

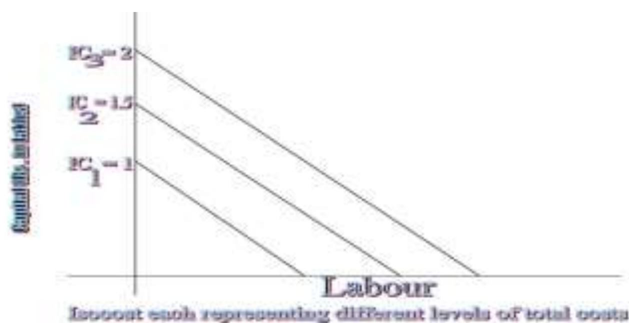
ΔK = Change in capital ΔL =

Change in Labour

Isocosts

Isocosts refers to that cost curve that represents the combination of inputs that will cost the producer the same amount of money. In other words, each Isocost denotes a particular level of total cost for a given level of production. If the level of production changes, the total cost changes and thus the Isocost curve moves upwards and vice-versa.

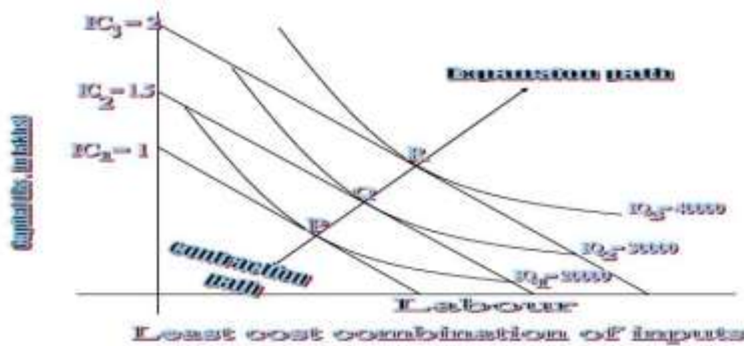
Least cost combination of inputs:



The manufacturer has to produce at lower costs to attain higher profits. The Isocosts and Isoquants can be used to determine the input usage that minimizes the cost of production.

Where the slope of Isoquant is equal to that of Isocost, there lies the lowest point of cost of production. This can be observed by super imposing the Isocosts on isoproducts curves: it is evident that the producer can, with a total outlay of Rs.1.5 lakh, reach the highest Isoquant curve which is IQ2. If he wants to reach IQ3 he has to bring additional resources, which is, let us assume it is not possible. He cannot compromise with IQ1 as it means lower output. There is no other input combination on IQ2 other than point Q, which is cheaper than Rs.1.5 Lakh. So the obvious choice for the producer is Q combination of inputs only on IQ2

The point of tangency P, Q & R on each of the Isoquant curves represents the least cost combination of inputs, yielding maximum level of output. Any output lower or higher than this will result in higher cost of production.



LAW OF PRODUCTION (OR) LAW OF RETURNS -

While production function specifies the relation- ship between a given quantity of output and certain given quantities of inputs. Laws of production state the relational output. The laws which explain input output relations are: J Law of variable proportions J Law of return to scale

LAW OF VARIABLE PROPORTION

The law of variable proportions also known as laws of returns is associated with short-term production function The law of variable proportions is the fundamental law of diminishing returns normally this law operates when factor proportions are variable by keeping certain factors constant. It is common experience for every former that as more and more lab our and capital are employed an given price of land the total returns increase after a point less than proportionately or at a diminishing rate **Assumptions**:-1) One factor is fixed and others are variable

2) Methods of production remain un changed

3) There is no change in production techniques

4) The variable factors are homogeneous and identical in amounts quality.

We assume that a farmer has 10 acres of land for increasing output on land. The farmer has to increase in this example land is fixed factor and lab our and capital are variable. The input output relationship is observed in the following table.

Units of input variables{Labo	Total production	Average production	M a
1	8	8	8
2	20	10	12
3	36	12	16
4	48	12	12
5	55	11	7
6	60	10	5
7	63	9	3
8	64	8	1
9	64	7.1	0
10	60	6	- 4

From the above table it is clear that as we go on increasing application of variable factors on a fixed factor in the beginning total product increases more than proportionally and after a point it shows a tendency to increase at a diminishing rate. In other words in the operation of this law we can point out three stages in the first stage total product increases along with an increase in the average product. It may be noted that TP increases at an increasing rate. This state ends at the point where AP is equal to MP in the third stage TP decreases. AP continues to decrease and MP become negative. These stages are shown in the fallowing diagram.

LAW OF RETURNS TO SCALE

There are three laws of returns governing production function.

1. Law of increasing returns to scale.
2. Law of constant returns to scale.
3. Law of decreasing returns to scale.

Law of increasing returns to scale: -This law states that the volume of output keeps on increasing with every increase in the inputs. Where a given increase in inputs leads to a more than proportional increase in the output, the law of increasing returns to scales is said to operate We can introduce division of labour and other technological means to increase production. Hence the total product increases at an increasing rate.

Law of constant returns to scale: -When the scope for division of labour gets restricted, the rate of increase in the total output remains constant, the law of constant returns to scale is said to operate. This law states that the rate of increase/decrease in volume of output is same to that of rate of increase/decrease in inputs.

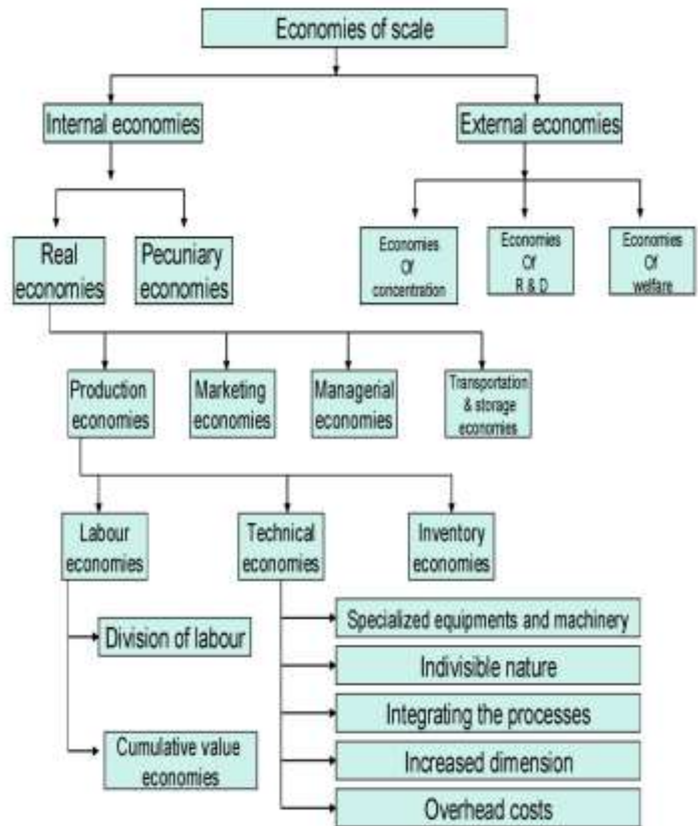
Law of decreasing returns to scale: - Where the proportionate increase in the inputs does not lead to equivalent increase in output, the output increases at a decreasing rate, the law of decreasing returns to scale is said to operate. This results in higher average cost per unit.

These laws can be illustrated with an example of agricultural land. Take one acre land, if you fill the land well with adequate bags of fertilizers and sow good quality seed, the volume of output increases.

Economies of scale

Economies of scale are of two types.

- Internal Economies of scale
- External Economies of scale


Economies of scale
Internal economies
External economies
Real economies
Pecuniary economies
Economies Of concentration
Economies Of R & D
Economies Of welfare
Production economies
Marketing economies
Managerial economies
Transportation & storage economies
Labour economies
Technical economies
Inventory economies
Division of labour
Cumulative value economies
Specialized equipments and machinery
Indivisible nature
Integrating the processes
Increased dimension
Overhead costs

Internal economies:

Internal economies of scale are those which arise when the firm increases its plant size. Internal economies of scale are related to long-run average cost (LAC) curve. The internal economies to scale are categorized into

Real economies of scale

- Pecuniary economies of scale

- ♦ **Real economies of scale**

  Real economies of scale occur when t he quantity of inputs used to produce a given level of output decreases. Real economies of scale are of four types.

  - ✓ Production economies of scale
  - ✓ Marketing economies of scale
  - ✓ Managerial economies of scale
  - ✓ Transportation and storage economies of scale

- o **Production economies of scale:**

  Production economies arises due to the following

  - ✓ Labour economies
  - ✓ Technical economies

  Inventory economies

- **Labour economies :** Labour economies of scale arises due to the following

Division of labour economies : An increase in output facilities the division of labour which reduces the cost by

- Improving specialization
- By saving the time period of production
- Providing good condition for inventions of number of machines

Cumulative volume economies: In large scale production , the technical personnel who engaged in production acquire a significant experience and this

cumulative volume of experience facilitates in higher productivity and therefore reduces the cost

Technical economies : Technical economies are associated with fixed assets like machines and equipments., these economies arise due to following

Specialized equipments and machinery: The increase in output level mechanizes the production method and the equipments involved in it. This specialization reduces the variable cost of production process.

Indivisible nature: Machinery and equipment used in the production process are indivisible i.e., they are available in certain definite sizes. As the output level increases from initial level to the maximum level which a machine is used for all output levels. As a result the cost of machine is shared between more and more output units which reduces the cost production per unit

Integrating the process: Integration of processes occurs when a large automatic or a numerically controlled machine manages everything without any involvement of labour units. This reduces the time and labour cost involved in production process.

Increased Dimensions: The initial and running cost of many machines increases less rapidly when compared to their capacity. These results in economies of increased dimension. If the external dimension of a container is doubled, its volume is increased by eight times and the area of its surface walls is increased by four times only. Therefore this reduces material cost per unit.

Overhead cost: As the output level is increased, the unit costs of initial fixed expenses, that is required for a new business or a new product.

Inventory economies: Inventories should always be ready to meet the changes in the input side and the output side of the production process. It has been observed that the inventories at the input and output increases less rapidly than output level. These economies occur due to the process of massed resources.

Marketing economies of scale: Marketing economies of scale occur due to the following

- Less proportionate increase in the advertising expenditure with respect to scale

- Increased R & D expenses due to the development and adoption of new models and designs.
  - **Managerial economies of scale:**

Managerial economies of scale occur to the following reasons.

A larger firm has a greater scope of division of managerial tasks which helps the manages to get specialized in their own areas and achieve efficiency Experience of working in teams helps the managers of the large firms to acquirea more comprehensive outlook and to take quicker and better decisions. •⁄ In large firms with the policy of decentralization in decision-making, the delay in the flow of information is reduced leading to increased managerial efficiency. •⁄ Opportunities for the introducing of modern management and organizational: restructuring techniques helps that management to increase its efficiency.

Transportation and storage economies of scale:

Increase in the output level causes the storage costs to fall as it leads to economies of increased dimensions. The transport cost falls upto a point of full capacity and then its remains constant.

♦ **Pecuniary economies of scale:**

Pecuniary economies of scale refers to those savings in the expenses which results to the firm in the nature of relatively low prices paid for the inputs of lower costs of distribution. These savings mainly occur due to the large amount of buying made by the growing firm. Pecuniary economies of scale include all those discounts/earnings that a firm can obtain because of its large size. The discounts include the followings

Lower prices of the raw materials as larger quantities are being rchased by larger firms. Lower costs of capital and les interest rate because banks have great faith in large forms. Low transportation costs are incurred due to bulk transportation.

- **External economies:**

External economies refer to all the firms in the industry, because of growth of the industry as a whole or because of growth of ancillary industry. External economies benefits all the firms in the industry as the industry expands. The external economies can be grouped under following three types.

•**Economies of concentration :** Because of all firms are located at one place, it is likely that there is better infrastructure in terms of approach, roads, transportation facilities such as railway lines and so on, banking and communication facilities, availabilities of skilled labour and other such factors.

Economies of R&D: All the firms can pool their resources together to finance research and development activities and thus share the benefits of research. There could be a common facility to share journals newspapers and other valuable references materials of common interest.

•**Economies of welfare:** There could be common facilities such as canteen, industrial housing, community halls, schools and colleges, employment bureau, hospitals and so on. Which can be used in common, by the employees in the whole industry

COST ANALYSIS

Cost and Revenue are the two Major factors that a profit maximizing firm needs to monitor continuously. It is the level of cost relative to revenue that determines the firm's overall Profitability. In order to maximize profits firms tries to increase its revenue and lower its cost. There are many different types of costs that a firm may consider relevant for decision - making under varying situations the manner in which costs are classified or defined is largely dependent on the purpose for which the cost data are being outlined.

Fixed Cost-

Fixed cost refers the amount needed to purchasing of the fixed assets of the organization. These fixed costs are fixed in the short-run wither production is taken up or not. Fixed Cost is those costs which in total do not vary which changes incorrupt. Fixed costs are associated with the very existence of a firm's plant and therefore must be paid even if the firm's rate of output is zero such cost as interest on borrowed capital.

Variable Cost: -

Variable cost refers the amount needed to purchasing of variable assets of the organisation .On the other hand variable costs are those costs which increase with the level of output. They include payments for raw materials. Changes as fuel, and electricity. Wages and salaries of temporary

staff, depreciation charges, based upon the production. Production is increases the cost also increases, if production decreases cost also decreases. **Marginal cost**:-Marginal cost refers to the additional cost incurred for producing an additional unit it equals the change n the variable cost per unit. This change is due to change in the level of output.

Explicit Costs: -

Payment made for the purchases of factors of production, goods and services from other firms for the production of the commodity is known as explicit cost. There costs are also known as out of pocket cost. For ex: - Wages, Pay for raw material, Rent.

Implicit Costs: -

Producer uses his own factors, also in the process of production; producers generally do not take into account the cost of their own factors. While calculating the expenditures, of the firm, but they should definitely be included. Their cost should be calculated on the market rate and that should be included. There are called implicit costs, because producers do not make payments to others for them.

Ex: - Rent to own land.

Opportunity Costs: -

Opportunity Cost refers, to "Sacrificing the next best alternative in order to attain that alternative". This is nothing but the revenue that is lost in not utilizing the best alternative. In other wards the foregone Opportunity is considered as cost and it termed opportunity cost. "Opportunity cost of a particular product that resources, used in its production could have produced.

Sunk Costs:

Sunk cost refers to those cost which is not affected by change in level of business activity. There costs remains same at all levels of business activity. Ex: - Preliminary expenses.

Urgent & Post ponable cost:-This classification distinguishes the cost that has priority. This is more significant when there is scarcity of funds. Urgent costs are those costs such as raw materials, wages to labours and so on, necessary to sustain the production activity. There is certain cost such as whitewashing the building and so forth which can be conveniently is postponed.

BREAK EVEN ANALYSIS:-Break even Analysis is a technique of profit planning. It is essentially a device for integrating costs. Revenues and output of the firm in order to illustrate the probable effects of alternative courses of action upon net profits. The economic basis of BEA originates from the cost output and revenue the difference between total revenue and total cost.

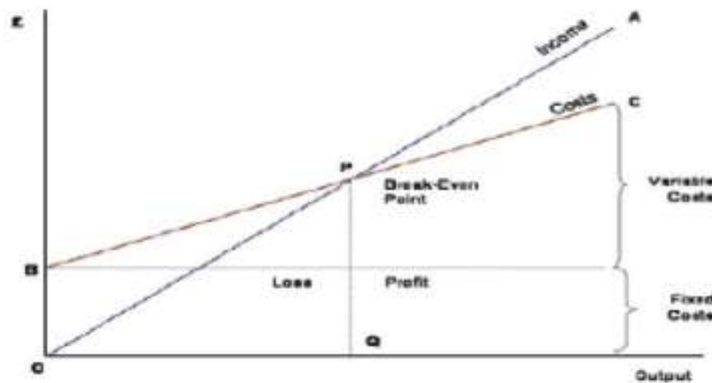
The Breakeven point is defined as the one where profit is equal to zero total

revenue equals total
cost. “No profit No loss zone is BEP” {TC = TR}

Assumptions-

- The behavior of costs and revenues of the firm remain linear.
- Sale prices remain constant.
- Cost of production remains unchanged.
- Volume of output is the only relevant factor affecting cost.
- Cost can be divided into fixed and variable

The Break even Analysis is often explained with the help of Graph:



In the above graph point & denotes the Break even. At point **E**

Total cost is equal to total revenue and hence total profit is equal to zero.

USES OF BREAK EVEN ANALYSIS :

1) Information provided by the break even chart can be understood by the mgt. more easily than that contained in the profit and loss account and cost statement.

2) It helps to fix the sales volume required to cover a given return as capital employed.

3) It helps the forecasting of cost and profit for the product.

4) It helps in determination of cost and revenue at various levels of output.

5) Profit abilities of various products can be studied and a most profitable product mix can be
chosen.

6) It is use full to estimate the feature market for the product

7) It is use full to minimizing the cost and maximizing the profits of the organization

- It is not dynamic because everything is assumed as constant
- It may not gives the accurate results all the time
- It is not realistic and it does not hold well in practice.
- It is limited to the short run period only.
- It does not take into consideration the corporate tax, income tax.
- To manage and control selling cost is very difficult.

CALCULATION OF BEP Contribution

=Sales-variable cost

$$\text{P/V Ratio} = \frac{\text{Contribution per unit}}{\text{Selling price per unit}} \text{ (OR) } \frac{\text{Change in Profits}}{\text{Change in Sales}} \times 100$$

$$\text{B E P (In units)} = \frac{\text{Fixed cost}}{\text{Selling Price per unit - variable cost}}$$

$$\text{B E P} = \frac{\text{Fixed cost}}{\text{Contribution}}$$

$$\text{B E P} = \frac{\text{Fixed Cost}}{\text{P/V Ratio}}$$

Margin of Safety:-

Margin of Safety is the difference between Actual Sales and Sales at B E P.

$$\textbf{Margin of Safety} = \frac{\text{Net Profit}}{\text{Profit Volume Ratio.}}$$

Margin of Safety = Actual Sales - Break even sales

To calculating fixed cost of the organization

$$S = \frac{FC + P}{P/V\ RATIO}$$

UNIT – III: **INTRODUCTION TO MARKETS & PRICING POLICIES**

MARKET

Introduction: A Market is understood as a place where commodities are bought and sold at retails or wholesale prices a market place is thought is a place consisting of a number of bi and small shops stalls and even hawkers selling various types of goods. In economics however the term 'Market' does not refers to a particular place as such but it refers to a market for commodity or commodities. These economists speak of say a wheat market, a tea market, a gold market are so on.

