



A Handbook on

# Managerial Economics

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D G V C

## Economics:

- It is a study of society and as such is extremely important.
- It trains the mind and enables one to think systematically about the problems of business and wealth.
- From a study of the subject it is possible to predict economic trends with some precision.
- It helps one to choose from various economic alternatives.

**Economics** is the science of making decisions in the presence of scarce resources. Resources are simply anything used to produce a good or service to achieve a goal. Economic decisions involve the allocation of scarce resources so as to best meet the managerial goal. The nature of managerial decision varies depending on the goals of the manager.

A **Manager** is a person who directs resources to achieve a stated goal and he/she has the responsibility for his/her own actions as well as for the actions of individuals, machines and other inputs under the manager's control.

**Managerial economics** is the study of how scarce resources are directed most efficiently to achieve managerial goals. It is a valuable tool for analyzing business situations to take better decisions.

## Managerial Economics:

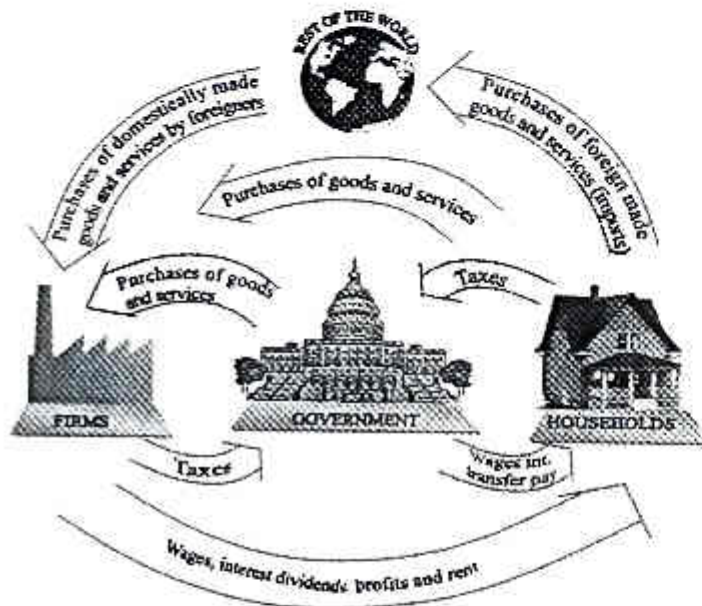
1. Managerial economics is concerned with the analysis of finding optimal solutions to decision making problems of businesses/ firms (micro economic in nature).
2. Managerial economics is a practical subject therefore it is pragmatic.
3. Managerial economics describes, what is the observed economic phenomenon (positive economics) and prescribes what ought to be (normative economics)
4. Managerial economics is based on strong economic concepts. (conceptual in nature)
5. Managerial economics analyses the problems of the firms in the perspective of the economy as a whole (macro in nature)
6. It helps to find optimal solution to the business problems (problem solving)

### **Managerial Economics And Other Disciplines**

Managerial economics has its relationship with other disciplines for propounding its theories and concepts for managerial decision making. Essentially it is a branch of economics. Managerial economics is closely related to certain subjects like statistics, mathematics, accounting and operations research. Managerial economics helps in estimating the product demand, planning of production schedule,

deciding the input combinations, estimation of cost of production, achieving economies of scale and increasing the returns to scale. It also includes determining price of the product, analyzing market structure to determine the price of the product for profit maximization, which helps them to control and plan capital in an effective manner.

### Circular Flow of Economic Activity



The major objectives of the firm are:

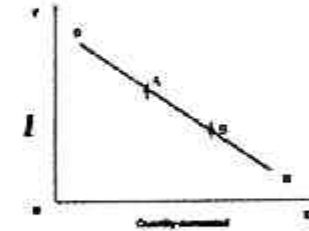
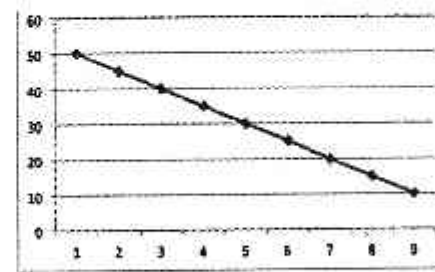
- To achieve the Organizational Goal
- To maximize the Output
- To maximize the Sales
- To maximize the Profit of the Organization
- To maximize the Customer and Stakeholders Satisfaction
- To maximize Shareholder's Return on Investment
- To maximize the Growth of the Organization

### Demand Analysis

**Demand:** Demand means the ability and willingness to buy a specific quantity of a commodity at the prevailing price in a given period of time. Therefore, demand for a commodity implies the desire to acquire it, willingness and the ability to pay for it.

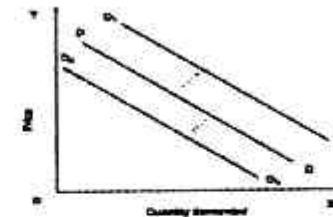
**Law of demand:** The quantity of a commodity demanded in a given time period increases as its price falls, ceteris paribus. (I.e. other things remaining constant)

**Demand Curve:** A demand curve is a graphical representation of a demand schedule. The price is quoted in the 'Y' axis and the quantity demanded over time at different price levels is quoted in 'X' axis. Each point on the curve refers to a specific quantity that will be demanded at a given price.



### Shifts in Demand:

Shift of the demand curve occurs when the determinants of demand change. When tastes and preferences and incomes are altered, the basic relationship between price and quantity demanded changes (shifts). This shifts the entire demand curve upward (rightward) and is called as increase in demand because more of that commodity is demanded at that price. The downward shift (leftward) is called as decrease in demand.



### Types of Demand:

- Direct and indirect demand
- Derived demand and autonomous demand
- Durable and non durable goods demand
- Firm and industry demand
- Total market and market segment demand
- Short run and long run demand
- Joint demand and Composite demand
- Price demand, income demand and cross demand



### Exception to demand

- **Giffen Goods:** Some special varieties of inferior goods are termed as Giffen goods.
- **Conspicuous Consumption / Veblen Effect:** goods with prestige value.
- **Conspicuous Necessities:** goods that are necessities of modern life.
- **Ignorance**
- **Emergencies**
- **Future Changes In Prices**
- **Change In Fashion**
- **Demonstration Effect**
- **Snob Effect**
- **Speculative Goods/ Outdated Goods/ Seasonal Goods**
- **Seasonal Goods**
- **Goods In Short Supply**

### Elasticity Of Demand

Elasticity of Demand is a technical term used by economists to describe the degree of responsiveness of the demand for a commodity due to a fall in its price. A fall in price leads to an increase in quantity demanded and vice versa. The elasticity of demand may be **Price Elasticity, Income Elasticity and Cross Elasticity.**

#### Price Elasticity-

The responsiveness of changes in quantity demanded due to changes in price is referred to as price elasticity of demand.

