

UNIT-I

INTRODUCTION AND DEMAND ANALYSIS

INTRODUCTION TO MANAGERIAL ECONOMICS

Micro Economics

- The study of an individual consumer or a firm is called Micro Economics. It is also called the theory of Firm.
- Micro means one millionth. Micro Economics deals with behaviour and problems of single individual and of micro organisation.

Managerial Economics

- Managerial Economics has its roots in micro economics and it deals with the micro or individual enterprises.
- It is concerned with the application of concepts such as Price Theory, Law of Demand and Theories of market structure and so on.

Definitions of Managerial Economics

M.H.SPENCER AND L. SIEGELMAN

➤ Managerial Economics defined as “the integration of economic theory with business practice for the purpose of facilitating decision making and forward planning by management”.

BRIGHAM AND PAPPAS believe that managerial economics is “the application of economic theory and methodology to business administration practice”.

C.I.SAVAGE AND T.R.SMALL therefore believes that managerial economics is concerned with business efficiency.

Nature of Managerial Economics

1. Close to micro economics

- Managerial Economics is concerned with finding the solutions for different managerial problems of a particular firm.
- Thus it is more close to micro economics.

2. Operates against the backdrop of Macro Economics

- The macro economic conditions of the economy are also seen as limiting factors for the firm to operate.
 - In other words, the managerial economics has to be aware of the limits set by the macro economic conditions such as government industrial policy, Inflation and so on

3. Normative Statements

- A Normative Statement usually includes or implies the words 'ought' or 'should'.
- They reflect people's moral attitudes and expressions of what a team of people ought to do.
- For instance, it deals with statements such as 'Government of India should open up the economy ' such statements are based on value judgements and express views of what is 'good' or 'bad' , 'right' or 'wrong' .
- One problem with normative statements is that they cannot be verified by looking at the facts, because they mostly deal with the future.
- Disagreements about such statements are usually settled by voting on them.

➤ 4. Prescriptive Actions

- Prescriptive action is goal oriented . Given a problem and the objectives of the firm , it suggests the course of action from the available alternatives for optimum solution.
- It does not merely mention the concept , it also explains whether the concept can be applied in a given context or not.
- For instance, the fact that variable costs or managerial costs can be used to judge the feasibility of an export order.

5. Applied in Nature

- Models are built to reflect the real life complex business situations and these models are of immense help to managers for decision making.
- The different areas where models are extensively used include inventory control, optimisation, project management etc.
- In managerial economics, we also employ case study method to conceptualise the problem , identify the alternatives and determine the best course of action.

6. Offers Scope to Evaluate each alternative

- Managerial economics provides an opportunity to evaluate each alternative in terms of its costs and revenues.
- The managerial economist can decide which is the better alternative to maximise the profits for the firm.

7. Interdisciplinary

➤ The content, tools and techniques of managerial economics are drawn from different subjects such as economics, management, mathematics, statistics, accountancy, psychology, organisational behaviour, sociology etc.

8. Assumptions and Limitations

➤ Every concept and theory of managerial economics is based on certain assumptions and as such their validity is not universal.

➤ where there is change in assumptions , the theory may not hold good at all.

SCOPE OF MANAGERIAL ECONOMICS

- **The scope of managerial economics refers its area of study.**
- **Managerial economics is primarily concerned with the application of economic principles and theories to five types of resource decisions made by all types of business organizations.**
 - 1. The selection of product or service to be produced.**
 - 2. The choice of production methods and resource combinations.**
 - 3. The determination of the best price and quantity combination.**
 - 4. Promotional strategy and activities.**
 - 5. The selection of the location from which to produce and sell goods or services to consumer.**

Unit-II: THEORY OF DEMAND

DEMAND:

“ Demand in economics means demand backed up by enough money to pay for the goods demanded”.

This means that the demand becomes effective only if it is backed by purchasing power in addition to this there must be willingness to buy a commodity.

Thus demand in economics means the desire backed by the willingness to buy a commodity and the purchasing power to pay.

DEFINITIONS OF LAW OF DEMAND

2. In the words of SAMUELSON

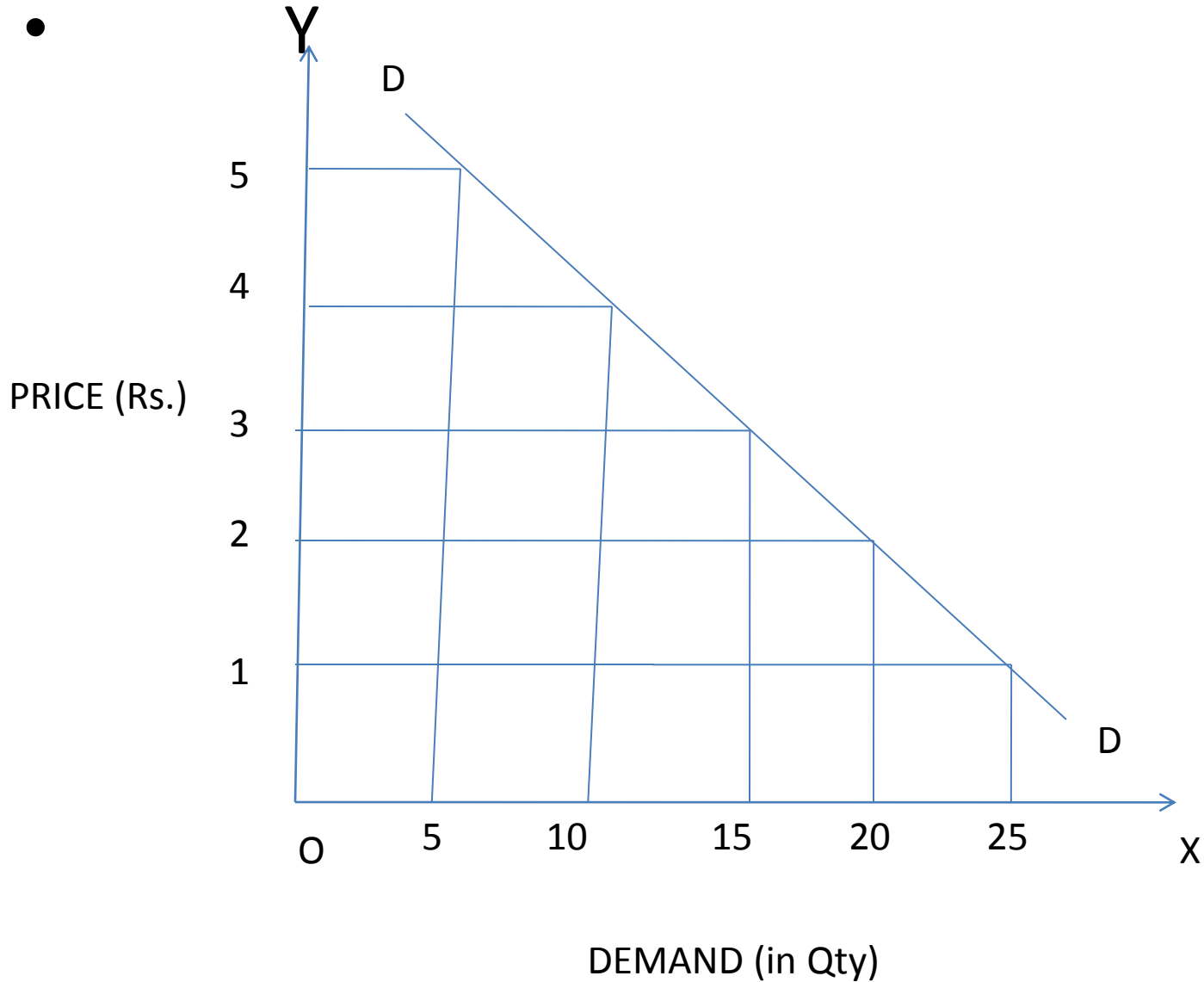
the Law of Demand may be stated as

“Other things being equal, the quantity demanded increases with a fall in price and decreases with a rise in price.”

.Law of Demand

A rise in the price of a commodity is followed by a fall in demand and a fall in price is followed by a rise in demand, if a condition of demand remains constant.