Definition An arrangement whereby buyers and sellers come in close contact with each other directly or indirectly to sell and buy goods is described as market.

Features of Market

- More no of sellers and buyers are participating to exchange goods services.
- If refers to the whole are of operation of demand and supply.
- Products sold in a market can be homogeneous or differentiated.
- The market in which the commodity it bought and sold must be well organized, trading must be continuous.
- There are many competitors in the market.
- Normal and abnormal profits gain by the market sellers

CLASSIFICATION OF MARKET:

Domestic Market: :

It deals with demand and supply of a commodity within the country. All the products are product of supplied in the local area is called domestic as local market. Ex. Vegetable market/Milk market.

Foreign Market ::

It deals with demand and supply of the country's commodity in foreign countries goods are produced as it can be exported to the other nations like foreign country's market called foreign market. Ex: Wheats.

Capital Market: :

It deals in funds to finance fixed assets. The transactions in shares and bonds belong to the domain of capital market. In other words the market which deals the exchange of funds and shares Ex: Share market. This market is also called financial market. All financial institutions can provide
funds to the business organization.

Perfect Market: :

It characterized by a large number of buyers and sellers of an essentially identical product each member of the market, whether buyer or seller is so small in relation to the total industry volume that he is unable to influence the price of the product individual buyers and sellers are essentially price takers. It requires that all the buyers and sellers must posses' perfect knowledge about the existing market conditions especially regarding the market price, quantities and source of supply.

Imperfect Market::

In this market just one producer of a product the firm has substantial control over the price. Further if product is differentiated and if there are no threats of new firms entering the same business a monopoly firm can manage to earn excessive profits aver a long period if doesn't requires knowledge about the existing market conditions .

Duopoly:

In this market situation there are two firms control the entire supply of the product naturally there is a great scope for collusion between the two firms and also possibility of cutthroat competition between them. The two firms are interdependent as regards their price- output decisions

Oligopoly;

Oligopoly means few poly means sellers oligopoly is a market structure in which a small number of firms account for the whole industry's output in this market few number of seller and more no of buyers are going to participate in the market.

Perfect Market

It characterized by a large number of buyers and sellers of an essentially identical product, each member of the market whether buyer or seller is so small in relation to the total industry volume that he is unable to influence the price of the product. Individual buyers and sellers are essentially price takers. It requires that all the buyers and sellers must posses' perfect knowledge about the existing market conditions especially regarding the market price, quantities and source of supply.

Characteristics

The following conditions must exist for a market structure to be perfectly competitive there is also the district feature or distinguishing markets of perfect competition

Large no of sellers:

A perfectly competitive market structure is basically formed by large number of actual and potential firms and sellers. Their number is sufficiently large and as the size of each firm is relatively small. So the individual seller's or firm's supply is just a fraction of the market supply.

Large no of buyers:

There is very large number of actual and potential buyers so that each individual buyer's demand constitutes just a fraction of the total market demand.

Product homogeneity:

The commodity supplied by each in a perfectly competitive market is homogeneous that means the product of each seller is virtually standardized i.e. each seller my sell different types of products different sizes, quantities and qualities of goods in the market.

Free entry and exit:

In a perfectly competitive market the super normal profits in the short period induce the new firms to enter in to the market. At the same time the exciting firms incurring losses in the short term and they leave the market. Therefore due to freedom of entry and exit each firm in a competitive market can earn only normal profit in the long period

Perfect knowledge of market:

Perfect competition requires that all buyers and sellers must possess perfect knowledge about the existing market conditions especially regarding the market price, qualities, quantities and source of supply.

Government Non interference;

Perfect competition also implies that there is no government interference in the working of market economy. That is to say there are no tariffs, subsidies, rationing of goods, and control on supply of raw material, licensing policy or other government interference.

PRICE DETERMINATION UNDER PERFECT MARKET:

It characterized by a large number of buyers and sellers of an essentially identical product each member of the market, whether buyer or seller is so small in relation to the total industry volume that he is unable to influence the price of the product individual buyers and sellers are essentially price takers. It requires that all the buyers and sellers must posses' perfect knowledge about the existing market conditions especially regarding the market price, quantities and source of supply

Assumptions:

1) More no of sellers & buyers
2) Price was fixed for a product
3) Average revenue equal to the marginal revenue
4) The buyers and sellers must posses' perfect knowledge

Monopoly

In this market just one producer of a product the firm has substantial control over the price. further if product is differentiated and if there are no threats of new firms entering the same business a monopoly firm can manage to earn excessive profits aver a long period if doesn't requires knowledge about the existing market conditions.

The word monopoly has been derived from the two Greek word "monos and polus" monos means single and polus means seller so the word monopoly means a single seller

Characteristics

- **Single producer or seller**:

Monopoly is that market situation in which a firm has the sole right over production or sale of the product and is has no competitor in the market.

- **No close substitute**:

There are no closely competitive substitutes for the product, so the buyers have no alternative or choice. They have to buy the product or go without it.

- **Price differentiation**:

A monopolist is a price maker and not a price taker in fact his price fixing power is absolute. He is in a position to fix the price for the product as he likes. He can vary the price from buyer to buyer. Thus in a competitive industry there is single ruling price while in a monopoly there may be price differentials.

- **Abnormal profits**:

In this market the total demand of the society may be undertaken by a single seller, so automatically sales volume can increases it lead to gain more profit by a single seller in the market.

- **Government Intervention:**

If the monopoly operating the public utilities like as Gas Company, electricity undertaking the government may grant a license to any particular person.

- **Absence of entry:**

In the pure monopoly market, no outside firm can enter the market the barrier to the entry of their firm may be economic, institutional, artificial and legal.

PRICE DETERMINATION UNDER MONOPOLY

The monopolistic firm attains equilibrium when its marginal cost becomes equal

to the marginal revenues. The monopolist always desires to make maximum profits. He makes maximum profit when MC=MR. He goes on increasing his output it his revenue exceeds his cost but when the costs exceeds the revenue the monopolist firm incur losses. Hence the monopolist curtails his production. He produces up to that point where additional cost is equal to the additional revenue MR=MC. That point is called equilibrium point the price output determination under monopoly may be explained with the help of a diagram

REVENUE ANALYSIS IN MONOPOLY

Units sold	Price	Total revenue	Average revenue	Marginal revenue
1	20	20	20	20
2	19	38	19	18
3	IS	54	IS	16
4	17	63	17	14
5	16	SO	16	12

Under monopoly market the seller has to reduce the price in order to increase the sales.the AR,MR

curves slops downwards MR tries to bellow AR

Assumptions:

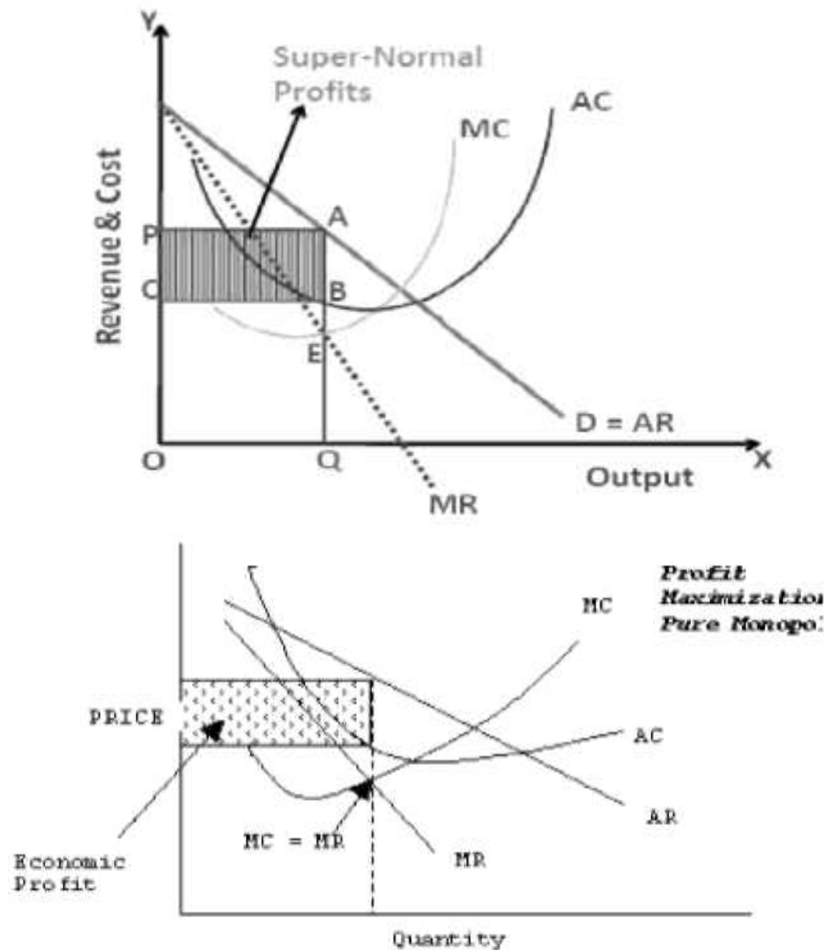
1) One Seller /Producer
2) MC=MR
3) Price Discriminations

MONOPOLY CURVE

In the diagram the equanimity supplied or demanded is shown along X axis, the cost or revenue is shown along Y axis, Ac and MC are average cost and Marginal cost curve respectively AR & MR curves slope downwards from left to right. Ac and MC are U shaped curves. The monopolistic
firm attains equilibrium when it's MC=MR under monopoly the MC curve may cut the MR curve from below or from a side. In the diagram the above condition is satisfied at point E, at point E, MC=MR. The firm is in equilibrium the equilibrium output is

PRICING

Pricing is not an end in itself pricing is a mean to an end .therefore the firm must



explicitly lay down its pricing objectives. The firm's overall objectives serve as guiding principle to pricing thus firm's business objectives are normally spelled out as the objectives of its price policy

Objectives of pricing:

- To survival of product in the market

- To maximization of sales
- To capture high share value in the market
- To earn more profits
- To return on investment
- To service motive

METHODS OF PRICING:

- **Cost Based Pricing - Cost Plus Pricing:**

This is also called full cost or markup pricing here the average cost at normal capacity of output is ascertained and then a conventional margin of profit is added to the cost to arrive at the price. In other words find out the product units total cost and add a percentage of profit to arrive at the selling price

- **Marginal Cost Pricing**:

In marginal cost pricing selling price is fixed in such a way that it covers fully the variable or marginal cost and contributed towards recovery of fixed cost fully or partially depending upon the market situations in times of stiff competition marginal cost offers a guide to me to how far the selling price can be lowered

- **Competition Based Pricing --Sealed Bid Pricing:**

This method is more popular in tenders and contracts. Each contracting from quotes its price in a sealed cover called 'tender' all the tenders are opened on a scheduled date and the person who quotes the lowest price other things remaining the same is awarded the contract.

- **Going rate pricing:**

Here the price charged by the firm by based upon the cost of the production (or) the total cost of the industry where costs are particularly difficult to measure this may seem to be the logical first step in rational pricing policy.

- **Strategy Based Pricing - Market Skimming:**

When the product is introduced for the first time in the market company follows this method under this method the company fixes a very high price for the product the main idea is to charge the customer maximum possible. In this situation all cannot afford except a very few. As the time passes by the price comes down and more people can afford to buy.

- **Market penetration:**

This is exactly opposite to the market skimming method. Here the price of the product is fixed so low that the company an increase its market share the company attains profits with increasing volumes and increase in the market share. More often the companies believe that it is necessary to dominate the market in the long-run the making profits in the short-run.

- **Two-Part Pricing**-

The firms with market power can enhance profits by the strategy of two-part pricing. Under this strategy a firm charges a fixed fee for the right to purchase its goods plus a per unit charge for each unit purchased. Entertainment houses such as country clubs, athletic clubs and health clubs usually adopt this strategy they charge a fixed initiation fee plus charge per month or per visit. to use the facilities.

- **Block pricing**-Block pricing is another way a firm with market power can enhance its profits. we see block pricing in our day to day life very frequently four santoor soaps in a single pack illustrate this pricing method. By selling certain number of units of profit maximization price on each package. it is generally the total value the consumer receives for the package. Including consumer surplus.
- **Peak load pricing**:-

During seasonal period when demand is likely to higher, a firm may enhance profits by peal load pricing. The firm philosophy is to charge a higher price during peak times than is charged during off-peak times.

- **Cross subsidization**-

In case where demand for two products produced by a form is interrelated through demand or cost, the firm may enhance the profitability of its operations through cross subsidization. using the profits generated by established products, a firm may expand its activities by financing new product development and diversification into new product markets.

UNIT – IV: INTRODUCTION TO BUSINESS ORGANISATION

BUSINES ORGANIZATIONS

Human being wish to have a satisfactory life in order to do so, they perform a number of activities such activates are guided by objectives that provide the greater satisfaction; different people do different things to attain maximum satisfactions. If the activities involve production, purchase and sale of goods desired by the people such activities are termed as "Business"

Definition of Business-

"Business may be defined as the regular production or purchase and sale of goods with the object of earning profits and acquiring wealth through satisfaction of human wants" In the words of Petersen and plowman, "Business may be defined as activities is which different person exchange something of value whether goods or services for mutual gain or profit"

Characteristics of Business:-From the above definitions, Business will have the following characteristics.

1) **Easy to start and easy to close: -** The form of business should be such that it should be easy to start and easy to close. There should not be hassles or long procedures in the process of setting up business or closing the same

2) **Division of labour**:- there should be possibility to divide the work among the available owners the idea is to poll the expertise of all the people in business and run the business most efficiently

3) **Liability**: - the liability of the owners should be limited to the extent of money invested in the business. It is better if their personal properties are not brought into business to make up the losses of the business.

4) **Exchange**: - Business involves exchange of goods and services for money or money's worth. On way transactions such as gift given by one person to another do not constitute business.

5) **Continuity of Operation: -** Business pre supposes continuity of operations these should be a regular sequence of dealing isolated transaction such as sale of house do not constitute business.

6) **Profit Motive**: - Business activity is motivated by desire to earn profit business has other
objectives apart from. But profit is desired as a fair compensation for the efforts of the
businessman.

7) **Risk**: - Every business involves some element of uncertainty in the operating environment. For ex; one may not be able to sell all the goods produced or purchased, amount due from credit sales may not be collected etc. Risk is an

inherent part of business

8) **Organized Activity**: - Business needs to be properly organized to be successful. There is a need for clear definition of roles and responsibilities of various people. Systems are designed and implemented so that there is co-ordination between the various activities.

9) **Taxation**: - One of the main sources of income to the government was tax .Based on the level of the income business organizations want to pay the tax to the government more income means more tax less income means less tax.

10)**Secrecy**: - The form of business organization you select should be such that it should permit to
take care of the business secrets. We know that century old business units are still surviving only
because they could successfully guard their business secrets

CLASIFICATION OF BUSINESS

Business undertaking can be classified on different criteria, such as nature of business and the activities involved. They can also be classified on the basis of ownership of the business may be owned by – public authority such as state government or central government such business are called "public sector enterprises". Alternatively, undertaking owned by private citizens is known as 'private enterprises" private enterprises could be owned by a single person or by a group of persons.

1) Sole trader or Proprietorship
2) Partnership
3) Joint Stock Company

SOLE TRADER (OR) PROPRIETORSHIP:

Sole trading business is the simplest and oldest and natural from of business organization. It is also called sole proprietorship "sole" means one. Sole trader impels that there is only one trader who is the owner of the business. Such person introduces his own capital or borrows from others. uses his own skills or employs people working under his direction, is in personal touch with the routing of the business, takes all the decisions concerning the business and is completely responsible for the profits made or losses incurred by the business .the person is called a sole trader. This business is called one man organization

Main feature or characteristics:-1. It is easy to start a
business under this from and also easy to close

2. He introduces his own capital. Sometimes, he may borrow, if necessary.

3. He is completely responsible for the profits made or losses incurred by the business
4. Centralization of authority sole trading is the one person show. Total authority can be enjoyed by him only.

5. Lack of system sole trader organization is largely unorganized. There are no clarity defined roles and responsibilities.
6. Small size all sole trader concerns are smaller in size this is mainly because the amount of capital that can be invested by a single person is limited

Merits of Sole Trading:
1. **The establishment of a sole trading is very easy and simple.** There is no need for detailed legal formalities to from such a concerns.
2. **It is very easy to carry on business operations**. The day today working is free from legal interference. There is flexibility in operation.
3. **Quick decision** making he can take decisions very fast and implement them promptly.
4**.Incentives to work** the sole trading form of business provide the best incentives to improve performance. All the profits resulting from efforts made by the proprietor are enjoyed by him.
4. **Self employment** sole trading business organization provides an alternative for capable people who are not able to get employment; it serves a useful social purpose as lack of employment can result in of frustration among such people, leading to crime.
5. **Direct contact with customer** the sole trading business organization provides direct contact with customers. He is therefore able to understand their changing needs better. He can ascertain their taste, attitude and habits and understand their difficulty.
6. **Secrecy business** secrets can well be maintained because there is only one trader.
7. **Total control** the ownership and management and control are in the hands of the sole trader and hence it is easy to maintain the hold on business.
8. **Law rate of Tax** the rate of income tax was very low compare to other business organizations
10. **Easy to close** the sole trader can decide to close down his business at any time he does not
have to go through lengthy legal procedures or obtain approvals.

De - Merits of Sole Trading;
1. **Limited capital** the amount of capital that a person can invest in a business is

limited moreover he cannot get unlimited credit.

2. **Unlimited liability** the creditor of the business concern can invest the private property of the businessman in settlements of their dues. Thus, there is a possibility that the proprietor may become a pauper because of one single mistake in business.

3. **Uncertainty** there is no continuity in the duration of the business on the death. Insanity or insolvency the business may come to an end.

4. **Limited growth potential** this firm is suitable for only small size, One-man-show type of organization. This may not really work out for growing and expanding organization.

5. **Low bargaining power** the sole trader is in the receiving end in terms of loans or supply of raw
materials. He may have to compromise many times regarding the terms and conditions of purchase
of materials of borrowing loans from the finance houses or banks.

PARTNERSHIP

Meaning and Definition:

According to the Oxford Dictionary for the Business World. "Partner is a person who shares or takes part in activities of another person. Partnership is an association of two or more people formed for the purpose of carrying on a business".

