

**MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS
(13A52301)**

LECTURE NOTES

B.TECH

(III-YEAR & II-SEM)

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13A52301 MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS

Course Objectives: The objective of this course is to equip the student with the basic inputs of Managerial Economics and Economic Environment of business and to impart analytical skills in helping them take sound financial decisions for achieving higher organizational productivity.

Unit I

INTRODUCTION TO MANAGERIAL ECONOMICS

Managerial Economics – Definition- Nature- Scope - Contemporary importance of Managerial Economics - Relationship of Managerial Economics with Financial Accounting and Management. **Demand Analysis:** Concept of Demand-Demand Function - Law of Demand - Elasticity of Demand- Significance - Types of Elasticity - Measurement of elasticity of demand - Demand Forecasting- factors governing demand forecasting- methods of demand forecasting.

UNIT II

THEORY OF PRODUCTION AND COST ANALYSIS

Production Function- Least cost combination- Short-run and Long- run production function- Isoquants and Isocosts, MRTS - Cobb-Douglas production function - Laws of returns - Internal and External economies of scale - **Cost Analysis:** Cost concepts and cost behavior- Break-Even Analysis (BEA) -Determination of Break Even Point (Simple Problems)- Managerial significance and limitations of Break- Even Point.

UNIT III

INTRODUCTION TO MARKETS AND NEW ECONOMIC ENVIRONMENT

Market structures: Types of Markets - Perfect and Imperfect Competition – Features of Perfect Competition- Monopoly- Monopolistic Competition-Oligopoly-Price-Output Determination - Pricing Methods and Strategies-Forms of Business Organizations- Sole Proprietorship- Partnership – Joint Stock Companies - Public Sector Enterprises – New Economic Environment- Economic Liberalization – Privatization - Globalization.

UNIT IV

INTRODUCTION TO FINANCIAL ACCOUNTING AND ANALYSIS

Financial Accounting – Concept - Emerging need and Importance - Double-Entry Book Keeping- Journal - Ledger – Trial Balance - Financial Statements - Trading Account – Profit & Loss Account – Balance Sheet (with simple adjustments). Financial Analysis – Ratios – Liquidity, Leverage, Profitability, and Activity Ratios (simple problems).

UNIT V

CAPITAL AND CAPITAL BUDGETING

Concept of Capital - Over and Undercapitalization – Remedial Measures - Sources of Short term and Long term Capital - Estimating Working Capital Requirements – Capital Budgeting – Features of Capital Budgeting Proposals – Methods and Evaluation of Capital Budgeting Projects – Pay Back Method – Accounting Rate of Return (ARR) – Net Present Value (NPV) – Internal Rate Return (IRR) Method (simple problems) **Learning Outcome:** After completion of this course, the student will be able to understand various aspects of Managerial Economics and analysis of financial statements and inputs therein will help them to make sound and effective decisions under different economic environment and market situations.

TEXT BOOKS:

1. Managerial Economics 3/e, Ahuja H.L, S.Chand, 2013.
2. Financial Management, I.M.Pandey, Vikas Publications, 2013.

REFERENCES

1. Managerial Economics and Financial Analysis, 1/e, Aryasri, TMH, 2013.
2. Managerial Economics and Financial Analysis, S.A. Siddiqui and A.S. Siddiqui, New Age International, 2013.
3. Accounting and Financial Management, T.S.Reddy& Y. Hariprasad Reddy, Margham Publishers.

UNIT – I
INTRODUCTION TO MANAGERIAL ECONOMICS

Define Managerial Economics. Explain its nature and scope.

Meaning & Definition:

Managerial Economics refers to the firm's decision making process. It could be also interpreted as "Economics of Management". Managerial Economics is also called as "Industrial Economics" or "Business Economics".

In the words of E.F.Brigham and J.L. Pappas Managerial Economics is "the applications of economics theory and methodology to business administration practice".

C.I.Savage&T.R.Small therefore believes that managerial economics "is concerned with business efficiency"

Nature of Managerial Economics

Close to microeconomics

Operates against the back drop of macroeconomics

Normative statements

Prescriptive actions

Applied in nature

Offers scope to evaluate each alternative

Interdisciplinary

Assumptions and limitations

Scope of Managerial Economics:

The scope of managerial economics covers two areas of decision making

a. Operational or Internal issues

b. Environmental or External issues

A. Operational issues:

Operational issues refer to those, which arise within the business organization and they are under the control of the management. Those are:

1. Theory of demand and Demand Forecasting

2. Pricing and Competitive strategy

3. Production cost analysis

4. Resource allocation

5. Profit analysis

6. Capital or Investment analysis

7. Strategic planning

B. Environmental or External Issues:

An environmental issue in managerial economics refers to the general business environment in which the firm operates. They refer to general economic, social and political atmosphere with in which the firm operates. A study of economic environment should include:

a. The type of economic system in the country.

b. The general trends in production, employment, income, prices, saving and investment.

c. Trends in the working of financial institutions like banks, financial corporations, insurance companies

d. Magnitude and trends in foreign trade;

e. Trends in labour and capital markets;

f. Government's economic policies viz. industrial policy monetary policy, fiscal policy, price policy etc.

Enumerate the relationship of financial accounting and management with Managerial Economics?

Managerial Economics refers to the firm's decision making process. It could be also interpreted as "Economics of Management". The economic analysis also a part of human analysis or mind analysis, so it does totally inter related each other. The major objective of the managerial economics is profit maximization.

Relation with Financial Accounting:

Capital Budgeting

Budgetary control

Cost and revenue

Financial analysis and information

Generation and interpretation of accounting data

Relationship with Management:

Assumptions

Decision making

Allocation of resources

Planning and controlling

Organizing and directing

DEMAND ANALYSIS AND LAW OF DEMAND

1) Define demand function and explain the determinants of demand.

There are factors on which the demand for a commodity depends. These factors are economic, social as well as political factors. The effect of all the factors on the amount demanded for the commodity is called Demand Function.

Mathematically the demand function for a product can be expressed –

$$Q_d = f(P, I, T, P_R, E_P, E_I, S_P, D_C, A, O)$$

Determinants of demand:

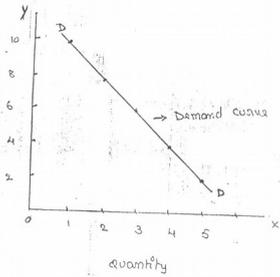
- Price of the product (P)
- Income level of the consumer (I)
- Tastes and preferences of the consumer (T)
- Prices of related goods which may be substitute (P_R)
- Expectations about the prices in future (E_p)
- Expectations about the incomes in future (E_i)
- Size of the population (S_p)
- Distribution of the consumers over different regions (D_c)
- Advertising efforts (A)
- Any other factor capable of effecting the demand (O)

2) Define law of demand with its exceptions?

Law of demand shows the relation between price and quantity demanded of a commodity in the market. In the words of Marshall, "the amount demand increases with a fall in price and diminishes with a rise in price".

Assumptions:

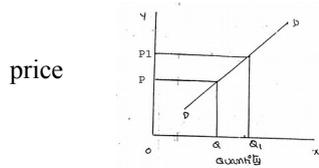
- Law of demand is based on certain assumptions:
1. This is no change in consumers taste and preferences.
 2. Income should remain constant.
 3. Prices of other goods should not change.
 4. There should be no substitute for the commodity
 5. The commodity should not confer at any distinction
 6. The demand for the commodity should be continuous
 7. People should not expect any change in the price of the commodity



Law of demand slopes downwards when the demand curve inverse relation between price and quantity demand.

The reasons for exceptional demand curve slopes every time upward areas follows.

1. Giffen paradox
2. Veblen or Demonstration effect
3. Ignorance
4. Speculative effect
5. Fear of shortage
6. Necessaries



3) What is meant by elasticity of demand and types of elasticity of demand?

Elasticity of demand explains the relationship between a change in price and consequent change in Amount demanded. "Marshall" introduced the concept of elasticity of demand. Elasticity of demand shows the extent of change in quantity demanded to a change in price.

In the words of "Marshall", "The elasticity of demand in a market is great or small according as the Amount demanded increases much or little for a given fall in the price and diminishes much or little for a given rise in Price"

Elastic demand: A small change in price may lead to a great change in quantity demanded. In this case, demand is elastic.
In-elastic demand: If a big change in price is followed by a small change in demanded then the demand in "inelastic".

TYPE OF ELASTISITY OF DEMAND

1. Price elasticity of demand

Proportionate change in the quantity demand of commodity X

$$\text{Price elasticity} = \frac{\text{Proportionate change in the quantity demand of commodity X}}{\text{Proportionate change in the price of commodity X}}$$

- a. Elastic price demand- $E > 1$
- Inelastic price Demand- $E < 1$

b. Unit price elasticity - $E = 1$

2. Income elasticity of demand

Proportionate change in the quantity demand of commodity X

$$\text{Income Elasticity} = \frac{\text{Proportionate change in the quantity demand of commodity X}}{\text{Proportionate change in the income of people}}$$

- a. Zero income elasticity - $E_y = 0$

- b. Negative Income elasticity - $E_y < 0$
- c. Unit income elasticity - $E_y = 1$
- d. Income elasticity greater than unity - $E_y > 1$
- e. Income elasticity less than unity - $E_y < 1$
- 3. Cross elasticity of demand

Proportionate change in the quantity demand of commodity "X"

$$\text{Cross elasticity} = \frac{\text{Proportionate change in the quantity demand of commodity "X"}}{\text{Proportionate change in the price of commodity "Y"}}$$

- a. In case of substitutes, cross elasticity of demand is positive
- b. In case of compliments, cross elasticity is negative
- c. In case of unrelated commodities, cross elasticity of demanded is zero
- 4. Advertising elasticity of demand – is always POSITIVE

Proportionate change in the quantity demand of commodity X

$$\text{Advertising elasticity} = \frac{\text{Proportionate change in the quantity demand of commodity X}}{\text{Proportionate change in the advertisement cost}}$$

4) Explain how do you measure elasticity of demand? Explain different types of price elasticity of demand?

Measure of elasticity of demand:

- a) Perfectly elastic demand- $E = \infty$
- b) Perfectly Inelastic Demand- $E = 0$
- c) Relatively elastic demand- $E > 1$
- d) Relatively in- elastic demand - $E < 1$
- e) Unit elasticity of demand- $E = 1$

Types of Price elasticity of demand

- a) Elastic price demand- $E > 1$
- b) Inelastic price Demand- $E < 1$
- c) Unit price elasticity - $E = 1$

5) Explain the significance of elasticity and the factors influencing elasticity

Significance of Elasticity of demand:

1. Price fixation
2. Production
3. Distribution
4. International Trade
5. Public Finance
6. Nationalization

Factors influencing the elasticity of demand:

Elasticity of demand depends on many factors.

1. Nature of commodity
2. Availability of substitutes
3. Variety of uses
4. Postponement of demand
5. Amount of money spent
6. Time
7. Range of Prices

6) What is the contemporary importance of managerial economics?

Managerial economics decides the business is going towards profit or loss. That's why it has its own priority on optimization of resources. Means to decrease the cost and increase the profit.

- a. Useful in business organization and policies
- b. Profit Planning and controlling
- c. Creates demand for casting
- d. Price determination
- e. Demand forecasting
- f. Solutions for taxation
- g. Understanding the mechanism of economic system
- h. Analysis of effects of government policies
- i. Supporting the manufacture
- j. Gives in right directions (decision making)
- k. Maintaining and distribution of profit
- l. Measurement of the efficiency of the firm

7) What are the needs for demand forecasting? Explain the factors governing of demand forecasting?

Need for demand forecasting

- a. Estimate & Assessment of future demand

- b. Business decision-making
- c. Production planning
- d. Estimating of revenue and expenditures
- e. Distinguish between forecast of demand and sales
- f. Time and reliability of forecast

Factors governing Demand Forecasting

- a. Functional nature of demand
- b. Forecasting levels
- c. Types of forecasting
- d. Degree of orientation
- e. Established or new products
- f. Nature of goods
- g. Degree of competition
- h. Market demand
- i. Functional nature of market demand

8) What do you understand by demand forecasting? Explain different methods of demand forecasting?

The information about the future is essential for both new firms and those planning to expand the scale of their production. Demand forecasting refers to an estimate of future demand for the product.

Based on the time span and planning requirements of business firms, demand forecasting can be classified into 1.Short-term demand forecasting and 2.Long-term demand forecasting.

- a. Estimate & Assessment of future demand
- b. Business decision-making
- c. Production planning
- d. Estimating of revenue and expenditures
- e. Distinguish between forecast of demand and sales
- f. Time and reliability of forecast

Methods of forecasting:

Several methods are employed for forecasting demand. All these methods can be grouped under Survey method and statistical method. Survey methods and statistical methods are further subdivided into different categories.