DEMAND CURVE

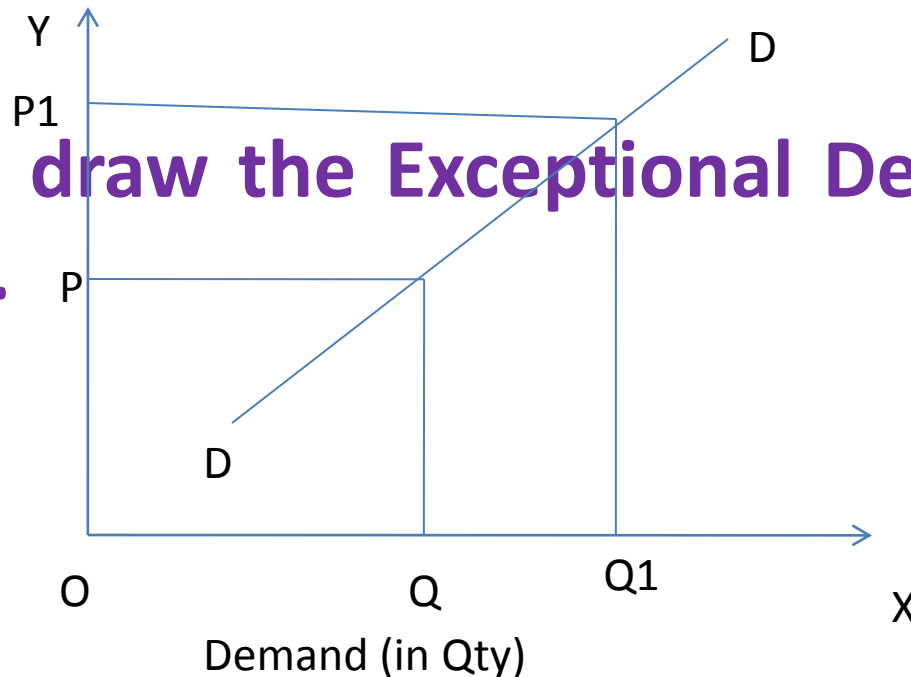


The Assumptions of Law of Demand

- Law of Demand is based on the following assumptions. The Law will hold good only if the following assumptions are fulfilled.
 1. That the tastes and fashions of the people remain unchanged.
 2. That the people's income remains unchanged / constant.
 3. That the prices of related goods remain unchanged / same.
 4. That there are no substitutes for the commodity in the market.
 5. That the commodity is not the one which has prestige value such as diamonds etc.
 6. That the demand for the commodity should be continuous.
 7. That the people should not expect any change in the price of the commodity.

Exceptions to the Law of Demand

- Some times in case of some commodities demand curve slopes upwards from left to right.
- It shows that when price rises demand also rises and when price falls demand also falls.
- In this case the demand curve has a positive slope.



- We can draw the Exceptional Demand Curve as follows.

SIGNIFICANCE OF THE LAW OF DEMAND

- 1. The law of demand is the primary law in consumption theory in Economics.**
- 2. It indicates the consumer behaviour for a given change in the variables in the study.**
- 3. Despite the assumption that other things remaining same, the results of the law of demand are time tested and have been the basis for further decisions relating to costs, output, investment appraisals and so on. This provides the basis for analysis of other economic law**

DEFINITIONS OF ELASTICITY OF DEMAND

➤ **In the words of Alfred Marshall,**

“ The elasticity of demand in a market is great or small according to 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”.

TYPES OF ELASTICITY OF DEMAND

➤ There are three types of elasticity of demand. They are

I. PRICE ELASTICITY OF DEMAND

II. INCOME ELASTICITY OF DEMAND

III. CROSS ELASTICITY OF DEMAND

I. PRICE ELASTICITY OF DEMAND:

- Marshall was the first economist to define price elasticity of demand.
- Price elasticity of demand measures changes in quantity demanded to a change in price.
- It is the ratio of percentage of change in demand to percentage of change in price.

I. KINDS OF PRICE ELASTICITY OF DEMAND

➤ There are five types of price elasticity of demand.

➤ They are

- 1. Perfectly elastic demand**
- 2. Perfectly inelastic demand**
- 3. Relatively elastic demand**
- 4. Relatively inelastic demand**
- 5. Unit elasticity of demand**

METHODS OF DEMAND FORECASTING

I. survey methods:

1. Surveys of Buyers Intentions

A. Census method B. Sample Method

2. Survey of Sales Force

II. Statistical Methods

1. Trend projection method

2. Barometric techniques

3. Correlation and Regression Methods

4. Simultaneous Equation method

III. Other Methods:

1. Expert opinion method

2. Test Marketing

3. controlled experiments

4. Judgemental Approach

UNIT-II

PRODUCTION AND COST ANALYSIS

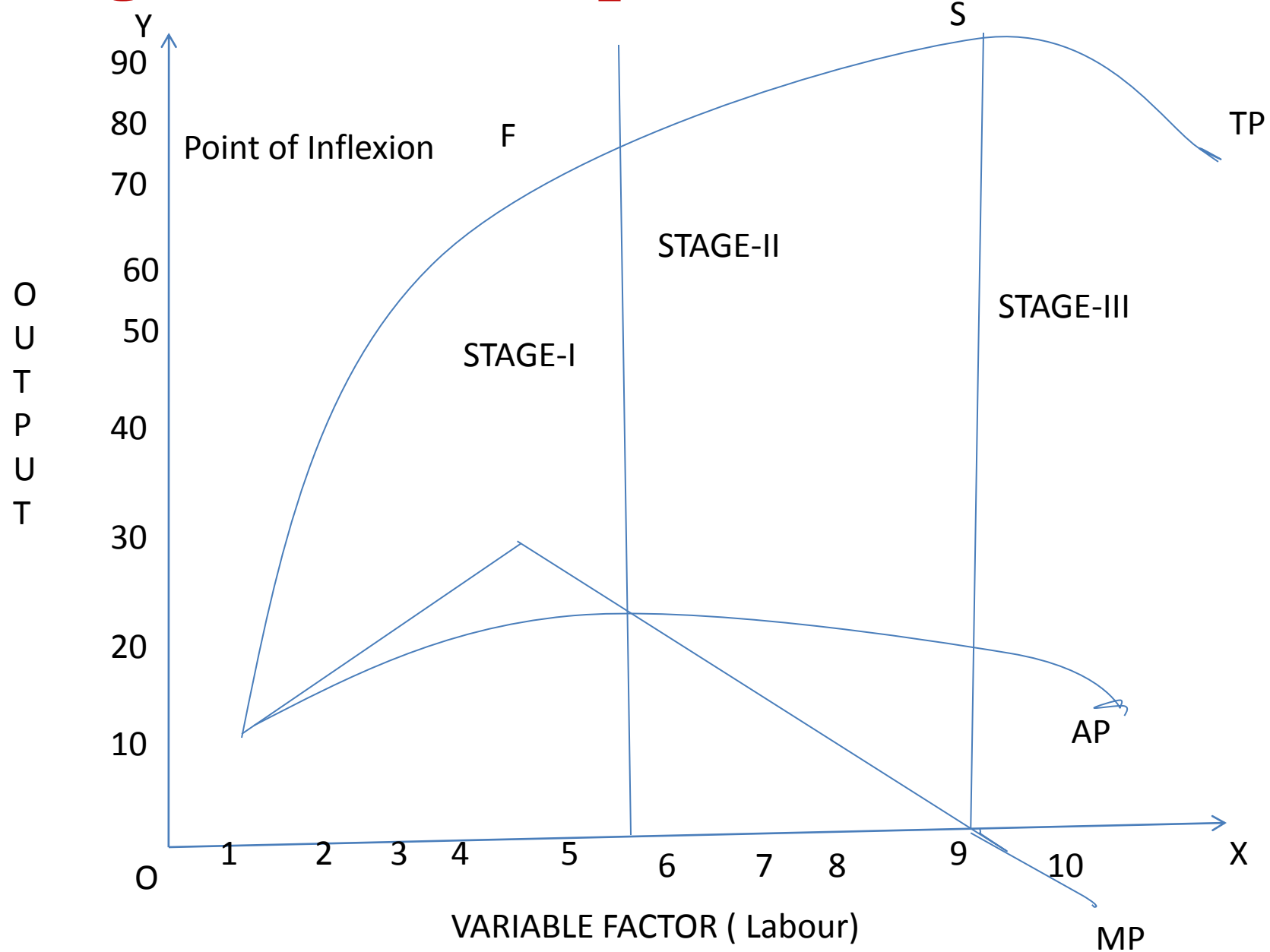
PRODUCTION FUNCTION

➤ 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 output 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.