According to **Indian Partnership Act 1932**"Tthe business which is organized by two are more than the two persons for the purpose of distribution of profit and losses equally"

MAIN FEATURES OR CHARACTERISTICS

1. **No. of Persons:** One person cannot have a partnership. It is a joint effort of at least two persons to start a partnership.
2. **Restriction on Number of Partners:** Unlike a Joint Hindu Family or a Cooperative Society, there is a restriction on the maximum number of people who can start a partnership. The number of partners cannot exceed 20 persons, and in case of banking business, the maximum number of partners is restricted to 10 persons.
3. **Contractual Relationship:** The relationship of partners is bound by the legal agreement or contract entered into by each of them. This agreement is called a 'Partnership Deed'.

4. **Sharing of Profits:** The intention of partners is to earn profit through collective effort. The profits earned are shared by partners as per the terms agreed upon by them. Any loss arising out of business transactions is also shared by the partners. It is not necessary that profit or loss is to be shared on the basis of capital contributed by the partners.

5. **Principle Agent relationship:** Each partner is both an agent and a principal of the partnership firm. The partner is a principal because he is responsible for his own acts and the acts of other partners. He is an agent of the firm as he can act on behalf of other partners and bind them with his acts.

6. Utmost Good Faith: Partners can bind each other by their action. Hence, each partner must be true to all other partners and disclose all the information in his possession to the other partners. Thus, utmost good faith is very crucial as the business cannot be run without mutual trust.

MERITS:

1. **Ease of Formation:** Any two persons capable of entering into contract can start partnership. The partnership deed can be oral or written. Registration is not compulsory. Thus, partnership is very easy to form.

2. **Flexibility of Operations:** There is considerable freedom in carrying out business operations. There is no need for taking approvals from Government or any other authority, to change the nature scope or location of the business.

3. **Greater Financial Resources:** Partnership combines the financial strength of all partners, as the liability of partners is joint and several. Not only is the ability to contribute capital greater, it also enhances the borrowing capacity of the firm.

4. **Incentive to Hard work:** Partners have share in the profits of the firm. Partners put in hard work and try to increase profits of the firm. A sincere and committed effort brings in extra rewards.

5. **Risk Reduction:** The profits and losses are shared by all partners. Similarly, if the firm is unable to meet any of its payment obligations, all partners are responsible. Thus, partnership offers risk reduction as the risk is spread across partners.

6. **Maintenance of Secrecy:** A partnership firm is a closely held business. It is not required by law to share its performance and position with others. Thus, all knowledge about the firm is restricted to only the partners of the firm.

7. **Personal contacts with Staff and Customers:** A partnership concern is a relatively small organization, whose activities can be managed by a group of people. Thus, partners keep in close contact with customers and staff. They are thus able to note the changing tastes and attitudes and react faster to such changes.

8. **Early Dissolution:** It is very easy to dissolve the partnership firm. Any partner can ask for dissolution of firm by giving a 14 day notice. The firm can be

dissolved on death, insolvency or lunacy of any partner. No legal formalities are required.

DEMERITS

1. **Unlimited Liability:** Partners become fully liable for all claims against the firm to an unlimited extent. The partner might lose all the savings of his life on account of a loss or a mistake in business.
2. **Restriction on Transfer of Interest:** One of the golden rules of any investment is that there must be an easy exit. If partner needs money, or is not in agreement with others, he cannot transfer his interest in the firm to outsiders without the consent of outsiders.
3. **Delay in Decision making:** While day to day management is handled by one or more partners independently, any major decision requires the consent of all partners. A discussion and consensus on decision to be taken might be time consuming, resulting in the firm losing out on prompt action.
4. **Lack of Public Confidence:** The affairs of the firm are not subject to public scrutiny. The
performance and position of the firm is not published. Hence, the firm does not enjoy any public confidence.

Company

Sole proprietary concern is the business of one person. Partnership is a collective effort of more than one person, subject to a maximum of 20 persons. However, if the scale of operations is such that it requires financial resources from more than twenty persons, a Joint Stock Company needs to be formed. There are certain features and advantages of a Joint Stock Company that may prompt even two persons to start a Joint Stock Company. Each person who contributes his money to the company on ownership basis is called a 'Share Holder' and his contribution is called the 'Share Capital' held by him. Another aspect of Joint Stock Company is that it is treated as a separate artificial person. Thus, it is different from the persons who have contributed towards the capital of the company. Moreover, the number of people who have contributed the capital being large, all people cannot be involved in decision making. Hence, the shareholders elect the people who manage the company. The shareholders don't have to commit their time for management of the company. They can continue to work in other organizations or carry on their own business, irrespective of the business of the company. The above factors have been brought out in the following definitions:

"A Company is a voluntary association or organization of many persons who

contribute money or money's worth to a common stock and employ it in some trade or business and who share the profit or losses arising there from"--- Lord Justice Lindley.
Lord Justice Lindley further explains that "The common stock so contributed is denoted in many and is the capital of the company. The persons who contribute it or to whom it belongs are members of the company. The proportion of capital to which each member is entitled is his 'share'. The shares are of fixed value and the whole capital of the company is divided into equal number of shares. The shares are generally transferable although under certain circumstances, the right to transfer may be restricted".

"A person – artificial, invisible, intangible and existing only in contemplation of the Law" – Chief Justice Marshall.

"A voluntary association of individuals for profit, having a capital divided into transferable shares, the ownership of which is the condition of membership" Prof. L.H.Haney.

"An artificial person (being an association of natural persons) recognized by law, with a distinctive name, a common seal, a common capital comprising of transferable shares of fix value carrying limited liability, and having a perpetual (continuous uninterrupted) succession"-Y.K.Bhushan.

"A company having permanent paid up or nominal share capital of fixed amount divided into shares, also of fixed amount, held and transferable as stock and formed on the principles of having in its members only the holders of those shares or stocks and no other persons" – **Indian Companies Act, 1956**.

Features:

1. **Artificial Person**: Accompany is an artificial person existing in the eyes of Law. It can enter
into contracts, purchase and sell goods, own property, use others and also get used, just like any
other natural person.
2. **Separate Legal Entity**: The Company being artificial person, it is different from its shareholders. A shareholder cannot represent the company. A shareholder can enter into a contract with the company. The shareholder can also start a business competing with the business of the company.
3. **Number of Persons**: A minimum of two persons are required to start a

company. The maximum number of shareholders cannot exceed 50 in case of a Private Limited Company. In case of a Public limited company, a minimum of 7 members are required and there is no maximum limit.

4. **Registration**: Registration is compulsory for a Joint Stock Company. Al companies have to be registered with Registrar of Companies as per the provisions of Companies. Act, 1956.
5. **Limited Liability**: The liability of shareholders is limited to the extent of his share capital. The personal property of the shareholder cannot be claimed in satisfaction of dues from the company.
6. **Transferability of Shares**: A shareholder can get out of the business by simply transferring his shares to any other person. The contribution of the organization is not effected on such transfer.
7. **Continuation:** A company continues to be in existence until it is wound up. Thus, life of the company can be perpetual. It is not related to life of shareholders.
8. **Ownership and Management are Separating**: Shareholders are the owners of the company. However, all shareholders cannot involve themselves in the management of the company. Shareholders elect the people who shall be authorized to manage the company. Professionals might be recruited for the purpose. Thus, owners and managers are different people.
9. **Common Seal**: A company can enter into agreements and contracts through its representatives. A seal is embossed in the documents, which signifies the acceptance of terms of contract by the company. Thus, the 'common seal' is the Signature of the company.

Merits

1. **Permanent existence**. The life of the company is permanent. It is not affected by the death, incapability, lunacy and insolvency of the shareholders. It has separate legal entity. The ownership and the management of the company changes smoothly without the dissolution of it company.
2. **Limited liability**. The maximum liability of the shareholders of the company is limited to the face value of shares held by him. The personal assets of the shareholders cannot be attached, even if the company is unable to meet the claims of outsiders.
3. **Availability of large capital**: The capital of the company is contributed by its shareholders, whose number is unlimited as much as the company requires. The face value of shares being nominal and the liability of shareholders being limited, these shares are easily sold, and the required capital is collected.
4. **Transferability of shares**: The shares of the company are transferable easily. Whenever the shareholder wants the money back, he can obtain it by selling his shares. This special feature also ensures that the company will not be required to

refund the capital. The shares of the company are purchased and sold in the stock exchange in the open market.

5. **Economics of large scale**: The company form of business organization assumes very large size because of huge share capital and professional management. This is why; the company enjoys internal and external economies of large scale enterprise.

6. **Tax relief**: The laws offer certain developmental rebates and concessions on certain
commodities of export promotion and for the establishment of industries in backward regions. The
company is charged income tax at flat rate. As such the tax liability on higher income is
comparatively lo9wer.

7. **Diffused risk**: The risk of business is shared among innumerable shareh0olders, so every
shareholder, has to bear nominal risk. This is not the case in proprietorship and partnership, where
the loss to be borne by the individual proprietor and limited number of partners 0of a firm
individually or collectively.

Demerits

The company suffers from the following limitations:

1. **Legal formalities**: Formation of company requires a lot of legal formalities and filing of several
documents. It is time consuming and expensive. Delay in filing of reports invites punishment. All
these formalities make the formation of company difficult.

2. **Fraud by promoters**: Sometimes promoters of companies play fraud in the formation of
company. They conceal material facts and cheat the shareholders. They manipulate the books of accounts in their favor. Promoters are rich people. They gain the experience at the cost of investors' funds, because they are not going to lose anything.

3. **Speculation in shares**: The shares of the company are purchased and sold in the open market. This practice encourages speculation, an immoral activity.

4. **Lack of secrecy**: It is very difficult to maintain secrecy in the company. Every matter has to be discussed in the board of directors meeting or in the annual general meeting of shareholders. This is why, there is delay in the decisions and sometimes opportunities are lost.

5. **Delay in Decision making:** In company form of organization no single individual can make a policy decision. All important decisions are taken either by the board of directors or shareholders. Decision making process is time consuming.

PUBLIC ENTERPRISES

Public enterprises as a form of business organization have gained importance only in recent times. Industrial revolution helped all – round growth of industries. Private entrepreneurs started working only for profit motive. The exploitation of consumers and workers by private entrepreneur become the order of the day. The industrial resolutions of 1948 and 1956 have clearly defined the role of public and private sectors. The government has reserved for itself basic and other strategy industries. A complimentary role has been assigned to both private and public sectors. At present public sector enterprises are engaged in manufacturing, trading as well as service activities. State enterprise is and undertaking owned and controlled by local or state or central government. Whole of the investment is done by the government.

The basic aim of a state enterprise is to provide goods and services to the public at a reasonable rate though profit earning is not excluded but their primary objective is social service.

Objectives of Public enterprises:

1. Helping all-round industrialization.
2. Establishing enterprises, requiring heavy investment.
3. To provide necessities.
4. To have balanced economic growth.
5. To avoid concentration of economic power
6. To establish socialistic pattern of society.
7. To run monopoly sector.
8. To exploit natural resources.
9. Helping in implementing government plans.
10. To increase government resources

Unit – V Accounting

Accounting is the system a company uses to measure its financial performance by noting and classifying all the transactions like sales, purchases, assets, and liabilities in a manner that adheres to certain accepted standard formats. It helps to evaluate a Company's past performance, present condition, and future prospects.

Definition

A more formal definition of accounting is ***the art of recording, classifying, and summarizing in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character and interpreting the results thereof***.

The Need for Accounting

Every organization needs to maintain good records to track how much money they have, where it came from, and how they spend it. These records are maintained by using an accounting system.

These records are essential because they can answer such important questions as:

- Am I making or losing money from my business
- How much am I worth?
- Should I put more money in my business or sell it and go into another business?
- How much is owed to me, and how much do I owe?
- How can I change the way I operate to make more profit

Even if you do not own or run a business, as an accountant you will be asked to provide the valuable information needed to assist management in the decision making process. In addition, these records are invaluable for filing your organization's tax returns.

The modern method of accounting is based on the system created by an Italian monk ***Fra Luca Pacioli***. He developed this system over 500 years ago. This great and scientific system was so well designed that even modern accounting principles are based on it.

In the past, many businesses maintained their records manually in books – hence the term "bookkeeping" came about. This method of keeping manual records was cumbersome, slow, and prone to human errors of translation.

A faster, more organized, and easier method of maintaining books is using Computerized Accounting Programs. With the decrease in the price of computers and accounting programs, this method of keeping books has become very popular.

What Accountants Do

We have said that accounting consists of these functions:

- Recording
- Classifying
- Summarizing
- Reporting and evaluating the financial activities of a business

Before any recording can take place, there must be something to record. In accounting, the something consists of a transaction or event that has affected the business. Evidence of the transaction is called a document. For example:

- A sale is made, evidenced by a sales slip.
- A purchase is made, as evidenced by a check and other documents such as an invoice and a
purchase order.
- Wages are paid to employees with the checks and payroll records as support.
- Accountants do not record a conversation or an idea. They must first have a document.

Types of Accounting

The two methods of tracking your accounting records are:

- Cash Based Accounting
- Accrual Method of Accounting

Cash Based Accounting:

Most of us use the cash method to keep track of our personal financial activities. The cash method recognizes revenue when payment is received, and recognizes expenses when cash is paid out. For example, your personal checkbook record is based on the cash method. Expenses are recorded when cash is paid out and revenue is recorded when cash or check deposits are received.

Accrual Accounting:

The accrual method of accounting requires that revenue be recognized and assigned to the accounting period in which it is earned. Similarly, expenses must be recognized and assigned to the accounting period in which they are incurred.

A Company tracks the summary of the accounting activity in time intervals called Accounting periods. These periods are usually a month long. It is also common for a company to

create an annual statement of records. This annual period is also called a Fiscal or an Accounting Year.

The accrual method relies on the principle of matching revenues and expenses. This principle says that the expenses for a period, which are the costs of doing business to earn income, should be compared to the revenues for the period, which are the income earned as the result of those expenses. In other words, the expenses for the period should accurately match up with the costs of producing revenue for the period.

In general, there are two types of adjustments that need to be made at the end of the accounting period. The first type of adjustment arises when more expense or revenue has been recorded than was actually incurred or earned during the accounting period.

An example of this might be the pre-payment of a 2-year insurance premium, say, for $2000. The actual insurance expense for the year would be only $1000. Therefore, an adjusting entry at the end of the accounting period is necessary to show the correct amount of insurance expense for that period.

Similarly, there may be revenue that was received but not actually earned during the accounting period. For example, the business may have been paid for services that will not actually be provided or earned until the next year. In this case, an adjusting entry at the end of the accounting period is made to defer, that is, to postpone, the recognition of revenue to the period it is actually earned.

Although many companies use the accrual method of accounting, some small businesses prefer the cash basis. The accrual method generates tax obligations before the cash has been collected. This benefits the Government because the IRS gets its tax money sooner.

Cash versus Accrual Accounting

Accounts Receivable is an asset that is owed to you but you do not have money in the bank or property to show you own something -it is intangible, on paper. It grows or accumulates as you issue invoices; therefore, Accounts Receivable is part of an accrual accounting system.

Double-entry accounting is the most accurate and best way to keep your financial records. With a computer, you don’t have to fully understand all the accounting details. Basically, in double entry accounting each transaction affects two or more categories or accounts, so everything stays in balance. Therefore, if you change an asset balance by issuing an invoice some other category balance changes as well. In this case, when you issue an invoice, the category that balances the asset called Accounts Receivable is an income or a sales account.

When you bill your client, there is an increase in income (on paper) and hence an increase in Accounts Receivable. When you are paid, the paper asset turns into money you put in the bank – a tangible asset. Through a process of recording the payment and the deposit, Accounts Receivable decreases and the bank balance increases. This accounting program takes care of all the accounting details.

This paper income can be confusing if you don’t understand that it is the total of all invoiced work, both paid and unpaid. If you have invoiced clients for a total of $10,000 but only $2,000 has been paid, your income will be $10,000 and your Accounts Receivable balance will be $8,000, and your bank account has increased by the $2,000 you received. An accountant would call this an accrual accounting method.

A cash accounting method only counts income when money is received, and it does not keep track of Accounts Receivable. However, in real life, small businesses tend to use both methods without realizing the difference until income tax time.

This program can handle both accrual and cash based accounting. You can use the **G/L Setup** option in the **G/L** module to select either Cash or Accrual based accounting. We recommended that you consult with your accountant to determine which system will work best for you.

Classification of Accounting

In order to satisfy needs of different people interested in the accounting information, different branches of accounting have developed.

Accounting is generally classified into three different disciplines as shown in Figure.

Financial Accounting: Accounting involves recording, classifying and summarizing of past events and thus is historical in nature. It is Historical accounting which is better known as financial accounting whose primary intention is to prepare the Statements revealing the Income /

Loss and financial position of the business on the basis of events, which have happened in the period being reckoned.

But this information, though of immense vitality does not adequately aid the management in planning, controlling, organizing and efficiently conducting the course of the business as a result of which Cost Accounting and Management Accounting are in place.

Cost Accounting: It shows classification and analysis of costs on the basis of functions, processes, products, centers etc. It also deals with cost computation, cost saving, cost reduction, etc.

Management Accounting: Management Accounting begins where Financial accounting and Cost Accounting ends. It deals with the processing of data generated in financial accounting and cost accounting for managerial decision-making. It also deals with application of managerial economics concepts for decision-making.

The Accounting Equation

Now let us discuss the accounting equation, which keeps all the business accounts in balance. We will create this equation in steps to clarify your understanding of this concept. In order to start a business, the owner usually has to put some money down to finance the business operations. Since the owner provides this money, it is called **Owner's equity**. In addition, this money is an **Asset** for the company. This can be represented by the equation:

ASSETS = OWNER'S EQUITY

If the owner of the business were to close down this business, he would receive all its assets. Let's say that owner decides to accept a loan from the bank. When the business decides to accept the loan, their Assets would increase by the amount of the loan. In addition, this loan is also a Liability for the company. This can be represented by the equation:

Assets = Liabilities + Owner's Equity

Now the Assets of the company consist of the money invested by the owner, (i.e. **Owner's Equity),** and the loan taken from the bank, (i.e. a **Liability**). The company's liabilities are placed before the owners' equity because creditors have first claim on assets.