1. Survey Method

- a. Opinion survey method-** This method is also known as sales- force composite method (or) collective opinion method. The salesmen are more knowledgeable. They can be an important source of information. They are cooperative.
- b. Expert opinion method-** Firms in advanced countries make use of outside experts for estimating future demand.
- c. Delphi Method-** A variant of the survey method is Delphi method. This method has been used in the area of technological forecasting.
- d. Consumers interview method-** contacted personally to know about their plans and preference regarding the consumption of the product. This method seems to be the most ideal method for forecasting demand

2. Statistical Methods

- a. Time series analysis or trend projection methods-** presented either in a tabular form or a graph.
 - 1. Trend line by observation*
 - 2. Least square method*
 - 3. Moving averages methods*
 - 4. Exponential smoothing*
- b. Barometric Technique-** (1) Construction Contracts awarded for building Materials (2) Personal income (3) Agricultural Income.(4) Employment (5) Gross national income (6) Industrial Production (7) Bank Deposits
- c. Regression and correlation method-** provides the values of the independent variables from within the model itself

UNIT – II
THEORY OF PRODUCTION AND COST ANALYSIS

PRODUCTION FUNCTION

1. Define production function. Explain Isocosts and Isoquants.

The production function expresses a functional relationship between physical inputs and physical outputs of a firm at any particular time period. The output is thus a function of inputs. Mathematically production function can be written as

$$Q = f(A, B, C, D)$$

Where “Q” stands for the quantity of output and A, B, C, D are various input factors such as land, labour, capital and organization. Here output is the function of inputs. Hence output becomes the dependent variable and inputs are the independent variables.

ISOCOSTS:

The term Isocosts is derived from the words ‘iso’ and ‘cost’ – ‘Iso’ means equal and ‘cost’ implies cost. Isocost therefore, means equal costs. Isocosts that refers to that cost curve that represents the combination of inputs that will cost the producer the same amount of money.

If the level of production changes the cost changes and thus the isocost curve move to upward and vice versa.

ISOQUANTS:

The term Isoquants is derived from the words ‘iso’ and ‘quant’ – ‘Iso’ means equal and ‘quant’ implies quantity. Isoquant therefore, means equal quantity. A family of iso-product curves or isoquants or production difference curves can represent a production function with two variable inputs, which are substitutable for one another within limits.

The curve of Isoquant also called as the product indifference curve.

For a given output level firm’s production become,

$$Q = f(L, K)$$

Where ‘Q’, the units of output is a function of the quantity of two inputs ‘L’ and ‘K’.

Assumptions:

1. There are only two factors of production, viz. labour and capital.
2. The two factors can substitute each other up to certain limit
3. The shape of the isoquant depends upon the extent of substitutability of the two inputs.
4. The technology is given over a period.

Features of ISO quants:

1. Downward sloping
2. Convex to origine
3. Do not interest
4. Do not touch axis

2. A) MRTS

Marginal rate of Technical Substitution

The MRTS refers to the rate at which one input factor is substituted with the other to attain a given level of output.

5 units of decrease in labor and compensated by an increase in one unit of capital, resulting in MRTS 5:1

$$\text{MRTS} = \frac{\text{Change in one input}}{\text{Change in another input}} = - \frac{\Delta K}{\Delta L}$$

B) Least cot combination

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.

C) Cobb Douglas production function

Production function of the linear homogenous type is invested by Juntwicksell and first tested by C. W. Cobb and P. H. Douglas in 1928. This famous statistical production function is known as Cobb-Douglas production function. Originally the function is applied on the empirical study of the American manufacturing industry. Cabb – Douglas production function takes the following mathematical form.

$$Y = (AK^{\alpha}L^{1-\alpha})$$

Where Y=output

K=Capital

L=Labour

A, α =positive constant

3. Explain the law of returns with diagram.

The law of returns to scale explains the behavior of the total output in response to change in the scale of the firm, i.e., in response to a simultaneous to changes in the scale of the firm, i.e., in response to a simultaneous and proportional increase in all the inputs. More precisely, the Law of returns to scale explains how a simultaneous and proportionate increase in all the inputs affects the total output at its various levels.

When a firm expands, its scale increases all its inputs proportionally, then technically there are three possibilities.

- (i) The total output may increase proportionately
- (ii) The total output may increase more than proportionately
- (iii) The total output may increase less than proportionately.

4. Explain internal and external economies of scale?

Production may be carried on a small scale or on a large scale by a firm. When a firm expands its size of production by increasing all the factors, it secures certain advantages known as economies of production. Marshall has classified these economies of large-scale production into internal economies and external economies.

Causes of internal economies:

Internal economies are generally caused by two factors

- 1. Indivisibilities
- 2. Specialization.

Internal Economies:

Internal economies may be of the following types.

- A) Technical Economies.
- B) Managerial Economies:
- C) Marketing Economies:
- D) Financial Economies:
- E) Risk bearing Economies:
- F. Economies of Research:
- G) Economies of welfare:

External Economies.

Business firm enjoys a number of external economies, which are discussed below:

- A) Economies of Concentration:
- B) Economies of Information
- C) Economies of Welfare:
- D) Economies of Disintegration:

Thus internal economies depend upon the size of the firm and external economies depend upon the size of the industry.

5. Explain the economies of large scale of production.

Internal and external diseconomies are the limits to large-scale production. It is possible that expansion of a firm's output may lead to rise in costs and thus result diseconomies instead of economies. When a firm expands beyond proper limits, it is beyond the capacity of the manager to manage it efficiently. This is an example of an internal diseconomy. In the same manner, the expansion of an industry may result in diseconomies, which may be called external diseconomies. Employment of additional factors of production becomes less efficient and they are obtained at a higher cost. It is in this way that external diseconomies result as an industry expands.

The major diseconomies of large-scale production are discussed below:

Internal Diseconomies:

- A) **Financial Diseconomies**
- B) **Managerial diseconomies**
- C) **Marketing Diseconomies**
- D) **Technical Diseconomies**
- E) **Diseconomies of Risk-taking**

External Diseconomies:

When many firm get located at a particular place, the costs of transportation increases due to congestion. The firms have to face considerable delays in getting raw materials and sending finished products to the marketing centers. The localization of industries may lead to scarcity of raw material, shortage of various factors of production like labour and capital, shortage of power, finance and equipments. All such external diseconomies tend to raise cost per unit.

COST ANALYSIS

6. What is cost analysis? Explain the concept of cost?

Profit is the ultimate aim of any business and the long-run prosperity of a firm depends upon its ability to earn sustained profits. Profits are the difference between selling price and cost of production. In general the selling price is not within the control of a firm but many costs are under its control. The firm should therefore aim at controlling and minimizing cost.

A managerial economist must have a clear understanding of the different cost concepts for clear business thinking and proper application.

1. Opportunity costs and outlay costs
2. Explicit and implicit costs
3. Historical and Replacement costs
4. Short – run and long – run costs
5. Out-of pocket and books costs
6. Fixed and variable costs
7. Past and Future costs
8. Traceable and common costs
9. Avoidable and unavoidable costs
10. Controllable and uncontrollable costs
11. Incremental and sunk costs
12. Total, average and marginal costs
13. Accounting and Economics costs

COST-OUTPUT RELATIONSHIP

A proper understanding of the nature and behavior of costs is a must for regulation and control of cost of production. The cost of production depends on money forces and an understanding of the functional relationship of cost to various forces will help us to take various decisions. Output is an important factor, which influences the cost.

The cost-output relationship plays an important role in determining the optimum level of production. Knowledge of the cost-output relation helps the manager in cost control, profit prediction, pricing, promotion etc. The relation between cost and its determinants is technically described as the cost function.

$$C = f(S, O, P, T \dots)$$

Where;

- C= Cost (Unit or total cost)
- S= Size of plant/scale of production
- O= Output level
- P= Prices of inputs

(a) Cost-Output Relation in the short-run:

The cost concepts made use of in the cost behavior are total cost, Average cost, and marginal cost.

Total cost is the actual money spent to produce a particular quantity of output. Total cost is the summation of fixed and variable costs.

$$TC = TFC + TVC$$

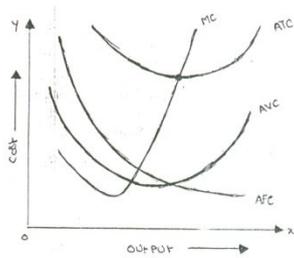
Up to a certain level of production total fixed cost i.e., the cost of plant, building, equipment etc, remains fixed. But the total variable cost i.e., the cost of labour, raw materials etc., Vary with the variation in output. Average cost is the total cost per unit. It can be found out as follows.

$$AC = \frac{TC}{Q}$$

The total of average fixed cost (TFC/Q) keep coming down as the production is increased and average variable cost (TVC/Q) will remain constant at any level of output.

Marginal cost is the addition to the total cost due to the production of an additional unit of product. It can be arrived at by dividing the change in total cost by the change in total output.

In the short-run there will not be any change in total fixed cost. Hence change in total cost implies change in total variable cost only.



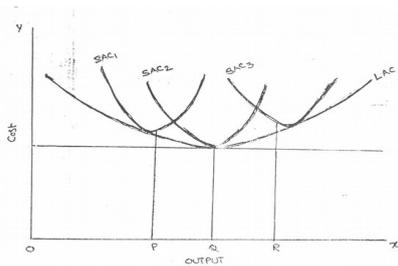
b. Cost-output Relationship in the long-run:

Long run is a period, during which all inputs are variable including the one, which are fixes in the short-run. In the long run a firm can change its output according to its demand. Over a long period, the size of the plant can be changed, unwanted buildings can be sold staff can be increased or reduced. The long run enables the firms to expand and scale of their operation by bringing or purchasing larger quantities of all the inputs. Thus in the long run all factors become variable.

The long-run cost-output relations therefore imply the relationship between the total cost and the total output. In the long-run cost-output relationship is influenced by the law of returns to scale.

In the long run a firm has a number of alternatives in regards to the scale of operations. For each scale of production or plant size, the firm has an appropriate short-run average cost curves. The short-run average cost (SAC) curve applies to only one plant whereas the long-run average cost (LAC) curve takes in to consideration many plants.

The long-run cost-output relationship is shown graphically with the help of ‘LCA’ curve.



7. Explain the breakeven point?

Break – Even- Point: If we divide the term into three words, then it does not require further explanation.

- Break-divide
- Even-equal
- Point-place or position

Break Even Point refers to the point where total cost is equal to total revenue. It is a point of no profit, no loss. This is also a minimum point of no profit, no loss. This is also a minimum point of production where total costs are recovered. If sales go up beyond the Break Even Point, organization makes a profit. If they come down, a loss is incurred.

1. Break Even point (Units) = $\frac{\text{Fixed Expenses}}{\text{Contribution per unit}}$
2. Break Even point (In Rupees) = $\frac{\text{Fixed expenses}}{\text{Contribution}} \times \text{sales}$

Impartant:

1. Profit and Loss Account
2. Relationship between cost, volume and profit
3. Long term planning
4. Useful for forecasting
5. Serves as a tool of cost control

8. What is break-even analysis? State its merits and demerits?

The study of cost-volume-profit relationship is often referred as BEA. The term BEA is interpreted in two senses. In its narrow sense, it is concerned with finding out BEP; BEP is the point at which total revenue is equal to total cost. It is the point of no profit, no loss. In its broad determine the probable profit at any level of production.

Merits:

- A. Information provided by the Break Even Chart can be understood more easily than those contained in the profit and Loss Account and the cost statement.
- B. Break Even Chart discloses the relationship between cost, volume and profit. It reveals how changes in profit. So, it helps management in decision-making.
- C. It is very useful for forecasting costs and profits long term planning and growth
- D. The chart discloses profits at various levels of production.
- E. It serves as a useful tool for cost control.
- F. It can also be used to study the comparative plant efficiencies of the industry.
- G. Analytical Break-even chart present the different elements, in the costs – direct material, direct labour, fixed and variable overheads.

Demerits:

- A. Break-even chart presents only cost volume profits. It ignores other considerations such as capital amount, marketing aspects and effect of government policy etc., which are necessary in decision making.
- B. It is assumed that sales, total cost and fixed cost can be represented as straight lines. In actual practice, this may not be so.
- C. It assumes that profit is a function of output. This is not always true. The firm may increase the profit without increasing its output.
- D. A major draw back of BEC is its inability to handle production and sale of multiple products.
- E. It is difficult to handle selling costs such as advertisement and sale promotion in BEC.
- F. It ignores economics of scale in production.
- G. Fixed costs do not remain constant in the long run.
- H. Semi-variable costs are completely ignored.
- I. It assumes production is equal to sale. It is not always true because generally there may be opening stock.
- J. When production increases variable cost per unit may not remain constant but may reduce on account of bulk buying etc.
- K. The assumption of static nature of business and economic activities is a well-known defect of BEC.

9. Explain in details the concepts of BEA?

The concept of Break Even analysis is -

- A. Fixed cost
- B. Variable cost
- C. Contribution
- D. Margin of safety
- E. Angle of incidence
- F. Profit volume ratio
- G. Break-Even-Point

UNIT – III

MARKETS AND NEW ECONOMIC ENVIRONMENT

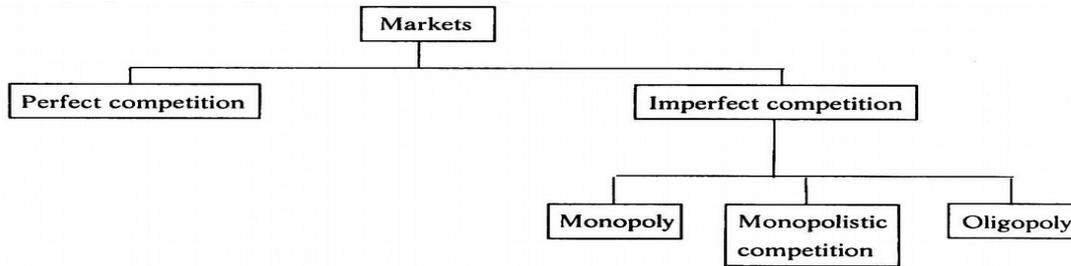
8. Define markets and explain how markets are classified?