$$= \frac{\text{Proportionate change in the Quantity Demanded}}{\text{Proportionate change in price}}$$

$$= \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price}}$$

$$= \frac{\Delta Q / Q}{\Delta P / P}$$

$\Delta Q$  = change in quantity demanded

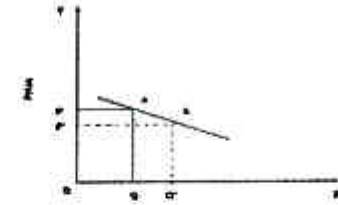
$\Delta P$  = change in price

P = price

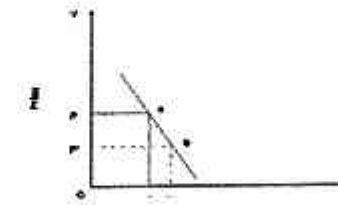
Q = quantity demanded

### Types of Price Elasticity:

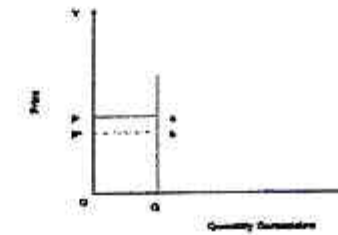
- **Relatively Elastic Demand**



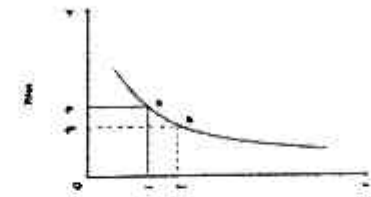
- **Perfectly Elastic Demand**



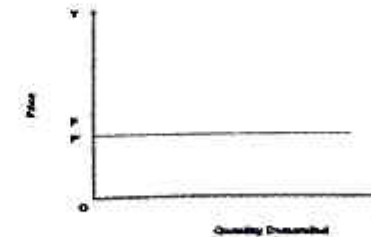
- **Relatively Inelastic Demand**



- **Perfectly Inelastic Demand**



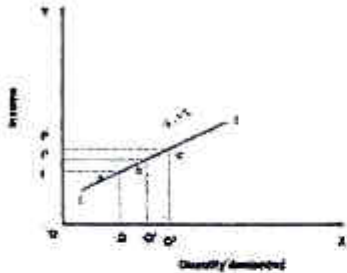
- **Unit Elasticity of Demand**



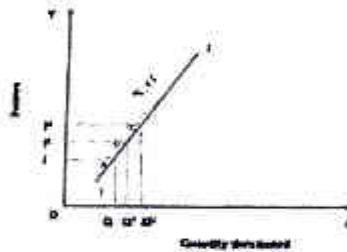
## Income Elasticity

Income elasticity of demand measures the responsiveness of quantity demanded to a change in income. It is measured by dividing the percentage change in quantity demanded by the percentage change in income.

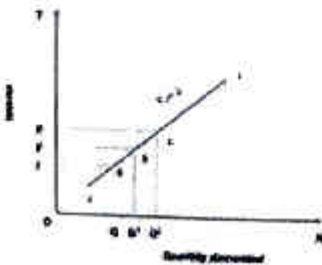
**Zero Income Elasticity:** The increase in income of the individual does not make any difference in the demand for that commodity. ( $E_i = 0$ ).



**Negative Income Elasticity:** The increase in the income of consumers leads to less purchase of those goods. ( $E_i < 0$ ).



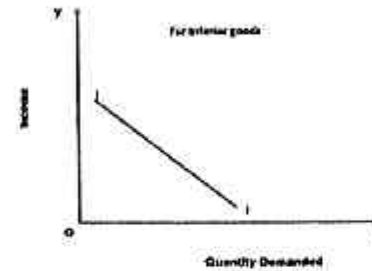
**Unitary Income Elasticity:** The change in income leads to the same percentage of change in the demand for the good. ( $E_i = 1$ ).



**Income Elasticity Is Greater than 1:** The change in income increases the demand for that commodity more than the change in the income. ( $E_i > 1$ ).



**Income Elasticity Is Less than 1:** The change in income increases the demand for the commodity but at a lesser percentage than the change in the income. ( $E_i < 1$ ).



## Cross Elasticity

The quantity demanded of a particular commodity varies according to the price of other commodities. Cross elasticity measures the responsiveness of the quantity demanded of a commodity due to changes in the price of another commodity.

$$E_c = \frac{\% \text{ change in demand for commodity A}}{\% \text{ change in price of commodity B}}$$

## Demand Forecasting

### Demand Forecasting

All organizations operate in an atmosphere of uncertainty but decisions must be made today that affect the future of the organization. There are various ways of making forecasts that rely on logical methods of manipulating the data that have been generated by historical events. A forecast is a prediction or estimation of a future situation, under given conditions. Demand forecast will help the manager to take the following decisions.

**Major short run decisions----**

- Purchase of inputs
- Maintaining of economic level of inventory
- Setting up sales targets
- Distribution network
- Management of working capital
- Price policy
- Promotion policy

Major Long run decisions --- Expansion of existing capacity  
Diversification of the product mix  
Growth of acquisition  
Change of location of plant  
Capital issues  
Long run borrowings  
Manpower planning

The steps to be followed: --- Identification of objectives  
Nature of product and market  
Determinants of demand  
Analysis of factors  
Choice of technology  
Testing the accuracy

Criteria to choose a method of forecasting are: --- Accuracy  
Plausibility  
Durability  
Flexibility  
Availability

The following are needed for demand forecasting:

Appropriate production scheduling  
Suitable purchase policy  
Appropriate price policy  
Setting realistic sales targets for salesmen  
Forecasting financial requirements  
Business planning  
Financial planning  
Planning man-power requirements

To select the appropriate forecasting technique, the manager/forecaster must be able to accomplish the following:

Define the nature of the forecasting problem  
Explain the nature of the data under investigation  
Describe the capabilities and limitations of potentially useful forecasting techniques.  
Develop some predetermined criteria on which the selection decision can be made.

Demand Forecasting Methods:

1. Survey of buyers' intension
2. Delphi method
3. Expert opinion
4. Collective opinion
5. Naive model
6. Smoothing techniques
7. Time series / trend projection
8. Controlled experiments
9. Judgmental approach

## COST ANALYSIS

There are various classifications of costs based on the nature and the purpose of calculation. But in economics and for accounting purpose the following are the important cost concepts.

**Actual cost/ Outlay cost/ Absolute cost / Accounting cost:** The cost or expenditure which a firm incurs for producing or acquiring a good or service. (Eg. Raw material cost) 62

**Opportunity cost:** The revenue which could have been earned by employing that good or service in some other alternative uses. (Eg. A land owned by the firm does not pay rent. Thus a rent is an income forgone by not letting it out)

**Sunk cost:** Are retrospective (past) costs that have already been incurred and cannot be recovered.

**Historical cost:** The price paid for a plant originally at the time of purchase.

**Replacement cost:** The price that would have to be paid currently for acquiring the same plant.

**Incremental cost:** Is the addition to costs resulting from a change in the nature of level of business activity. Change in cost caused by a given managerial decision.

**Explicit cost:** Cost actually paid by the firm. If the factors of production are hired or rented then it is an explicit cost.

**Implicit cost:** If the factors of production are owned by a firm then its cost is implicit cost.

**Book cost:** Costs which do not involve any cash payments but a provision is made in the books of accounts in order to include them in the profit and loss account to take tax advantages.