If the business were to close down, after the liabilities are paid off, anything left over (assets) would belong to the owner

Accounting Principle

Meaning of Accounting Principles

Accounting principles refer to the rules and actions adopted by the accountants globally for recording accounting transactions. These are classified into two categories:

1. Accounting concepts
2. Accounting conventions

Accounting Concepts

Accounting concepts include the assumptions and conditions on which the science of accounting is based. These are also known as accounting standards. Important accounting concepts are:

1. Separate entity concept
2. Going concern concept
3. Money measurement concept
4. Cost concept
5. Dual aspect concept
6. Accounting period concept
7. Realization concept

Business Entity Concept or Separate entity concept

The concept of business entity assumes that business has a distinct and separate entity from its owners. It means that for the purposes of accounting, the business and its owners are to be treated as two separate entities. Keeping this in view, when a person brings in some money as capital into his business, in accounting records, it is treated as liability of the business to the owner.

Going Concern Concept

The concept of *going concern assumes that a business firm would continue to carry* out its operations indefinitely, i.e. for a fairly long period of time and would not be liquidated in the foreseeable future.

Money Measurement Concept

The concept of money measurement states that only those transactions and happenings in an organisation which can be expressed in terms of money such as sale of goods or payment of

expenses or receipt of income, etc. are to be recorded in the book of accounts. All such transactions or happenings which cannot be expressed in monetary terms,

For example, the appointment of a manager, capabilities of its human resources or creativity of its research department

Cost Concept

The cost concept requires that all assets are recorded in the book of accounts at their purchase price, which includes cost of acquisition, transportation, installation and making the asset ready to use 5

Accounting Period Concept

Accounting period refers to the span of time at the end of which the financial statements of an enterprise are prepared, to know whether it has earned profits or incurred losses during that period and what exactly is the position of its assets and liabilities at the end of that period. Such information is required by different user at regular interval for various purposes, as no firm can wait for long to know it financial results as various decisions are to be taken at regular intervals on the basis of such information.

Dual Aspect Concept

Dual aspect is the foundation or basic principle of accounting. It provides the very basis for recording business transactions into the book of accounts. This concept states that every transaction has a dual or two-fold effect and should therefore be recorded at two places.

Revenue Recognition (Realisation) Concept

The concept of *revenue recognition requires that the revenue for a business* transaction should be included in the accounting records only when it is realized.

Matching Concept

The process of ascertaining the amount of profit earned or the loss incurred during a particular period involves deduction of related expenses from the revenue earned during that period. The matching concept emphasizes exactly on this aspect.

It states that expenses incurred in an accounting period should be matched with revenues during that period.

Objectivity Concept

The concept of objectivity requires that accounting transaction should be recorded in an objective manner, free from the bias of accountants and others

This can be possible when each of the transaction is supported by verifiably documents or vouchers. For example, the transaction for the purchase of materials may be supported by the cash receipt for the money paid

Accounting Conventions

Accounting conventions include the customs and traditions that assist the accountants in preparing accounting statements. Important accounting conventions are:

1. Convention of conservatism
2. Convention of full disclosure
3. Convention of consistency
4. Convention of materiality

Conservatism Concept: The concept of conservatism (also called 'prudence') provides guidance for recording transactions in the book of accounts and is based on the policy of playing safe

Full Disclosure Concept: The financial statement makes a full, fair and adequate disclosure of all information which is relevant for taking financial decisions

The principle of full disclosure requires that all material and relevant facts concerning financial performance of an enterprise must be fully and completely disclosed in the financial statements and their accompanying footnotes

Consistency Concept: The accounting information provided by the financial statements would be useful in drawing conclusions regarding the working of an enterprise only when it allows comparisons over a period of time as well as with the working of other enterprises.

Materiality Concept: The concept of materiality requires that accounting should focus on material facts. In certain cases, when the amount involved is very small, strict adherence to accounting principles is not required. For example, stock of erasers, pencils, scales, etc. are not shown as assets, whatever amount of stationery is bought in an accounting period is treated as the expense of that period, whether consumed or not.

Accounting process

The sequence of activities beginning with the occurrence of a transaction is known as the **accounting cycle**. This process is shown in the following diagram:

Steps in the Accounting Process

Identify the Transaction

Identify the event as a transaction and generate the source document.

Analyze the Transaction

Determine the transaction amount, which accounts are affected, and in which direction.

Journal Entries

The transaction is recorded in the journal as a debit and a credit.

Post to Ledger

The journal entries are transferred to the appropriate T-accounts in the ledger.

Trial Balance

A trial balance is calculated to verify that the sum of the debits is equal to the sum of the credits.

Adjusting Entries

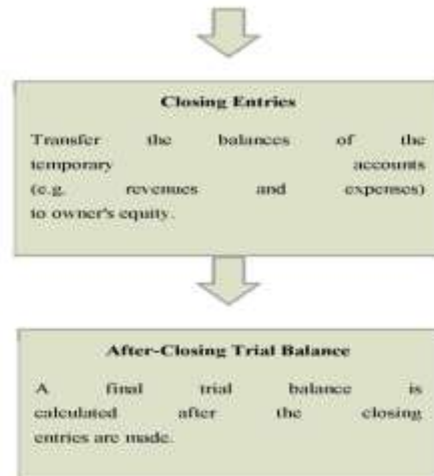
Adjusting entries are made for accrued and deferred items. The entries are journalized and posted to the T-accounts in the ledger.

Adjusted Trial Balance

A new trial balance is calculated after making the adjusting entries.

Financial Statements

The financial statements are prepared.



The above diagram shows the financial statements as being prepared after the adjusting entries and adjusted trial balance. The financial statements also can be prepared before the adjusting entries with the help of a worksheet that calculates the impact of the adjusting entries before they actually are posted.

The above stages are repeated in accounting process, as previous years closing balances are taken as opening balances for current year. As this process is repeated, this is also called as accounting cycle. This can be represented in the following way

The Accounting Cycle

The following stages are in accounting cycle:

1) All the business transactions are systematically entered in journal by way of journal entries
2) From the journal, they are recorded in various accounts in the book called ledger
3) With the help of the balances in various accounts, trial balance is prepared to know the arithmetical accuracy
4) Finally, preparing final accounts with the help of the balance. Trading & Profit & Loss Account is prepared to ascertain the profit or loss made during a particular period, balance sheet is prepared to know the exact financial position

Systems of Book-Keeping

Two types of systems of book-keeping are:

1. **Single entry system**: It is used to record only cash and personal accounts.
2. **Double entry system**: It is used to record each transaction under two different accounts. It is more reliable and efficient than the single entry system.

Difference between Double Entry and Single Entry Systems

Features	Double Entry System	Single Entry System
Recording of transactions	Dual aspect is followed for all transactions	Dual aspects is not followed for all transactions
Maintenance of books	Subsidiary books such as cash,	Only cash book is maintained

	sales, purchases are maintained	
Maintenance of books of accounts	All real, personal, nominal accounts are	Only personal account is maintained
Preparation of trail balance & final statements	Trail balance & Final statements can be accurately maintained	Trail balance cannot be prepared & Final statements does not provide

DOUBLE ACCOUNTING SYSTEM

Double entry system of Book-keeping is simple and universal in its application. It has the test of four hundred years continuous use. It may be claimed that it is the only system worthy of adoption by the practical businessman. To understand the system of double entry system of bookkeeping all that we need to remember is the fundamental rule:

"Debit – the account which receives the benefit."

"Credit – the account which gives the benefit"

Types of account

1) Personal Account
2) Real Account
3) Nominal Account

RULES FOR DEBIT & CREDIT.

1) **Personal Account**: - This account deals with the individuals of the organization these includes
accounts of natural persons in varied capacities likes suppliers and buyers of goods, lenders and
borrowers of loans etc.

"Debit – the receiver"

"Credit – the giver"

2) **Real Account**: - This account deals with the group of individuals of the organization these
include combinations of the properties or assets are known as real account.

"Debit – what comes in"

"Credit – what goes out"

3) **Nominal Account**: - Nominal accounts relate to such items which exist in name only. These items pertain to expenses and gains like interest, rent, commission, discount, salary etc,

"Debit – all expenses and losses" "Credit – all incomes and gains"

Journal Entries

A journal entry is an entry into an accounting journal. An accounting journal records accounting transactions as they occur. A journal entry converts accounting transactions into the language of accounting by using debits and credits.

Requirements for journal entries

All journal entries should satisfy the following requirements:

(1)At least one entry on the debit side

(2)At least one entry on the credit side

(3)Sum of debit side amounts = sum of credit side amounts

Journals (Preparation of Journal Entries)

The word 'Journal' is derived from the French word "jour" meaning 'a day'. Journal, therefore, means a 'daily record'. Transactions are first entered in a book called 'Journal' to show which accounts should be debited and which credited along with an explanation of the entry (called 'narration'). Journal entry is any transaction that is recorded in the journal. The process of recording the transactions in the journal is termed as journalizing the entries.

All transactions are first recorded in the journal as they occur in a chronological order. This is the first step in the accounting process. The journal is called 'Book of original entry' as all transactions that occur are first recorded here.

The form of the journal is given below:

JOURNAL

Date	Particulars	L.F	Debit amount	Credit amount

Date is the date of the transaction

Particulars: Here the names of the account involved are written. First the account to be debited is written and on the next line the account to be credited is written preceded by the word "To". Then in the next line the explanation for the entry together with necessary details is given (called 'narration')

"L.F" indicates "Ledger Folio" where in the page number in the ledger on which the account is written up is recorded.

Preparation of journal entries:

All the accounting transactions must be first recorded in Journal. The recording of transactions in the journal is called journal entry. Preparation of journal entries involves certain steps that are explained below:

- Analyze the transactions and identify the accounts that are affected by the transaction
- Ascertain the nature of the accounts involved as real, personal or nominal.
- Determine the rule of debit or credit applicable to each of the accounts involved.
- Ascertain the account to be debited and the account to be credited.
- Now, write the date of transaction in the 'Date' column
- Write the name of the account to be debited and the amount to be debited in debit amount column against the name of the account.
- Write the name of the account to be credited in the next line preceded by the word "To" at a few spaces towards the right in particular column, and the amount to be credited in the credit amount column against the name of the account.
- Write narration (brief description of the transaction) within brackets in the next line in particular column.

Example:

Let us consider the following transactions and prepare journal entries in the format shown above. i. Purchased goods on credit from Mr. X for $200,000 on 4 Jan 2009 ii. Sold goods to Mr. Y for cash $100,000 on 12 Jan 2009 iii. Purchased furniture for office purpose $ 20,000 on 25 Jan 2009 iv. Paid $100,000 to Mr. X in full settlement of his dues on 30 Jan 2009

Date	Particulars	L.F No	Debit amount	Credit amount
4 Jan 2009	Purchases Account To Mr. X Account (Being purchase of goods on credit from Mr. X)		200,000	200,000
12 Jan 2009	Cash Account To Sales Account (Being sale of goods to Mr. Y for cash)		100,000	100,000
25 Jan 2009	Furniture Account To Cash Account (Being furniture purchased for cash)		20,000	20,000
30 Jan 2009	Mr. X Account To Cash Account (Being paid Mr. X in full settlement of his dues)		100,000	100,000

Illustration: I

Journalize the following transactions and prepare a cash ledger.

1. Ram invests Rs. 10, 000 in cash.
2. He bought goods worth Rs. 2000 from shyam.
3. He bought a machine for Rs. 5000 from Lakshman on account.
4. He paid to Lakshman Rs. 2000
5. He sold goods for cash Rs.3000
6. He sold goods to A on account Rs. 4000
7. He paid to Shyam Rs. 1000
8. He received amount from A Rs. 2000

Illustration II

Journalize the following transactions and post them into Ledgers

Jan 1. Commenced business with a capital of Rs. 10000

,, 2. Bought Furniture for cash Rs. 3000

,, 3. Bought goods for cash from ‘B’ Rs. 500

,, 4. Sold goods for cash to A Rs. 1000
,, 5. Purchased goods from C on credit Rs.2000
,, 6. Goods sold to D on credit Rs. 1500
,, 8. Bought machinery for Rs. 3000 paying Cash
,, 12. Paid trade expenses Rs. 50
,, 18. Paid for Advertising to Apple Advertising Ltd. Rs. 1000
,, 19. Cash deposited into bank Rs. 500
,, 20. Received interest Rs. 500
,, 24. Paid insurance premium Rs. 200
,, 30. Paid rent Rs. 500
,, 30. Paid salary to P Rs.1000

LEDGER Ledger is the **secondary book** of accounts all business transactions are recorded in the first instance in the journal, but they must find their place ultimately in the accounts in the ledger in a duly classified form. This ledger are also called **final entry book**. OR Transferring of all journals in to accounts by using accounting principles is called ledger.

Format of ledger

Dr Ledger Cr

Dale	**Particulars**	**L.F.No**	**Debit amount**	**Credit amount**	**Date**	**Particular**	**L.F.No**	**Debit amounl**	**Credit aiiioiint**

Illustration

Record the following transactions in a Journal and then post the entries into the ledger.

1. 15th June: Ibrahim a sole proprietor Commenced business, with a capital of Rs. 2,00,000.
2. 17th June: Eought Furniture for cash Rs. 20,000.
3. 17th June: Paid Rent to the shop owner Mr. Murugan Rs. 5,000.
4. 18th June: Paid cash intc bank Rs. 1,50,000
5. 18th June: Bought Goods for cash Rs. 10,000 from M/s Shamir Jain & Co.,
6. 18th June: Eought Goods on credit from M/s Ramdas & Bros, for Rs. 10,000.
7. 19th June: Sold goods for cash Rs. 12,000 to Mr. Naryan Tiwari
8. 20th June: Bought Machinery from M/s Eoolani Machinery and paid by cheque Rs. 25,000.
9. 21st June: Sold goods on credit to Mr. Natekar for Rs. 8,000
10. 21st June: Paid weekly wages to workers Rs. 5,000
11. 24th June: Paid M/s Ramdas and Brothers by cheque Rs. 5,000
12. 24th June: Received from Mr. Natekar Rs. 2,000
13. 24th June: Received commission from M/s Orion Traders for giving a trade lead Rs. 500.

Journal the books of *fJifs* for **the** period from

Date	V/R No.	Particulars b'F		Debit Amount (in Rs)	Credit Amount
June 15th		Cash Dr To Capital a/c [Eeing the amount received from Mr. Ibrahim, the proprietor as his capital contribution]	a/c	2,00,000	2,00,000
17th		Furniture Dr To Cash a/c [Eeing the amount paid towards Furniture purchased]	a/c	20,000	20,000
17th		Rent Paid Dr To Cash a/c [For the amount paid towards rent for the shop for the month of May]	a/c	5,000	5,000
18th	;	Eank Dr To Cash a/c [For the amount of cash paid into bank]	a/c	1,50,000	1,50,000

Date	Particulars		Debit	Credit
18th	Goods/Stock a/c	Dr	10,000	
	To Cash a/c [Being the value of stock cash]	-		10.000
18th	Goods/Stock a/c	Dr	10,000	
	Tc M/s Ramdas St Eros a/c [Being the value of stock M/s Ramdas St Eros., on credit]	-		10.000
19th	Cash a/c	Dr	12,000	
	To Goods/Stock a/c [Being the value of stock sold for	-		12.000
20th	Machinery a/c	Dr	25,000	
	To Bank a/c [Eeing the amount paid by cheque towards purchase of machinery]	-		Z57D00
21th	Mr. Natekar a/c	Dr	8,000	
	To Goods/Stock a/c |Eeing the value of stock sold on Mr. Natekar]	-		8,000
21th	Wages paid a/c	Dr	5,000	
	To Cash a/c Tcrthe amount paid towards weekly wages for the workers]	-		5,000
24th	M/s Rarndas St Eros a/c	Dr	5,000	
	To Eank a/c [For the amount paid by cheque to Ramdas St Eros., on account]	-		5,000
24th	Cash a/c	Dr	2,000	
	To Mr. Natekar a/c [For the amount received in cash Mr. Natekar on account]	-		2,000
24th	Cash a/c	Dr	500	
	To commission Received a/c [For the amount received in cash Mr. Natekar on account]	-		500

By going through the above journal entries we can identify the list of ledger <u>accounts</u> affected by these transactions.