A market may be also defined as the demand made by a certain group of potential buyers for a good or service. The former one is a narrow concept and later one, a broader concept.

Economists describe a market as a collection of buyers and sellers who transact over a particular product or product class (the housing market, the clothing market, the grain market etc.).

For business purpose we define a market as people or organizations with wants (needs) to satisfy, money to spend, and the willingness to spend it.

Market structure describes the competitive environment in the market for any good or service. A market consists of all firms and individuals who are willing and able to buy or sell a particular product. This includes firms and individuals currently engaged in buying and selling a particular product, as well as potential entrants.



9. What is a perfect and imperfect market? Describe its features.

Perfect competition refers to a market structure where competition among the sellers and buyers prevails in its most perfect form. In a perfectly competitive market, a single market price prevails for the commodity, which is determined by the forces of total demand and total supply in the market.

Features of Perfect Competition

The following features characterize a perfectly competitive market:

- d. A large number of buyers and sellers
- e. Homogeneous product
- f. Free entry and exit
- g. Perfect knowledge
- h. Indifference
- i. Non-existence of transport costs
- j. Perfect mobility of factors of production

Features of imperfect competition

Features of monopoly

The following are the features of monopoly.

- 3. Single person or a firm
- 4. No close substitute
- 5. Large number of Buyers
- 6. Price Maker
- 7. Supply and Price
- 8. Downward Sloping Demand Curve

Features of Monopolistic Competition

The important features of monopolistic competition are:

- H. Existence of Many firms
- I. Product Differentiation
- J. Large Number of Buyers
- K. Free Entry and Exist of Firms
- L. Selling costs
- M. Imperfect Knowledge

Features of Oligopoly

The main features of oligopoly are: The term oligopoly is derived from two Greek words, oligos meaning a few, and pollen meaning to sell. Oligopoly is the form of imperfect competition where there are a few firms in the market, producing either a homogeneous product or producing products, which are close but not perfect substitute of each other.

- e. Few Firms
 - f. Interdependence
 - g. Indeterminate Demand Curve
 - h. Advertising and selling costs
 - i. Price Rigidity
10. Explain features of monopolistic competition. How price and out-put is determined ?

Perfect competition and pure monopoly are rare phenomena in the real world. Instead, almost every market seems to exhibit characteristics of both perfect competition and monopoly. Hence in the real world it is the state of imperfect competition lying between these two extreme limits that work. Edward. H. Chamberlain developed the theory of monopolistic competition, which presents a more realistic picture of the actual market structure and the nature of competition.

Features of Monopolistic Competition

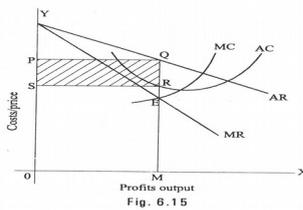
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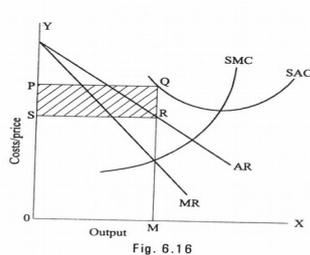
Price – Output Determination under Monopolistic Competition

Since under monopolistic competition different firms produce different varieties of products, different prices for them will be determined in the market depending upon the demand and cost conditions. Each firm will set the price and output of its own product. Here also the profit will be maximized when marginal revenue is equal to marginal cost.

Short-run equilibrium of the firm

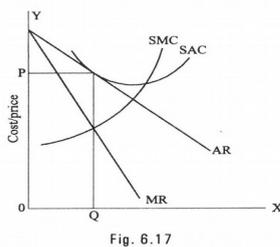


If the demand and cost conditions are less favorable the monopolistically competitive firm may incur loss in the short-run



Long – Run Equilibrium of the Firm:

A monopolistically competitive firm will be long – run equilibrium at the output level where marginal cost equal to marginal revenue. Monopolistically competitive firm in the long run attains equilibrium where $MC=MR$ and $AC=AR$ Fig 6.17 shows this trend.



Price determinants – Demand and supply

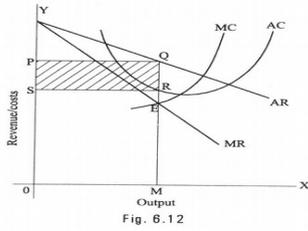
The price of a product is determined by the demand for and supply of that product. According to Marshall the role of these two determinants is like that of a pair of scissors cutting cloth. It is possible that at times, while one pair is held fixed, the other is moving to cut the cloth. Similarly, it is conceivable that there could be situations under which either demand or supply is playing a passive role, and the other, which is active, alone appear to be determining the price. However, just as one pair of scissors alone can never cut a cloth, demand or supply alone is insufficient to determine the price.

Equilibrium Price

The price at which demand and supply of a commodity is equal known as equilibrium price.

Price output determination under MONOPOLY (Equilibrium Point)

The monopolistic firm attains equilibrium when its marginal cost becomes equal to the marginal revenue. The monopolist always desires to make maximum profits. He makes maximum profits when $MC=MR$. He does not increase his output if his revenue exceeds his costs. But when the costs exceed the revenue, the monopolist firm incurs losses. Hence the monopolist curtails his production. He produces up to that point where additional cost is equal to the additional revenue ($MR=MC$). Thus point is called equilibrium point.



The above diagram (Average revenue) = MQ or OP

Average cost = MR

Profit per unit = Average Revenue - Average cost = $MQ - MR = QR$

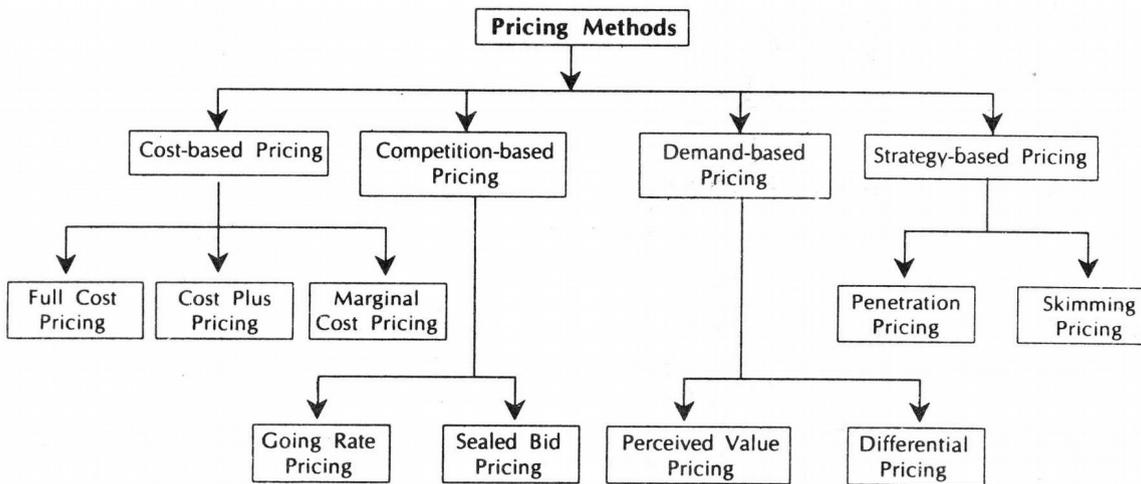
Total Profit = $QR \times SR = PQRS$

The area $PQRS$ represents the maximum profit earned by the monopoly firm.

But it is not always possible for a monopolist to earn super-normal profits. If the demand and cost situations are not favorable, the monopolist may realize short run losses

5) Explain various pricing methods followed by business organizations.?

The micro-economic principle of profit maximization suggests pricing by the marginal analysis. That is by equating MR to MC . However the pricing methods followed by the firms in practice around the world rarely follow this procedure. This is for two reasons; uncertainty with regard to demand and cost function and the deviation from the objective of short run profit maximization.



PRICING OBJECTIVES:

1. Monetary pricing objectives:
 - a. To achieve a targeted return on investment
 - b. To maximize the profits
 - c. To increase sales volume
 - d. Pricing stabilization
2. Non-monetary pricing objectives
 - a. Society oriented objectives
 - b. Maximize market share
 - c. Operation oriented objectives
 - d. Patronage oriented objectives

PRICING POLICY: the pricing policy of a company sends out signals about the company philosophies. It helps in creating that perception in customers mind.

1. Negotiations
2. Quality
3. Discounts

BUSINESS FEATURES AND EVALUATION OF DIFFERENT FORMS OF BUSINESS ORGANIZATION

6) Explain the features of sole trade organization. Discuss the merits and demerits of sole trade form of organization.

The sole trader is the simplest, oldest and natural form of business organization. It is also called sole proprietorship. 'Sole' means one. 'Sole trader' implies that there is only one trader who is the owner of the business. It is a one-man form of organization wherein the trader assumes all the risk of ownership carrying out the business with his own capital, skill and intelligence. He is the boss for himself. He has total operational freedom. He is the owner, Manager and controller.

Features

- a. It is easy to start a business under this form and also easy to close.
- b. He introduces his own capital. Sometimes, he may borrow, if necessary
- c. He enjoys all the profits and in case of loss, he lone suffers.
- d. He has unlimited liability which implies that his liability extends to his personal properties in case of loss.
- e. He has a high degree of flexibility to shift from one business to the other.
- f. Business secretes can be guarded well
- g. There is no continuity. The business comes to a close with the death, illness or insanity of the sole trader. Unless, the legal heirs show interest to continue the business, the business cannot be restored.
- h. He has total operational freedom. He is the owner, manager and controller.
- i. He can be directly in touch with the customers.
- j. He can take decisions very fast and implement them promptly.
- k. Rates of tax, for example, income tax and so on are comparatively very low.

Merits

The following are the merits of the sole trader form of business organization:

- g. Easy to start and easy to close
- h. Personal contact with customers directly
- i. Prompt decision-making
- j. High degree of flexibility
- k. Secrecy
- l. Low rate of taxation
- m. Direct motivation
- n. Total Control
- o. Minimum interference from government
- p. Transferability

Demerits

The following are the demerits of sole trader form:

- 9) Unlimited liability
- 10) Limited amounts of capital
- 11) No division of labour
- 12) Uncertainty
- 13) Inadequate for growth and expansion
- 14) Lack of specialization
- 15) More competition
- 16) Low bargaining power

7) Explain the features, merits and limitations of Joint Stock Company?

The joint stock company emerges from the limitations of partnership such as joint and several liability, unlimited liability, limited resources and uncertain duration and so on. Normally, to take part in a business, it may need large money and we cannot foretell the fate of business. It is not literally possible to get into business with little money. Against this background, it is interesting to study the functioning of a joint stock company. The main principle of the joint stock company form is to provide opportunity to take part in business with a low investment as possible say Rs.1000. Joint Stock Company has been a boon for investors with moderate funds to invest.

The word 'company' has a Latin origin, com means 'come together', pany means 'bread', joint stock company means, people come together to earn their livelihood by investing in the stock of company jointly.

Features

This definition brings out the following features of the company:

- f) Artificial person
- g) Separate legal existence
- h) Voluntary association of persons

- i) Limited Liability
- j) Capital is divided into shares
- k) Transferability of shares
- l) Common Seal
- m) Perpetual succession
- n) Ownership and Management separated
- o) Winding up
- p) The name of the company ends with 'limited'

Advantages

The following are the advantages of a joint Stock Company

- (a) Mobilization of larger resources
- (b) Separate legal entity
- (c) Limited liability
- (d) Transferability of shares
- (e) Liquidity of investment
- (f) Inculcates the habit of savings and investments
- (g) Democracy in management
- (h) Economics of large scale production
- (i) Continued existence
- (j) Institutional confidence
- (k) Professional management
- (l) Growth and Expansion

Disadvantages

- 10. Formation of company is a long drawn procedure
- 11. High degree of government interference
- 12. Inordinate delays in decision-making
- 13. Lack of initiative
- 14. Lack of responsibility and commitment
- 15. Lack of responsibility and commitment

8) Explain features of partnership with its merits and demerits.

Partnership is an improved form of sole trader in certain respects. Where there are like-minded persons with resources, they can come together to do the business and share the profits/losses of the business in an agreed ratio. Persons who have entered into such an agreement are individually called 'partners' and collectively called 'firm'. The relationship among partners is called a partnership.

Indian Partnership Act, 1932 defines partnership as the relationship between two or more persons who agree to share the profits of the business carried on by all or any one of them acting for all.

Features

- 9. Relationship
- 10. Two or more persons
- 11. There should be a business
- 12. Agreement
- 13. Carried on by all or any one of them acting for all

The following are the other features:

- f. Unlimited liability
- g. Number of partners
 - l. 10 partners is case of banking business
 - m. 20 in case of non-banking business
- h. Division of labour
- i. Personal contact with customers
- j. Flexibility

Advantages

The following are the advantages of the partnership from:

3. Easy to form
4. Availability of larger amount of capital
5. Division of labour
6. Flexibility
7. Personal contact with customers
8. Quick decisions and prompt action
9. The positive impact of unlimited liability

Disadvantages:

The following are the disadvantages of partnership:

- L. Formation of partnership is difficult
- M. Liability:
- N. Lack of harmony or cohesiveness
- O. Limited growth
- P. Instability
- Q. Lack of Public confidence

9) Explain different types of public sector enterprises?