**Social cost:** Total cost incurred by the society on account of production of a good or service.

**Transaction cost:** The cost associated with the exchange of goods and services.

**Controllable cost:** Costs which can be controllable by the executives are called as controllable cost.

**Shut down cost:** Cost incurred if the firm temporarily stops its operation. These can be saved by continuing business.

**Economic costs** are related to future. They play a vital role in business decisions as the costs considered in decision - making are usually future costs. They are similar in nature to that of incremental, imputed explicit and opportunity costs.

### Determinants Of Short -Run Cost

**Fixed cost:** Some inputs are used over a period of time for producing more than one batch of goods. The costs incurred in these are called fixed cost. For example amount spent on purchase of equipment, machinery, land and building.

**Variable cost:** When output has increased the firm spends more on these items. For example the money spent on labour wages, raw material and electricity usage. Variable costs vary according to the output. In the long run all costs become variable.

**Total cost:** The market value of all resources used to produce a good or service.

**Total Fixed cost:** Cost of production remains constant whatever the level of output.

**Total Variable cost:** Cost of production varies with output.

**Average cost:** Total cost divided by the level of output.

**Average variable cost:** Variable cost divided by the level of output.

**Average fixed cost:** Total fixed cost divided by the level of output.

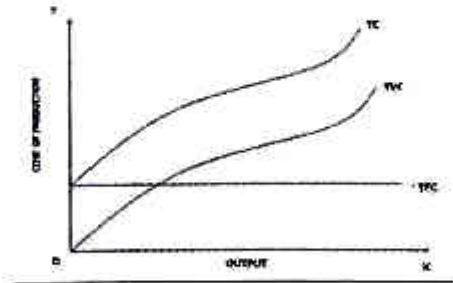
**Marginal cost:** Cost of producing an extra unit of output.

### Short Run Cost Output Relationship

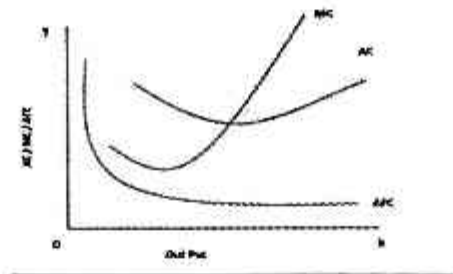


Fixed cost curve is a horizontal line which is parallel to the 'X' axis. This cost is constant with respect to output in the short run. Fixed cost does not change with output. It must be paid even if '0' units of output are produced. Total fixed cost (TFC) consists of various costs incurred on the building, machinery, land, etc. The total variable costs vary according to the output. Whenever the output increases the firm has to buy more raw materials, use more electricity, labour and other sources therefore the TVC curve is upward sloping. The total cost consists of fixed (TFC) and variable costs (TVC).

**Graph - Total Cost Curves**



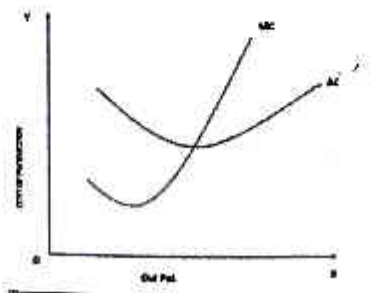
**Graph - Average Cost Curves**



**Relationship Between Marginal Cost And Average Cost Curve:**

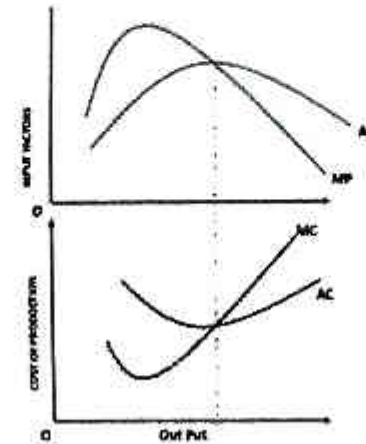
The marginal cost and average cost curves are U shaped because of law of diminishing returns. The marginal cost curve cuts the average cost curve and average variable cost curves at their lowest point. Marginal cost curve cuts the average variable cost from below. The AC curve is above the MC curve when AC is falling. The AC curve is below the MC when AC is increasing. The intersecting point indicates that  $AC=MC$  and that is the minimum average cost with an optimum output. (No more output can be produced at this average cost without increasing the fixed cost of production)

**Graph - Relationship Between Average Cost And Marginal Cost**



**Optimum Output And Minimum Cost**

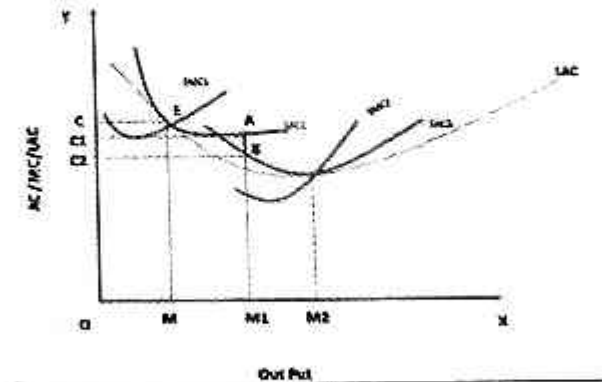
The MC and AC curves are mirror image of the MP (marginal production) and AP (average production) curves. All organizations aim for maximum output with minimum cost. To achieve this goal they like to derive the point where optimum output can be produced with the given amount of input factors and with a minimum average cost. In the graph the  $MP=AP$  at maximum average production. On the other hand  $MC = AC$  at minimum average variable cost. Therefore this is the optimum output to be produced to achieve their managerial goals.



**Cost Output Relationship In The Long Run**

In the long run costs fall as output increases due to economies of scale, consequently the average cost AC of production falls. Some firms experience diseconomies of scale if the average cost begins to increase. This fall and rise derives a U shaped or boat shaped average cost curve in the long run which is denoted as LAC. The minimum point of the curve is said to be the optimum output in the long run.

**Graph - Long Run Average Cost Curve**



### Economies Of Scale-

Economies of scale exist when long run average costs decline as output is increased. Diseconomies of scale exist when long run average cost rises as output is increased. The economies of scale occur because of (i) technical economies: the change in production process due to technology adoption.

(ii) Managerial economies (iii) purchasing economies, (iv) marketing economies and (v) financial economies. Economies of scale means a fall in average cost of production due to growth in the size of the industry within which a firm operates.

### Diseconomies Of Scale:

Arises due to managerial problems. If the size of the business becomes too large, then it becomes difficult for management to control the organizational activities therefore diseconomies of scale arise.

### Factors Causing Economies Of Scale:

There are various factors influencing the economies of scale of an organization. They are generally classified in to two categories as Internal factors and External factors.