- Cash a/c
- Capital a/c
- Furniture a/c
- Rent Paid a/c
- Bank a/c
- Goods/Stock a/c
- M/s Ram das &. Eros, a/c
- Machinery a/c

- Mr. Natekar a/c
- Wages Paid a/c
- Commission Received a/c

General Ledger
[Books of Mr. **Ibrahim]**

Dr Cash a/c Cr

Date	Particulars	J/F	Amount (in Rs)	Date	Particulars	J/F	Amount (in Rs)
15/06/0	To Capital a/c	-	2,00,000	17/06/0	By Furniture a/c	-	20,000
19/06/0	To Goods/Stock	-	12.000	17/06/0	Bv Rent Paid a/c	-	5.000
24/06/0	To Mr. Natekar a/c	-	2.000	18/06/0	Ev Eank a/c	-	1.50.000
24/06/0	To Commission Received a/c		500	18/06/0	Bv Goods/Stock	-	10.000
				21/06/0 5	By Wages Paid a/c		5,000
	sub-total		2,14,500		subtotal		1,90,000
25/06/0 5	Total		2,14,500	25/06/0 5	Ey Ealance c/d		24,500
	To Ealance b/d		24,500		**Total**		2,14,500

Dr Capital a/c **Cr**

Oate	Particulars	J F	Amount (in Rs)	Date	Particulars	J. F	Amount (in Rs)
	sub-total	-			By Cash a/c		i.:: :::
25/06/0 5	To Balance c/d		2,00,000	1S/0S/	sub-total		2.00,000
	Total		2,00,000		Total		2,00,000
					By Balance b/d		2,00,000

Dr **Furniture a/c** Cr

Date	Particulars	J F	Amount (in Rs)	Date	Particulars	J	Amount (in Rs)
17/06/0	To Cash a/c		::.:::	25/06/0 5	sub-total	-	
	sub-total				**By Balance** e/d		20,000
	Total		20,000		**Total**		20,000
25/05/0 5	To Balance b/d		20,000				

Dr Rent Paid a/c Cr

Date	Particulars	J/F	Amount (in Rs)	Date	Particulars	J/F	Amount (in Rs)
17/06/0	To Cash a/c		5,000	25/06/0 5	subtotal	-	
	sub-total		5,000		Ey Ealance c/d		0 5,00
	Total		5,000		Total		5,000
	To Ealance b/d		5,000				

Dr Bank a/c Cr

Date	Particulars	J/F	Amount (in Rs)	Date	Particulars	J/F	Amount (in Rs)

18/06/0	To Cash a/c sub-total Total To Ealance b/d		1,50,000 1,50,000 1,50,000 1,20,000	20/06/0 5 24/06/0 5 25/06/0 5	By Machinery a/c By M/s Ramdas St Bros, a/c sub-total Ey Ealance c/d Total	-	25,00 0 30,000 1,20,00 1,50,000

Dr Goods/Stock a/c Cr

Date	Particulars	J/F	Amount (in Rs)	Date	Particulars	J/F	Amount (in Rs)
18/06/0 5 18/06/0 5	To Cash a/c By M/E Rarndas St Bros, a/c sub-total Total	-	10,00 0 20,000 20,000	19/06/0 5 21/05/0 5	By Cash a/c By Mr. Natekar a/c sub-total Total		12,00 0 8,000 20,000 20,000

Dr Ws 1 Bros. Cr

Date	Particulars	J'F	Amount (in Rs)	Date	Particulars	J'F	Amount (in Rs)
24/05/0 5	To Bank a/c sub-total To Balance c/d Total	-	5,000 5,000 10,000	18/05/0	By Goods/Stock a/c sub-total Total		10,000 10,000 10,000 5,000

Dr Machinery a/c. Cr

Date	Particulars	J F	Amount (in Rs)	Date	Particulars	J/F	Amount (in Rs)
20/06/	Tc Eank a/c su b-total Total To Ealance b/d		25,000 25,000 25,000 25,000	25/05/ 05	sub-total Ey Ealance c/d Total	-	25,000 25,000

Dr Mr. Natekar a/c Cr

Date	Particulars	J/F	Amount (in Rs)	Date	Particulars	J/F	Amount (in Rs)
21/06/0	To Goods/Stock a/c sub-total Total To Ealance b/d		3,000 8,000 3,000 6,000	24/06/0 5	Ey Cash a/c **su b-total** By Balance c/d Total	-	2,000 2,00 0 S,000

Dr Wages P aid a/c Cr

Date	Particulars	J/F	Amount (in Rs)	Date	Particulars	J/F	Amount (in Rs)

21/06/0	To Cash a/c sub-total Total To Balance b/d		5,000 5,000 5,000 5,000	25/06/0 5	subtotal Ey Ealance c/d Total	-	 5,000 5,000

Dr Commission Received *ale* **Cr**

Date	Particulars	J/F	Amount (in Rs)	Date	Particulars	J/F	Amount (in Rs)
25/06/0 5	**sub-total** To Ealance c/d **Total**	-	 500 500	24/06/0	By Cash a/c **sub-total** **Total** By Balance b/d		500 500 500 500

INTRODUCTION TO FINAL ACCOUNT INTRODUCTION

All business transactions are first recorded in Journal or Subsidiary Books. They are transferred to Ledger and balanced it. The main object of keeping the books of accounts is to ascertain the profit or loss of business and to assess the financial position of the business at the end of the year. The object is better served if the businessman first satisfies himself that the accounts written up during the year are correct or at least arithmetically accurate.

When the transactions are recorded under double entry system, there is a credit for every debit, when on a/c is debited; another a/c is credited with equal amount. If a Statement is prepared with debit balances on one side and credit balances on the other side, the totals of the two sides will be equal. Such a Statement is called Trial Balance.

Trail Balance

DEFINITION

Trial Balance can be defined as “a list of all balances standing in the Ledger Accounts and Cash Book of a concern at any given time”.

Advantages:

1. It is the shortest method of verifying the arithmetical accuracy of entries made in the Ledger. If the Trial balances agree, it is an indication that the Accounts are correctly written up; but it is not a conclusive proof.
2. It helps to prepare the Trading A/c, Profit & Loss a/c and Balance Sheet.
3. It presents to the businessman consolidated lists of all Ledger Balances.

Preparation:

There are two methods for preparing the Trial Balance

First Method:

In this method, Ledger Accounts are not balanced. They are totaled. The debit side totals and the credit side totals are entered in a separate sheet. The grand total of Debit Column will be equal to the grand total of the Credit Column.

Second Method:

This method is more widely used. In this method, ledger accounts are balanced. The brought down balances are then brought to a sheet as given bellow.

Format of the Trail balance

Particulars	**Debit amount**	**Particulars**	**Credit amount**
Opening stock	**xxx**	Sales	**xxx**
Purchases	**xxx**	Commission received	**xxx**
Carriage inwards	**xxx**	Bad debts reserve	**xxx**
Wages	**xxx**	Interest received	**xxx**
All factory expenses	**xxx**	Commission received	**xxx**
Manufacturing expenses	**xxx**	Interest on drawing	**xxx**
Factory rent	**xxx**	Discount on creditors	**xxx**
Insurance	**xxx**	Capital	**xxx**
Oil, water, gas	**xxx**	Bank loan	**xxx**
Fuel, coal, power	**xxx**	Bank over draft	**xxx**
Exercise duty	**xxx**	Income received in advances	**xxx**
Trade expenses	**xxx**	Creditors	**xxx**
Salaries	**xxx**	Bills payable	**xxx**
Rent & Taxes	**xxx**	All other loans	**xxx**
Advertising expenses	**xxx**	Closing stock	**xxx**
Bad debts	**xxx**		
Insurance	**xxx**		
Repairs	**xxx**		
Discount allowed	**xxx**		
Commission paid	**xxx**		
Printing & Stationary	**xxx**		
Cash at bank	**xxx**		
Cash in hand	**xxx**		
All manufacturing expenses	**xxx**		
All depreciations	**xxx**		
All fixed assets	**xxx**		

All current assets Selling expenses General expenses	xxx xxx xxx		
	xxxxxx		xxxxxx

SUNDRY DEBTORS

When a trader sells on credit basis, The Buyer's Account in the Ledger is debited. For each buyer, there is one Ledger a/c. Some of the buyer accounts may be automatically balanced. But it is quite natural that many of these Customer's Accounts have a debit balances. When we bring these balances to the Trial Balance, if we are going to write all individual names of customers, then the Trial balance will be too lengthy. Therefore, first a list of Debtors with their individual debit balances are prepared and totaled. Instead of writing the individual names of Debtors, the total is written under the heading "Sundry Debtors" which appears in the Trial Balance.

SUNDRY CREDITORS

There are a number of parties from whom the Trader buys goods on credit basis. For each one of them, an Account is opened in the Ledger. As in the case of Debtors, a List of Creditors with the balances due to them is prepared. In the Trial Balance, instead of writing the individual names of Creditors,, the total of the balances of the creditors is written under the heading "Sundry Creditors"

If the Trial Balance agrees, it is an indication that the accounts are correctly written up; but it is not a conclusive proof. If the trial balance disagrees, then the difference amount is generally placed in 'Suspense Account'

FINAL ACCOUNTS

So far, we have discussed that how the business transactions are recorded in Journal, ledger, how to detect, rectify the errors and how to prepare trial Balance. It is quite natural that the businessman is interested in knowing whether his business is running on Profit or Loss and also the true financial position of his business. The main aim of Bookkeeping is to inform the Proprietor, about the business progress and the financial position at the right time and in the right way. Preparation of Final accounts is highly possible only after the preparation of Trial Balance.

Final Accounts

Final accounts are done in three steps 1. Trading A/c

3. Balance sheet

1. Trading and Profit and Loss A/c is prepared to find out Profit or Loss.
2. Balance Sheet is prepared to find out financial position of Company.

Trading and P&L A/c and Balance sheet are prepared at the end of the year or at end of the part. So it is called Final Account.

Revenue account of trading concern is divided into two-part i.e.

1. Trading Account and
2. Profit and Loss Account.

TRADING ACCOUNT

Trading refers buying and selling of goods. Trading A/c shows the result of buying and selling of goods. This account is prepared to find out the difference between the Selling prices and Cost price. If the selling price exceeds the cost price, it will bring Gross Profit.

For example, if the cost price of Rs. 50,000 worth of goods are sold for Rs. 60,000 that will bring in Gross Profit of Rs. 10,000. If the cost price exceeds the selling price, the result will be Gross Loss.

For example, if the cost price Rs. 60,000 worth of goods are sold for Rs. 50,000 that will result in Gross Loss of Rs.10, 000. Thus the Gross Profit or Gross Loss is indicated in Trading Account.

Items appearing in the Debit side of Trading Account.

1. Opening Stock: Stock on hand at the commencement of the year or period is termed as the Opening Stock.
2. Purchases: It indicates total purchases both cash and credit made during the year.
3. Purchases Returns or Returns out words: Purchases Returns must be subtracted from the total purchases to get the net purchases. Net purchases will be shown in the trading account.
4. Direct Expenses on Purchases: Some of the Direct Expenses are.

I. Wages: It is also known as productive wages or Manufacturing wages.

II. Carriage or Carriage Inwards:

III. Octroi Duty: Duty paid on goods for bringing them within municipal limits.

IV. Customs duty, dock dues, clearing charges, Import duty etc.

V. Fuel, Power, Lighting charges related to production.

VI. Oil, Grease and Waste.

VII. Packing charges: Such expenses are incurred with a view to put the goods in the Saleable Condition.

Items appearing on the credit side of Trading Account

1. Sales: Total Sales (Including both cash and credit) made during the year.
2. Sales Returns or Return Inwards: Sales Returns must be subtracted from the Total Sales to get Net sales. Net Sales will be shown.
3. Closing stock: Generally, Closing stock does not appear in the Trial Balance. It appears outside the Trial balance. It represents the value of goods at the end of the trading period.

Specimen Form of a trading A/c

Trnding Account fro the year ending

Dr. Particulars.	Amount R& P.	Amount Rs. P.	Particulars	Cr. Amount Rs P.	Amount Rs P.
To Opeining Stock		**XXX**	By Sales	**XXX**	
To Purcka&e	**XXX**		Lesi: Returns Inwards	**XXX**	**XXX**
Le^s: Returns Outwards	**XXX**	**XXX** - **XXX**	By Closing Stock		**XXX**
			By Gross Lo *M* (to be transferred to P&L A/c)		**XXX**
Tc Wages		**XXX**			
To Freight					
Tc Carnage Inwards		**XXX**			
To Clearing Charge i		**XXX**			
To Packing charges		**XXX**			
To Dock dues		**XXX**			
To Power		**XXX**			
To Gross Proft (to be transferred to P&L Ac;		**XXX**			
		XXX			**XXX**

Bis tit ration 1:

Prepare a T lading Account from the following information of a trader

Total Purchase made during the year 2007 Ri 20,000 Total Sales made during the year 2007 Rs, 25,000 Solution

Tradine Account for the Tear endins *IV* December 2007

Particulars	Amount	Particulars	Amount
To Purchases	20,000	By Sales,	25,000
To Grosi Profit c'd	5,000		
	25,000		25,000

1

BALANCING OF TRADING ACCOUNT

The difference between the two sides of the Trading Account indicates either Gross Profit or Gross Loss. If the total on the credit side is more, the difference

represents Gross Profit. On the other hand, if the total of the debit side is high, the difference represents Gross Loss. The Gross Profit or Gross Loss is transferred to Profit and Loss A/c.

Closing Entries of Trading A/c

Trading A/c is a ledger account. Hence, no direct entries should be made in the trading account. Several items such as Purchases, Sales are first recorded in the journal and then posted to the ledger. The Same accounts are closed by the transferring them to the trading account. Hence it is called as closing entries.

Advantages of Trading Account

1. The result of Purchases and Sales can be clearly ascertained
2. Gross Profit ratio to Sales could also be easily ascertained. It helps to determine Price.
3. Gross Profit ratio to direct Expenses could also be easily ascertained. And so, unnecessary
expenses could be eliminated.
4. Comparison of trading account details with previous years details help to draw better administrative policies.

PROFIT AND LOSS ACCOUNT

Trading account reveals Gross Profit or Gross Loss. Gross Profit is transferred to credit side of Profit and Loss A/c. Gross Loss is transferred to debit side of the Profit Loss Account.

Thus Profit and Loss A/c is commenced. This Profit & Loss A/c reveals Net Profit or Net loss at a given time of accounting year.

Items appearing on Debit side of the Profit & Loss A/c

The Expenses incurred in a business is divided in two parts. i.e. one is Direct expenses are recorded in trading A/c., and another one is Indirect expenses, which are recorded on the debit side of Profit & Loss A/c. Indirect Expenses are grouped under four heads:

1. Selling Expenses: All expenses relating to sales such as Carriage outwards, Travelling Expenses, Advertising etc.,
2. Office Expenses: Expenses incurred on running an office such as Office Salaries, Rent, Tax, Postage, Stationery etc.,
3. Maintenance Expenses: Maintenance expenses of assets.It includes Repairs and Renewals, Depreciation etc.
4. Financial Expenses: Interest Paid on loan, Discount allowed etc., are few examples for Financial Expenses.

Item appearing on Credit side of Profit and Loss A/c.

1. Gross Profit is appeared on the credit side of P & L. A/c.
2. Also other gains and incomes of the business are shown on the credit side.
3. Typical of such gains are items such as
    a. Interest received,
    b. Rent received,
    c. Discounts earned,
    d. Commission earned.

Specimen Form

Pi ofit & Less Account

For the year ended 31^{5t} March 2007

Particular?	Amount	Particular:	Amount
To Trading A/c (Gross Loss) To Salaries To Rent fr Taxes To Stationeries To Postage expenses To Insurance To Repairs To Trading expenses To office expenses To Interest To Bant charges To Establishment expenses To Sunder expenses To Commission To Discount To Adveitisement To Carnage outwards. To Traveling expenses To Distribution expenses To Bad debt provision To Net Profit (transferred to Capital A'c)		By Trading A/c (Gross Profit) By Commission earned By Ren: received By Interest received By Discounts received By Net Loss (Capital A'c)	

Illustration

Prepare Profit and Loss Account, from the following balances of Mr. Murugan for the year ending

31.12.2007.

Office rent Rs. 3000, Printing expenses Rs. 2,200, Tax, Insurance Rs. 1,400, Discount received

Rs. 400, Advertisement Rs. 3,600, Salaries Rs. 8,000, and Stationeries Rs. 2,400, Discount

allowed Rs. 600, Travelling expenses Rs. 2,600, Gross Profit transferred from the Trading A/c Rs.

25,000

Profit s For nd Lim Account o f Mi. Mil ruga u
Dr. the year ending 31 "Dec . 2007
Cr

Particulars	Amount	Pa rticular^	Amount
To Salaries	s,ooo	By Gross Profit (transferred from the trading a.:c)	2}r000
To Office rent	3=0OO	By Discount received	400
To Stationeries	2.400		
To Printing expenses	2,200		
To Tax. Insurance	1.400		
To Discount allowed	600		
To Travelling expenses	2.600		
To Advertisement	3.600		
To Xet Profit (Capital A/c)	1,600		
25,400			25,400

BALANCE SHEET

Trading A/c and Profit & Loss A/c reveals G.P. or G.L and N.P or N.L respectively, Besides the Proprietor wants

i. To know the total Assets invested in business

ii. To know the Position of owner's equity

iii. To know the liabilities of business.

DEFINITION

The Word 'Balance Sheet' is defined as "a Statement which sets out the Assets and Liabilities of a business firm and which serves to ascertain the financial position of the same on any particular date." On the left hand side of this statement, the liabilities and capital are shown. On the right hand side, all the assets are shown. Therefore the two sides of the Balance sheet must always be equal. Capital arrives Assets exceeds the liabilities.

OBJECTIVES OF BALANCE SHEET:

1. It shows accurate financial position of a firm.

2. It is a gist of various transactions at a given period.
3. It clearly indicates, whether the firm has sufficient assents to repay its liabilities.
4. The accuracy of final accounts is verified by this statement
5. It shows the profit or Loss arrived through Profit & Loss A/c.

Specimen format for balance sheet

Balance leetof
SI As 911 ________________

Liabilities	Amount	Amount	Asset*	A mo inn	Amount
Sundry Creditors		XXX	Cash in hand		XXX
Bilk Payable		XXX	Cash at bank		XXX
Bant overdraft		XXX	Bills receivable		XXX
Loans		XXX	Sundry Debtors		XXX
Mortgage		XXX	Closing Stock		XXX
Reserve Fund		XXX	Furniture & Fittings		XXX
Outstanding exp.			Investments		XXX
Capital	XXX		Plant & Machinery		XXX
Add: Net			Loose tools		XXX
(or)			Land & Buildings		XXX
Less: Xet Loss	XXX		Business premises		XXX
	XXX		Horses & carts		XXX
Less Drawings	XXX		Prepaid exp.		XXX
	XXX		Patents &. Trade		XXX
			marks Good will		XXX
Less: Income tax	XXX	XXX			XXX
		XXX			

The Balance sheet contains two parts i.e.
1. Left hand side i.e. the Liabilities
2. Right hand side i.e. the Assets

ASSETS:

Assets represent everything which a business owns and has money value. Assets are always shown as debit balance in the ledger. Assets are classified as follows.

1. **Tangible Assets:** Assets which can be seen and felt by touch are called Tangible Assets. Tangible Assets are classified into two:

a. Fixed Assets: Assets which are durable in nature and used in business over and

again are known as Fixed Assets. e.g. land and Building, Machinery, Trucks, etc. b. Floating Assets or Current Assets: Current Assets are i. Meant to be converted into cash, ii. Meant for resale, iii. Likely to undergo change e.g. Cash, Balance, stock, Sundry Debtors.

2. **Intangible Assets:** Assets which cannot be seen and has no fixed shape.
E.g., goodwill, Patent.

3. **Fictitious assets:** Assets which have no real value and will appear on the Assets side of Balance Sheet. Are known as Fictitious assets:
E.g. Preliminary expenses, Discount or creditors.

LIABILITIES:

All that the business owes to others are called Liabilities. It also includes Proprietor's Capital. They are known as credit balances in ledger.

Classification of Liabilities:

1. **Long Term Liabilities:** Liabilities will be redeemed after a long period of time 10 to 15 Years. E.g. Capital, Long Term Loans.
2. **Current Liabilities:** Liabilities, which are redeemed within a year, are called Current Liabilities or short-term liabilities. E.g. Trade creditors, B/P, Bank Loan.
3. **Contingent Liabilities:** Liabilities,which have the following features, are called Contingent liabilities. They are:
   i. Not actual liability at present ii. Might become a liability in future on condition that the contemplated event occurs. E.g. Liability in respect of pending suit.

Equation of Balance Sheet:

1. Capital = Assets – Liabilities
2. Liabilities = Assets – Capital
3. Assets = Liabilities + Capital.

DIFFERENCE BETWEEN A TRIAL BALANCE AND A BALANCE SHEET

S.>o.	Trial Balance	Balance Sheet
1.	It shows the balances of all ledger accounts.	It shows the balances of personal and real accounts onlv.
2.	It is prepared after the completion of the ledger accouurs or airival of trie balances	It is prepared after the cojnpletion of Trading and P&L A/c.

