UNIT 10 OBJECTIVES AND METHODS OF PRICING

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10.0 OBJECTIVES

After studying this unit, you should be able to:

- appreciate the specific role of pricing in marketing;
- identifying various objectives that a company hopes to achieve through pricing;
- evaluate the factors that influence price determination; and
- state various methods adopted in price determination.

10.1 INTRODUCTION

In the area of pricing, management will find itself in an unenviable position to address a number of issues simultaneously, some of which may be conflicting with some others. The issues may range from recovering costs, achieving a certain return on investment, profit maximization, obtaining a certain sales volume or market share, just surviving during a difficult period, avoiding price wars to meeting competition, the

value perception of the customer, etc., and, at the same time, adhere to the laws of the Government. The company is also to be projected about it among consumers and the law makers and is also to be integrated with the policies pertaining to the other marketing variables. This Unit attempts to explain various inter-related issues pertaining to the pricing objectives of a company, factors influencing price determination and the basic techniques used in pricing a product.

10.2 ROLE AND IMPORTANCE OF PRICE

No other marketing variable is, perhaps, as crucial in influencing the buyer's choice, as the price of a product. A company's success in a competitive environment is, to a great extent, dependent on its pricing policy. A sound pricing policy will ensure desired market penetration and sales volume and proper flow of funds. An unsuccessful pricing policy, on the other hand, may result in losses and deprive the company of funds required to continue/develop the business.

As you know, pricing is one of the 4 Ps of marketing mix. Price is the only element in the marketing mix that generates revenue while the other elements (product, promotion and distribution), represent costs. Second, price is the most flexible of all the elements as price adjustments can be quickly made to meet competition, to take advantage of temporary shortages, etc. Pricing and price competition have been rated as the number one problem facing marketing executives. Yet, it appears that sufficient attention is not paid to pricing decisions by most companies. Pricing decisions taken by many firms are known to be based in intuition, guesswork and unsubstantiated assumptions.

There is a price for everything though it may be known by different names in different contexts. Thus, it is known as **rent** for apartment, **tuition** for education, **fee** for the doctor, **fare** for air or train or taxi journey, **interest** on the money borrowed, **toll** while passing through a highway, **bribe** to get certain things done, **retainer** for certain services rendered, **salary** to an employee, **commission** to an agent, wages to a labourer and **taxes** to the authorities.

As discussed above, a number of products and services are exchanged between producers and consumers daily. Price may be defined as the amount of money changed for a product or service. Broadly, price represents the sum of the values consumers exchange for the benefit of possessing the product or service.

Since price represents the sum of values the consumers exchange for the benefit of possessing the product or service, the key to pricing is understanding the set of values that the consumer perceives the product/service. These values are related not only to the tangible features of a product, but also to intangible ones. Thus, some consumers may be happy with "low" price, some with "high" price, some would like to bargain, and some others will buy only during "sales" or in supermarkets or departmental stores or at duty-free shops or during weekly fairs.

While price represents the **value** of the product for the consumer, as perceived by him, it determines **profits** for the manufacturer. Arriving at a price that satisfies the consumer, and at the same time generates the desired level of profits to the company is the key to success in business.

10.3 OBJECTIVES OF PRICING

Though *pricing* objectives cannot be different from company's overall objectives, yet the management must be clear about those overall objectives of the firm whose attainment it wants to be furthered by pricing policy. A company may seek to achieve one or more objectives by pricing policy. A number of factors, some of which may be

be internal to the company, and some others external, must be considered while formulating the pricing objective(s). Thus, the image it wants to project about it, long run/short run profit maximization, maintaining/increasing market share, sales maximization, return on investment, social responsibility, adhering to the legal requirements etc. are some of the factors that a company may have to take into account while formulating the pricing objectives. Very often, companies may have to pursue more than one objective. Therefore, as a marketer you may have no choice but to strike a balance among a number of objectives, some of which may conflict with some others.

10.3.1 Profit Oriented Objectives

Current Profit Maximization: A number of companies have the objective to earn maximum profit possible in the immediate future. For this objective, the firm decides highest possible price for the product. They estimate demand and costs at different prices and select the unit price that maximizes profits. Charging a high price to earn maximum profit is possible if the product is a unique product catering to the requirements of a select group of consumers who are not price conscious, but more status conscious. It is also possible to have the pricing objective of current profit maximization during periods of shortage or if the company is a monopoly supplier of the product. However, this objective suffers from the drawback that high prices themselves invite competition in the long run. High price project may also be a negative image among the consumers and may invite government intervention.

Achieving Desired Return on Investment (ROI): Another revenue oriented objective could be achieving a pre-determined return on investment. In this case, the companies first decide on what percentage of return they would like to earn on investment, and accordingly price the product in such a way that the profit margins ensure that they achieve the objective. This objective is suitable when the company would like to recover its investments within a particular period due to various reasons such as generating resources for investing in new ventures, anticipating the entry of competitors in the near future, proving for cushion against economic and political uncertainties in future, etc. However, this strategy may not be suitable under conditions of intense competition and if the company is a marginal player in the market.