Public enterprises occupy an important position in the Indian economy. Today, public enterprises provide the substance and heart of the economy. Its investment of over Rs.10,000crore is in heavy and basic industry, and infrastructure like power, transport and communications. The concept of public enterprise in Indian dates back to the era of pre-independence.

Features

- d) Under the control of a government department
- e) More financial freedom
- f) Like any other government department
- g) Budget, accounting and audit controls
- h) More a government organization, less a business organization

Advantages

- F)** Effective control
- G)** Responsible Executives
- H)** Less scope for mystification of funds
- I)** Adds to Government revenue

Disadvantages

5. Decisions delayed
6. No incentive to maximize earnings
7. Slow response to market conditions
8. Redtapism and bureaucracy
9. Incidence of more taxes

10) Explain the impact of liberalization, privatization and globalization on Indian economy?

The economy of India had undergone significant policy shifts in the beginning of the 1990s. this new model of economic reforms is commonly known as the LPG or liberalization, privatization and globalization model.

Liberalization: liberalization is a very broad term that usually refers to fewer government regulations and restrictions in the economy in exchange for greater participation of private entity.

According to M.Dhanuja: Liberalisation is related to that state of economic conditions in which rules, regulations and controls are eliminated to promote competition.

The main aim of liberalization was to dismantle the excessive regulatory framework which acted as a barrier for industries growth. Major purpose of liberalization was free the large private sector from the bureaucratic control if therefore started dismantling the industrial licensing and controls.

Nature of Liberalisation:

1. Freedom in fixing price

2. Reduction in restriction
3. Increase competitiveness
4. Reforms of the banking system
5. Increase of foreign investment

Factors favouring Liberalisation:

1. Severe economic situation
2. Success of export-promotion, industrialization and failure of import-substitution industrialization
3. globalisation

THE POSITIVE AND NEGATIVES IMPACTS OF LIBERALISATION IN INDIA

Positive impact:

1. Improvement in healthcare
2. Growth of agriculture
3. Liberalization and employment
4. Liberalization and economic growth
5. Liberalization and mergers in India

Negative impact:

1. Reduces profit
2. Exploitation of workers
3. Reduces economic freedom
4. Short-term adjustments
5. Effect on capital

PRIVATISATION:

Privatization is part of the process of rethinking the welfare state. Society is searching for new ways of delivering services because of our collective sense of efficiency. "Privatization where applied has achieved some measures of success in the local government"

According to Butler "privatization is the transfer of government assets or functions to the private sector".

NATURE OF PRIVATISATION:

1. Transfer of ownership
2. Increased competition
3. Increased efficiency
4. Increased opportunities
5. Effectiveness of deal depends on host country

MODE OF PRIVATISATION:

1. Initial public offering
2. Strategic sale
3. Sale of foreigners
4. Equal-Access voucher programmes
5. Management-employee buy-out
6. Franchising
7. Leasing
8. Liquidation
9. Denationalization
10. Managerial privatization
11. Contracting out

IMPACT OF PRIVATISATION

1. Positive impact:

- a. Provides momentum in the competitive sector
- b. Fosters sustainable competitive advantage
- c. Improves financial health
- d. Better services to the customers
- e. Beneficial for the growth of employees
- f. Escalates the performance benchmark

2. Negative impact:

- a. Ignores social objectives
- b. Lack of transparency
- c. Loses the mission
- d. High employee turnover
- e. Support to unfair practices
- f. Conflict of interest
- g. Escalates price inflation

Globalization: Globalisation is the process of international integration arising from the interchange of worldviews products, ideas and other aspects of culture. Advances in transaction telecommunication etc.

Globalization is a powerful real aspects of the new world system and it represents one of the most influential forces in determining the future course of the planet.

According to Charles Hill "Globalisation is the shift towards a more integrated and interdependent world economy.

Globalization has 2 main components

1. The globalisation of markets
2. The globalization of production

Nature of globalization:

2. Improved technology in transportation and telecommunications
3. Movement of people and capital
4. Diffusion of knowledge
5. NGO's and MNC's
6. Rapid discontinuous change
7. Growing complexity
8. Increased number and diversity of participants

FACTORS GOVERNING GLOBALISATION:

1. Human resources
2. Growing entrepreneurship
3. Growing domestic market
4. Niche markets
5. Expanding markets
6. NGO's
7. Competition
8. Economic liberalization

IMPACT OF GLOBALISATION:

Positive:

- a. Huge amount of foreign investment
- b. Provides employment
- c. Updated technology
- d. Free flow of capital
- e. Increase in industrialisation
- f. Balanced development of world economy
- g. Culture exchange
- h. Demand for a variety of products

Negative:

- a. Reduced job and income
- b. Poor labour practices and environmental policies
- c. Heterogeneity of problems
- d. Risks and uncertainties
- e. Short term gains
- f. Social security
- g. Reluctance of developed and developing countries
- h. Globalization and the world's poor

Evaluation of LPG

1. Giant and Lilliputians compete
2. FII more opportunistic
3. Costly debt servicing
4. Public sector employees disgruntled
5. Decline in purchasing power
6. Declining personal savings
7. Disappearing competitive edge
8. Increasing sickness in industries
9. Unfavorable government policies
10. Dumping grounds
11. Anti-dumping duties
12. Benefit of LPG marginalized

INTRODUCTION TO FINANCIAL ACCOUNTING

1. INTRODUCTON

As you are aware, every trader generally starts business for purpose of earning profit. While establishing business, he brings own capital, borrows money from relatives, friends, outsiders or financial institutions. Then he purchases machinery, plant , furniture, raw materials and other assets. He starts buying and selling of goods, paying for salaries, rent and other expenses, depositing and withdrawing cash from bank. Like this he undertakes innumerable transactions in business. Observe the following transactions of small trader for one week during the month of July, 1998.

1998		Rs.
July 24	Purchase of goods from Sree Ram	12,000
July 25	Goods sold for cash	5,000
July 25	Sold gods to Syam on credit	8,000
July 26	Advertising expenses	5,200
July 27	Stationary expenses	600
July 27	Withdrawal for personal use	2,500
July 28	Rent paid through cheque	1,000
July 31	Salaries paid	9,000
July 31	Received cash from Syam	5,000

The number of transactions in an organization depends upon the size of the organization. In small organizations, the transactions generally will be in thousand and in big organizations they may be in lakhs. As such it is humanly impossible to remember all these transactions. Further, it may not be possible to find out the final result of the business without recording and analyzing these transactions.

Accounting came into practice as an aid to human memory by maintaining a systematic record of business transactions.

2. BOOK-KEEPING AND ACCOUNTING

According to G.A. Lee the accounting system has two stages.

1. The making of routine records in the prescribed form and according to set rules of all events which affect the financial state of the organization; and
2. The summarization from time to time of the information contained in the records, its presentation in a significant form to interested parties and its interpretation as an aid to decision making by these parties.

First stage is called Book-Keeping and the second one is Accounting.

Book — Keeping: Book — Keeping involves the chronological recording of financial transactions in a set of books in a systematic manner.

Accounting: Accounting is concerned with the maintenance of accounts giving stress to the design of the system of records, the preparation of reports based on the recorded date and the interpretation of the reports.

BOOK KEEPING AND ACCOUNTING:

According to G.A.Lee the Accounting system has two stages. First stage is Book keeping and the second stage is accounting.

[A]. BOOK KEEPING:

Book keeping involves the chronological recording of financial transactions in a set of books in a systematic manner

“Book keeping is the system of recording Business transactions for the purpose of providing reliable information to the owners and managers about the state and prospect of the Business concepts”.

Thus Book keeping is an art of recording business transactions in the books of original entry and the ledges.

[B]. ACCOUNTING: Accounting begins where the Bookkeeping ends

1. SMITH AND ASHBUNNE: Accounting means “measuring and reporting the results of economic activities”.

2. R.N ANTHONY: Accounting is a system of “collecting, summarizing, Analyzing and reporting in monster terms, the information about the Business”.

3. ICPA: Recording, classifying and summarizing is 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 there.

Thus accounting is an art of recording, classifying, summarizing and interpreting business transactions of financial nature. Hence accounting is the “Language of Business”.

Distinction between Book — Keeping and Accountancy

Thus, the terms, book-keeping and accounting are very closely related, through there is a subtle difference as mentioned below.

1. Object : The object of book-keeping is to prepare original books of Accounts. It is restricted to journal, subsidiary book and ledge accounts only. On the other hand, the main object of accounting is to record analyse and interpret the business transactions.

2. Level of Work: Book-keeping is restricted to level of work. Clerical work is mainly involved in it. Accountancy on the other hand, is concerned with all level of management.

3. Principles of Accountancy: In Book-keeping Accounting concepts and conventions will be followed by all without any difference. On the other hand, various firms follow various methods of reporting and interpretation in accounting.

4. Final Result: In Book-Keeping it is not possible to know the final result of business every year,

2.1 Meaning of Accounting

Thus, book-keeping is an art of recording the business transactions in the books of original entry and the ledges. Accountancy begins where Book-keeping ends. Accountancy means the compilation of accounts in such a way that one is in a position to know the state of affairs of the business. The work of an accountant is to analyse, interpret and review the accounts and draw conclusion with a view to guide the management in chalking out the future policy of the business.

2.2 Definition of Accounting:

Smith and Ashburne: “Accounting is a means of measuring and reporting the results of economic activities.”

R.N. Anthony: “Accounting system is a means of collecting summarizing, analyzing and reporting in monetary terms, the information about the business.

American Institute of Certified Public Accountants (AICPA): “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.”

Thus, accounting is an art of identifying, recording, summarizing and interpreting business transactions of financial nature. Hence accounting is the **Language of Business**.

2.3 Branches of Accounting:

The important branches of accounting are:

- 1. Financial Accounting:** The purpose of Accounting is to ascertain the financial results i.e. profit or loss in the operations during a specific period. It is also aimed at knowing the financial position, i.e. assets, liabilities and equity position at the end of the period. It also provides other relevant information to the management as a basic for decision-making for planning and controlling the operations of the business.
- 2. Cost Accounting:** The purpose of this branch of accounting is to ascertain the cost of a product / operation / project and the costs incurred for carrying out various activities. It also assist the management in controlling the costs. The necessary data and information are gathered from financial and other sources.
- 3. Management Accounting :** Its aim to assist the management in taking correct policy decision and to evaluate the impact of its decisions and actions. The data required for this purpose are drawn accounting and cost-accounting.
- 4. Inflation Accounting :** It is concerned with the adjustment in the values of asset and of profit in light of changes in the price level. In a way it is concerned with the overcoming of limitations that arise in financial statements on account of the cost assumption (i.e

recording of the assets at their historical or original cost) and the assumption of stable monetary unit.

- 5. Human Resource Accounting :** It is a branch of accounting which seeks to report and emphasize the importance of human resources in a company's earning process and total assets. It is concerned with the process of identifying and measuring data about human resources and communicating this information to interested parties. In simple words, it is accounting for people as organizational resources.

3. FUNCTIONS OF AN ACCOUNTANT

The job of an accountant involves the following types of accounting works :

- 1. Designing Work :** It includes the designing of the accounting system, basis for identification and classification of financial transactions and events, forms, methods, procedures, etc.
- 2. Recording Work :** The financial transactions are identified, classified and recorded in appropriate books of accounts according to principles. This is "Book Keeping". The recording of transactions tends to be mechanical and repetitive.
- 3. Summarizing Work :** The recorded transactions are summarized into significant form according to generally accepted accounting principles. The work includes the preparation of profit and loss account, balance sheet. This phase is called preparation of final accounts
- 4. Analysis and Interpretation Work:** The financial statements are analysed by using ratio analysis, break-even analysis, funds flow and cash flow analysis.
- 5. Reporting Work:** The summarized statements along with analysis and interpretation are communicated to the interested parties or whoever has the right to receive them. For Ex. Share holders. In addition, the accounting departments has to prepare and send regular reports so as to assist the management in decision making. This is Reporting.
- 6. Preparation of Budget :** The management must be able to reasonably estimate the future requirements and opportunities. As an aid to this process, the accountant has to prepare budgets, like cash budget, capital budget, purchase budget, sales budget etc. this is Budgeting.
- 7. Taxation Work :** The accountant has to prepare various statements and returns pertaining to income-tax, sales-tax, excise or customs duties etc., and file the returns with the authorities concerned.
- 8. Auditing :** It involves a critical review and verification of the books of accounts statements and reports with a view to verifying their accuracy. This is Auditing

This is what the accountant or the accounting department does. A person may be placed in any part of Accounting Department or MIS (Management Information System) Department or in small organization, the same person may have to attend to all this work.

4. USERS OF ACCOUNTING INFORMATION

Different categories of users need different kinds of information for making decisions. The users of accounting can be divided in two broad groups (1). Internal users and (2). External users.

4.1 Internal Users:

Managers : These are the persons who manage the business, i.e. management at the top, middle and lower levels. Their requirements of information are different because they make different types of decisions.

Accounting reports are important to managers for evaluating the results of their decisions. In addition to external financial statements, managers need detailed internal reports either branch division or department or product-wise. Accounting reports for managers are prepared much more frequently than external reports.