3.	Its object is to ■check: the arithmetical accuracy.	Its object is to repeal the financial position of the business.
4,	Items shown in. the Trial balance are not in order.	But in the B/S,, the items ihown niust be in order.
5.	It snowv the opening. stock	It shows the closing vtock.
6.	It has the headinss. debit and credit.	It lias the keadine: of Assets and Liabilities..

Illustration

From the following trial balance extracted from the books of Thiru.Venkatachalam as on 31.12.07. Prepare (i) Trading and Profit & Loss A/c and (ii) Balance Sheet

Trial balance as on 31/12/2007

Debit Balances	R*3.	**Credit RalsiiLces**	Rs.
Ca.F .li in liand	2.OO0	Capital	2.00.000
!Ma c li iaer\:	60.000	Sales*	2.5 4.SOO
Stock	50 000	Sundry -Creditors	40 000
ES-Jl-. receivable	1.6O0	Bank overdiaft	22.O0G
SiirnJi.'v debtors	50.000	Return outwards	3.000
Wages.	70.000	D: -^.c ounr i^eceived	l.SOO
T anr.	40.000	Bills payable	i.eoo
C an. iage inix'ards>	2.4O0		
Prune ha vti	1.8O OO0		
Salaries	24 000		
Rent	4.OO0		
Postaae	1.000		
Return inwand&	3.2O0		**1**
Dra.wiio.g57	10.000		
FIT: ii it line	1S.O0O		
Lure re vt	eoo		
Ca.f- ti at bade	e.eoo		
	5.23.4O0		5.23.400

Stock as on 31.12.07 to Rs. 1, 00,000

Solution:

Trading. Profit & Loss A For the year /c of Tliiru. % enkatachalam ending 31.12.07

Dr. Cr.

Particulars.	Amount	Particulars	Amount
To Stock (1.1.07) To Purchaser 1,50,000 Lesv Returns 3.000	50,000	By Sales 2;54,SO0 Leii. Returns. 3,200	2.51,600 J
To Wagev	70,000	By Closing Stock	1=00,000
To Carriage inwards	2,400		
To Gross Profit C/d (transferred to P&L A/c)	52,200		
	3,51,600		3,51,600
To Salaries	24,000	By Gross Profit b/d (transferred from trading A/c)	52,200
To Rent	4,000		
To Postage	1,000	Bv Discount received	1rS00
To Interest	600		
To Net Profit (Capital A/c)	2+,4O0		
	54,000	r \	54,000

Biilnnee Sheet of Thiru. Yenkatachalam a^ at 3-1.12.07

Liabilities		Amount	Assets	Amount
Sundry Creditors		40,000	Caihm hand	2,000
Bank overdraft		22,000	Ca'Ja at bank	6,600
Bills payable		1,800	Machinery	60,000
Capital Add: Net pre fit Less: Drawings	2,00,000 24,400 2,24400 10,000	2,14,400	Bills, receivable Sundry debtors Land Furniture Closing Stock	1,600 50,000 40,000 1S,000 1,00,000
		2,78,200		2,78,200

Illustration From the following trial balance of Shri Samir , Prepare Trading a/c, Profit & loss a/c and Balance sheet as on that date after taking into consideration the necessary adjustments

Particulars	Debit (Rs)	Credit (Rs)
Stock	45000	
Plant & Machinery	75000	
Purchases	225000	

Trade charges	10000	
Carriage inwards	2500	
Carriage outwards	1500	
Fctory rent	1500	
Discount	350	
Insurance	700	
Sundry debtors	60000	
Office rent	3000	
Printing & stationary	600	
Travelers salaries	2800	
Advertising	15000	
Bills receivable	6000	
Drawings	6000	
Salaries	15000	
Wages	20000	
Furniture	7500	
Coal and gas	1000	
Capital		75000
Creditors		15000
Sales		420750
Bad debts provision		200
Bills payable		2000
Cash in hand	2000	
Cash at bank	12500	
	512950	**512950**

Additional Information

I. Closing stock amounted to Rs. 35000

II. Depreciate machinery by 10% & Furniture by 5%

III. Raise the bad debts provision to 5% on debtors

IV. Outstanding factory rent Rs. 300 & Office rent Rs.600

V. Insurance prepaid Rs.100

Solution : Trading account of shir Shamir

Dr	**Cr**

Particulars	Amount	Amount	Particulars	Amount	Amount
To stock		45000	By sales		420750
To purchases		225000	By closing stock		35000
To carriage inwards		2500			
To factory rent	1500				
(+) Outstanding	300	1800			
To wages		20000			
To gross profit		161450			
		455750			455750

Profit & Loss account of shir Shamir

Dr			Cr			
Particulars	**Amount**	**Amount**	**Particulars**	**Amount**	**A**	**oun**
By trade expenses		10000	By Gross Profit		16	450
By carriage outwards		1500				
By discount		350	By provision on bad debts		32	00
By insurance		700				
By office rent	3000					
(+) outstanding	600	3600				
By printing & Stationary		600				
By travelers salaries		2800				
By advertising		15000				
By drawings		6000				
By salaries		15000				
To coal & Gas		1000				
To depreciation on Machinery		7500				
To depreciation on Furniture		375				
To prepaid Insurance		100				
To bad-debts provision		3000				
To net profit						

		94125			
		161650			161650

Balance sheet of Shir Shamir

Liabilities	Amount	Amount	Assets	Amount	Amount
Capital	75000		Plant & Machinery	75000	
(+) Net Profit	94125	169125	(-) Depreciation	7500	67500
Bills payable		2000	Sundry debtors	60000	
Sundry creditors		15000	(-) Provision for Bad debts	3200	56800
Outstanding factory rent		300	Bills receivable		6000
Outstanding office rent		600	Furniture	7500	
			(-) Depreciation	375	7125
			Prepaid Insurance		100
			Cash in hand		2000
			Cash at bank		12500
			Closing stock		35000
		187025			187025

Institute of Chartered Accountants of India

Council of Institute of Chartered Accountants issues from time-to-time preface to the statements of accounting standards that defines the various aspects of accounting standards.

1. It established an Accounting Standards Board (ASB) on 22nd April, 1977.
2. The function of ASB is to formulate accounting standards, which are then established by the Council of Institute of Chartered Accountants.

Indian Accounting Standards (IND ASs)

These are the converged Indian Accounting Standards (Ind ASs) hosted by MCA on its website. The date on which these will come into force is yet to be notified. Any changes in the Ind AS vis. a vis. corresponding IAS/IFRS are given in Appendix 1 appearing at the end of each Ind AS.

1. *Framework for the Preparation and Presentation of Financial Statements in accordance with Indian Accounting Standards*
2. Ind AS 101 *First-time Adoption of Indian Accounting Standards*
3. Ind AS 102 *Share based Payment*
4. Ind AS 103 *Business Combinations*
5. Ind AS 104 *Insurance Contracts*
6. Ind AS 105 *Noncurrent Assets Held for Sale and Discontinued Operations*
7. Ind AS 106 *Exploration for and Evaluation of Mineral Resources*
8. Ind AS 107 *Financial Instruments: Disclosures*
9. Ind AS 108 *Operating Segments*
10. Ind AS 1 *Presentation of Financial Statements*
11. Ind AS 2 *Inventories*
12. Ind AS 7 *Statement of Cash Flows*
13. Ind AS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*
14. Ind AS 10 *Events after the Reporting Period*
15. Ind AS 11 *Construction Contracts*
16. Ind AS 12 *Income Taxes*
17. Ind AS 16 *Property, Plant and Equipment*
18. Ind AS 17 *Leases*
19. Ind AS 18 *Revenue*
20. Ind AS 19 *Employee Benefits*
21. Ind AS 20 *Accounting for Government Grants and Disclosure of Government Assistance*
22. Ind AS 21 *The Effects of Changes in Foreign Exchange Rates*
23. Ind AS 23 *Borrowing Costs*
24. Ind AS 24 *Related Party Disclosures*
25. Ind AS 27 *Consolidated and Separate Financial Statements*

26. Ind AS 28 *Investments in Associates*
27. Ind AS 29 *Financial Reporting in Hyperinflationary Economies*
28. Ind AS 31 *Interests in Joint Ventures*
29. Ind AS 32 *Financial Instruments: Presentation*
30. Ind AS 33 *Earnings per Share*
31. Ind AS 34 *Interim Financial Reporting*
32. Ind AS 36 *Impairment of Assets*
33. Ind AS 37 *Provisions, Contingent Liabilities and Contingent Assets*
34. Ind AS 38 *Intangible Assets*
35. Ind AS 39 *Financial Instruments: Recognition and Measurement*
36. Ind AS 40 *Investment Property*
37. *Comparison of IFRS as applicable on 1st April 2011 with Ind AS placed at MCA's website*

Ratio Analysis

Meaning

The ratio is an arithmetical expression i.e. relationship of one number to another. It may be defined as an indicated quotient of the mathematical expression. It is expressed as a proportion or a fraction or in percentage or in terms of number of times. A financial ratio is the relationship between two accounting figures expressed mathematically. Suppose there are two accounting figures of a concern are sales Rs 100000 and profits Rs 15000. The ratio between these two figures will be

$$\frac{15000}{100000} = 3 : 20 \text{ or } 15\%$$

Ratios provide clues to the financial position of a concern. These are the indicators of financial strength, soundness, position or weakness of an enterprise. One can draw conclusions about the financial position of a concern with the help of accounting ratios.

Example

Suppose one shopkeeper (X) earns a profit of Rs 1000 and another (Y) earns Rs 20000 which one is more efficient? We may say that the one who earns a higher profit is running his shop better. In fact to answer the questions, we must ask, how much is the capital employed by each shopkeeper Let, X employ Rs 100000 and Y Rs 400000. We can work out the percentage of profit earned by each to the capital employed. Thus

These figures show that for every Rs100 of capital X earns Rs 10 and Y earns Rs 5. Y is obviously making a better use of the funds employed by him. He

$$X = \frac{Rs\ 10000}{Rs\ 100000} \times 100 = 10\%$$

$$Y = \frac{Rs\ 20000}{Rs\ 400000} \times 100 = 5\%$$

two.The above example shows that absolute figures by themselves do not communicate the meaningful information.

1) Current assets are those assets which can be converted into cash within a period of one
   year or normal operating cycle of the business whichever is longer

   Examples : Cash in hand, cash at bank ,stock, debtors, bills receivable, prepaid expenses

2) Current liabilities are those liabilities payable within an year or operating cycle
3) Quick assets = current assets – (stock+prepaid expenses)
4) Quick ratio is also known as the acid test ratio or liquidity ratio
5) Tangible assets are those assets which have physical existence
6) Long term debt /external funds/external equities =debentures+termloans
7) Share holders' funds/internal funds/proprietary funds/owners funds=equity share capital+preference share capital+reserves+profit and loss account-fictitious assets

2) **Profitability ratios**

S.no	Ratio	Formula	Ideal ratio	comments	
1	Gross Profit Ratio	<u>Gross profit</u> X 100 Net sales	Higher the better it is	This ratio relationship bet gross profit and net sa Gross profit should adequate to c	the wee n les be ove r
2	Net Profit ratio	<u>Net profit</u> X100 Net sales	Higher the better it is	This ratio relationship between profit and Net sales	the net
3	Net operating profit	(Net operating profit/net	Higher ratio	Helps in	the

			better	efficiency with whic affairs of the bus being managed	h the ines s
4	Operating Ratio	Operating cost X100 net sales	Ratio should low	This ratio is operating efficiency which the busines being carried	t wit h s is

5	Fixed charges cover	PBIT Interest	6 -7 times for industrial concern	Important from point of view It indicates whether business would sufficient profits to periodically the int charges	der' the earn pay eres t
6	Debt Service ratio	PBIT/interest+(principal)/1-taxra		Indicates company to r principal	the epa y
7	Overall ratio/Return on investment/return capital employed	Operating profit x 100 Capital employed	Higher ratio better	Indicates the return on ca	tage pita l
8	Return on share funds	Profit after tax(PAT) Share holders funds X100	Higher ratio better	Indicates the return on share hol funds	tage ders'
9	Return on Equity holders Funds	PAT-pref.dividend X100 Eq.shareholders funds	Higher ratio better	Indicates the return on e shareholders	tage quit y
10	Price Earnings Ratio	Market price per share Earnings per share	Higher ratio better	Indicates the times the earning share is covered by market price Helps the investor deciding whether to or	r per the i n buy es
11	Earnings per share	PAT – pref.dividend No of Equity shares	Higher ratio better	Helps in company's capacity pay dividend	atin to the

				shareholders	

Notes

1) Calculation of Gross profit

Gross profit = Sales- Cost of goods sold

Cost of goods sold (COGS) =opening stock +purchases+ all direct expenses–closing stock

2) Operating profit = Gross profit-operating expenses

Operating expenses= COGS+administration expenses +selling and distribution expenses Note: does not include financial charges like interest and provision for tax

3) Capital employed= sum total of all the long term funds employed in the business

C E= Equity share capital+ preference share capital+ reserves+ profit and loss account+ long term loans-fictitious assets

Shareholder's funds= Equity share capital +preference share capital+reserves +profit and loss account-fictitious assets

Equity share holder's funds= equity share capital + reserves+ profit and loss account-fictitious assets

3) **Turnover ratios**

S.no	Ratio	Formula	Ideal ratio	comments	
1	Fixed assets turn over ratios	Net sales / Fixed Assets	Higher ratio is better	Indicates the extent investment in fixe	to w d a
2	Working capital turnover ratio	Net sales / Working capital	Higher ratio	This ratio indicates wh working	the r o

			is better	effectively utilized in making s
3	Debtors ratio(DTR)/debtors velocity	Net credit sales / Average debtors	Higher is better	Average debtors+opening receivable+closing bills receivable)/2
4	Debt collection period	Months in a year / DTR	Lower ratio better	Indicates the extent whi have been collected in time
5	Creditors Turnover ratio(creditors velocity) (CTR)	Credit purchases / Average creditors	Higher ratio is better	Indicates the speed h wit payments for whi the credi are made c t Average creditors= purc creditors+bills creditors+closing bills payable
6	Credit payment period	Months in a year / CTR	Low ratio better	Indicates the which the payments the creditors
7	Stock turnover ratio	Cost of goods sold / Average Stock	Higher ratio is better	Indicates whether investmen stock is efficiently used or not Average stock= (op e stock+closing stock)/2

Broadly accounting ratios can be grouped into the following categories:

(a)Liquidity ratios

(b)Activity ratios

(c)Solvency ratios

(d)Profitability ratios

(e)Leverage ratio

Liquidity Ratios

The term liquidity refers to the ability of the company to meet its current liabilities. Liquidity ratios assess capacity of the firm to repay its short term liabilities. Thus, liquidity ratios measure the firms' ability to fulfill short term commitments out of its liquid assets. The important liquidity ratios are

(i) Current ratio

(ii) Quick ratio

Current ratio

Current ratio is a ratio between current assets and current liabilities of a firm for a particular period. This ratio establishes a relationship between current assets and current liabilities. The objective of computing this ratio is to measure the ability of the firm to meet its short term liability. It compares the current assets and current liabilities of the firm. This ratio is calculated as under:

$$\text{Current ratio} = \frac{\text{Current Assets}}{\text{Current liabilities}}$$

Current Assets are those assets which can be converted into cash within a short period i.e. not exceeding one year. It includes the following:
Cash in hand, Cash at Bank, Bill receivables, Short term investment, Sundry debtors, Stock, Prepaid expenses

Current liabilities are those liabilities which are expected to be paid within a year. It includes the following: Bill payables, Sundry creditors, Bank overdraft, Provision for tax, outstanding expenses

Significance

It indicates the amount of current assets available for repayment of current liabilities. Higher the ratio, the greater is the short term solvency of a firm and vice a versa. However, a very high ratio or very low ratio is a matter of concern. If the ratio is very high it means the current assets are lying idle. Very low ratio means the short term solvency of the firm is not good. Thus, the ideal current ratio of a company is **2 : 1** i.e. to repay current liabilities, there should be twice current assets.

Illustration 1 Calculate current ratio from the given information Sundry debtors 4, 00,000, Stock 160,000, Marketable securities 80,000, Cash 120,000, prepaid expenses 40,000, Bill payables 80,000, Sundry creditors 160,000, Debentures 200,000, Outstanding Expenses 160,000

$$\text{Current ratio} = \frac{\text{Current Assets}}{\text{Current liabilities}}$$

Current Assets = Sundry debtors + Stock + Marketable securities + Cash + Prepaid expenses = Rs (400,000 + 160,000 + 80,000 + 120,000 + 40,000) = Rs 800,000

Current liabilities = Bill Payables + Sundry creditors + Outstanding Expenses = Rs (80,000 + 160,000 + 160,000) = Rs 400,000

$$\text{Current ratio} = \frac{800{,}000}{400{,}000} = 2:1$$

Interpretation

From the above ratio we can say that the liquidity position of the company is very strong

Quick ratio

Quick ratio is also known as Acid test or Liquid ratio. It is another ratio to test the liability of the concern. This ratio establishes a relationship between quick assets and current liabilities. This ratio measures the ability of the firm to pay its current liabilities. The main purpose of this ratio is to measure the ability of the firm to pay its current liabilities. For the purpose of calculating this ratio, stock and prepaid expenses are not taken into account as these may not be converted into cash in a very short period. This ratio is calculated as under:

$$\text{Liquid ratio} = \frac{\text{Liquid or quick assets}}{\text{Current liabilities}}$$

Where,

liquid assets = current assets – (stock + prepaid expenses)

Current liabilities are those liabilities which are expected to be paid within a year. It includes the following:

Bill payables, Sundry creditors, Bank overdraft, Provision for tax, outstanding expenses

Significance

Quick ratio is a measure of the instant debt paying capacity of the business

enterprise. It is a measure of the extent to which liquid resources are immediately available to meet current obligations. A quick ratio of **1 : 1** is considered good/favourable for a company

Illustration 2

Calculate current ratio from given information Sundry debtors 4, 00,000, Stock 160,000, Marketable securities 80,000, Cash 120,000, prepaid expenses 40,000, Bill payables 80,000, Sundry creditors 160,000, Debentures 200,000, Outstanding Expenses 160,000 calculates the quick ratio.

$$\text{Liquid ratio} = \frac{\text{Liquid or quick assets}}{\text{Current liabilities}}$$

Quick Assets = currents assets – (Stock + Prepaid expenses)

= Rs 800,000 – (Rs 160,000 + Rs 40,000) = Rs 600000

Current liabilities = Rs 600000

$$\text{Quick Ratio} = \frac{\text{Rs } 600000}{\text{Rs } 600000} = 1 : 1$$

Interpretation

From the above ratio we can say that the liquidity position of the company is very strong

Absolute Quick ratio

It is another ratio to test the liability of the concern. This ratio establishes a relationship between Absolute quick assets and current liabilities. This ratio measures the ability of the firm to pay its current liabilities. The main purpose of this ratio is to measure the ability of the firm to pay its current liabilities. For the purpose of calculating this ratio, only cash may be taken as Absolute quick assets.

$$\text{Absolute Quick Ratio} = \frac{\text{Absolute quick assets}}{\text{Current Liabilities}}$$

Absolute quick assets are cash, cash at bank

This ratio is calculated as under:

Current liabilities are those liabilities which are expected to be paid within a year. It includes the

following: Bill payables, Sundry creditors, Bank overdraft, Provision for tax, outstanding expenses

Significance

Absolute Quick ratio is a measure of the instant debt paying capacity of the business enterprise. It is a measure of the extent to which liquid resources are immediately available to meet current obligations. A absolute quick ratio of **0.5 : 1** is considered good/favourable for a company **Illustration 2**

Calculate current ratio from given information Sundry debtors 4, 00,000, Stock 160,000, Marketable securities 80,000, Cash 120,000, prepaid expenses 40,000, Bill payables 80,000, Sundry creditors 160,000, Debentures 200,000; Outstanding Expenses 160,000 calculates the quick ratio.

$$\text{Absolute Quick Ratio} = \frac{\text{Absolute quick assets}}{\text{Current Liabilities}}$$

Absolute Quick Assets = cash in hand + cash at bank

120000+0 =

120000 Current liabilities = Rs 600000

$$\text{Absolute Quick Ratio} = \frac{120000}{600000} = 0.20:1$$

Interpretation: From the above ratio we can say that the liquidity position of the company is very weak

ACTIVITY OR TURNOVER RATIOS

Activity ratios measure the efficiency or effectiveness with which a firm manages its resources.