#### Internal Factors:

1. Labour economies: if the labour force of a firm is specialized in a specific skill then the organization can achieve economies of scale due to higher labour productivity.
2. Technical economies: with the use of advanced technology they can produce large quantities with quality which reduces their cost of production.
3. Managerial economies: the managerial skills of an organization will be advantageous to achieve economies of scale in various business activities.
4. Marketing economies: use of various marketing strategies will help in achieving economies of scale.
5. Vertical integration: if there is vertical integration then there will be efficient use of raw material due to internal factor flow.
6. Financial economies: the firm's financial soundness and past record of financial transactions will help them to get financial facilities easily.
7. Economies of risk spreading: having variety of products and diversification will help them to spread their risk and reduce losses.
8. Economies of scale in purchase: when the organization purchases raw material in bulk reduces the transportation cost and maintains uniform quality.

#### External Factors:

1. Better repair and maintenance facilities: When the machinery and equipments are repaired and maintained, then the production process never gets affected.
2. Research and Development: research facilities will provide opportunities to introduce new products and process methods.
3. Training and Development: continuous training and development of skills in the managerial, production level will achieve economies of scale.
4. Economies of location: the plant location plays a major role in cutting down the cost of materials, transport and other expenses.
5. Economies of Information Technology: advanced Information technology provides timely accurate information for better decision making and for better services.
6. Economies of by-products: Organizations can increase the economies of scale by minimizing waste and can be environmental responsible by using the by- products of the organization.

#### Factors Causing Diseconomies Of Scale:

1. Labour union: continuous labour problem and dissatisfaction can lead to diseconomies of scale.
2. Poor team work: Poor performance of the team leads to diseconomies of scale.
3. Lack of co-ordination: lack of coordination among the work force has a major role to play in causing diseconomies of scale.
4. Difficulty in fund raising: difficulties in fund raising reduce the scale of operation.

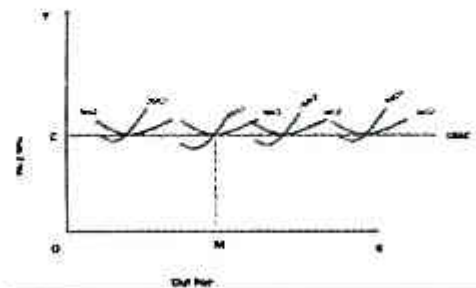
5. Difficulty in decision making: the managerial inability, delay in decision making is also a factor that determines the economies of scale.

6. Scarcity of Resources: raw material availability determines the purchase and price. Therefore there is a possibility of facing diseconomies in firms.

7. Increased risk: growing risk factors can cause diseconomies of scale in an organization. It is essential to reduce the same.

### Constant Returns To Scale:

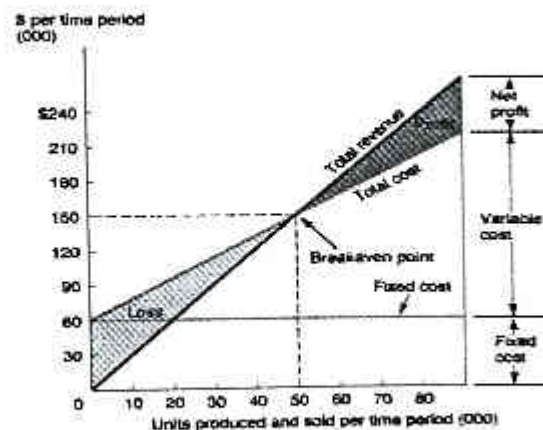
In the long run if the returns to scale are constant then the average cost of production will be the same.



### Break Even Analysis

Break even analysis helps to identify the level of output and sales volume at which the firm 'breaks even'. It means the revenues are sufficient to cover all costs of production. Various managerial decisions of firms are taken by the managers based on the break- even point. It is a study of cost, revenues and sales of a firm and finding out the volume of sales where the firm's costs and revenues will be equal. There is no profit and no loss. The total revenue is equal to the total cost of production. The amount of money which the firm receives by the sale of its output in the market is known as revenue.

#### Graph - Break Even Point



The above graph shows the break- even point of an organization. The total revenue curve (TR) and total cost curve (TC) is given. When they produce 50 units the total cost and total revenue are equal that is \$ 150'000 which is at the intersecting point of the curves. Break even point always denotes the quantity produced or sold to equalize the revenue and cost. When the firm produces less than 50 units the



revenue earned is less than the cost of production ( $TR < TC$ ) therefore in the initial period the firm incurs loss which is shown in the graph. Through selling more than 50 units the revenue increases more than the cost of production therefore the difference increases and provides profit to the organization ( $TR > TC$ ). It can be calculated with the help of the following formula.

$$\text{Break even quantity} = \frac{\text{TFC}}{\text{Selling Price} - \text{AVC}}$$

$$\text{To decide a quantity to achieve a targeted profit} = \frac{\text{TFC} + \text{targeted profit}}{\text{Selling price} - \text{AVC}}$$

$$\text{Safety margin} = \frac{\text{Sales} - \text{BEP}}{\text{Sales}} \times 100$$

#### Managerial Uses Of Break-Even Analysis:

1. **Product planning:** it helps the firm in planning its new product development. Decisions regarding removal or addition of new products in their product line.
2. **Activity planning:** the firm decides the expansion of production capacity.
3. **Profit planning:** this helps the firm to plan about their profit well in advance and at the same time it helps to identify the quantity to be sold to achieve the targeted profit.
4. **Target capacity:** the targeted sales quantity helps to decide the purchase, inventory and management.
5. **Price and cost decision:** Decision regarding how much the price of the commodity should be reduced or increased to cover their cost of production.
6. **Safety margin:** it helps to understand the extent to which the firm can withstand their fall in sales.
7. **Price decision:** the selling price can be fixed based on its expected revenue or profit.
8. **Promotional decision:** the firm can decide the kind of promotion required and how much amount could be spent.
9. **Distribution decision:** Break even analysis helps to improve the distribution system and for business expansion.
10. **Dividend decision:** firm can decide the dividend to be fixed for their shareholders.
11. **Make or buy decision:** break even analysis helps to decide on whether to make or buy the product. It means outsourcing or in house production.

We can conclude that the break – even analysis is a useful tool for decision making at various levels of a business firm in the short and long run. Therefore it is an essential tool to be used by the Managers.

#### RISK AND ITS TYPES

**Economic risk:** Choice of loss due the fact that all possible outcomes and their probability of occurrence are unknown.

**Uncertainty:** When the outcomes of managerial decisions cannot be predicted with absolute accuracy but all possibilities and their associated probabilities of occurrence are known.

**Business risk:** Chance of loss associated with a given managerial decision.

**Market risk:** Chance that a portfolio of investments can lose money due to volatility in the financial market.

**Inflation risk:** A general increase in the price level will undermine the real economic value of any legal agreement that involves a fixed promise to pay over an extended period.

**Interest rate risk:** The changing interest rates affect the value of any agreement that involves a fixed promise to pay over a specified period.

**Credit risk:** May arise when the other party fails to abide by the contractual obligations.

**Liquidity risk:** Difficulty of selling corporate assets and investments.

**Derivative risk:** Chance that volatile financial derivatives could create losses on investments by increasing price volatility.

**Cultural risk:** Risk may arise due to loss of markets differences due to distinctive social customs.

**Currency risk:** Is the probable loss due to changes in the domestic currency value in terms of expected foreign currency.