Accounting information also helps the managers in appraising the performance of subordinates. As such Accounting is termed as “ the eyes and ears of management.”

4.2 External Users :

1. Investors : Those who are interested in buying the shares of company are naturally interested in the financial statements to know how safe the investment already made is and how safe the proposed investments will be.

2. Creditors : Lenders are interested to know whether their loan, principal and interest, will be paid when due. Suppliers and other creditors are also interested to know the ability of the firm to pay their dues in time.

3. Workers : In our country, workers are entitled to payment of bonus which depends on the size of profit earned. Hence, they would like to be satisfied that the bonus being paid to them is correct. This knowledge also helps them in conducting negotiations for wages.

4. Customers : They are also concerned with the stability and profitability of the enterprise. They may be interested in knowing the financial strength of the company to rent it for further decisions relating to purchase of goods.

5. Government: Governments all over the world are using financial statements for compiling statistics concerning business which, in turn, helps in compiling national accounts. The financial statements are useful for tax authorities for calculating taxes.

6. Public : The public at large is interested in the functioning of the enterprises because it may make a substantial contribution to the local economy in many ways including the number of people employed and their patronage to local suppliers.

7. Researchers: The financial statements, being a mirror of business conditions, is of great interest to scholars undertaking research in accounting theory as well as business affairs and practices.

5. ADVANTAGES FROM ACCOUNTING

The role of accounting has changed from that of a mere record keeping during the 1st decade of 20th century of the present stage, which it is accepted as information system and decision making activity. The following are the advantages of accounting.

- 1. Provides for systematic records:** Since all the financial transactions are recorded in the books, one need not rely on memory. Any information required is readily available from these records.
- 2. Facilitates the preparation of financial statements:** Profit and loss account and balance sheet can be easily prepared with the help of the information in the records. This enables the trader to know the net result of business operations (i.e. profit / loss) during the accounting period and the financial position of the business at the end of the accounting period.
- 3. Provides control over assets:** Book-keeping provides information regarding cash in hand, cash at bank, stock of goods, accounts receivables from various parties and the amounts invested in various other assets. As the trader knows the values of the assets he will have control over them.
- 4. Provides the required information:** Interested parties such as owners, lenders, creditors etc., get necessary information at frequent intervals.
- 5. Comparative study:** One can compare the present performance of the organization with that of its past. This enables the managers to draw useful conclusion and make proper decisions.

6. **Less Scope for fraud or theft:** It is difficult to conceal fraud or theft etc., because of the balancing of the books of accounts periodically. As the work is divided among many persons, there will be check and counter check.
7. **Tax matters:** Properly maintained book-keeping records will help in the settlement of all tax matters with the tax authorities.
8. **Ascertaining Value of Business:** The accounting records will help in ascertaining the correct value of the business. This helps in the event of sale or purchase of a business.
9. **Documentary evidence:** Accounting records can also be used as an evidence in the court to substantiate the claim of the business. These records are based on documentary proof. Every entry is supported by authentic vouchers. As such, Courts accept these records as evidence.
10. **Helpful to management:** Accounting is useful to the management in various ways. It enables the management to assess the achievement of its performance. The weakness of the business can be identified and corrective measures can be applied to remove them with the help of accounting.

6. LIMITATIONS OF ACCOUNTING

The following are the limitations of accounting.

1. **Does not record all events:** Only the transactions of a financial character will be recorded under book-keeping. So it does not reveal a complete picture about the quality of human resources, locational advantage, business contacts etc.
2. **Does not reflect current values:** The data available under book-keeping is historical in nature. So they do not reflect current values. For instance, we record the value of stock at cost price or market price, whichever ever is less. In case of, building, machinery etc., we adopt historical cost as the basis. Infact, the current values of buildings, plant and machinery may be much more than what is recorded in the balance sheet.
3. **Estimates based on Personal Judgment:** The estimate used for determining the values of various items may not be correct. For example, debtor are estimated in terms of collectibility, inventories are based on marketability, and fixed assets are based on useful working life. These estimates are based on personal judgment and hence sometimes may not be correct.
4. **Inadequate information on costs and Profits:** Book-keeping only provides information about the overall profitability of the business. No information is given about the cost and profitability of different activities of products or divisions.

BASIC ACCOUNTING CONCEPTS

Accounting is a system evolved to achieve a set of objectives. In order to achieve the goals, we need a set of rules or guidelines. These guidelines are termed here as “BASIC ACCOUNTING ONCEPTS”. The term concept means an idea or thought. Basic accounting concepts are the fundamental ideas or basic assumptions underlying the theory and profit of FINANCIAL ACCOUNTING. These concepts help in bringing about uniformity in the practice of accounting. In accountancy following concepts are quite popular.

1. **BUSINESS ENTITY CONEPT:** In this concept “Business is treated as separate from the proprietor”. All the Transactions recorded in the book of Business and not in the books of proprietor. The proprietor is also treated as a creditor for the Business.
2. **GOING CONCERN CONCEPT:** This concept relates with the long life of Business. The assumption is that business will continue to exist for unlimited period unless it is dissolved due to some reasons or the other.

3. **MONEY MEASUREMENT CONCEPT:** In this concept “Only those transactions are recorded in accounting which can be expressed in terms of money, those transactions which can not be expressed in terms of money are not recorded in the books of accounting”.
4. **COST CONCEPT:** Accounting to this concept, an asset is recorded at its cost in the books of account. i.e., the price, which is paid at the time of acquiring it. In balance sheet, these assets appear not at cost price every year, but depreciation is deducted and they appear at the amount, which is cost, less classification.
5. **ACCOUNTING PERIOD CONCEPT:** every Businessman wants to know the result of his investment and efforts after a certain period. Usually one-year period is regarded as an ideal for this purpose. This period is called Accounting Period. It depends on the nature of the business and object of the proprietor of business.
6. **DUAL ASPECT CONCEPT:** According to this concept “Every business transactions has two aspects”, one is the receiving benefit aspect another one is giving benefit aspect. The receiving benefit aspect is termed as “DEBIT”, where as the giving benefit aspect is termed as “CREDIT”. Therefore, for every debit, there will be corresponding credit.
7. **MATCHING COST CONCEPT:** According to this concept “The expenses incurred during an accounting period, e.g., if revenue is recognized on all goods sold during a period, cost of those goods should also be charged to that period.
8. **REALISATION CONCEPT:** According to this concept revenue is recognized when a sale is made. Sale is considered to be made at the point when the property in goods passes to the buyer and he becomes legally liable to pay.

ACCOUNTING CONVENTIONS

Accounting is based on some customs or usages. Naturally accountants here to adopt that usage or custom. They are termed as conventional conventions in accounting. The following are some of the important accounting conventions.

1. **FULL DISCLOSURE:** According to this convention accounting reports should disclose fully and fairly the information. They purport to represent. They should be prepared honestly and sufficiently disclose information which is of material interest to proprietors, present and potential creditors and investors. The Companies Act, 1956 makes it compulsory to provide all the information in the prescribed form.
2. **MATERIALITY:** Under this convention the trader records important factors about the commercial activities. In the form of financial statements if any unimportant information is to be given for the sake of clarity it will be given as footnotes.
3. **CONSISTENCY:** It means that accounting method adopted should not be changed from year to year. It means that there should be consistency in the methods or principles followed. Or else the results of a year cannot be conveniently compared with that of another.
4. **CONSERVATISM:** This convention warns the trader not to take unrealized income into account. That is why the practice of valuing stock at cost or market price, whichever ever is lower is in vogue. This is the policy of “playing safe”; it takes into consideration all prospective losses but leaves all prospective profits.

KEY WORDS IN BOOK-KEEPING

1. TRANSACTIONS: Any sale or purchase of goods or services is called the transaction.

Transactions are two types.

[a]. cash transaction: cash transaction is one where cash receipt or payment is involved in the exchange.

[b]. Credit transaction: Credit transaction will not have cash, either received or paid, for something given or received respectively.

2.GOODS: All those things which a firm purchases for resale are called goods.

3.PURCHASES: Purchases means purchase of goods, unless it is stated otherwise it also represents the Goods purchased.

4.SALES: Sales means sale of goods, unless it is stated otherwise it also represents these goods sold.

5.EXPENSES: Payments for the purchase of goods or services are known as expenses.

6.REVENUE: Revenue is the amount realized or receivable from the sale of goods or services.

7.ASSETS: The valuable things owned by the business are known as assets. These are the properties Owned by the business.

8.LIABILITIES: Liabilities are the obligations or debts payable by the enterprise in future in the term Of money or goods.

9. DEBTORS: Debtors means a person who owes money to the trader.

10.CREDITORS: A creditor is a person to whom something is owned by the business.

11.DRAWINGS: cash or goods withdrawn by the proprietor from the Business for his personal or Household is termed as "drawing".

12.RESERVE: An amount set aside out of profits or other surplus and designed to meet contingencies.

13.ACCOUNT: A summarized statements of transactions relating to a particular person, thing, Expense or income.

14.DISCOUNT: There are two types of discounts..

a. cash discount: An allowance made to encourage early payment or before the expiration of the period allowed for credit.

b. Trade discount: A deduction from the gross or catalogue price allowed to traders who buy them for resale.

CLASSIFICATION OF BUSINESS TRANSACTIONS

All business transactions are classified into three categories:

1.Those relating to persons

2.Those relating to property(Assets)

3.Those relating to income & expenses

Thus, three classes of accounts are maintained for recording all business transactions. They are:

1.Personal accounts

2.Real accounts

3.Nominal accounts

1.Personal Accounts :Accounts which are transactions with persons are called "Personal Accounts" .

A separate account is kept on the name of each person for recording the benefits received from ,or given to the person in the course of dealings with him.

E.g.: Krishnas A/C, Gopals A/C, SBI A/C, Nagarjuna Finance Ltd.A/C, ObulReddy & Sons A/C , HMT Ltd. A/C, Capital A/C, Drawings A/C etc.

2.Real Accounts: The accounts relating to properties or assets are known as “Real Accounts” .Every business needs assets such as machinery , furniture etc, for running its activities .A separate account is maintained for each asset owned by the business .

E.g.: cash A/C, furniture A/C, building A/C, machinery A/C etc.

3.NominalAccounts: Accounts relating to expenses, losses, incomes and gains are known as “Nominal Accounts”.

A separate account is maintained for each item of expenses, losses, income or gain.

E.g.: Salaries A/C, stationery A/C, wages A/C, postage A/C, commission A/C, interest A/C, purchases A/C, rent A/C, discount A/C, commission received A/C, interest received A/C, rent received A/C, discount received A/C.

Before recording a transaction, it is necessary to find out which of the accounts is to be debited and which is to be credited. The following three different rules have been laid down for the three classes of accounts....

1.Personal Accounts: The account of the person receiving benefit (receiver) is to be debited and the account of the person giving the benefit (given) is to be credited.

Rule: “Debit---The Receiver
Credit---The Giver”

2.Real Accounts: When an asset is coming into the business, account of that asset is to be debited .When an asset is going out of the business, the account of that asset is to be credited.

Rule: “Debit---What comes in
Credit---What goes out”

3. Nominal Accounts: When an expense is incurred or loss encountered, the account representing the expense or loss is to be debited . When any income is earned or gain made, the account representing the income of gain is to be credited.

Rule: “Debit---All expenses and losses
Credit---All incomes and gains”

JOURNAL

The first step in accounting therefore is the record of all the transactions in the books of original entry viz., Journal and then posting into ledges.

JOURNAL: The word Journal is derived from the Latin word journ which means a day. Therefore, journal means a day Book in day-to-day business transactions are recorded in chronological order.

Journal is treated as the book of original entry or first entry or prime entry. All the business transactions are recorded in this book before they are posted in the ledges. The journal is a complete and chronological (in order of dates) record of business transactions. It is recorded in a systematic manner. The process of recording a transaction in the journal is called “JOURNALISING”. The entries made in the book are called “Journal Entries”.

The proforma of Journal is given below.

Date	Particulars	LF	Dr. (Amount Rs.)	Cr. (Amount Rs.)

LEDGER

All the transactions in a journal are recorded in a chronological order. After a certain period, if we want to know whether a particular account is showing a debit or credit balance it becomes very difficult. So, the ledger is designed to accommodate the various accounts maintained the trader. It contains the final or permanent record of all the transactions in duly classified form. "A ledger is a book which contains various accounts." The process of transferring entries from journal to ledger is called "POSTING".

Posting is the process of entering in the ledger the entries given in the journal. Posting into ledger is done periodically, may be weekly or fortnightly as per the convenience of the business. The following are the guidelines for posting transactions in the ledger.

1. After the completion of Journal entries only posting is to be made in the ledger.
2. For each item in the Journal a separate account is to be opened. Further, for each new item a new account is to be opened.
3. Depending upon the number of transactions space for each account is to be determined in the ledger.
4. For each account there must be a name. This should be written in the top of the table. At the end of the name, the word "Account" is to be added.
5. The debit side of the Journal entry is to be posted on the debit side of the account, by starting with "TO".
6. The credit side of the Journal entry is to be posted on the debit side of the account, by starting with "BY".

Proforma for ledger: LEDGER BOOK

Dr.
Cr.

Date	Particulars	J F	Amount Rs.	Date	Particulars	J F	Amount Rs.