• Diagrammatic Representation of Law



ISOQUANTS

➤ The term isoquants is derived from the words 'iso' and 'quant'. Iso means equal and quant implies quantity. Isoquant means that the quantities throughout a given isoquant are equal. Isoquants are also called isoproduct curves. An Isoquant curve shows various combinations of two input factors such as capital and labour. Which yield the same level of output.

➤ A family of iso-quant 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.

➤ Isoquants are the curves, which represent different combinations of inputs producing a particular quantity of output. Any combination on the isoquant represents the same level of output. For a given output level firm's production become, $Q = f(L, K)$ Where Q represents the units of output is a function of the quantity of two inputs L and K.

Thus an isoquant shows all possible combinations of two inputs, which are capable of producing equal or a given level of output. Since each combination yields same output, the producer becomes indifferent towards these combinations.

COBB-DOUGLAS PRODUCTION FUNCTION

- Production function of the linear homogenous type is investigated by Junt Wicksell and tested by C.W.Cobb and P. H.Douglas in 1928.
- This famous statistical production function is known as Cobb-Duglas production function.
- Originally the function is applied on the empirical study of the American manufacturing industry.
- Cobb-Douglas production function takes the mathematical form.

It has the following assumptions:

1. The function assumes that output is the function of two factors viz., capital and labour.
2. It is a linear homogeneous production function of the first degree.
3. The function assumes that the logarithms of the total output of the economy is a linear function of the logarithms of the labour force .
4. There are constant returns to scale.
5. All inputs are homogeneous.
6. There is perfect competition.
7. There is no change in technology.

LAW OF RETURNS TO SCALE

- The law of returns to scale explains the behaviour 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.
- Returns to scale refer to the returns enjoyed by the firm as a result of change in all the outputs.
- It explains the behaviour of the returns when the inputs are changed simultaneously.
- The returns to scale are governed by laws of returns to scale.
- There are three laws of returns governing production function. They are
 1. Law of Increasing Returns to Scale
 2. Law of Constant Returns to Scale
 3. Law of Decreasing Returns to Scale.

ECONOMIES AND DISECONOMIES OF SCALE

- The economies of scale result because of increase in the scale of production.
- Alfred Marshall divides the economies of scale into two groups.
- They are
 - I. INTERNAL ECONOMIES
 - II. EXTERNAL ECONOMIES

➤ **I. INTERNAL ECONOMIES:**

➤ Internal economies refer to the economies in production costs which accrue to the firm alone when it expands its output.

➤ The internal economies occur as a result of increase in the scale of production.

➤ The internal economies may be of the following types:

TYPES OF INTERNAL ECONOMIES:

- 1. Managerial Economies**
- 2. Commercial Economies**
- 3. Financial Economies**
- 4. Technical Economies**
- 5. Marketing Economies**
- 6. Risk-Bearing Economies**
- 7. Indivisibilities and Automated Machinery**
- 8. Economies of Larger Dimension**
- 9. Economies of Research and Development.**

Types of External Economies

1. Economies of Concentration

2. Economies of R&D/

Information

3. Economies of Welfare

4. Economies of Disintegration

Classification of Cost for Managerial Use

The Cost may be classified into eight categories on the basis of managerial Decisions. They are

- 1. Marginal cost**
- 2. Out of pocket costs**
- 3. Differential cost**
- 4. Sunk cost**
- 5. Imputed or notional costs**
- 6. Opportunity cost.**
- 7. Replacement cost.**
- 8. Avoidable and Unavoidable cost**

1. Marginal Cost

- Marginal cost is the total of variable costs i.e., prime cost plus variable overheads.
- It is based on the distinction between fixed and variable costs.
- Fixed costs are ignored and only variable costs are taken into consideration for determining cost of products and value of work-in-progress and finished goods.

2. Out of Pocket Costs

- This is that portion of the costs which involves payment to outsiders i.e., gives rise to each expenditure as opposed to such costs as depreciation, which do not involve any cash expenditure.
- such costs are relevant for price fixation during recession or when make or buy decision is to be made.

3. Differential Cost

- The change in costs due to change in the level of activity or pattern or method of production is known as differential cost.
- If the change increases the cost, it will be called incremental cost.
- If there is decrease in cost resulting from decrease in output, the difference is known as decremental cost.

4. Sunk Cost

- A sunk cost is an irrecoverable cost and is caused by complete abandonment / rejection / leaving of a plant.
- It is written down value of the abandoned plant less its salvage value. Such costs are not relevant for decision-making and are not affected by increase or decrease in volume / size.
- Thus, expenditure which has taken place and is irrecoverable in a situation, is treated as sunk cost.

- For taking managerial decisions with future implications, a sunk cost is an irrelevant cost.
- If a decision has to be made for replacing the existing plant, the book value of the plant less salvage value(if any) will be a sunk cost and will be irrelevant cost for taking decision of the replacement of the existing plant.

5. Imputed Costs or Notional Costs

- Imputed costs or notional costs have the same meaning.
- The American , equivalent term of the British term 'notional cost' is imputed cost.
- These costs are notional in nature and do not involve any cash outlay.
- The Chartered Accountants, London defines notional cost as “ the value of a benefit where no actual cost is incurred.”
- Even though such costs do not involve any cash outlay but are taken into consideration while making managerial decisions.

- **Examples of such costs are: notional / unreal rent charged on business premises owned by the proprietor, interest on capital for which no interest has been paid.**
- **When alternative capital investment projects are being evaluated it is necessary to consider the imputed interest on capital before a decision is arrived as to which is the most profitable project.**

6. Opportunity Cost

- It is the maximum possible alternative earning that might have been earned if the productive capacity or services had been put to some alternative use.
- in simple words, it is the advantage , in measurable terms which has been foregone due to not using the facility in the manner originally planned.
- For example, if an owned building is proposed to be used for a project, the likely rent of building is the opportunity cost which should be taken into consideration while evaluating the profitability of the project.

- Similarly, if the fixed deposit in a bank is withdrawn for financing a new project, the loss of interest on such fixed deposit is the opportunity cost.

7. Replacement Cost

- It is the cost at which there could be purchase of an asset or material identical to that which is being replaced or revalued.
- It is the cost of replacement at current market price.

8. Avoidable and Unavoidable Cost

- Avoidable costs are those which can be eliminated if a particular product or department with which they are directly related, is discontinued.
- For example, salary of the clerks employed in a particular department can be eliminated, if the department is discontinued.
- Unavoidable cost is that cost which will not be eliminated with the discontinuation of a product or department.
- For example, salary of factory manager or factory rent cannot be eliminated even if a product is eliminated.

- **Break-even analysis is defined as analysis of costs and their possible impact on revenues and volume / size of the firm.**
- **Hence, it is also called the cost-volume-profit analysis.**
- **A firm is said to attain the BEP when its total revenue is equal to total cost($TR=TC$).**
- **Total cost comprises fixed cost and variable cost.**
- **The significant variables on which the BEP is based are fixed cost, variable cost and total revenue.**

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

10. Profit and Volume Ratio (P/V Ratio):

- The ratio between the contribution and sales is known as P/V Ratio.
- It is one of the most useful ratios for studying the profitability of the business.
- The ratio of contribution to sales is the P/V Ratio . It may be expressed in percentage.
- Therefore, every organization tries to improve the P/V Ratio of each product by reducing the variable cost per unit or by increasing the selling price per unit. The concept of P/V Ratio helps in determining Break-Even Point , a desired amount of profit etc.
- $P/V \text{ Ratio} = (\text{Contribution} / \text{Sales}) \times 100$

11. 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 production where total costs are recovered. If sales go up beyond the Break-even point , organization makes profit. If they come down , the loss is incurred.