**Government policy risk:** Chance of loss because of domestic and foreign government policies.

### Market Structure

- ✓ Types of market
- ✓ Perfect market
- ✓ Pricing under perfect market
- ✓ Shutdown point
- ✓ Monopoly market
- ✓ Profit maximization under monopoly market
- ✓ Monopolistic competition
- ✓ Oligopoly market
- ✓ Kinked demand curve
- ✓ Price discrimination

(REFER MICRO ECONOMICS)

### CAPITAL BUDGETING

#### Concept of Capital Budgeting:

Capital budgeting or capital expenditure management is concerned with planning and control of capital expenditure. Budgeting of capital expenditure is an important factor in the management of a business. The term capital budgeting refers to long term planning for proposed capital outlays and their financing. It includes both raising of long term funds as well as their utilisation.

Capital budgeting as a prelude for capital investment requires the management to have some highly objective and rational means of determining the size and content of the capital budget and to screen all proposals in order to select those which seem to be the most beneficial.

#### The following definitions give a clear meaning of the term capital budgeting:

(i) As put by Charles T. Horngren, "Capital budgeting is a long term planning for making and financing proposed capital outlays".

(ii) Gilman L.J. has put thus, "Capital budgeting refers to the total process of generating, evaluating, selecting and following up on capital expenditure alternatives".

(iii) Milton H. Spencer has opined it as, "Capital budgeting involves the planning of expenditure for assets, the return from which will be realised in future time periods".

#### The need for capital budgeting arises for various reasons which are listed below:

(i) Capital budgeting is indispensable for establishing and running industrial organisation. In modern times, a lump amount is needed to set up a plant which will have to be raised from the financial market.



If the outcome from the investments is not sufficient then the firm incurs losses. While for spending large amount for a project, the management will have to make a proper study of its future profitability.

(ii) Capital budgeting is essential in order to secure adequate return from investment. For this purpose, higher operating expenses are to be reduced and idleness of the machinery should be avoided. The level and planning period of investment should be done carefully through capital budgeting.

(iii) There arises long term nature of fund commitment when capital expenditure is incurred on a project. Different investment proposals have varying degrees of risks and uncertainties. When a huge investment is made, it cannot be transferred, and the investment sinks. All these uncertainties can be avoided if a realistic capital budgeting is made.

(iv) Capital budgeting decisions are quite vital for the reputation of the management. Apart from this, the decision regarding choice of capital projects, addition to the stock of capital, replacement of worn out capital, volume and timing of investment are very essential for capital budgeting. Thus capital budgeting is one of the areas of managerial decision making.

**Items which are included in capital budgeting are:**

- (i) Expenditure of new capital equipment or creation of long term assets by a new firm;
- (ii) Expenditure on expansion or diversification of assets, and addition to the existing capital stock;
- (iii) Expenditure on replacement of depreciated capital;
- (iv) Expenditure on advertisement which bears fruit over time; and
- (v) Expenditure on research, development and innovation.

**The objectives of a capital expenditure budget are as follows:**

- (i) It determines the capital projects on which work can be started during the budget period after taking into account their urgency and the expected rate of return on each project.
- (ii) It estimates the expenditure that would have to be incurred on capital projects approved by the management together with the source or sources from which the required funds would be obtained.
- (iii) It restricts the capital expenditure on projects within authorised limits.

There are different kinds of capital expenditure budgets. There are different ways in which they are used by the companies. The differences are only to the extent of details, timing and methods in evaluation.

**There are two types of capital expenditure budgets:**

- (i) Short-range capital budgets.
- (ii) Long-range capital budget.

The short-range capital budgets relate to the estimated amount to be spent in the coming year. Budget is prepared to spend a fixed amount. This method does not deal with individual projects. The management takes a decision based upon profit potential of the proposed projects. This kind of budget is a necessity for the management device of planning and control.

The long-range capital budgets involve analytical calculations of the estimates of projected amounts. One version of this approach is to use a per cent of sales growth for expansion investment and a per cent of continuing sales volume for replacements or reinvestments.

**Process of Capital Budgeting:**

It may involve a number of steps depending upon the size of the concern, nature of projects, their numbers, complexities and diversities, etc.

**The important steps involved in a capital budgeting process are the following:**

**(i) Project Generation:**

Capital expenditure proposals may be of two types:

- (a) Proposals for expanding the revenues, and
- (b) Proposals for reducing the cost.

Under the first category, proposals to add new products and to expand the capacity in existing lines may be included. Under the second category, replacement proposals are included. Such proposals are designed to bring savings in cost.

**(ii) Project Evaluation:**

It involves:

- (a) Estimating the cost and benefits in terms of cash flows, and
- (b) Selecting an appropriate criterion for judging the desirability of the projects.

**(iii) Project Selection:**

This step is related to the screening and selecting the projects.

**(iv) Project Execution:**

When capital expenditure proposals are finally selected, funds are allocated for them. It is the duty of the top management to ensure that funds are spent in accordance with the allocation made in the capital budgets.

**(v) Follow up:**

Lastly, a system of following-up the result of completed projects should be established.

**Importance of Capital Budgeting:**

In the modern complicated business world, importance of Capital Budgeting has been considered as very great and beneficial.



**Proper and Intelligent Capital Budgeting can help the management of the enterprise in the following ways:**

**1. Helpful in the replacement of current equipment:**

It can help in better way the replacement of current obsolete equipment with more efficient and up-to-date equipment.

**2. Helpful in the preparation of capital requirements of the firm:**

It is of great help in estimating the capital requirements of the firm by selecting the best proposal for the capital investment.

**3. Helpful in meeting financial commitments:**

It helps to make proper arrangements to cope with financial commitments well in time.

**4. Helpful in taking long-term investment decisions:**

Capital Budgeting is of great help in taking long-term investment decisions.

**5. Helpful in avoiding losses:**

Capital Budgeting is necessary to avoid losses. It helps in taking a correct and proper decisions by evaluating various proposals of capital investment on the basis of their profitability and otherwise.

6. It helps in the calculation of money requirements in future, so that the firm may make necessary requirements of the capital.

**7. It helps in knowing the profits of the concern:**

It helps in knowing the effect of depreciation, insurance etc., on the profits of the concern.

**8. It helps in reducing and avoiding unnecessary expenses:**

Reduction in expenses will lead to increase in the profit that will help in timely payment of salary interest and bonus. This will increase reputation and goodwill of the firm.

## Pricing

### Perfect Competition

Perfect competition is a situation prevailing in a market in which buyers and sellers are so numerous and well informed that all elements of monopoly are absent and the market price of a commodity is beyond the control of individual buyers and sellers

With many firms and a homogeneous product under perfect competition no individual firm is in a position to influence the price of the product that means price elasticity of demand for a single firm will be infinite.

#### Determinants of Price under Perfect Competition

Market price is determined by the equilibrium between demand and supply in a market period or very short run. The market period is a period in which the maximum that can be supplied is limited by the existing stock. The market period is so short that more cannot be produced in response to increased

demand. The firms can sell only what they have already produced. This market period may be an hour, a day or a few days or even a few weeks depending upon the nature of the product.