SUBSIDIARY BOOKS

In a small business concern, the numbers of transactions are limited. These transactions are first recorded in the journal as and when they take place. Subsequently, these transactions are posted in the appropriate accounts of the ledger. Therefore, the journal is known as "Book Of Original Entry" or "Book of Prime Entry" while the ledger is known as main book of accounts.

On the other hand, the transactions in big concern are numerous and sometimes even run into thousands and lakhs. It is inconvenient and time wasting process if all the transactions are going to be managed with a journal.

Therefore, a convenient device is made. Smaller account books known as subsidiary books or subsidiary journals are disturbed to various sections of the business house. As and when transactions take place, they are recorded in these subsidiary books simultaneously without delay. The original journal (which is known as Journal Proper) is used only occasionally to record those transactions which cannot be recorded in any of the subsidiary books.

TYPES OF SUBSIDIARY BOOKS:-- Subsidiary books are divided into eight types. They are,

1. Purchases Book
2. Sales Book
3. Purchase Returns Book
4. Sales Returns Book
5. Cash Book
6. Bills Receivable Book
7. Bills Payable Book
8. Journal Proper

1. **PURCHASES BOOK** :- This book records all credit purchases only. Purchase of goods for cash and purchase of assets for cash. Credit will not be recorded in this book. Purchases book is otherwise called Purchases Day Book, Purchases Journal or Purchases Register.

2. **SALES BOOK** :- This book is used to record credit sales only. Goods are sold for cash and sale of assets for cash or credit will not be recorded in this book. This book is otherwise called Sales Day Book, Sales Journal or Sales Register.

3. **PURCHASE RETURNS BOOK** :- This book is used to record the particulars of goods returned to the suppliers. This book is otherwise called Returns Outward Book.

4. SALES RETURNS BOOK :- This book is used to record the particulars of goods returned by the customers. This book is otherwise called Returns Inward Book.

5. CASH BOOK :- All cash transactions , receipts and payments are recorded in this book. Cash includes cheques, money orders etc.

6. BILLS RECEIVABLE BOOK :- This book is used to record all the bills and promissory notes are received from the customers.

7. BILLS PAYABLE BOOK :- This book is used to record all the bills or promissory notes accepted to the suppliers.

8. JOURNAL PROPER :- This is used to record all the transactions that cannot be recorded in any of the above mentioned subsidiary books.

FORMAT FOR PURCHASE BOOK

Date	Name of supplier	Invoice No	Lf no	Details	Amount(Rs.)

FORMAT FOR SALES BOOK

Date	Name of customer	Invoice No	Lf no	Details	Amount(Rs.)

FORMAT FOR PURCHASE RETURNS BOOK

Date	Name of supplier	Debit note No	Lf no	Details	Amount(Rs.)

FORMAT FOR SALES RETURNS BOOK

Date	Name of supplier	Credit note No	Lf no	Details	Amount(Rs.)

CASH BOOK

Cash book plays an important role in accounting. Whether transactions made are in the form of cash or credit, final statement will be in the form of receipt or payment of cash. So, every transaction finds place in the cash book finally.

Cash book is a principal book as well as the subsidiary book. It is a book of original entry since the transactions are recorded for the first time from the source of documents. It is a ledger in a sense it is designed in the form of cash account and records cash receipts on the debit side and the cash payments on the credit side. Thus, a cash book fulfils the functions of both a ledger account and a journal.

Cash book is divided into two sides. Receipt side (debit side) and payment side (credit side). The method of recording cash sample is very simple. All cash receipts will be posted on the debit side and all the payments will be recorded on the credit side.

Types of cash book: cash book may be of the following types according to the needs of the business.

- Simple cash book
- Double column or two column cash book
- Three column cash book
- Petty cash book

SINGLE COLUMN CASH BOOK: The simple cash book is a record of only cash transactions. The model of the cash book is given below.

CASH BOOK

Date	Particulars	Lf no	Amount	Date	Particulars	Lf no	Amount

TWO COLUMN CASH BOOK: This book has two columns on each side one for discount and the other for cash. Discount column on debit side represents loss being discount allowed to customers. Similarly, discount column on credit side represents gain being discount received.

Discount may be two types. (i) Trade discount. (ii) Cash discount

TRADE DISCOUNT: when a retailer purchases goods from the wholesaler, he allows some discount on the catalogue price. This discount is called as Trade discount. Trade discount is adjusted in the invoice and the net amount is recorded in the purchase book. As such it will not appear in the book of accounts.

CASH DISCOUNT: When the goods are purchased on credit, payment will be made in the future as agreed by the parties. If the amount is paid early as promptly a discount by a way of incentive will be allowed by the seller to the buyer. This discount is called as cash discount. So cash discount is the discount allowed by the seller to encourage prompt payment from the buyer. Cash discount is entered in the discount column of the cash book. The discount recorded in the debit side of the cash book is discount allowed. The discount recorded in the credit side of the cash book is discount received.

CASH DISCOUNT COLUMN CASH BOOK

Date	Particulars	Lf no	Disc. Allowed	cash	Date	Particulars	Lf No	Disc Received.	cash

PETTY CASH BOOK: We have seen that all the cash receipts and payments will be recorded in the cash book. But in the case of big concerns if all transactions like postage, cleaning charges, etc., are recorded in the cash book, the cash book becomes bulky and un wieldy. So, all petty disbursement of cash is recorded in a separate cash book called petty cash book.

TRAIL BALANCE

The first step in the preparation of final accounts is the preparation of trail balance. In the double entry system of book keeping, there will be credit for every debit and there will not be any debit without credit. When this principle is followed in writing journal entries, the total amount of all debits is equal to the total amount all credits.

A trail balance is a statement of debit and credit balances. It is prepared on a particular date with the object of checking the accuracy of the books of accounts. It indicates that all the transactions for a particular period have been duly entered in the book, properly posted and balanced. The trail balance doesnt include stock in hand at the end of the period. All adjustments required to be done at the end of the period including closing stock are generally given under the trail balance.

DEFINITIONS: SPICER AND POGLAR : A trail balance is a list of all the balances standing on the ledger accounts and cash book of a concern at any given date.

J.R.BATLIBOI:

A trail balance is a statement of debit and credit balances extracted from the ledger with a view to test the arithmetical accuracy of the books.

Thus a trail balance is a list of balances of the ledger accounts and cash book of a business concern at any given date.

PROFORMA FOR TRAIL BALANCE:

Trail balance for MR..... as on

NO	NAME OF ACCO	DEBIT AMOUN	CREDIT AMOUN

Trail Balance Specimen of trial balance

1	Capital	Cre	Loa
2	Opening stock	Deb	Ass
3	Purchases	Deb	Exp
4	Sales	Cre	Gai
5	Returns inwards	Deb	Loss
6	Returns outwards	Deb	Gai
7	Wages	Deb	Exp
8	Freight	Deb	Exp
9	Transport expenses	Deb	Exp
10	Royalties on production	Deb	Exp
11	Gas, fuel	Deb	Exp
12	Discount received	Cre	Rev
13	Discount allowed	Deb	Loss
14	Bas debts	Deb	Loss
15	Dab debts reserve	Cre	Gai
16	Commission received	Cre	Rev
17	Repairs	Deb	Exp
18	Rent	Deb	Exp
19	Salaries	Deb	Exp

20	Loan Taken	Cre	Loa
21	Interest received	Cre	Rev
22	Interest paid	Deb	Exp
23	Insurance	Deb	Exp
24	Carriage outwards	Deb	Exp
25	Advertisements	Deb	Exp
26	Petty expenses	Deb	Exp
27	Trade expenses	Deb	Exp
28	Petty receipts	Cre	Rev
29	Income tax	Deb	Dra
30	Office expenses	Deb	Exp
31	Customs duty	Deb	Exp
32	Sales tax	Deb	Exp
33	Provision for discount on	Deb	Liab
34	Provision for discount on	Deb	Ass
35	Debtors	Deb	Ass
36	Creditors	Cre	Liab
37	Goodwill	Deb	Ass
38	Plant, machinery	Deb	Ass
39	Land, buildings	Deb	Ass
40	Furniture, fittings	Deb	Ass
41	Investments	Deb	Ass
42	Cash in hand	Deb	Ass
43	Cash at bank	Deb	Ass
44	Reserve fund	Cre	Liab
45	Loan advances	Deb	Ass
46	Horse, carts	Deb	Ass
47	Excise duty	Deb	Exp
48	General reserve	Cre	Liab
49	Provision for depreciation	Cre	Liab
50	Bills receivable	Deb	Ass
51	Bills payable	Cre	Liab

FINAL ACCOUNTS

In every business, the business man is interested in knowing whether the business has resulted in profit or loss and what the financial position of the business is at a given time. In brief, he wants to know

- (i)The profitability of the business and (ii) The soundness of the business.

The trader can ascertain this by preparing the final accounts. The final accounts are prepared from the trial balance. Hence the trial balance is said to be the link between the ledger accounts and the final accounts. The final accounts of a firm can be divided into two stages. The first stage is preparing the trading and profit and loss account and the second stage is preparing the balance sheet.

TRADING ACCOUNT

The first step in the preparation of final account is the preparation of trading account. The main purpose of preparing the trading account is to ascertain gross profit or gross loss as a result of buying and selling the goods.

Trading account of MR..... for the year ended

Particulars	Amount	Particulars	Amount
-------------	--------	-------------	--------

To opening stock	Xxxx	By sales xxxx	
To purchases xxxx		Less: returns xxx	Xxxx
Less: returns xx	Xxxx	By closing stock	Xxxx
To carriage inwards	Xxxx		
To wages	Xxxx		
To freight	Xxxx		
To customs duty, octroi	Xxxx		
To gas, fuel, coal, Water	Xxxx		Xxxx
To factory expenses	Xxxx		
To other man. Expenses	Xxxx		

Finally, a ledger may be defined as a summary statement of all the transactions relating to a person, asset, expense or income which have taken place during a given period of time. The up-to-date state of any account can be easily known by referring to the ledger.

PROFIT AND LOSS ACCOUNT

The business man is always interested in knowing his net income or net profit. Net profit represents the excess of gross profit plus the other revenue incomes over administrative, sales, Financial and other expenses. The debit side of profit and loss account shows the expenses and the credit side the incomes. If the total of the credit side is more, it will be the net profit. And if the debit side is more, it will be net loss.

PROFIT AND LOSS A/C OF MR.....FOR THE YEAR ENDED.....

PARTICULARS	AMOUNT	PARTICULARS	AMOUNT
TO office salaries	Xxxxxx	By gross profit b/d	Xxxxx
TO rent,rates,taxes	Xxxxx	Interest received	Xxxxx
TO Printing and stationery	Xxxxx	Discount received	Xxxx
TO Legal charges		Commission received	Xxxxx
Audit fee	Xxxx	Income from investments	
TO Insurance	Xxxx	Dividend on shares	
TO General expenses	Xxxx	Miscellaneous investments	Xxxx
TO Advertisements	Xxxxx	Rent received	Xxxx
TO Bad debts	Xxxx		
TO Carriage outwards	Xxxx		xxxx
TO Repairs	Xxxx		
TO Depreciation	Xxxxx		
TO interest paid	Xxxxx		
TO Interest on capital	Xxxxx		
TO Interest on loans	Xxxx		
TO Discount allowed	Xxxxx		
TO Commission	Xxxxx		
TO Net profit----- □ (transferred to capital a/c)	Xxxxx		
	xxxxxx		Xxxxxx

BALANCE SHEET

The second point of final accounts is the preparation of balance sheet. It is prepared often in the trading and profit, loss accounts have been compiled and closed. A balance sheet may be considered as a statement of the financial position of the concern at a given date.

DEFINITION: A balance sheet is an item wise list of assets, liabilities and proprietorship of a business at a certain state.

J.R.botliboi: A balance sheet is a statement with a view to measure exact financial position of a business at a particular date.

Thus, 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 the capital are shown. On the right-hand side all the assets are shown. Therefore, the two sides of the balance sheet should be equal. Otherwise, there is an error somewhere.

BALANCE SHEET OF AS ON

Liabilities and capital	Amount	Assets	Amount
Creditors Bills payable	Xxxx	Cash in hand	Xxxx
Bank overdraft	Xxxx	Cash at bank	Xxxx
Loans	Xxxx	Bills receivable	Xxxx
Mortgage	Xxxx	Debtors	Xxxx
Reserve fund	Xxxx	Closing stock	Xxxx
Capital xxxxxx		Investments	Xxxx
<u>Add:</u>		Furniture and fittings	Xxxx
Net Profit xxxx		Plats&machinery	
-----		Land & buildings	Xxxx
xxxxxxx		Patents, tm ,copyrights	Xxxx
-----		Goodwill	Xxxx
<u>Less:</u>		Prepaid expenses	
Drawings xxxx	Xxxx	Outstanding incomes	Xxxx
-----			Xxxx
	XXXX		XXXX

Advantages: The following are the advantages of final balance .

1. It helps in checking the arithmetical accuracy of books of accounts.
2. It helps in the preparation of financial statements.
3. It helps in detecting errors.
4. It serves as an instrument for carrying out the job of rectification of entries.
5. It is possible to find out the balances of various accounts at one place.