Break-Even Point is calculated as follows:

- **Break-even point(in Rupees)**
= Fixed Cost / P/V Ratio
- **Break-even point(in Rupees)**
= (Fixed Cost /Contribution)X Sales
- **Break-even point(in Units)**
= Fixed Cost /Contribution Per Unit
- **Break-even point(in Rupees)**
**= Fixed Cost /Selling price per unit – Variable cost
per unit**

ASSUMPTIONS OF BREAK EVEN ANALYSIS:

- 1. Costs can perfectly be classified into fixed and variable costs.**
- 2. Selling price per unit remains constant in spite of competition or change in the volume of production. It does not consider the price discounts or cash discounts.**
- 3. Volume of sales and volume of production are equal(All the goods produced are sold). Hence there is no closing stock/ unsold stock.**
- 4. There is only one product available for sale. In case of multi product firm, the product mix / Sales mix remains constant.**

- 5. Fixed costs remain constant at all levels of output.**
- 6. Variable cost fluctuates /vary proportionally with volume of production.**
- 7. There is no opening or closing stock.**
- 8. There will be no change in operating efficiency.**
- 9. The volume of output or production is the only factor which affecting/influencing the cost.**
- 10. There will be no change in general price level.**

SIGNIFICANCE / IMPORTANCE OF BREAK-EVEN ANALYSIS

- 1. Information provided by Break-Even Chart can be understood more easily than those contained in profit and Loss Account and the cost statement.**
- 2. Break Even Chart discloses the relationship between cost, volume and profit. It reveals how changes in the profit. So it helps management in decision-making.**
- 3. It is very useful for forecasting costs and profits for a long-term planning and growth.**
- 4. The Break Even Chart discloses profits at various levels of production.**

UNIT-III

MARKETS AND NEW ECONOMIC ENVIRONMENT

TYPES OF COMPETITION

➤ Based on degree of competition, the markets can be classified into two categories.

➤ They are I. Perfect Markets

II. Imperfect Markets.

I. PERFECT MARKET:

➤ In perfect markets, there is said to prevail perfect competition and in case of imperfect markets, imperfect competition.

➤ Perfect competition is said to exist when certain conditions are fulfilled.

➤ These conditions are ideal and hence only imaginative / inspired, not realistic.

➤ Financial markets and agricultural products are some of the sectors of economy where perfect competition can be observed.

Features / Conditions of Perfect Market

- 1. Large number of buyers and sellers.**
- 2. Homogeneous products or services.**
- 3. Freedom to enter and exit the market.**
- 4. Perfect information is available to the buyers and sellers.**
- 5. Perfect mobility of factors of production.**
- 6. Each firm is a price taker.**

II. IMPERFECT MARKET

- A competition is said to be imperfect when it is not perfect.
- In other words, when any or most of the conditions of perfect market do not exist in a given market.
- It is referred to as an imperfect market.
- Based on the number of buyers and sellers, the structure of market varies as outlined as 'poly' refers to seller and 'psony' means buyer.
- Based on the number of buyers and sellers, the imperfect markets are classified seven categories.

➤ **They are**

- 1. Monopoly**
- 2. Monopolistic competition**
- 3. Duopoly**
- 4. Oligopoly**
- 5. Monopsony**
- 6. Duopsony**
- 7. Oligopsony**

PERFECT MARKET-MEANING

- Market is defined as a place or point at which buyers and sellers negotiate their exchange of well-defined products or services.
- A market structure in which all firms in an industry are price takers and in which there is freedom of entry into and exit from the industry is called Perfect Market.
- The market with perfect competition conditions is known as perfect market.
- A market is said to be perfect if certain conditions are satisfied. Where the market is perfect the competition is said to be perfect.

- **According to Marshall “ the more nearly perfect market is, the stronger is the tendency for the same price to be paid for the same thing at the same time, in all parts of the market”.**
- **Perfect competition in economic theory has a meaning diametrically opposite to the everyday use of the term.**
- **In practice, businessmen use the word competition as synonymous to rivalry.**
- **In theory, perfect competition implies no rivalry among firms.**

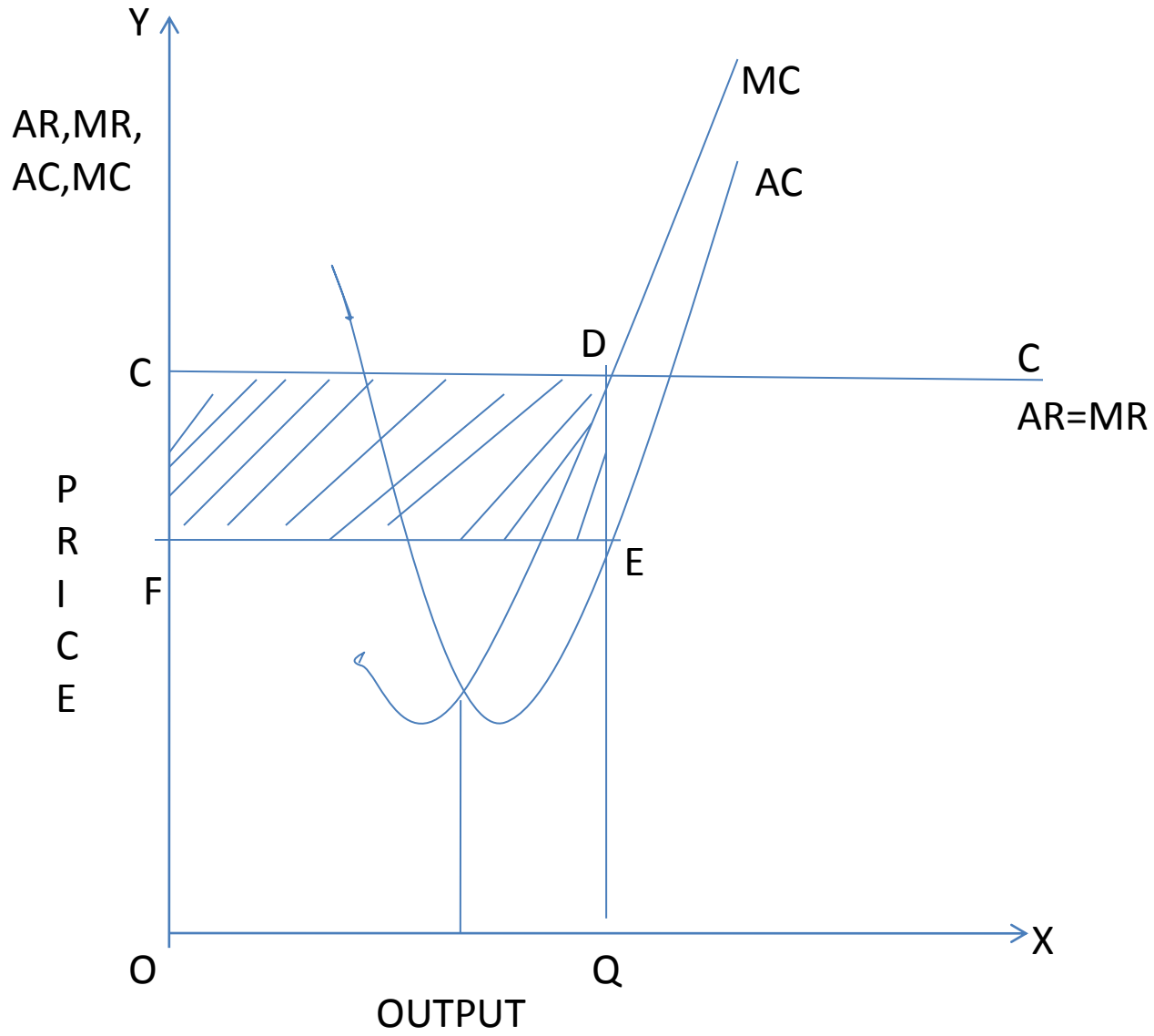
PRICE-OUTPUT DETERMINATION IN CASE OF PERFECT COMPETITION