These ratios are also called turnover ratios because they indicate the speed at which assets are converted or turned over in sales.

These ratios are expressed as 'times' and should always be more than one.

Some of the important activity ratios are :

(i) Stock turnover ratio

(ii) Debtors turnover ratio

(iii) Creditors turnover ratio

(iv) Working capital turnover ratio

Stock turnover ratio

Stock turnover ratio is a ratio between cost of goods sold and the average stock or inventory. Every firm has to maintain a certain level of inventory of finished goods. But the level of inventory should neither be too high nor too low. It evaluates the efficiency with which a firm is able to manage its inventory. This ratio establishes relationship between costs of goods sold and average stock.

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of goods Sold}}{\text{Average Stock}}$$

Cost of goods sold = Opening stock + Purchases + Direct expenses – Closing Stock

O

R Cost of goods sold = Sales – Gross Profit

$$\text{Average stock} = \frac{\text{Opening stock + Closing stock}}{2}$$

(i) If cost of goods sold is not given, the ratio is calculated from the sales.

(ii) If only closing stock is given, then that may he treated as average stock.

$$\text{Stock Turnover Ratio} = \frac{\text{Net sales}}{\text{Closing stock}}$$

Significance

The ratio signifies the number of times on an average the inventory or stock is disposed off during the period. The high ratio indicates efficiency and the low ratio indicates inefficiency of stock management.

Illustration : Calculate stock turnover ratio from the following information: Opening stock Rs 45000 Closing stock Rs 55000

Purchases Rs 160000

Solution:

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of goods Sold}}{\text{Average Stock}}$$

$$\text{Average stock} = \frac{\text{Opening stock + Closing stock}}{2}$$

$$\text{Average stock} = \frac{45000 + 55000}{2} = \text{Rs } 50000$$

C

= Rs 45000 + 160000 – 55000

= Rs 150000

$$\text{Stock Turnover Ratio} = \frac{\text{Rs } 150000}{\text{Rs } 50000} = 3 \text{ times}$$

Illustration : Opening stock Rs 19,000

Closing stock Rs 21,000

Sales Rs 2, 00,000

Gross Profit 25% of sale. Calculate stock turnover ratio.

Solution: Cost of goods sold = Sales – Gross profit

= Rs 2,00,000 – 25% of Rs 2,00,000

= Rs (2,00,000 – 50,000)

= Rs 1,50,000

$$\text{Average stock} = \frac{\text{Opening stock + Closing stock}}{2}$$

$$\text{Average stock} = \frac{19{,}000 + 21{,}000}{2} = \text{Rs } 20{,}000$$

$$\text{Stock Turnover Ratio} = \frac{\text{Rs } 150000}{\text{Rs } 20{,}000} = 7.5 \text{ times}$$

Debtors Turnover ratio

This ratio establishes a relationship between net credit sales and average account receivables i.e. average trade debtors and bill receivables. The objective of computing this ratio is to determine the efficiency with which the trade debtors are managed. This ratio is also known as Ratio of Net Sales to average receivables. It

$$\text{Debtors Turnover Ratio} = \frac{\text{Net credit sales}}{\text{Average debtors}}$$

In case, figure of net credit sale is not available then it is calculated as if sales are credit sales

$$\text{Average debtors} = \frac{\text{Opening Debtors} + \text{Closing Debtors}}{2}$$

is calculated as under

Note : If opening debtors are not available then closing debtors and bills receivable are taken as average debt

Debt collection period

This period refers to an average period for which the credit sales remain unpaid and measures the quality of debtors. Quality of debtor's means payment made by debtors within the permissible credit period.
It indicates the rapidity at which the money is collected from debtors. This period may be calculated as under :

$$\text{Debt collection period} = \frac{\text{12 months / 52 weeks / 365 days}}{\text{Debtors turnover ratio}}$$

Significance

Debtor's turnover ratio is an indication of the speed with which a company collects its debts. The higher the ratio, the better it is because it indicates that debts are being collected quickly. In general, a high ratio indicates the shorter collection period which implies prompt payment by debtor and a low ratio indicates a longer collection period which implies delayed payment for debtors.

Illustration 10

Find out (a) debtors turnover and (b) average collection period from the following information for one year ended 31st March 2006. Annual credit sales 500000

Debtors in the beginning 80000
Debtors at the end 100000
Debt to be taken for the year 360 days

Solution

$$\text{Debtors Turnover Ratio} = \frac{\text{Net credit sales}}{\text{Average debtors}}$$

$$\text{Average debtors} = \frac{\text{Opening Debtors + Closing Debtors}}{2}$$

$$\frac{80000 + 100000}{2} = \text{Rs } 90000$$

$$\text{Debtor turnover ratio} = \frac{500000}{90000} = 5.56 \text{ times}$$

$$\text{Average collection period} = \frac{360}{5.56} = 64.7 \text{ days}$$

$$\text{Debt collection period} = \frac{\text{12 months / 52 weeks / 365 days}}{\text{Debtors turnover ratio}}$$

Creditors Turnover Ratio

It is a ratio between net credit purchases and average account payables (i.e creditors and Bill payables). In the course of business operations, a firm has to make credit purchases. Thus a supplier of goods will be interested in finding out how much time the firm is likely to take in repaying the trade creditors. This ratio helps in finding out the exact time a firm is likely to take in repaying to its trade creditors. This ratio establishes a relationship between credit purchases and average trade creditors and bill payables and is calculated as under

$$\text{Creditors turnover ratio} = \frac{\text{Net credit purchases}}{\text{Average trade creditors}}$$

$$\text{Average creditors} = \frac{\text{Creditors in the beginning} + \text{Creditors at the end}}{2}$$

$$= \frac{\text{Opening creditors} + \text{Opening Bill payables} + \text{Closing creditors} + \text{Closing Bill payables}}{2}$$

Significance

Creditor's turnover ratio helps in judging the efficiency in getting the benefit of credit purchases offered by suppliers of goods. A high ratio indicates the shorter payment period and a low ratio indicates a longer payment period

Debt payment period

This period shows an average period for which the credit purchases remain unpaid or the average credit period actually availed of :

$$\text{Debt payment period} = \frac{\text{12 months or 52 weeks or 365 days}}{\text{Creditors turnover ratio}}$$

Illustration 11

Calculate creditor's turnover ratio and debt payment period from the following information: Cash purchases 1,00,000, Total purchases 4,07,000

Opening sundry creditors 25,000 Closing sundry creditors 50,000

Closing bill payables 25,000 Opening bill payables 20,000

Purchase returns 7,000

Solution:

$$\text{Creditors turnover ratio} = \frac{\text{Net Credit Purchases}}{\text{Average trade creditors}}$$

Net purchases = Total purchases – Purchase returns

= Rs 407000 – Rs 7000 = Rs 400000

Net credit purchases = Net purchases – cash purchases

= Rs 4,00,000 – Rs 1,00,000

= Rs 3,00,000

$$\text{Average creditors} = \frac{\text{Rs } 25{,}000 + \text{Rs } 20{,}000 + \text{Rs } 50{,}00 + \text{Rs } 25{,}000}{2}$$

$$\text{Average creditors} = \frac{1{,}20{,}000}{2} = \text{Rs } 60{,}000$$

$$\text{Creditors Turnover Ratio} = \frac{3{,}00{,}000}{60{,}000} = 5 \text{ times}$$

$$\text{Debt payment ratio} = \frac{365}{\text{Creditors turnover ratio}}$$

$$\text{Debt payment ratio} = \frac{365}{5} = 73 \text{ days}$$

Working Capital Turnover Ratio

Working capital of a concern is directly related to sales. The current assets like debtors, bill receivables, cash, stock etc, change with the increase or decrease in sales.

Working capital = Current Assets - Current Liabilities

Working capital turnover ratio indicates the speed at which the working capital is utilised for business operations. It is the velocity of working capital ratio that indicates the number of times the working capital is turned over in the course of a year. This ratio measures the efficiency at which the working capital is being used by a firm. A higher ratio indicates efficient utilization of working capital and a low ratio indicates the working capital is not properly utilised.

This ratio can be calculated as

$$\text{Working Capital Turnover Ratio} = \frac{\text{Cost of sales}}{\text{Average working capital}}$$

$$\text{Average working capital} = \frac{\text{Opening working capital} + \text{Closing working capital}}{2}$$

If the figure of cost of sales is not given, then the figure of sales can be used. On the other hand if opening working capital is not discussed then working capital at the year-end will be used

Illustration: Find out working capital turnover ratio for the year 2006.

Cash 10,000
Bills receivable 5,000
Sundry debtors 25,000
Stock 20,000
Sundry creditors 30,000
Cost of sales 1,50,000

Solution :

$$\text{Working capital turnover ratio} = \frac{\text{Cost of sales}}{\text{Working capital}}$$

Current assets = Rs 10,000 + 5,000 + 25,000 + 20,000

= Rs 60,000

Current liabilities = Rs 30,000

Net working capital = CA – CL = Rs 60,000 – 30,000 = Rs 30,000

$$\text{So, working capital turnover ratio} = \frac{\text{Rs } 1,50,000}{\text{Rs } 30,000} = 5 \text{ times}$$

Practice problems

1) From the following information calculate current ratio and quick ratio

Cash in hand - Rs 2000

Bank overdraft - Rs 40000

Cash at Bank - Rs 10000

Billsreceivable– Rs 30000

Creditors –Rs60000

Outstanding

expenses-Rs7000

Proposed dividend-

Rs10000

Debtors-Rs 70000

Stock –Rs 40000

Provision for taxation –Rs20000 2)From the following details calculate current ratio and liquidity ratio

Current assets ,loans and advances	**Rs**	**Rs**
Stock in trade	77500	
debtors	46800	
Cash in hand	6300	
Loans and advances	13700	
Prepaid expenses	700	
Current liabilities		145000
Sundry debtors & creditors	23000	43000
Interest accrued	1900	
Bills payable	7560	
Dividend warrants issued but not encashed	390	
Provision for taxation	10150	

3) Calculate the following ratios from the balance sheet given below

1) Current ratio
2) Quick ratio
3) Inventory turnover ratio
4) Average collection period assuming 360 days in a year
5) Debt- Equity ratio
6) Gross profit ratio
7) Fixed assets turnover ratio

8) Proprietary ratio

liabilities	Rs	Assets	Rs
Share capital	200000	Goodwill	1,20,000
Reserves and Surpluses	58000	Plant and machinery	1,50,000
debentures	1,00,000	stock	80000
creditors	40,000	debtors	45,000
Bills payable	20,000	cash	17000
Other current liabilities	2000	Misc.Current assets	8000
	4,20,000		4,20,000

Sales - Rs 400000

Gross profit – Rs 1,60,000

4) Following is the Profit and Loss Account of Vector Limited for the year ended March 31, 2008 and the Balance Sheet as on that date.

Profit and Loss Account for the year ended March 31, 2008

Details	**Value in Rs**	**Value in Rs**
Sales		30,00,000
Less: **Cost of Goods Sold**		25,80,000
Gross Profit		4,20,000
Less **Operating Expenses**		
Selling Expenses	22,000	
Administrative Expenses	40,000	

Rent of Office	28,000	
Depreciation	1,00,000	1,90,000
Earnings before Interest and Tax		2,30,000
Less: **Interest Expense**		
Interest on Bank Overdraft	3,000	
Interest on Debentures	42,000	45,000
Operating Profit before tax		1,85,000
Add. **Interest on Investment**		15,000
Total Profit before tax		2,00,000
Taxes [50%]		1,00,000
Net Profit after taxes		**1,00,000**

Balance Sheet as on March 31, 2008

Details	**Value in Rs**
Sources	
Equity Share Capital	5,00,000
Reserve and Surplus	4,00,000
7% Preference Share Capital	1,00,000
6% Mortgage Debentures	7,00,000
Current Liabilities	
Sundry Creditors	60,000
Bills Payable	1,00,000
Outstanding Expenses	10,000
Provision Taxation	1,30,000
Total	**20,00,000**
Application	
Fixed Assets [Net of Depreciation]	13,00,000

Current Assets	
Inventory	3,00,000
Sundry Debtors	2,00,000
Marketable Securities	1,50,000
Cash	50,000
Total	**20,00,000**

Calculate the following financial ratios and interpret the same

- Return on Investment
- Debt Collection Period
- Debt Equity Ratio
- Current Ratio
- Inventory Turnover Ratio
- Fixed assets turnover ratio
- Proprietary ratio
- Return on share holders' funds
- Return on equity shareholders funds
- Gross profit ratio
- Net profit ratio
- Operating ratio

5) Calculate earnings per share from the following data

Net profit before tax = Rs 100000

Tax rate= 50%

10% preference capital (Rs.10 each) = Rs 100000

Equity share capital (Rs 10 per share) = Rs 100000

6) The following are the balance sheets of Robert Limited for the year 2005 and 2006

liabilities	2005	2006	assets	2005	2006
Share capital	100000	100000	Fixed assets	200000	250000
General	50000	50000	stock	40000	60000

reserve					
Profit & loss A/c	50000	100000	debtors	30000	40000
8% debentures	50000	80000	cash	20000	30000
Sundry creditors	40000	50000	Prepaid expenses	10000	20000
Proposed dividend	10000	20000			
	300000	400000		300000	400000

Calculate the following ratios

a) Current ratio
b) Acid-Test ratio
c) Debt-equity ratio
d) Fixed assets-shareholders ratio
e) Proprietary ratio

7) The current ratio is 2.5, liquid ratio 1.5 and working capital is Rs.100000.find current assets, current liabilities and stock.
8) The average stock is Rs.80000 and the opening stock is 10000 less than the closing stock. Find opening and closing stock.
9) It is given that the long term debt to equity ratio is 2:3 and the equity amount is Rs 50000.compute the value of long term debt

10) The following financial data is given:

Sales for the year = Rs

200000 Stock – Rs 100000

Credit sales = Rs 150000

Debtors= Rs 75000 Total

assets = Rs300000

Share capital(10000 shares of 10 each) = Rs 100000

Net profit = Rs 50000

Market price per share is Rs 12.from the above information calculate and give your opinion on each ratio

a) Stock turnover ratio
b) Debtors turnover ratio
c) Debt collection period
d) Price-earnings ratio
e) Earnings per share

11) Gross profit ratio is 20% .gross profit is Rs 50000.calculate sales

12) Given below is the trading and profit and loss account

Opening stock	120000	Cash sales	120000
Cash purchases	60000	Credit sales	480000
Credit purchases	320000	Closing stock	80000
Gross profit	180000		
Total	680000	Total	680000
General expenses	40000	By gross profit	180000
depreciation	20000		
Income tax	30000		
Net profit	90000		
	180000		180000

Balance Sheet

Share capital	300000	Fixed assets	170000
General reserve	60000	stock	80000
Profit and loss	110000	investments	100000

account			
creditors	80000	debtors	160000
Bills payable	20000	cash	60000
	570000		570000

Compute:

a) Current ratio
b) Acid test ratio
c) Debt-equity ratio
d) Proprietary ratio
e) Stock turnover ratio
f) Creditors turnover ratio
g) Debtors turnover ratio
h) Debt collection period
i) Credit payment period
j) Gross profit ratio
k) Net profit ratio
l) Return on share holders' funds

13) Below is the summarized balance sheet and profit and loss account of hero limited for the year ended 31/3/08 amounts are in lakhs

liabilities	**Rs**	**Assets**	**Rs**
Share capital(Rs 10 each)	4	Fixed assets	11
reserves	3	Liquid assets	3
overdraft	4	Other current assets	5
Current liabilities	8		
	19		19

Profit and Loss account

To opening capital	2	By sales less returns	28
Purchases	22	Closing stock	3
expenses	3		
Net profit	4		
	31		31

Calculate all the key ratios and comment on the financial position of the company

14) The following is the information of a textile company. Complete the proforma balance sheet if the sales are 3200000

Sales to networth - 2.3 times

Current debt to networth – 42%

Total debt-networth – 75%

Current ratio – 2.9 times

Netsales to inventory – 4.7 times

Average collection period-64 days

Fixed assets to Networth – 53.2%

Pro - forma Balance Sheet

Networth	?	Fixed assets	?
Long term debt	?	Cash	?
Current debt	?	Stock	?
		Sundry debtors	?

	?		?