FINAL ACCOUNTS -- ADJUSTMENTS

We know that business is a going concern. It has to be carried on indefinitely. At the end of every accounting year. The trader prepares the trading and profit and loss account and balance sheet. While preparing these financial statements, sometimes the trader may come across certain problems .The expenses of the current year may be still payable or the expenses of the next year have been prepaid during the current year. In the same way, the income of the current year still receivable and the income of the next year have been received during the current year. Without these adjustments, the profit figures arrived at or the financial position of the concern may not be correct. As such these adjustments are to be made while preparing the final accounts.

The adjustments to be made to final accounts will be given under the Trial Balance. While making the adjustment in the final accounts, the student should remember that “every adjustment is to be made in the final accounts twice i.e. once in trading, profit and loss account and later in balance sheet generally”. The following are some of the important adjustments to be made at the time of preparing of final accounts:-

1. CLOSING STOCK :-

(i) If closing stock is given in Trail Balance: It should be shown only in the balance sheet “Assets Side”.

(ii) If closing stock is given as adjustment :

1. First, it should be posted at the credit side of “Trading Account”.
2. Next, shown at the asset side of the “Balance Sheet”.

2. OUTSTANDING EXPENSES :-

(i) If outstanding expenses given in Trail Balance: It should be only on the liability side of Balance Sheet.

(ii) If outstanding expenses given as adjustment :

1. First, it should be added to the concerned expense at the debit side of profit and loss account or Trading Account.
2. Next, it should be added at the liabilities side of the Balance Sheet.

3. PREPAID EXPENSES :-

(i) If prepaid expenses given in Trial Balance: It should be shown only in assets side of the Balance Sheet.

(ii) If prepaid expense given as adjustment :

1. First, it should be deducted from the concerned expenses at the debit side of profit and loss account or Trading Account.
2. Next, it should be shown at the assets side of the Balance Sheet.

4. INCOME EARNED BUT NOT RECEIVED [OR] OUTSTANDING INCOME [OR] ACCURED INCOME :-

(i) If incomes given in Trial Balance: It should be shown only on the assets side of the Balance Sheet.

(ii) If incomes outstanding given as adjustment:

1. First, it should be added to the concerned income at the credit side of profit and loss account.
2. Next, it should be shown at the assets side of the Balance sheet.

5. INCOME RECEIVED IN ADVANCE: UNEARNED INCOME:-

(i) If unearned incomes given in Trail Balance : It should be shown only on the liabilities side of the Balance Sheet.

(ii) If unearned income given as adjustment :

1. First, it should be deducted from the concerned income in the credit side of the profit and loss account.
2. Secondly, it should be shown in the liabilities side of the Balance Sheet.

6. DEPRECIATION:-

(i) If Depreciation given in Trail Balance: It should be shown only on the debit side of the profit and loss account.

(ii) If Depreciation given as adjustment

1. First, it should be shown on the debit side of the profit and loss account.
2. Secondly, it should be deducted from the concerned asset in the Balance sheet assets side.

7. INTEREST ON LOAN [OR] CAPITAL :-

(i) If interest on loan (or) capital given in Trail balance :It should be shown only on debit side of the profit and loss account.

(ii) If interest on loan (or) capital given as adjustment :

1. First, it should be shown on debit side of the profit and loss account.
2. Secondly, it should added to the loan or capital inthe liabilities side of the Balance Sheet.

8. BAD DEBTS:-

(i) If bad debts given in Trail balance :It should be shown on the debit side of the profit and loss account.

(ii) If bad debts given as adjustment:

1. First, it should be shown on the debit side of the profit and loss account.
2. Secondly, it should be deducted from debtors in the assets side of the Balance Sheet.

9. INTEREST ON DRAWINGS :-

(i) If interest on drawings given in Trail balance: It should be shown on the credit side of the profit and loss account.

(ii) If interest on drawings given as adjustments :

1. First, it should be shown on the credit side of the profit and loss account.

2. Secondly, it should be deducted from capital on liabilities side of the Balance Sheet.

10. INTEREST ON INVESTMENTS :-

(i) If interest on the investments given in Trail balance :It should be shown on the credit side of the profit and loss account.

(ii) If interest on investments given as adjustments :

1. First, it should be shown on the credit side of the profit and loss account.
2. Secondly, it should be added to the investments on assets side of the Balance Sheet.

FINANCIAL ANALYSIS THROUGH RATIOS

Ratio Analysis

Absolute figures are valuable but they standing alone convey no meaning unless compared with another.

Accounting ratio show inter-relationships which exist among various accounting data. When relationships among various accounting data supplied by financial statements are worked out, they are known as accounting ratios.

Accounting ratios can be expressed in various ways such as:

1. a pure ratio says ratio of current assets to current liabilities is 2:1 or
2. a rate say current assets are two times of current liabilities or
3. a percentage say current assets are 200% of current liabilities.

Each method of expression has a distinct advantage over the other the analyst will selected that mode which will best suit his convenience and purpose.

Uses or Advantages or Importance of Ratio Analysis

Ratio Analysis stands for the process of determining and presenting the relationship of items and groups of items in the financial statements. It is an important technique of financial analysis. It is a way by which financial stability and health of a concern can be judged. The following are the main uses of Ratio analysis:

- (i) **Useful in financial position analysis:** Accounting reveals the financial position of the concern. This helps banks, insurance companies and other financial institution in lending and making investment decisions.
- (ii) **Useful in simplifying accounting figures:** Accounting ratios simplify, summaries and systematic the accounting figures in order to make them more understandable and in lucid form.
- (iii) **Useful in assessing the operational efficiency:** Accounting ratios helps to have an idea of the working of a concern. The efficiency of the firm becomes evident when analysis is based on accounting ratio. This helps the management to assess financial requirements and the capabilities of various business units.
- (iv) **Useful in forecasting purposes:** If accounting ratios are calculated for number of years, then a trend is established. This trend helps in setting up future plans and forecasting.
- (v) **Useful in locating the weak spots of the business:** Accounting ratios are of great assistance in locating the weak spots in the business even through the overall performance may be efficient.
- (vi) **Useful in comparison of performance:** Managers are usually interested to know which department performance is good and for that he compare one department with the another department of the same firm. Ratios also help him to make any change in the organization structure.

Limitations of Ratio Analysis:

These limitations should be kept in mind while making use of ratio analyses for interpreting the financial statements. The following are the main limitations of ratio analysis.

1. **False results if based on incorrect accounting data:** Accounting ratios can be correct only if the data (on which they are based) is correct. Sometimes, the information given in the financial statements is affected by window dressing, i. e. showing position better than what actually is.
2. **No idea of probable happenings in future:** Ratios are an attempt to make an analysis of the past financial statements so they are historical documents. Now-a-days keeping in view the complexities of the business, it is important to have an idea of the probable happenings in future.

3. **Variation in accounting methods:** The two firms results are comparable with the help of accounting ratios only if they follow the some accounting methods or bases. Comparison will become difficult if the two concerns follow the different methods of providing depreciation or valuing stock.
4. **Price level change:** Change in price levels make comparison for various years difficult.
5. **Only one method of analysis:** Ratio analysis is only a beginning and gives just a fraction of information needed for decision-making so, to have a comprehensive analysis of financial statements, ratios should be used along with other methods of analysis.
6. **No common standards:** It is very difficult to by down a common standard for comparison because circumstances differ from concern to concern and the nature of each industry is different.
7. **Different meanings assigned to the some term:** Different firms, in order to calculate ratio may assign different meanings. This may affect the calculation of ratio in different firms and such ratio when used for comparison may lead to wrong conclusions.
8. **Ignores qualitative factors:** Accounting ratios are tools of quantitative analysis only. But sometimes qualitative factors may surmount the quantitative aspects. The calculations derived from the ratio analysis under such circumstances may get distorted.
9. **No use if ratios are worked out for insignificant and unrelated figure:** Accounting ratios should be calculated on the basis of cause and effect relationship. One should be clear as to what cause is and what effect is before calculating a ratio between two figures.

Ratio Analysis: Ratio is an expression of one number is relation to another. It is one of the methods of analyzing financial statement. Ratio analysis facilities the presentation of the information of the financial statements in simplified and summarized form. Ratio is a measuring of two numerical positions. It expresses the relation between two numeric figures. It can be found by dividing one figure by another ratios are expressed in three ways.

1. Proportionate method
2. Ratio Method
3. Percentage Method

Classification of ratios: All the ratios broadly classified into four types due to the interest of different parties for different purposes. They are:

1. Profitability ratios
2. Turn over ratios
3. Financial ratios
4. Leverage ratios

1. **Profitability ratios:** These ratios are calculated to understand the profit positions of the business. These ratios measure the profit earning capacity of an enterprise. These ratios can be related its save or capital to a certain margin on sales or profitability of capital employ. These ratios are of interest to management. Who are responsible for success and growth of enterprise? Owners as well as financiers are interested in profitability ratios as these reflect ability of enterprises to generate return on capital employ important profitability ratios are:

2. Turn over ratios or Activity ratios or Performance Ratio:

These ratios measure how efficiency the enterprise employees the resources of assets at its command. They indicate the performance of the business. The performance if an enterprise is judged with its save. It means ratios are also laced efficiency ratios.

3. Financial ratios or liquidity ratios:

Liquidity refers to ability of organisation to meet its current obligation. These ratios are used to measure the financial status of an organisation. These ratios help to the management to make the decisions about the maintained level of current assets & current libraries of the business. The main purpose to calculate these ratios is to know the short terms solvency of the concern. These ratios are useful to various parties having interest in the enterprise over a short period — such parties include banks. Lenders, suppliers, employees and other.

The liquidity ratios assess the capacity of the company to repay its short term liabilities. These ratios are

calculated in ratio method.

UNIT- V

CAPITAL AND CAPITAL BUDGETING

Introduction

Finance is the prerequisite to commence and vary on business. It is rightly said to be the lifeblood of the business. No growth and expansion of business can take place without sufficient finance. It shows that no business activity is possible without finance. This is why; every business has to make plans regarding acquisition and utilization of funds.

However efficient a firm may be in terms of production as well as marketing if it ignores the proper management of flow of funds it certainly lands in financial crunch and the very survival of the firm would be at a stake.

Explain the different sources of raising finance for corporate sector?

In case of proprietorship business, the individual proprietor generally invests his own savings to start with, and may borrow money on his personal security or the security of his assets from others. Similarly, the capital of a partnership firm consists partly of funds contributed by the partners and partly of borrowed funds. But the company form of organization enables the promoters to raise necessary funds from the public who may contribute capital and become members (shareholders) of the company. In course of its business, the company can raise loans directly from banks and financial institutions or by issue of securities (debentures) to the public. Besides, profits earned may also be reinvested instead of being distributed as dividend to the shareholders.

Source of Company Finance

Based upon the time, the financial resources may be classified into (1) sources of long term (2) sources of short – term finance. Some of these sources also serve the purpose of medium – term finance.

I. The source of long – term finance are:

Issue of shares
Issue debentures
Loan from financial institutions
Retained profits and
Public deposits

II. Sources of Short-term Finance are:

Trade credit
Bank loans and advances and
Short-term loans from finance companies.

What is working capital ? Explain the factors governing working capital requirements. Illustrate

Finance is required for two purpose viz. for its establishment and to carry out the day-to-day operations of a business. Funds are required to purchase the fixed assets such as plant, machinery, land, building, furniture, etc, on long-term basis. Investments in these assets represent that part of firm's capital, which is blocked on a permanent or fixed basis and is called fixed capital. Funds are also needed for short-term purposes such as the purchase of raw materials, payment of wages and other day-to-day expenses, etc. and these funds are known as working capital.

Factors determining the working capital requirements

There are a large number of factors such as the nature and size of business, the character of their operations, the length of production cycle, the rate of stock turnover and the state of economic situation etc. that decide requirement of working capital. These factors have different importance and influence on firm differently. In general following factors generally influence the working capital requirements.

Nature or character of business
Size of business or scale of operations
Production policy
Manufacturing process/Length of production cycle
Seasonal variations
Working capital cycle
Credit policy
Business cycles
Rate of growth of business

Components of working capital and working capital cycle. Importance of Working capital?

Working capital cycle= inventory days+ Receivable days –payable days

There are two components of working capital:

Gross working capital- gross working capital refers to the capital invested in total current assets of the enterprise.

In the broader sense, the term working capital refers to the gross working capital. The notion of the gross working capital refers to the capital invested in total current assets of the enterprise. Current assets are those assets, which in the ordinary course of business, can be converted into cash within a short period, normally one accounting year.

Examples of current assets:

Cash in hand and bank balance
Bills receivables or Accounts Receivables
Sundry Debtors (less provision for bad debts)
Short-term loans and advances.
Inventories of stocks, such as:
Raw materials
Work – in process
Stores and spares
Finished goods
Temporary Investments of surplus funds.
Prepaid Expenses
Accrued Incomes etc.

Net working capital- Networking capital represents the excess of current assets over current liabilities.

In a narrow sense, the term working capital refers to the net working capital. Networking capital represents the excess of current assets over current liabilities.

Current liabilities are those liabilities, which are intend to be paid in the ordinary course of business within a short period, normally one accounting year out of the current assets or the income of the business. Net working capital may be positive or negative. When the current assets exceed the current liabilities net working capital is positive and the negative net working capital results when the liabilities are more then the current assets.