#### Market Price of a Perishable Commodity

In the case of perishable commodity like fish, the supply is limited by the available quantity on that day. It cannot be stored for the next market period and therefore the whole of it must be sold away on the same day whatever the price may be.

#### Market Price of Non-Perishable and Reproducible Goods

In case of non-perishable but reproducible goods, some of the goods can be preserved or kept back from the market and carried over to the next market period. There will then be two critical price levels.

The first, if price is very high the seller will be prepared to sell the whole stock. The second level is set by a low price at which the seller would not sell any amount in the present market period, but will hold back the whole stock for some better time. The price below which the seller will refuse to sell is called the Reserve Price.

### Monopolistic Competition

Monopolistic competition is a form of market structure in which a large number of independent firms are supplying products that are slightly differentiated from the point of view of buyers. Thus, the products of the competing firms are close but not perfect substitutes because buyers do not regard them as identical. This situation arises when the same commodity is being sold under different brand names, each brand being slightly different from the others.

For example – Lux, Liril, Dove, etc.

Each firm is therefore the sole producer of a particular brand or "product". It is monopolist as far as a particular brand is concerned. However, since the various brands are close substitutes, a large number of "monopoly" producers of these brands are involved in a keen competition with one another. This type of market structure, where there is competition among a large number of "monopolists" is called monopolistic competition.

basic characteristics of monopolistic competition are –

- There are large number of independent sellers and buyers in the market.
- The relative market shares of all sellers are insignificant and more or less equal. That is, seller-concentration in the market is almost non-existent.
- There are neither any legal nor any economic barriers against the entry of new firms into the market. New firms are free to enter the market and existing firms are free to leave the market.
- In other words, product differentiation is the only characteristic that distinguishes monopolistic competition from perfect competition.



## Monopoly

Monopoly is said to exist when one firm is the sole producer or seller of a product which has no close substitutes. According to this definition, there must be a single producer or seller of a product. If there are many producers producing a product, either perfect competition or monopolistic competition will prevail depending upon whether the product is homogeneous or differentiated.

On the other hand, when there are few producers, oligopoly is said to exist. A second condition which is essential for a firm to be called monopolist is that no close substitutes for the product of that firm should be available.

From above it follows that for the monopoly to exist, following things are essential –

- One and only one firm produces and sells a particular commodity or a service.
- There are no rivals or direct competitors of the firm.
- No other seller can enter the market for whatever reasons legal, technical, or economic.
- Monopolist is a price maker. He tries to take the best of whatever demand and cost conditions exist without the fear of new firms entering to compete away his profits.

## Oligopoly

In an oligopolistic market there are small number of firms so that sellers are conscious of their interdependence. The competition is not perfect, yet the rivalry among firms is high. Given that there are large number of possible reactions of competitors, the behavior of firms may assume various forms. Thus there are various models of oligopolistic behavior, each based on different reactions patterns of rivals.

Oligopoly is a situation in which only a few firms are competing in the market for a particular commodity. The distinguishing characteristics of oligopoly are such that neither the theory of monopolistic competition nor the theory of monopoly can explain the behavior of an oligopolistic firm.

Two of the main characteristics of Oligopoly are briefly explained below –

- Under oligopoly the number of competing firms being small, each firm controls an important proportion of the total supply. Consequently, the effect of a change in the price or output of one firm upon the sales of its rival firms is noticeable and not insignificant. When any firm takes an action its rivals will in all probability react to it. The behavior of oligopolistic firms is interdependent and not independent or atomistic as is the case under perfect or monopolistic competition.
- Under oligopoly new entry is difficult. It is neither free nor barred. Hence the condition of entry becomes an important factor determining the price or output decisions of oligopolistic firms and preventing or limiting entry of an important objective.

## Pricing Strategies

Pricing is the process of determining what a company will receive in exchange for its product or service. A business can use a variety of pricing strategies when selling a product or service. The price can be set to maximize profitability for each unit sold or from the market overall. It can be used to defend an existing market from new entrants, to increase market share within a market or to enter a new market.

There is a need to follow certain guidelines in pricing of the new product. Following are the common pricing strategies –

### Pricing a New Product

Most companies do not consider pricing strategies in a major way, on a day-to-day basis. The marketing of a new product poses a problem because new products have no past information.

Fixing the first price of the product is a major decision. The future of the company depends on the soundness of the initial pricing decision of the product. In large multidivisional companies, top management needs to establish specific criteria for acceptance of new product ideas.

The price fixed for the new product must have completed the advanced research and development, satisfy public criteria such as consumer safety and earn good profits. In pricing a new product, below mentioned two types of pricing can be selected –

### Skimming Price

Skimming price is known as short period device for pricing. Here, companies tend to charge higher price in initial stages. Initial high helps to “Skim the Cream” of the market as the demand for new product is likely to be less price elastic in the early stages.

### Penetration Price

Penetration price is also referred as stay out price policy since it prevents competition to a great extent. In penetration pricing lowest price for the new product is charged. This helps in prompt sales and keeping the competitors away from the market. It is a long term pricing strategy and should be adopted with great caution.

### Multiple Products

As the name indicates multiple products signifies production of more than one product. The traditional theory of price determination assumes that a firm produces a single homogenous product. But firms in reality usually produce more than one product and then there exists interrelationships between those products. Such products are joint products or multi-products. In joint products the inputs are common in the production process and in multi-products the inputs are independent but have common overhead expenses. Following are the pricing methods followed –

### Full Cost Pricing Method

Full cost plus pricing is a price-setting method under which you add together the direct material cost, direct labor cost, selling and administrative cost, and overhead costs for a product and add to it a markup percentage in order to derive the price of the product. The pricing formula is –



**Pricing formula =**  
**Total production costs – Selling and administration costs – Markup**Number of units expected to sell

This method is most commonly used in situations where products and services are provided based on the specific requirements of the customer. Thus, there is reduced competitive pressure and no standardized product being provided. The method may also be used to set long-term prices that are sufficiently high to ensure a profit after all costs have been incurred.

#### Marginal Cost Pricing Method

The practice of setting the price of a product to equal the extra cost of producing an extra unit of output is called marginal pricing in economics. By this policy, a producer charges for each product unit sold, only the addition to total cost resulting from materials and direct labor. Businesses often set prices close to marginal cost during periods of poor sales.

For example, an item has a marginal cost of \$2.00 and a normal selling price is \$3.00, the firm selling the item might wish to lower the price to \$2.10 if demand has waned. The business would choose this approach because the incremental profit of 10 cents from the transaction is better than no sale at all.

#### Transfer Pricing

Transfer Pricing relates to international transactions performed between related parties and covers all sorts of transactions.

The most common being distributorship, R&D, marketing, manufacturing, loans, management fees, and IP licensing.

All intercompany transactions must be regulated in accordance with applicable law and comply with the "arm's length" principle which requires holding an updated transfer pricing study and an intercompany agreement based upon the study.

Some corporations perform their intercompany transactions based upon previously issued studies or an ill advice they have received, to work at a "cost plus X%". This is not sufficient, such a decision has to be supported in terms of methodology and the amount of overhead by a proper transfer pricing study and it has to be updated each financial year.