Short-run

- The price and output of the firm are determined, under perfect competition, based on the industry price and its own costs.
- The industry price has greater say in this process because the firm's own sales are very small and insignificant.
- the process of price output determination in case of perfect competition is illustrated as follows:

- **The firm's demand curve is horizontal at the price determined in the industry($MR=AR=PRICE$).**
- **This demand curve is also known as Average Revenue Curve(ARC).**
- **This is because if all the units are sold at the same price, on or average, the revenue to the firm equals its price.**
 - **When the average revenue is constant (neither falling nor rising), it will coincide with the marginal revenue curve.**
- **Thus, CC is the demand curve representing the price, average revenue curve, and also marginal revenue curve($Price=AR=MR$).**

- **Average cost (AC) and marginal cost (MC) are the firm's average and marginal cost curves.**
- **The firm satisfies both conditions: i) $MR=MC$ and ii) MC curve must cut the MR curve from below. The firm attains equilibrium at point D where $MR=MC$. The MC curve passes through the minimum point of AC curve.**

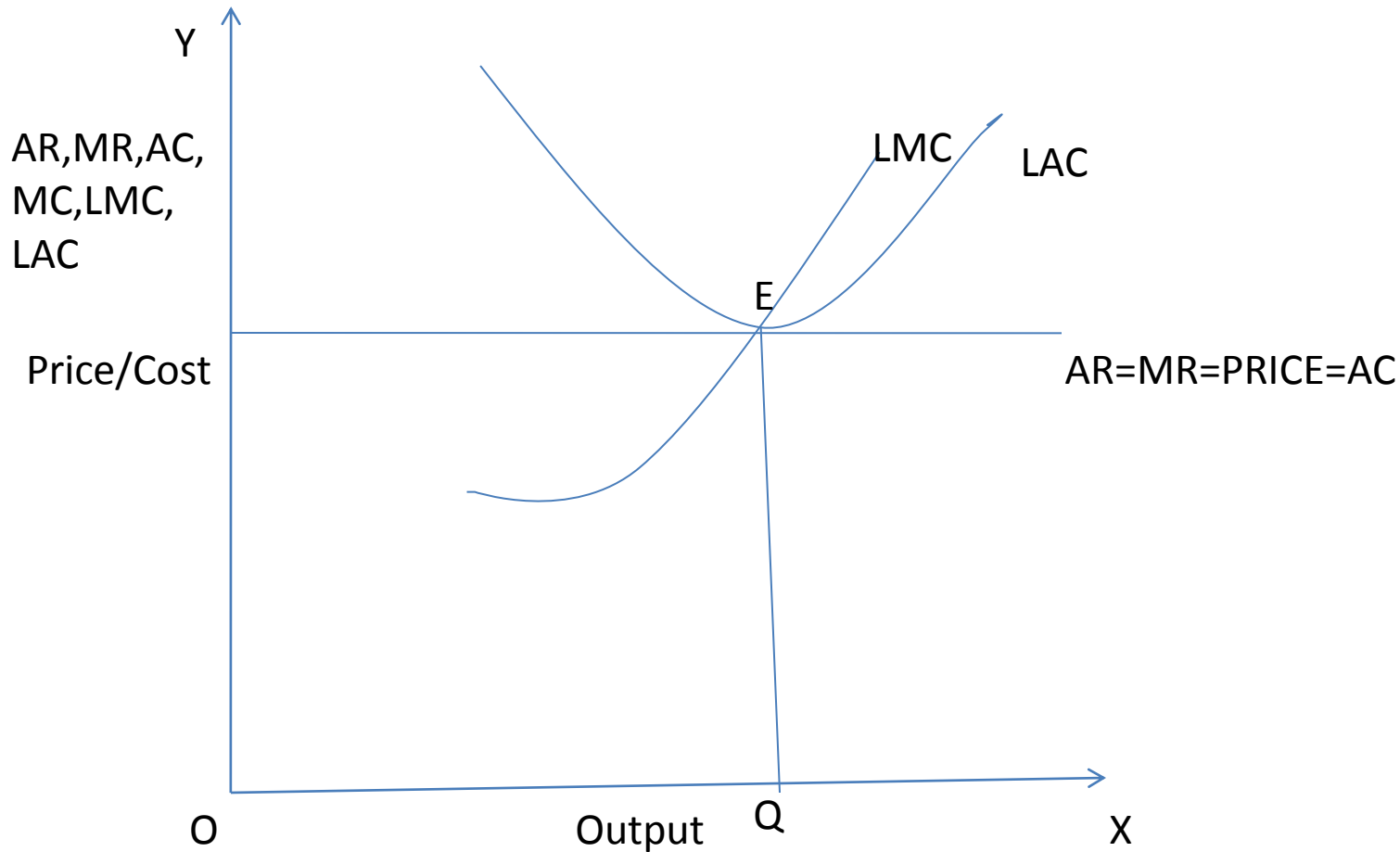


Long-run:

- Having been attracted by supernormal profits, more and more firms enter the industry.
- With a result, there will be a scramble for scarce inputs among the competing firms pushing the input prices.
- The entry of more firms will expand the supply pulling down the market price.

- In the long run, the firms will be in a position to enjoy only normal profits but not supernormal profits.
- Normal profits are the profits that are just sufficient for the firms to stay in the business.
- It is to be noted that normal profits are included in the average cost curve.
- All those firms that are not able to earn at least normal profits will leave the industry.

Price-Output Determination in case of Long-run Under Perfect Competition



MONOPOLY MARKET

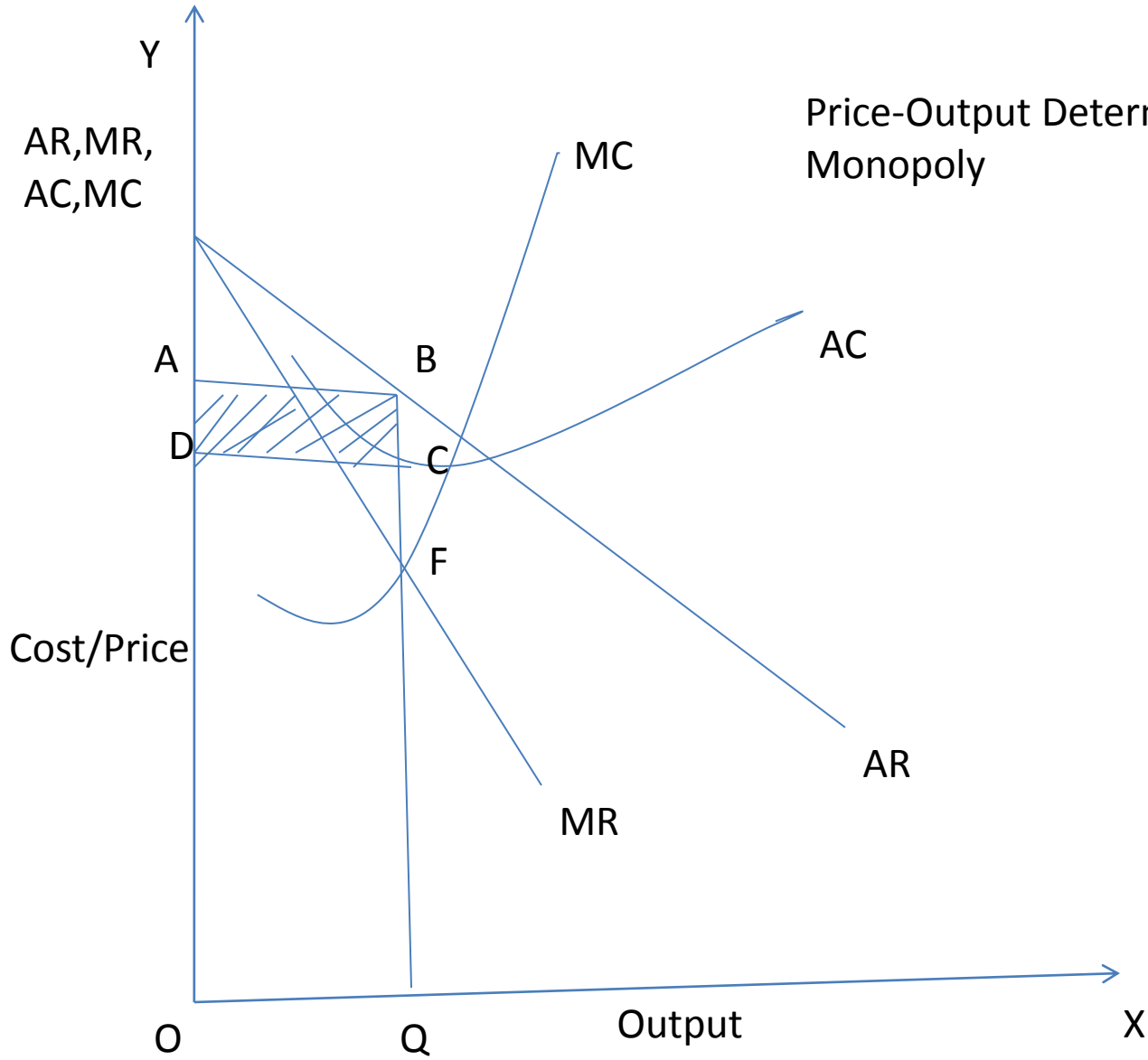
- The word monopoly is a Latin term ‘Mono’ means single and ‘poly’ means seller.
- Thus monopoly is a form of market organization in which there is only one seller of the commodity.
- There are no close substitutes for the commodity sold by the seller.