Examples of current liabilities:

Bills payable
Sundry Creditors or Accounts Payable.
Accrued or Outstanding Expanses.
Short term loans, advances and deposits.
Dividends payable
Bank overdraft
Provision for taxation etc

IMPORTANCE OF Working Capital:

Working capital is refereed to be the lifeblood and nerve center of a business. Working capital is as essential to maintain the smooth functioning of a business as blood circulation in a human body. No business can run successfully with out an adequate amount of working capital. The main advantages of maintaining adequate amount of working capital are as follows:

- a. **Solvency of the business:** Adequate working capital helps in maintaining solvency of the business by providing uninterrupted flow of production.
- b. **Good will:** Sufficient working capital enables a business concern to make prompt payment and hence helps in creating and maintaining good will.
- c. **Easy loans:** A concern having adequate working capital, high solvency and good credit standing can arrange loans from banks and others on easy and favorable terms.
- d. **Cash Discounts:** Adequate working capital also enables a concern to avail cash discounts on the purchases and hence it reduces costs.
- e. **Regular supply of raw materials:** Sufficient working capital ensures regular supply of raw materials and continuous production.
- f. **Regular payments of salaries wages and other day to day commitments:** A company which has ample working capital can make regular payment of salaries, wages and other day to day commitments which raises the morale of its employees, increases their efficiency, reduces wastage and cost and enhances production and profits.
- g. **Exploitation of favorable market conditions:** The concerns with adequate working capital only can exploit favorable market conditions such as purchasing its requirements in bulk when the prices are lower.
- h. **Ability to face crisis:** Adequate working capital enables a concern to face business crisis in emergencies.
- i. **Quick and regular return on Investments:** Every investor wants a quick and regular return on his investment. Sufficiency of working capital enables a concern to pay quick and regular dividends to its investors, as there may not be much pressure to plough back profits. This gains the confidence of its investors and creates a favorable market to raise additional funds in the future.
- j. **High morale:** Adequacy of working capital creates an environment of security, confidence, and high morale and creates overall efficiency in a business. Every business concern should have adequate working capital to run its business operations.

The need or objectives of working capital

The need for working capital arises mainly due to the time gap between production and realization of cash. The process of production and sale cannot be done instantaneously and hence the firm needs to hold the current assets to fill-up the time gaps. There are time gaps in purchase of raw materials and production; production and sales: and sales and realization of cash. The working capital is needed mainly for the following purposes:

- J)** For the purchase of raw materials.
- K)** To pay wages, salaries and other day-to-day expenses and overhead cost such as fuel, power and office expenses, etc.
- L)** To meet the selling expenses such as packing, advertising, etc.
- M)** To provide credit facilities to the customers and
- N)** To maintain the inventories of raw materials, work-in-progress, stores and spares and finishes stock etc.

Factors determining the working capital requirements

There are a large number of factors such as the nature and size of business, the character of their operations, the length of production cycle, the rate of stock turnover and the state of economic situation etc. that decide requirement of working capital. These factors have different importance and influence on firm differently. In general following factors generally influence the working capital requirements.

- i. Nature or character of business:** The working capital requirements of a firm basically depend upon the nature of its business. Public utility undertakings like electricity, water supply and railways need very limited working capital as their sales are on cash and are engaged in provision of services only. On the other hand, trading firms require more investment in inventories, receivables and cash and such they need large amount of working capital. The manufacturing undertakings also require sizable working capital.
- j. Size of business or scale of operations:** The working capital requirements of a concern are directly influenced by the size of its business, which may be measured in terms of scale of operations. Greater the size of a business unit, generally, larger will be the requirements of working capital. However, in some cases, even a smaller concern may need more working capital due to high overhead charges, inefficient use of available resources and other economic disadvantages of small size.
- k. Production policy:** If the demand for a given product is subject to wide fluctuations due to seasonal variations, the requirements of working capital, in such cases, depend upon the production policy. The production could be kept either steady by accumulating inventories during slack periods with a view to meet high demand during the peak season or the production could be curtailed during the slack season and increased during the peak season. If the policy is to keep the production steady by accumulating inventories it will require higher working capital.
- l. Manufacturing process/Length of production cycle:** In manufacturing business, the requirements of working capital will be in direct proportion to the length of manufacturing process. Longer the process period of manufacture, larger is the amount of working capital required, as the raw materials and other supplies have to be carried for a longer period.
- m. Seasonal variations:** If the raw material availability is seasonal, they have to be bought in bulk during the season to ensure an uninterrupted material for the production. A huge amount is, thus, blocked in the form of material, inventories during such season, which give rise to more working capital requirements. Generally, during the busy season, a firm requires larger working capital than in the slack season.
- n. Working capital cycle:** In a manufacturing concern, the working capital cycle starts with the purchase of raw material and ends with the realization of cash from the sale of finished products. This cycle involves purchase of raw materials and stores, its conversion into stocks of finished goods through work-in progress with progressive increment of labour and service costs, conversion of finished stock into sales, debtors and receivables and ultimately realization of cash. This cycle continues again from cash to purchase of raw materials and so on. In general the longer the operating cycle, the larger the requirement of working capital.
- o. Credit policy:** The credit policy of a concern in its dealings with debtors and creditors influences considerably the requirements of working capital. A concern that purchases its requirements on credit requires lesser amount of working capital compared to the firm, which buys on cash. On the other hand, a concern allowing credit to its customers shall need larger amount of working capital compared to a firm selling only on cash.
- p. Business cycles:** Business cycle refers to alternate expansion and contraction in general business activity. In a period of boom, i.e., when the business is prosperous, there is a need for larger amount of working capital due to increase in sales. On the contrary, in the times of depression, i.e., when there is a down swing of the cycle, the business contracts, sales decline, difficulties are faced in collection from debtors and firms may have to hold large amount of working capital.
- q. Rate of growth of business:** The working capital requirements of a concern increase with the growth and expansion of its business activities. The retained profits may provide for a part of working capital but the fast growing concerns need larger amount of working capital than the amount of undistributed profits.

Capital budgeting Techniques:

The capital budgeting appraisal methods are techniques of evaluation of investment proposal will help the company to decide upon the desirability of an investment proposal depending upon their; relative income generating capacity and rank them in order of their desirability. These methods provide the company a set of norms on the basis of which either it has to accept or reject the investment proposal. The most widely accepted techniques used in estimating the cost-returns of investment projects can be grouped under two categories.

- m. Traditional methods
- n. Discounted Cash flow methods

1. Traditional methods: These methods are based on the principles to determine the desirability of an investment project on the basis of its useful life and expected returns. These methods depend upon the accounting information available from the books of accounts of the company. These will not take into account the concept of 'time value of money', which is a significant factor to determine the desirability of a project in terms of present value.

a. Payback period method

It is the most popular and widely recognized traditional method of evaluating the investment proposals. It can be defined, as 'the number of years required to recover the original cash out lay invested in a project'.

According to Weston & Brigham, “The pay back period is the number of years it takes the firm to recover its original investment by net returns before depreciation, but after taxes”.

According to James. C. Vanhorne, “The payback period is the number of years required to recover initial cash investment. The pay back period is also called payout or payoff period. This period is calculated by dividing the cost of the project by the annual earnings after tax but before depreciation under this method the projects are ranked on the basis of the length of the payback period. A project with the shortest payback period will be given the highest rank and taken as the best investment. The shorter the payback period, the less risky the investment is the formula for payback period is

$$\text{Pay-back period} = \frac{\text{Cash outlay (or) original cost of project}}{\text{Annual cash inflow}}$$

Merits:

1. It is one of the earliest methods of evaluating the investment projects.
2. It is simple to understand and to compute.
 - o. It dose not involve any cost for computation of the payback period
 - p. It is one of the widely used methods in small scale industry sector
 - q. It can be computed on the basis of accounting information available from the books.

Demerits:

14. This method fails to take into account the cash flows received by the company after the pay back period.
15. It doesn't take into account the interest factor involved in an investment outlay.
16. It doesn't take into account the interest factor involved in an investment outlay.
17. It is not consistent with the objective of maximizing the market value of the company's share.
5. It fails to consider the pattern of cash inflows i. e., the magnitude and timing of cash in flows.

B. Accounting (or) Average rate of return method (ARR): It is an accounting method, which uses the accounting information repeated by the financial statements to measure the probability of an investment proposal. It can be determine by dividing the average income after taxes by the average investment i.e., the average book value after depreciation.

According to 'Soloman', accounting rate of return on an investment can be calculated as the ratio of accounting net income to the initial investment, i.e.,

$$\text{ARR} = \frac{\text{Average net income after taxes}}{\text{Average Investment}} \times 100$$

$$\text{Average net income after taxes} = \frac{\text{Total Income after Taxes}}{\text{No. Of Years}}$$

$$\text{Average investment} = \frac{\text{Total Investment}}{2}$$

On the basis of this method, the company can select all those projects who's ARR is higher than the minimum rate established by the company. It can reject the projects with an ARR lower than the expected rate of return. This method can also help the management to rank the proposal on the basis of ARR. A highest rank will be given to a project with highest ARR, where as a lowest rank to a project with lowest ARR.

Merits:

- It is very simple to understand and calculate.
- q. It can be readily computed with the help of the available accounting data.
 - r. It uses the entire stream of earning to calculate the ARR.

Demerits:

- k. It is not based on cash flows generated by a project.
- l. This method does not consider the objective of wealth maximization
- m. IT ignores the length of the projects useful life.
- n. It does not take into account the fact that the profits can be re-invested.

II: Discounted cash flow methods:

The traditional method does not take into consideration the time value of money. They give equal weight age to the present and future flow of incomes. The DCF methods are based on the concept that a rupee earned today is more worth than a rupee earned tomorrow. These methods take into consideration the profitability and also time value of money.

A. Net present value method (NPV)

The NPV takes into consideration the time value of money. The cash flows of different years and valued differently and made comparable in terms of present values for this the net cash inflows of various period are discounted using required rate of return which is predetermined.

According to Ezra Solomon, “It is a present value of future returns, discounted at the required rate of return minus the present value of the cost of the investment.”

NPV is the difference between the present value of cash inflows of a project and the initial cost of the project.

Accordinging the NPV technique, only one project will be selected whose NPV is positive or above zero. If a project(s) NPV is less than 'Zero'. It gives negative NPV hence. It must be rejected. If there are more than one project with positive NPV's the project is selected whose NPV is the highest.

The formula for NPV is

NPV= Present value of cash inflows – investment.

$$NPV = \frac{C_1}{(1+K)} + \frac{C_2}{(1+K)^2} + \frac{C_3}{(1+K)^3} + \dots + \frac{C_n}{(1+K)^n} - Co$$

Co- investment

C1, C2, C3... Cn= cash inflows in different years. K= Cost of the Capital (or) Discounting rate D= Years.

Merits:

- j.* It recognizes the time value of money.
- k.* It is based on the entire cash flows generated during the useful life of the asset.
- l.* It is consistent with the objective of maximization of wealth of the owners.
- m.* The ranking of projects is independent of the discount rate used for determining the present value.

Demerits:

- 17) It is different to understand and use.
- 18) The NPV is calculated by using the cost of capital as a discount rate. But the concept of cost of capital. If self is difficult to understood and determine.
- 19) It does not give solutions when the comparable projects are involved in different amounts of investment.
- 20) It does not give correct answer to a question whether alternative projects or limited funds are available with unequal lines.

B. Internal Rate of Return Method (IRR)

The IRR for an investment proposal is that discount rate which equates the present value of cash inflows with the present value of cash out flows of an investment. The IRR is also known as cutoff or handle rate. It is usually the concern's cost of capital.

According to Weston and Brigham "The internal rate is the interest rate that equates the present value of the expected future receipts to the cost of the investment outlay.

When compared the IRR with the required rate of return (RRR), if the IRR is more than RRR then the project is accepted else rejected. In case of more than one project with IRR more than RRR, the one, which gives the highest IRR, is selected.

The IRR is not a predetermine rate, rather it is to be trial and error method. It implies that one has to start with a discounting rate to calculate the present value of cash inflows. If the obtained present value is higher than the initial cost of the project one has to try with a higher rate. Like wise if the present value of expected cash inflows obtained is lower than the present value of cash flow. Lower rate is to be taken up. The process is continued till the net present value becomes Zero. As this discount rate is determined internally, this method is called internal rate of return method.

$$IRR = L + \frac{P_1 - Q}{P_1 - P_2} \times D$$

L- Lower discount rate

P1 - Present value of cash inflows at lower rate.

P2 - Present value of cash inflows at higher rate.

Q- Actual investment

D- Difference in Discount rates.

Merits:

- 9. It consider the time value of money
- 10. It takes into account the cash flows over the entire useful life of the asset.
- 11. It has a psychological appear to the user because when the highest rate of return projects are selected, it satisfies the investors in terms of the rate of return an capital
- 12. It always suggests accepting to projects with maximum rate of return.
- 13. It is inconformity with the firm's objective of maximum owner's welfare.

Demerits:

- b. It is very difficult to understand and use.
- c. It involves a very complicated computational work.
- d. It may not give unique answer in all situations.

C. Probability Index Method (PI)

The method is also called benefit cost ratio. This method is obtained through a slight modification of the NPV method. In case of NPV the present value of cash outflows are profitably index (PI), the present value of cash inflows are divided by the present value of cash outflows, while NPV is an absolute measure, the PI is a relative measure.

If the PI is more than one (>1), the proposal is accepted else rejected. If there are more than one investment proposal with the more than one PI the one with the highest PI will be selected. This method is more useful in case of projects with different cash outlays and hence is superior to the NPV method.