15) From the following particulars calculate current assets current liabilities and stock

Sales 1200000, GP ratio 25%, Current ratio 1.75, Quick ratio 1.25

Stock turnover ratio 9 times

16) With the help of following details prepare balance sheet of the firm concerned:

Working capital 75000
Reserves and surpluses 100000
Bank overdraft 60000
Current ratio 1.75
Liquid ratio 1.15
Fixed assets-proprietary funds 0.75
Long term liabilities NIL

17) With the help of following ratios regarding sujith films, draw a balance sheet of the company for the year 2007:

Current ratio 2.5

Liquidity ratio 1.5

Net working capital Rs 300000

Stock turnover ratio(cost of sales/cl stock) 6 times

Gross profit ratio 20%

Fixed assets turnover ratio(on cost of sales) 2 times

Debt collection period 2 months

Fixed assets to shareholders net worth 0.80

Reserve and surplus to capital 0.50

18) The following are the ratios extracted from the balance sheet of a firm

Current ratio -2.5

Working capital – 300000

Liquid ratio – 1.5

Stock turnover ratio – 6

Gross profit as a percentage of sales 20%

debt collection period – 2 months

share capital – Rs 500000

reserves and surpluses- 250000

fixed assets turnover -2

19) From the following information prepare a balance sheet

Current ratio – 2.5

Liquid ratio- 1.5

Proprietary ratio (fixed assets/proprietary funds) 0.75

Working capital – Rs 60000

Reserves and surpluses –Rs 40000

Bank overdraft- Rs 10000

There is no long term or fictitious assets

20) Following is the Profit and Loss account and Balance Sheet of Jai Hind Ltd. Calculate the following ratios:

a) Liquidity ratio
b) Activity ratio
c) Profitability ratio

Particulars	**Amount(Rs)**	**Particulars**	**Amount(Rs)**
To opening stock of finished stock	10000	By sales	800000
To Raw materials	50000	By closing stock	
To manufacturing exp	10000	Raw materials	150000
To purchase	300000	Finished goods	100000

To Administration exp	50000	By profit on sale of share	50000
To Selling exp	50000		
To Loss sale of Plant	55000		
To interest on Debentures	10000		
To net profit	385000		
	1100000		**1100000**

Balance Sheet

Liabilities	**Amount(Rs)**	**Assets**	**Amount(Rs)**
Share capital		Fixed Assets	250000
Equity share capital	100000	Stock of raw materials	150000
Preference shares	100000	Stock of Finished goods	100000
capital	100000	sundry Debtors	100000
Reserves	200000	Bank balance	50000
Debentures	50000		
Sundry creditors	50000		
Bills payable	50000		
	650000		**650000**

UNIT VI: CAPITAL AND CAPITAL BUDGETING

CAPITAL

Capital refers amount needed to starts the business. The initial amount invested in the business is called as capital to start business we need fixed capital. Without fixed capital one cannot start any business for any type of business fixed capital is required. The fixed capital can be used to purchase fixed assets of the business like. Land, building, machinery and furniture etc. To run any type of business activity we need working capital. Working capital refers to the amount needed to run day-to-day expenses of the business. “Capital does not include money only but it includes money worth also”.

NEED / SIGNIFICANCE OF CAPITAL

The long term investment decision is also popularly termed as capital budgeting decision. It refers to the investment in project whose results would be available only in the long run i.e. after one year examples are the deployment of financer to purchase of land building and machinery etc. The investments in their projects are quite heavy and to be made immediately but the returns will be available only

after a period of time. The following are some of the situations where long term investment may be necessary.

> To promote a business

> To conduct business operations smoothly.

> To establishment of the organization

> To pay taxes like income tax & sales tax.

> To pay dividends and interests.

> Support the workers welfare programmers

> At the time of winding up the company may need funds to meet the liquidation expanses.

♦ **EXPANSION**: A firm may have to expand its productivity capacity on account of high demand for its products and inadequate production capacity .This will need on additional capital investment.

- ♦ **DIVERSIFICATION**: A firm may be interested in diversifying its production to reduce risk by operating in several markets rather than in a single market in such an event long term investment may became necessary for purchase of new machinery and facilities to handle new products.
- ♦ **RESEARCH AND DEVALOPMENT**: Huge amount may have to be expended for research and development in case of those industries where technology is rapidly changing.
- ♦ **REPLACEMENT & MODERNISATION:** Replacement of fixed assets may become necessary on account of their being worn out or became out dated on account of new technology.
- ♦ **MISCELLANEOUS: -** A firm may have to invest money in project which do not directly help in achieving profit oriented goals for example ; installation of pollution control equipment may be necessary on account of legal requirement

TYPES OF CAPITAL:

Capital can be classified into two types:-

a) Fixed capital (or) Block capital

b) Working capital

FIXED CAPITAL:

To start business we need fixed capital. Without fixed capital one cannot start any business for any type of business fixed capital is required. The fixed capital can be used to purchase fixed assets of the business like. Land .building, machinery and furniture etc

Sources of Fixed Capital:-

1. Issue of shares
2. Issues of debauchers
3. Public deposits
4. Lone from financial institutions such as IFC, SFC

WORKING CAPITAL:

To run any type of business activity we need working capital. Working capital refers to the amount needed to run day to- day expenses of the business. Working capital is usually invested in

- > Raw materials
- > Stock of semi finished goods
- > Salaries, rent, advertisement

> Plant maintenance, tool & Consumables Since working capital is continuously circulating hence it is also known as **circulating capital**.

FACTORS DETERMINING WORKING CAPITAL

1. **Nature of business**:

The working capital requirement depends on nature of business. In case of public utilities like electricity, water and railways they need working capital. Since they do not maintain big inventory. But in case of trading and financial firms more amount of working capital is needed.

2. **Size of business**:

Generally large size requires more amount of working capital where as for small scale business normally working capital requirement will be less.

3. **Working Capital cycle or operating cycle**:

This working capital cycle refers to the time taken to convert raw materials into cash. The more the time taken, the more the working capital, less the time, working capital will be less.

4. **Abnormal factors**:

Abnormal factors like strikes and lockouts also require additional working capital. Recessionary
conditions require higher amount of stock of finished goods remaining in stock. Similarly,
inflationary conditions necessitate more funds for working capital to maintain the same amount of
current assets.

5. **Market conditions**:

Working capital requirements are also affected by market conditions like degree of competition.
Large inventory is essential as delivery has to be off the shelf of credit has to be extended on
liberal terms when markets competition is fierce or maker is not very strong or is a buyer's market.

6. **Level of tax**:

The amount of taxes paid depends on taxation laws. These amounts usually have to be paid in advance. Thus for working capital varies with tax rates and advance tax provisions.

7. **Dividend policy**:

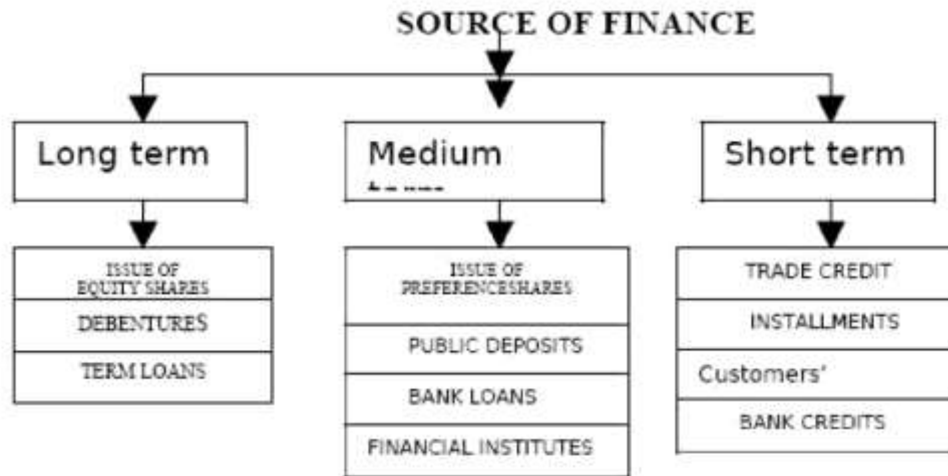
Payment of dividend utilizes cash while retaining profits acts as a source of working capital. Thus working capital gets affected by dividend policies.

8. **Business cycle:**

Business fluctuations lead to cyclical and seasonal changes in production and

sales affect the working capital requirements.

SOURCE OF FINANCE



LONG TERM FINANCIAL SOURCES:

- **Issues of equity shares**: Equity capital also called as common stock, is a principal source of long term finance for a firm .these are the ownership capital and the equity holders are thus the real owner of the business who bear the ultimate risk of ownership.
- **Issues of preference shares**: Preference capital is one of the important sources of medium term finance of a company it is hybrid kind of security, possessing some characteristics of equity and some of debt. Legally, it is a part of company's equity base preference dividends are not tax-deductible expenses to the business, and unless the company's charter or the contract with the preferred stock holders runs to the contrary, owners of preferred stock have almost the same rights as equity stock holders have
- **Issues of debentures**: Debenture is one of the frequently used methods of raising long-term funds by a firm. It is a written instrument signed by the company under its common seal acknowledging the debt due by it to its holders. It carries a fixed rate of interest and the interest is payable irrespective of whether the company earns profits or not .The interest paid on debenture is chargeable against profit and hence is a tax deductible. Capital collected through issue of debenture can be secured, unsecured, convertible, non-convertible, redeemable and irredeemable.
- **Term Loans** Term loan represents yet another source of debt finance which is generally repayable after one year but within ten years. They are utilized to finance the acquisition of fixed assets and working capital margin .term loans differ from short term bank loans

in as much as the latter are utilized to finance short-term working capital needs and are liquidated within a year.

- ♦ **Issues of preference shares**: Preference capital is one of the important sources of medium term finance of a company it is hybrid kind of security, possessing some characteristics of equity and some of debt. Legally, it is a part of company's equity base-preference dividends are not tax-deductible expenses to the business, and unless the company's charter or the contract with the preferred stock holders runs to the contrary, owners of preferred stock have almost the same rights as equity stock holders
- ♦ **Bank loans:** Commercial banks play a very important role in corporate finance .They accepts deposits from the public and lend the money to business. On account of the medium -term nature of bank deposits, banks normally do not lend for a long period of time. They provide various types of advances for short and medium period of term.
- ♦ **Assistance from special industrial financial institutions**: Companies have the option of raising money from financial institutions. Financial institutions normally provides long term and medium term finance while there are many financial institutions in the country, some of them have been specifically set up to meet the financial needs of industrial enterprises. They are also known as Development Banks.

CAPITAL BUDGETING

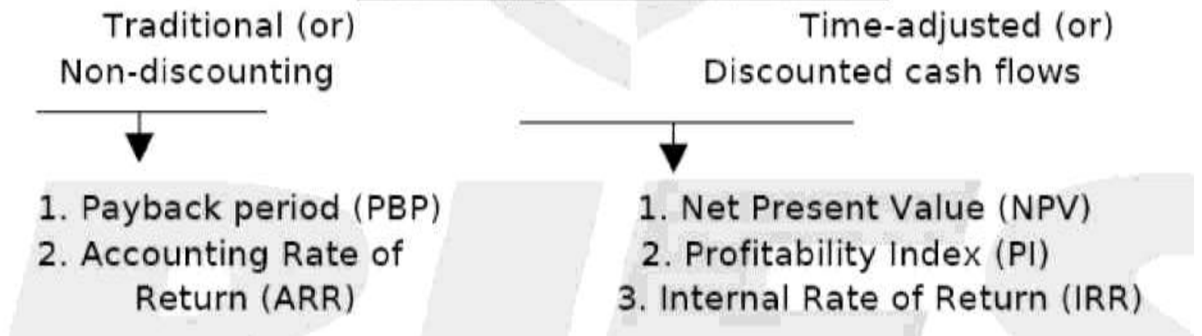
The long term investment decision is also popularly termed as capital budgeting decision it refers to the investment in project whose results would be available only in the long run i.e. after one year examples are the deployment of financer to purchase of land, building and machinery etc. The investments in their projects are quite heavy and to be made immediately but the returns will be available only after a period of time. Capital budgeting is a continuous process and it is carried out by different functional areas of management such as production, marketing, engineering, financial management etc.

Capital budgeting decision involves three steps:

1. Estimation of costs and benefits of a proposal or of each alternative.
2. Estimation of the required rate of return, i.e., the cost of capital
3. Selection and applying the decision criterion

CAPITAL BUDGETING METHODS

Broadly there are two methods by which an investment opportunity or project can be evaluated. These are as follows.



Payback Period {PBP}

The basic characteristic of investment is that a current outlay is followed by a stream is future cash inflow for a specified period. Payback period may be defined as number of years required to recoup or recover the initial investment from the generated cash flow. Since different projects have razing patron and firming of cash flows the projects will have different pay back periods.

$$\text{Payback period (CF equal)} = \frac{\text{Initial Investment}}{\text{Annual cash flow}}$$

$$\text{PBP (CF Un equal)} = \text{Base year} + \frac{\text{Required CFAT in cumulative}}{\text{Next year CFAT}}$$

AVERAGE/ACCOUNTING RATE OF RETURN {ARR}

This method is also known as average rate of return as average of the net profit after taxes over the whole of the economic life of the project are taken under this method returned is expressed as percentage of capital or investment accounting

$$\text{I). ARR} = \frac{\text{Average net profit after taxes}}{\text{Total Investment}} \times 100$$

$$\text{ii). ARR} = \frac{\text{Average net profit after taxes}}{\text{Average Investment}} \times 100$$

$$\text{Average net profit after taxes} = \frac{\text{Total Net Profit after Taxes}}{\text{No. of Years}}$$

Average Investment = Investment – Scraper value + (Add Working Capitals + Scrap Value)

NET PRESENT VALUE METHOD {NPV}

rate of return may be calculated using any one of the following formula.

This method is generally considered to be a modern and the best method for evaluating the capital
budgeting proposals.
“NPV may be defined as the solution of the present values of cash blows in each year minus (-)
the summation of present values of the net out flows in each year” In other words the excess of
present value of cash inflows over the present value of cash out flows.
This method takes into consideration the time value of money and attempts to calculate the return
on investments by introducing the factor oftime element.
Formula:

NPV = Total of P.V of cash in flows

Initial outlay {Cash out flow}

PRESENT VALUE of Re.1 (10%)

Using your calculator

Using your calculator
Formula: 1x100 / (100+discounting factor)
Multiply 1 with 100/110 for the first year
Multiply the first year result with 100/110 for the second year so on
Eg: 1x100/110 =.909
.909x100/110 =.826

PROFITABILITY INDEX METHOD {PI}

The method is also called benefit cost ration. This method is obtained with a slight modification of the net present valued method. In case of NPV the present value of cash outflows are deducted from present value of cash flows, whereas in case of profitability index (PI), the present value of each inflows are divided by the present value of each outflows, while NPV is a absolute measure, the PI is a relative measure

INTERNAL RATE OF RETURN METHOD {IRR}

The internal rate of return for an investment proposal is that discount rate which equates the present value of cash inflows with the present value of cash outflows of an investment. When compared the IRR with a required rate of return, if the IRR is more than required rate of return, then the project is accepted else rejected. In case of more than one project with IRR more than required rate of return, the one which gives the highest IRR rate is selected.

Assignment Questions

Unit 1: Introduction to Managerial Economics:

1. Define Managerial Economics. Explain its Nature And Scope.
2. Discuss the importance of Managerial Economics in decision making.
3. What is Managerial Economics? Explain its focus areas.
4. Point out the importance of Managerial Economics in decision making.
5. Explain the role of a Managerial Economist in a Business Firm.
6. Define 'Demand' and explain the factors that influence the demand of a product.
7. State the 'Law of Demand'. What are the various factors that determine the demand for a Mobile Phone?
8. Explain the various factors that influence the demand for computer.

9 A) what is cross Elasticity of Demand? Explain

B) Explain the concept of Cross Elasticity of Demand. Illustrate your answer with Examples.

10.Why does the Law of Diminishing Returns operate? Explain with the help of assumed data and also represent in a diagram.

11.Whatare the needs for Demand Forecasting? Explain the various steps involved in demand forecasting.

12.What are the possible approaches to forecasting demand for new products? Illustrate all the methods of Demand Forecasting.

.Unit 2: THEORY OF PRODUCTION & COST ANALYSIS

1. Define production Function. Discuss in detail the different types of production functions.
2. Explain the Law of variable proportions or Law of return to scale
3. Explain the following with reference to production function IT Marginal Rate of Technical Substitution(MRTS)

~1 r Variable Proportions of Factors.

4. Define 'Cost'. How are costs classified? Explain any five important cost concepts useful for managerial decisions.
5. Discuss the role and importance of cost analysis in managerial decisions.
6. a) State and explain Break-Even analysis and explain its importance.

b) What are its limitations? Use suitable diagrams.

7. a) The information about Raj and Co., are given below.

i) Profit-Volume Ratio (P/V Ratio) is 20%

ii) Fixed costs Rs. 36000

iii) Selling price per Unit Rs. 150
b) Calculate:
i) BEP (in Rs.)
ii) BEP (in Units)

Unit 3: INTRODUCTION TO MARKETS & PRICING POLICIES

1. Define Market and explain how markets are classified? Explain important features in Market structure?
2. What is perfect competition? How price determined under conditions of Perfect Market Competition?
3. a) Explain the features of Monopoly.
   b) How can a Monopolist attain equilibrium position under conditions of monopoly?
4. Compare and contrast between Perfect competition and Monopoly.
5. What are the causes for the emergence of Monopoly?
6. What is pricing and explain the Method of Pricing?

UNIT 4:Introduction to Business Organization:

1. a) What are the different types of Business organizations?
   b) What are the features of Sole trading form of Organization?
2. a) What are the salient features Partnership firm
   b) What are the advantages and limitations of partnership firm?
3. a) What do you mean by Joint Stock Company? What are the salient features? b) Describe the advantages and disadvantages of Joint Stock Companies?
4. Distinguish between the Joint Stock Company and Partnership.
5. What are the objectives behind starting public sector enterprises in the country? To what extent have they fulfilled these objectives?

Unit 5: Accounting:

UNIT – 6:Capital & Capital Budgeting:

1. What are the components of Working capital? Explain each of them.
2. a) What is the important of capital?
   b) What factors determine the working capital requirements of company?

3. Describe the institutions providing long term finances.
4. Explain the right procedure for Capital Budgeting decision
5. What are the merits and limitations of Pay Back Period? How does Discounting approach
overcome the limitations of Pay back method?
6. What do you understand by time value of money? How is it helpful in Capital Budgeting?