- **Monopoly is that market form in which a single producer controls the entire supply of a single commodity, which has no close substitutes.**
- **There will be only one seller or producer.**
- **The commodity produced by the producer will have no close substitutes.**
- **Monopoly can exist only when there are strong barriers to entry.**
- **The barriers, which prevent the entry, may be economic, institutional or artificial in nature.**

PRICE-OUTPUT DETERMINATION UNDER MONOPOLY

- Under monopoly the average revenue curve for a firm is a downward sloping one.
- It is because, if the monopolist reduces the price of his product, the quantity demanded increases and vice versa.
- In monopoly, marginal revenue is less than the average revenue.
- In other words, the marginal revenue curve lies below the average revenue curve.

- The monopolist always wants to maximize his profits.
- To achieve maximum profits, it is necessary that the marginal revenue should be more than the marginal cost.
- He can contribute to sell as long as the marginal revenue exceeds marginal cost.
- At this point F, where $MR=MC$, profits will be maximized.
- Profits will diminish if the production is continued beyond this point.



Price-Output Determination Under Monopoly

MONOPOLISTIC COMPETITION

- Perfect competition and monopoly are rarely found in the real world.
- Therefore, Professor Edward. H. Chamberlin of Harvard University brought about a synthesis of the two theories and put forth, “Theory of monopolistic competition in 1933”.
- Monopolistic competition is more realistic than either pure competition or monopoly.
- Monopolistic competition refers to competition among a large number of sellers producing close but not perfect substitutes.

- **Monopolistic competition is said to exist when there are many firms and each one produces such goods and services that are close substitutes to each other.**
- **They are similar but not identical.**
- **There are no restrictions on the entry and with the result, many firms who feel they can offer a relatively better product or service.**

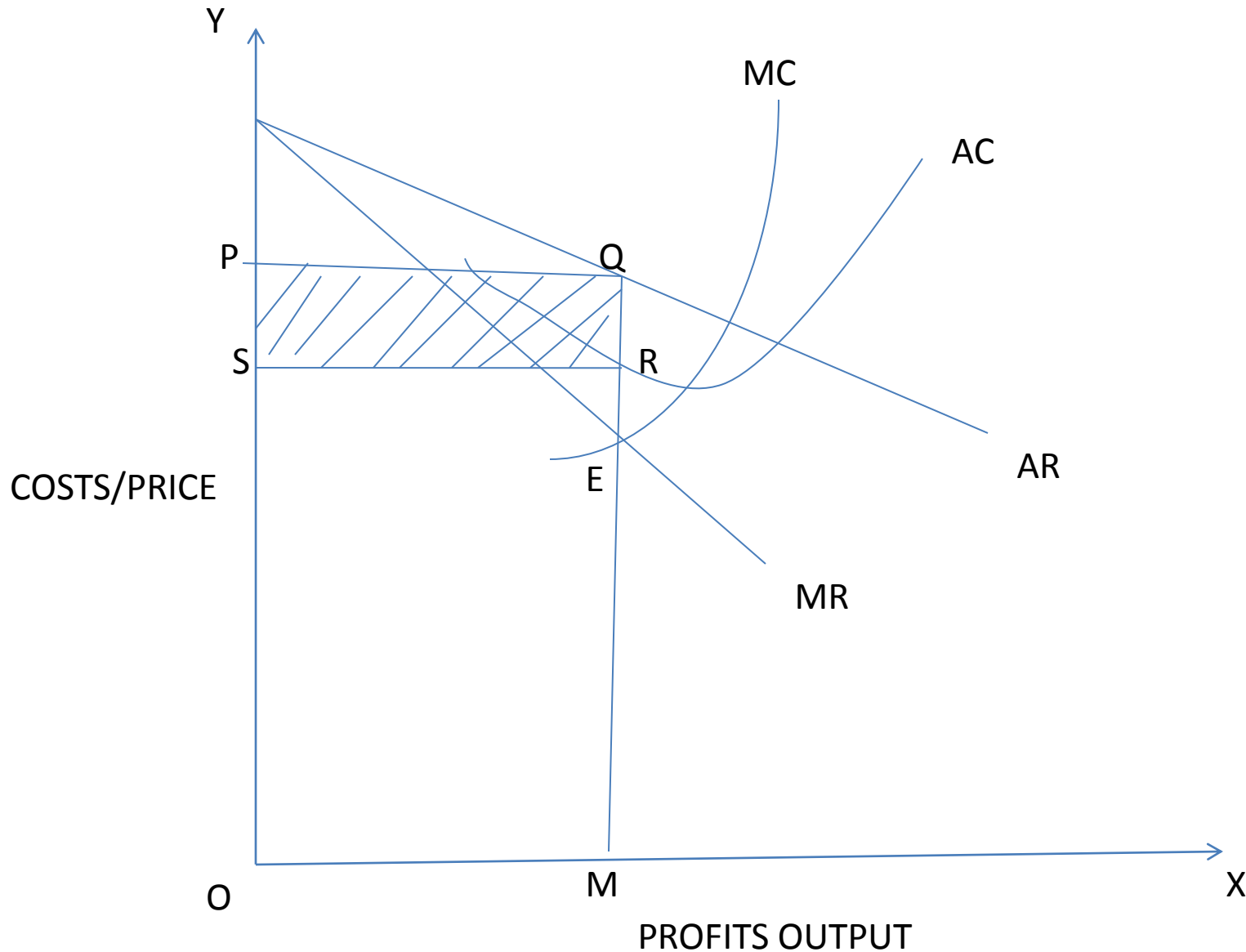
PRICE-OUTPUT DETERMINATION UNDER MONOPOLISTIC

- 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(MR) is equal to marginal cost(MC).

Short-run equilibrium of the firm

- In the short run the firm is in equilibrium when Marginal Revenue equals to Marginal cost ($MR=MC$).
- In this diagram AR is the Average Revenue curve.
- MR is the Marginal Revenue curve, SMC is the Short-run Marginal Cost Curve.
- SAC is the Short-run Average Cost Curve.
- MR and SMC intersect at point E where output is OM and price OP.
- Thus the equilibrium output or maximum profit output is OM and the price OP or MQ.
- When the price (AR) is above average cost (AC) a firm will be making supernormal profit.