#### Dual Pricing

In simple words, different prices offered for the same product in different markets is dual pricing. Different prices for same product are basically known as dual pricing. The objective of dual pricing is to enter different markets or a new market with one product offering lower prices in foreign county.

There are industry specific laws or norms which are needed to be followed for dual pricing. Dual pricing strategy does not involve arbitrage. It is quite commonly followed in developing countries where local citizens are offered the same products at a lower price for which foreigners are paid more.

Airline Industry could be considered as a prime example of Dual Pricing. Companies offer lower prices if tickets are booked well in advance. The demand of this category of customers is elastic and varies inversely with price.

As the time passes the flight fares start increasing to get high prices from the customers whose demands are inelastic. This is how companies charge different fare for the same flight tickets. The differentiating factor here is the time of booking and not nationality.

### Price Effect

Price effect is the change in demand in accordance to the change in price, other things remaining constant. Other things include – Taste and preference of the consumer, income of the consumer, price of other goods which are assumed to be constant. Following is the formula for price effect –

**Price Effect =**

**Proportionate change in quantity demanded of X**Proportionate change in price of X

Price effect is the summation of two effects, substitution effect and income effect

Price effect = Substitution effect – Income effect

#### Substitution Effect

In this effect the consumer is compelled to choose a product that is less expensive so that his satisfaction is maximized, as the normal income of the consumer is fixed. It can be explained with the below examples –

- Consumers will buy less expensive foods such as vegetables over meat.
- Consumers could buy less amount of meat to keep expenses in control.

#### Income Effect

Change in demand of goods based on the change in consumer's discretionary income. Income effect comprises of two types of commodities or products –

**Normal goods** – If there is a price fall, demand increases as real income increases and vice versa.

**Inferior goods** – In case of inferior goods, demand increases due to an increase in the real income.

## ADVERTISING

**Meaning of Advertising** - Advertising is an activity of attracting public attention to a product, service, or business as by paid announcements in the print, broadcast, or electronic media.

**Definition of Advertising** - "Advertising is the non-personal communication of information usually paid for and usually persuasive in nature about products, services or ideas by identified sponsors through the various media." Now let's take this statement apart and see what it means.

#### **Non-personal**

Basically sales is done either personally or non-personally. Personal selling requires the seller and buyer to get together. Personal selling has its own advantages and disadvantages. Whereas advertising is non-personal selling. Personal selling has many advantages over advertising like direct communication,



bargaining, enough time to discuss in detail about the product, seller can easily locate potential buyer. Advertising has none of the advantages of personal selling, very little time to present sales message, message is cannot be changed easily.

But, advertising has its own advantages which is not found in personal selling: advertising has comparatively speaking, all the time in the world. Unlike personal selling, the sales message and its presentation does not have to be created on the spot with the customer watching. It can be created in as many ways as the writer can conceive, be rewritten, tested, modified, injected with every trick and appeal known to affect consumers.

Advertising covers large groups of customer and to make it effective proper research about customer is done to identify potential customers, to find out what message element might influence them, and figure out how best to get that message to them.

### Functions of Advertising –

Following are the basic functions of advertising:

1. **To distinguish product from competitors' products:** There are so many products of same category in the market and they competes with each other, advertising performs the function of distinguishing advertiser's product from competitors.
2. **To communicate product information:** Product related information required to be communicated to the targeted customers, and advertisement performs this function.
3. **To urge product use:** Effective advertisement can create the urge within audience for a product.
4. **To expand product distribution:** When the market demand of a particular product increases, the number of retailer and distributor involved in sale of that product also increases, hence product distribution get expanded.
5. **To increase brand preference:** There are various products of different bands are available, the brand which is effectively and frequently advertised is preferred most.
6. **To reduce overall sale cost:** Advertising increases the primary demand in the market. When demand is there and the product is available, automatically the overall cost will decrease, simultaneously the cost of sales like distribution cost, promotional cost also get decreased.

**Classification of Advertising –** Advertising can be classified on the basis of Function, Region, Target Market, Company demand, Desired response, and Media.

#### A) Classification on the basis of function

- Advertisement informs the customers about a product
- Advertisement persuades the consumers to buy a product
- Advertisement reminds existing customers about the presence of the product in the market

Let us discuss some important types of advertising based on the functional aspect of advertising.

**Informative advertising:** This type of advertising informs the customers about the products, services, or ideas of the firm or organization.

**Persuasive advertising:** This type of advertising persuades or motivates the prospective buyers to take quick actions to buy the products or services of the firm. Example: "Buy one, get one free".

**Reminder advertising:** This genre of advertising reminds the existing customers to become medium or heavy users of the products or services of the firm that have been purchased by them at least once. This type of advertising exercise helps in keeping the brand name and uses of the products in the minds of the existing customers.

#### B) Classification on the basis of region

Advertisements can also be classified on the basis of the region, say:

**Global advertising:** It is executed by a firm in its global market niches. Reputed global magazines like Time, Far Eastern Economic Review, Span, Fortune, Futurist, Popular Science. Cable TV channels are also used to advertise the products through out world. Supermodels and cinema stars are used to promote high-end products. Examples: Sony, Philips, Pepsi, Coca Cola, etc.

**National advertising:** It is executed by a firm at a national level. It is done to increase the demand of its products and services throughout the country. Examples: BPL (Believe in the best) Whirlpool Refrigerator (Fast Forward Ice Simple) etc.

**Regional advertising:** If the manufacturer confines his advertising to a single region of the country, its promotional exercise is called Regional Advertising. This can be done by the manufacturer, wholesaler, or retailer of the firm. Examples: Advertisements of regional newspapers covering those states or districts where these newspapers are circulated. Eg. The Assam Tribune (only for the NE region) etc.

**Local advertising:** When advertising is done only for one area or city, it is called Local Advertising. Some professionals also call it Retail Advertising. It is sometime done by the retailer to persuade the customer to come to his store regularly and not for any particular brand. Examples: Advertisements of Ooo la la, Gupshup (Local FM channels) etc.

#### C) Classification on the basis of target market

Depending upon the types of people who would receive the messages of advertisements, we can classify advertising into four subcategories:

**Consumer product advertising:** This is done to impress the ultimate consumer. An ultimate consumer is a person who buys the product or service for his personal use. This type of advertising is done by the manufacturer or dealer of the product or service. Examples: Advertisements of Intel, Kuttons (shirt), Lakme (cosmetics) etc.

**Industrial product advertising:** This is also called Business-to-Business Advertising. This is done by the industrial manufacturer or his distributor and is so designed that it increases the demand of industrial product or services manufactured by the manufacturer. It is directed towards the industrial customer.

**Trade advertising:** This is done by the manufacturer to persuade wholesalers and retailers to sell his goods. Different media are chosen by each manufacturer according to his product type, nature of distribution channel, and resources at his command. Hence, it is designed for those wholesalers and retailers who can promote and sell the product.

**Professional advertising:** This is executed by manufacturers and distributors to influence the professionals of a particular trade or business stream. These professionals recommend or prescribe the products of these manufacturers to the ultimate buyer. Manufacturers of these products try to reach these professionals under well-prepared programmes. Doctors, engineers, teachers, purchase professionals, civil contractors architects are the prime targets of such manufacturers.