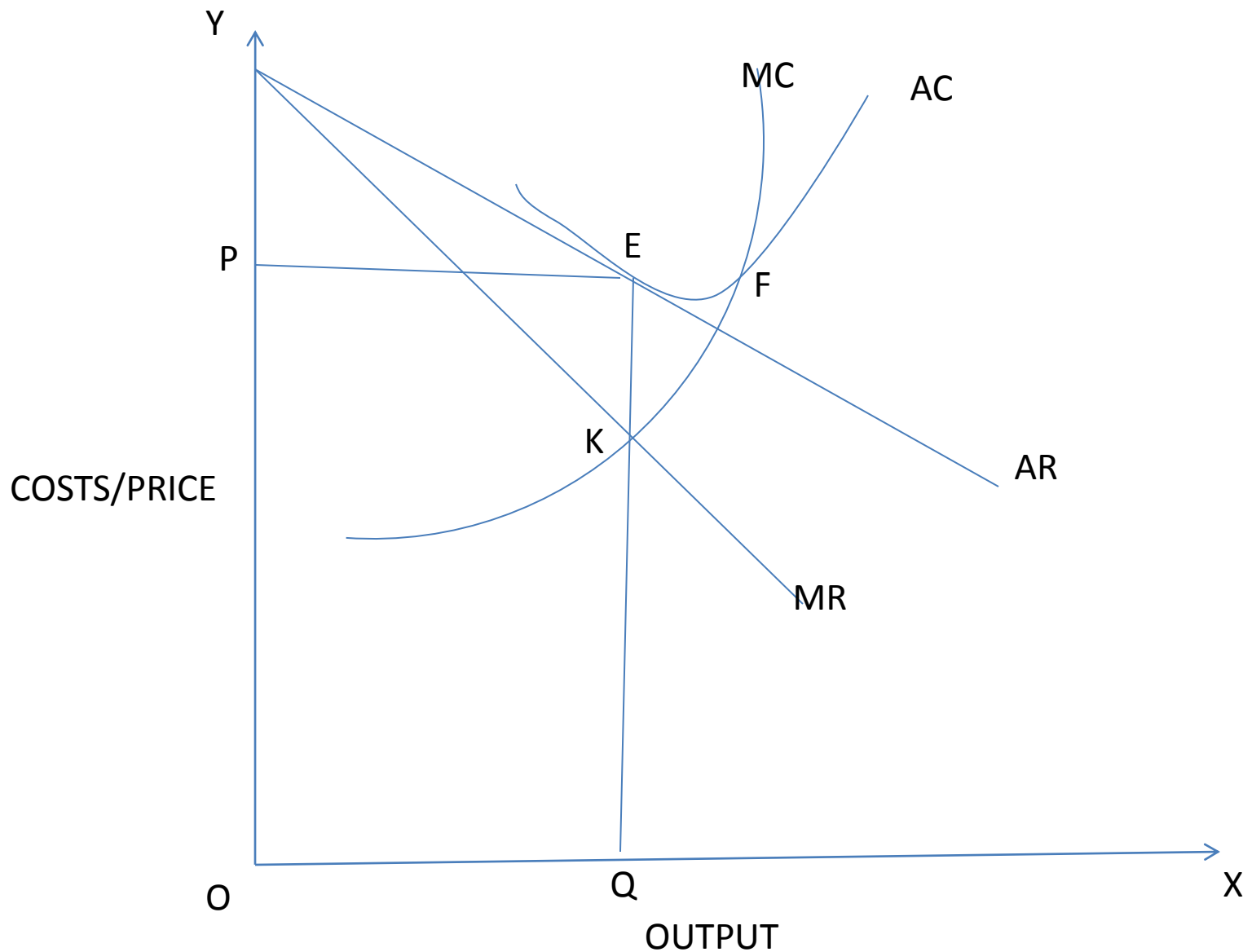
Short-run equilibrium of the firm



Long-run equilibrium of the firm

- In the long run, in order to achieve equilibrium position, the firm has to fulfil the following two conditions.
 1. $MR = MC$
 2. $AR = AC$ at the equilibrium level of output.
- AC will not be at its minimum point at equilibrium level of output.
- And also MR is not equal to either AR or AC, MR is well below AR in the case of monopolist competition.

Long-run equilibrium of the firm



CONCEPT OF BUSINESS

- Literally speaking, the term Business means a state of being busy.
- Hence, business included all occupations in which people are busy in earning income either by production or purchase and sale or exchange of goods and services to satisfy the needs of other people so as to earn income or profit.
- Business relates to the creation of three utilities viz.,
 - i) form utility through processing
 - ii) Time utility through storage
 - iii) Place utility through transportation.

CONCEPT OF BUSINESS

Meaning of Business

- Any activity carried mainly with the object of earning profit can be called as business activity.
- This object of earning profit is achieved by production and /or exchange of want satisfying goods and services.
- A person engaged in business is called a businessman or entrepreneur.
- Similarly a firm established for the purpose of carrying a business called enterprise or a business unit.

Differences between Public and Private companies

Point of Difference	Public Company	Private Company
1. NUMBER OF MEMBERS	It can be started with a minimum of seven members. There is no limit to the maximum number of members.	It can be started with a minimum of two members. The maximum number of members is fifty.
2. TRANSFER OF SHARES	No restriction on transfer of shares.	Transfer of shares is generally restricted by the Articles.
3. ISSUE OF PROSPECTUS	It can issue prospectus or statement in lieu of prospectus for inviting the public for purchase of its shares.	It cannot issue prospectus for inviting the public for purchase of its shares.
4. MINIMUM PAID UP CAPITAL	Minimum capital of public company is Rs.5 lakh or higher, as may be prescribed.	Its minimum capital is Rs.1 lakh , as may be prescribed.

Differences between Public and Private companies

Point of Difference	Public Company	Private Company
5. USE OF THE WORD 'LIMITED'	The words 'Limited' must be added at the end of its name.	The words 'Private Limited' must be added at the end of its name.
6. MINIMUM SUBSCRIPTION	It must secure minimum subscription.	It need not secure minimum subscription before the allotment of shares.
7. COMMENCEMENT OF BUSINESS	It cannot commence business unless it gets 'Certificate of commencement of Business'	It can commence business as soon as it gets 'Certificate of Incorporation'
8. NUMBER OF DIRECTORS	The minimum number of directors is three.	The minimum number of directors is two.

Differences between Public and Private companies

Point of Difference	Public Company	Private Company
9. ISSUE OF SHARES	It can issue only equity and preference shares.	It can issue shares of any kind including deferred shares.
10. INSPECTION OF ACCOUNTS	Final accounts are open for public inspection.	Final accounts of this company are not open to inspection by the public.
11. WRITTEN CONSENT OF DIRECTORS	Written consent of directors is necessary to get 'Certificate of Incorporation'	Written consent of directors is not necessary to get certificate of incorporation.
12. POSSESSION OF QUALIFICATION SHARES	Directors should possess qualification shares.	Directors need not possess qualification shares.

Differences between Public and Private companies

Point of Difference	Public Company	Private Company
13. STATUTORY MEETING	It must hold statutory meeting and file a statutory report.	It need not hold statutory meeting nor file statutory report.
14. AGE LIMIT OF DIRECTORS	Persons who are of 65 years of age or more cannot be appointed as directors.	There is no age limit to the directors of this company.
15. RETIREMENT OF DIRECTORS	One-third of the retiring directors should retire by rotation every year.	Directors need not retire by rotation.
16. RESOLUTION	A separate resolution is necessary for electing each director.	A single resolution is sufficient for electing all directors.
17. GRANT LOANS	It can grant loans to its directors only with the consent of the government.	It can grant loans to its directors without the consent of government.

SOLE TRADER

- 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 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.

SOLE TRADER

- He has total freedom and flexibility.
- Full control lies with him.
- He can take his own decisions. He can choose or drop a particular product or business based on its merits.
- He need not discuss this with any body.
- He is responsible for himself.
- This form of organization is popular all over the world. Restaurants, super markets, pan shops, medical shops, hosiery shops, the list of such small establishments are endless.

JOINT STOCK COMPANY

- The joint stock company emerges from the limitations of partnership such as joint and several responsibility, unlimited liability, limited resources, and uncertain duration and so on.
- 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 the company jointly.

DEFINITIONS OF JOINT STOCK

COMPANY

1. ACCORDING TO L.H.HANEY

“joint stock company is a voluntary association of individuals for profit, having a capital divided into transferable shares, the ownership of which is the condition of the membership”.

2. ACCORDING TO LORD LINDLEY

“An association of many persons who contribute money or money’s worth to a common stock and employ it for a common purpose”.

3. ACCORDING TO INDIAN COMPANIES ACT 1956

A joint stock company limited by shares is “a company having permanent paid up capital of fixed amount divided into shares also of fixed amount held and transferable as stock and formed on the principles of having in its members only the holders of those shares or stocks and no other persons”.

4. ACCORDING TO CHIEF JUSTICE MARSHALL OF U.S.A.

“A corporation is an artificial being invisible, intangible and existing only in contemplation of law. Being a mere creation of law, it possesses only the properties which the charter of its creation confers upon it, either expressly or as incidental to its very existence”.

- **A joint stock company is described as a voluntary association of persons recognized by law, having a distinct name, a common seal, formed to carry on business for profit, with capital divisible into transferable shares, limited liability, corporate body and perpetual succession.**
- **Joint stock company is also defined as an artificial person recognized by law with a distinctive name, a common seal, a common capital comprised of transferable shares of fixed value carrying limited liability and having perpetual succession.**
- **In brief, it is like an artificial person created by law with perpetual succession and common seal.**

PUBLIC ENTERPRISES

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

UNIT-IV

CAPITAL BUDGETING

CAPITAL BUDGETING

MEANING OF CAPITAL BUDGETING:

- Capital budgeting is the process of making investment decisions in capital expenditures.
- A capital expenditure may be defined as an expenditure the benefits of which are expected to be received over a period of time exceeding one year.

DEFINITIONS OF CAPITAL BUDGETING

1. According to Charles T. Horngreen, “ capital budgeting is long term planning for making and financing proposed capital outlays.”
2. According to Richard and Greenlaw, “ capital budgeting as acquiring inputs with long run return.”
3. In the words of Lynch, “ capital budgeting consists in planning development of available capital for the purpose of maximising the long term profitability of the concern.”

Significance / Importance of Capital Budgeting

Capital budgeting decisions assume special significance for the following reasons:

- 1. Substantial capital outlays:** Capital budgeting decisions involve substantial capital outlays.
- 2. Long-term implications:** Capital budgeting proposals are of longer duration and hence have long-term implications. For instance, the cash flows for the next 5 years to 15 years have to be forecast.
- 3. Strategic in Nature:** Capital budgeting decision can affect the future of the company significantly as it constitutes the strategic determinant for the success of a company. A right investment decision is the secret for the success of many business enterprises.

4. Irreversible: Once the funds are committed to a particular project, we cannot take back the decision. If the decision is to be reversed, we may have to lose a significant portion of the funds already committed. It may involve loss of time and efforts. In other words, the capital budgeting decisions are irreversible or may not be easily reversible.

LIMITATIONS OF CAPITAL BUDGETING:

1. Uncertainty in future: The Capital budgeting proposals are infested with the uncertainty in future. All data used in the evaluation of proposals is the estimates. The data is error-prone more with the human judgement, bias or discretion in the identification of cash inflows and cash out flows. Even advanced capital budgeting techniques such as sensitivity analysis cannot be useful if the data is erroneous.

2. Qualitative factors ignored: In capital budgeting, we consider only such factors which can be quantified in terms of money. Factors such as improved morale of employees as a result of implementation of proposals are not focused. The other factors in the business environment such as social, political and economic conditions and so on, are not reflected here.

3. Volatile business conditions: The factors influencing investment decisions include technological advancement, government policies, sales forecast, attitudes of management, estimated cash flows discount factor and rate of return. Any change in one or more of these factors is going to affect the capital budgeting decisions. .

4. Unrealistic Assumptions: There are certain unrealistic assumptions underlying capital budgeting process. They are i) There is no risk and uncertainty in the business environment. This is not correct. The future of the business is full of uncertainty and we apply the management techniques to minimise the risk. ii) The cash flows are received in lump sum at the end of the given period. iii) The key variables such as sales revenue, costs , price or investments and so on are taken based on past data. Particularly in times of raising prices , these seldom hold good for future. iv) The cost of capital and discount rates are one and the same.

UNIT-V

INTRODUCTION TO

FINANCIAL ACCOUNTING AND ANALYSIS

Meaning and Definitions of Ratio Analysis

- Alexander Wall is considered to be the pioneer of Ratio Analysis. He presented the detailed system of Ratio Analysis in 1909 and explained its usefulness in financial analysis.
- Ratio Analysis is most widely used powerful tool of financial analysis. It is an important technique of analysis and interpretation of financial statements.
- It is also used to analyze various aspects of operational efficiency and degree of profitability.
- Ratio Analysis is based on different ratios which are calculated from the accounting information contained in the financial statements. Different ratios are used for different purposes.

Advantages/ importance/significance of Ratio Analysis

- **Ratio Analysis is an important technique of financial analysis.**
- **It is used as a device to analyze and interpret the financial health of enterprises.**
- **Its usefulness is not only confined to business managers but also extends to various interested parties like government, creditors, employees, investors, consumers etc.**

Limitations of Ratio Analysis

1. Limited use of a Single Ratio:

- A single ratio does not convey meaningful message. As such, a number of ratios will have to be calculated for a better understanding of particular situation.
- Thus, a series of ratios computed may create confusion.
- Ratios can be useful only when they are computed in a sufficient large number.
- calculation of more ratios some times confuses the analysts than help him.

IMPORTANT FORMULAE IN RATIO ANALYSIS

I. LIQUIDITY RATIOS:

1. **Current Ratio =**

Current Assets / Current Liabilities.

2. **Quick Ratio / Liquid Ratio =**

Liquid Assets / Quick Liabilities

3. **Absolute Quick Ratio =**

Highly liquid Assets / Current Liabilities

II. CAPITAL STRUCTURE/ SOLVENCY **/ LEVERAGE RATIOS:**

1. Debt- Equity Ratio =

**Long-Term Debts/ Shareholders
Funds**

or

**External Equity / Internal
Equity**

2. Proprietary Ratio =

Shareholders Funds / Total Assets

3. Interest Coverage Ratio=
Earning before Interest
and Taxes (EBIT) /
Fixed Interest Charges.

4. Debts to Total Funds
Ratio = Debts / Total
Funds.

III. TURNOVER/ ACTIVITY RATIOS:

1. Inventory /Stock Turnover Ratio=

Cost of Goods Sold / Average inventory at cost.

Or

Sales/ Average Inventory at selling prices

or

Sales / Average Inventory at cost.

2. (i) Debtors Turnover Ratio =

Net Credit Sales / Average Debtors.

(ii) Average Collection Period

(in terms of days) =

(Debtors / Credit Sales) X 365 Days.

3. Creditors Turnover Ratio =

**Net Credit purchases/ Average
Creditors**

4. Working Capital Turnover Ratio =
Cost of Sales / Net Working Capital

5. Fixed Assets Turnover Ratio=
Cost of sales / Fixed Assets at cost
Less Accumulated Depreciation.

6. Capital Turnover Ratio=
Cost of sales / Capital
Employed

IV. PROFITABILITY RATIOS

1. Gross Profit Ratio=

(Gross Profit / Net Sales) x 100

or

(Net Sales- cost of goods sold / net sales)x 100

2. Net Profit Ratio=

(Net Profit / Net Sales) x 100

3. Operating Ratio=

(Cost of goods sold + operating expenses)/ Net Sales.

4. Operating Profit Ratio=

(Operating Net profit / Net Sales) x 100

OR

100% - Operating Ratio

IV. PROFITABILITY RATIOS

5. Expenses Ratios:

For cost of Materials =

(Materials consumed / Net sales) x 100

For Selling Expenses=

(Selling Expenses / Net Sales) x 100

6. Return on Investment Ratio (ROI)=

**(Net profit before interest and Taxes /
Total Capital Employed) x 100**

IV. PROFITABILITY RATIOS

7. Returns on Shareholders Funds=

(Net Profit after Interest and Taxes / Shareholders Funds) x 100

8. Return on Equity Share Capital=

(Net profit after interest, Taxes and Dividend / Equity Shareholders Funds) x 100

IV. PROFITABILITY RATIOS

9. Earning Per Share (EPS)=

(Net Profit after Taxes- Preference Dividend)/ Number of Equity Shares

10. Dividend Payout Ratio=

Dividend per Share / Earning per share.

11. Price Earning Ratio(P/E Ratio)=

Market Price per Equity Share / Earning per share.