**Financial advertising:** Banks, financial institutions, and corporate firms issue advertisements to collect funds from markets. They publish prospectuses and application forms and place them at those points where the prospective investors can easily spot them.

#### D) Classification on the basis of desired responses



An ad can either elicit an immediate response from the target customer, or create a favourable image in the mind of that customer. The objectives, in both cases, are different. Thus, we have two types of advertising under this classification.

**Direct action advertising:** This is done to get immediate responses from customers. Examples: Season's sale, purchase coupons in a magazine.

**Indirect action advertising:** This type of advertising exercise is carried out to make a positive effect on the mind of the reader or viewer. After getting the advertisement he does not rush to buy the product but he develops a favourable image of the brand in his mind.

**Surrogate advertising:** This is a new category of advertising. In this type of promotional effort, the marketer promotes a different product. For example: the promotion of Baggiper soda. The firm is promoting Baggiper Whisky, but intentionally shows soda. They know that the audience is quite well aware about the product and they know this fact when the actor states, "Khoob Jamega Rang Jab Mil Baithenge Teen Yaar ... Aap ... Main, Aur Baggiper").

#### E) Classification on the basis of the media used in advertisement

The broad classification based on media is as follows:

**Audio advertising:** It is done through radio, P A systems, auto-rickshaw promotions, and four-wheeler promotions etc.

**Visual advertising:** It is done through PoP displays, without text catalogues, leaflets, cloth banners, brochures, electronic hoardings, simple hoardings, running hoardings etc.

**Audio-visual:** It is done through cinema slides, movies, video clips, TV advertisements, cable TV advertisements etc.

**Written advertising:** It is done through letters, fax messages, leaflets with text, brochures, articles and documents, space marketing features in newspapers etc.

**Internet advertising:** The world wide web is used extensively to promote products and services of all genres. For example Bharat Matrimony, www.teleshop.com, www.asianskyshop.com etc.

**Verbal advertising:** Verbal tools are used to advertise thoughts, products, and services during conferences, seminars, and group discussion sessions. Kinesics also plays an important role in this context.

#### **Why ethics and social responsibilities are important in advertising**

In today's world of cut throat competition every organisation is investing heavily in advertising. Advertising is necessary to make a new product popular in the market and to increase the sales of existing brands. Advertising plays an important role in brand building and informing public about available products so that they can make informed choice among different products or brands.

Advertising is a powerful medium of mass communication. As advertising is a form of mass communication and thus just like other popular forms it too have some social responsibilities associated with it. However, the question is whether advertising fulfil its social responsibilities or not.

Advertisements are meant for the masses and people relate themselves with this medium. Thus, for understanding its responsibilities towards the public, its positive and the negative aspects needs to be understood.

#### **Positive and Negative Aspects of Advertising**

As like any other medium of mass communication, advertising also have positive as well as negative aspects. Advertising increases sales, advertising makes the product popular, advertising helps in brand formation, advertising makes the public aware with the available brands or products. Advertising is the largest financial source for mass media. Advertising is sometimes subjected to wide criticism. Many of the advertisements are criticised as deceptive or manipulative. Other criticism focus on the social or environmental impact of advertising, the effect of advertising on our value system, commercial clutter, stereotypes, and offensiveness.

#### **Ethics in Advertising**

Ethics means a set of moral principles which govern a person's behaviour or activities. Ethics in advertising means a set of well defined principles which govern the ways of communication taking place between the seller and buyer.

Advertising benefits advertisers in many ways, similarly it makes the public aware with the available brands so that they can make informed choice among the available products or brands. But, some of the advertisement doesn't match the ethical norms of advertising, such ads causes political, cultural, or moral harm to society. Ethical ad is one which is in the limit of decency, make no false claims, and doesn't lie.

Nowadays advertisements are highly exaggerated and a lot of puffing is used. It seems like the main area of interest for advertisers is to increase their sales, gain maximum market share, prove their product best in the market by presenting a well decorated, colourful, and puffed advertisement.

#### **Ethical and Moral principles of Advertising**

Advertisers must have sufficient knowledge of ethical norms and principles, so that they can understand and decide what is correct and what is wrong. We can identify several ethical and moral principles that are particularly relevant to advertising. We are speaking briefly of three as follows:-

1. Truthfulness in advertising;
2. The dignity of the human person; and
3. Social responsibility.

#### **Truthfulness in Advertising**

Truth in advertising promotes a highly efficient, functioning economy by:

- Discouraging deceptive business practices;
- Encouraging the provision of accurate and truthful information;
- Enhancing competition by ensuring a level playing field; and
- Enabling informed consumer choice.

#### **The Dignity of the Human Person**

- The dignity of human beings should be respected; advertisements should not insult the dignity of human beings;
- Different cultures and ethnic groups should be presented in advertising as equal with the majority of the population;
- Special care should be given to weak and vulnerable groups like - children, poor people, or elderly people.

#### **Advertising and Social Responsibility**

Advertising has a strong social responsibility, independent of its known commercial responsibility. Advertisers should have a deeper sense of social responsibility and should develop their own set of ethical and social norms taking into consideration the values of their society.

Nowadays it seems like many of the advertisers lack knowledge of ethical norms and principles. They doesn't understand what is right or wrong, and that's by number of misleading and unethical ad is increasing. But, on the other side some advertisers are giving importance to ethical norms and principles. When the ethical norms and principles are followed, it makes the organisation answerable for all its activities, reduces the chances of getting pointed out by critics or any regulatory body, aid helps in gaining confidence of the customer and makes them trust organisation and its products.

#### **The Consumer Protection Act, 1986:**

Consumer protection implies assurance against anti-consumer trade practices by the producers or traders. Anti-consumer trade practices include adulteration, sub-standard quality, fractional weights and measures, overcharging, misleading, claims in advertisements, etc. Naturally, curbing such practices through legislative and other measures and taking action against the procedures and traders indulging in such practices is the essence of consumer protection.

The C.P.A. was passed by the Parliament in 1986 and it came into force from 1987. Its purpose is to protect consumers against defective goods, unsatisfactory services, unfair trade practices, etc.

Some of the unfair practices that justify government's role in consumer protection are as follows:

(i) The traders may sell goods that do not conform to the claimed standards of quality, size, weight, design, etc.

(ii) The traders may supply inferior or duplicate products to the consumers.

(iii) The goods supplied to the consumers may not be safe for human consumption or use.

(iv) The producers may advertise a low price for the goods on offer. But when one goes to purchase the goods, he ends up paying more than the advertised price because it did not include the price of accessories or other things that are necessary to use the goods.

(v) The consumers may find goods weighing less than the 'quantity printed on the package. Producers escape responsibility by claiming that the package indeed contained the printed quantity at the time of packing and the loss could be in transit.

(vi) The producers may cause ecological and environmental hazards for the consumers and society by causing water, air and noise pollution.

(vii) Some producers promote goods that are injurious to public health through surrogate advertising. For instance advertisement of a Soda brand may be carried out to promote the sale of liquor with the same brand name.