10.3.2 Sales Related Objectives

Obtaining Desired Sales Volume: Some companies may fix a target regarding the volume of sales they want to achieve and arrive at a price which will give them that desired sales volume. The target may be maximization of sales volume during a particular year in relation to the production level of the firm, or market leadership in sales as far as the particular industry is concerned or different sales levels for different years. Though this strategy may not result in profit maximization, a company may opt for this strategy so long as it does not result in loss. This objective may prove to be a better strategy in the long run to survive in the market and proper in the business, than maximization of profits in the short run. This strategy may, however, result in loss to the company for the firm may have to resort to heavy promotion, price discounts and high incentives to salesmen and distributors in order to achieve the desired sales level. However, since the company has established itself in the market, it may be able to raise the price.

Achieving Desired Market Share: In case of some companies the pricing objective may be dominant market share or a desired market share, as they feel that market share is a better indicator of customer support and corporate strength than sales volume or profits or return on investment. Market share objective may be in different forms such as obtaining maximum market share or obtaining desired share

of the market or increasing the market share from the present level to a higher level or retaining the present market share in a growing market, etc. The company will fix the price and design the marketing programme to achieve the market share objective it has set. However, a high market share may not only invite competition, but may also invite government action under the laws designed to curb monopolies.

10.3.3 Competition Oriented Objectives

Survival: A company may decide survival as the pricing objective under conditions of over capacity, stiff competition, frequent changes in consumer tastes, low demand, unfavourable business environments, etc. In case of survived objective, prices are kept very low since staying in business for the time being is the only consideration and it may not be practical to consider factors like profits or return on investment as the objectives. However, low price itself may spur demand and generate sufficient returns. The reductions in air fares consequent to the fall in air traffic following the attack on the twin towers of the World Trade Centre building in New York on September 11, 2001 and following the SARS scare during the first half of 2003 are instances of pricing for survival.

To Prevent Competition: At times, a company may like to preempt the possibility of competitors entering the market, rather than earning high or immediate profits. Hence fix the price of its product at the lowest possible level. This is particularly done by companies for mass consumed items to get a foothold. Once they establish themselves in the market and have successfully driven away the competition, the market becomes almost a "captive" market for the company and subsequent increases in price becomes easy. The Japanese companies are known to adopt this strategy in overseas markets.

10.3.4 Other Objectives

Price Stabilisation: Companies which are not rich in resources, particularly financial resource, normally enter the market lately. Such enterprises are engaged in the production of standardized products, and are not able to bring about product differentiation. Therefore, they may choose to avoid price war, and "follow the leader" in the pricing decisions. It is common among most manufacturers of candies, biscuits, bread, soft drinks, etc., and among restaurants to price their products at a particular level accepted by the customers and make adjustments in the other marketing variables.

Price Leadership: A company may like to be known as producer of high quality products/innovative products. Since production and promotion of high quality and innovative products involves substantial expenditure, the price should also be correspondingly high. Such companies set very high prices and do not follow other companies. They succeed in creating a prestige image for their products. Though they may cater to small sized market segments in terms of number of customers, the high unit price offers them sufficient margin of profits. Companies like IBM are known to be price leaders and not market followers.

Other pricing objectives may be: (a) to create an image of a socially responsible company engaging in ethical practices (low prices and hence low margins), (b) to cater to a number of consumer segments with a number of models of the product with different attributes and different prices (refrigerators and air conditioners of different capacities, toothpastes with different attributes, etc.), (c) to promote a high priced product using the lower price of another version of the same product, etc.

Check Your Progress A

1) Give two reasons as to why "pricing" is considered important over other marketing mix elements.

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2) What are the revenue-oriented objectives of pricing?

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3) Are the following statements true or false?

   i) Price represents only the values related to the tangible features of the product.

   ii) Pricing is governed by not only the internal factors of a company but also external environmental factors.

   iii) Sales maximisation will automatically lead to profit maximisation.

   iv) Companies which want to create a "prestige image" for their products normally price them high.

   v) Price stabilization policy seeks to prevent price wars.

10.4 FACTORS INFLUENCING PRICE DETERMINATION

Price is a point at which exchange takes place i.e. a point where demand and supply meet. Thus, factors on both demand and supply sides influence price setting. The major factors influencing price determination are:

1) The "value" of the product, as perceived by the buyer
2) Product costs
3) Competition
4) Company's policies
5) Government regulations
6) Other elements of marketing

Let us now study each of them in detail.

10.4.1 'Value' of the Product

As you know, any transaction is an exchange of money for a bundle of utility. For the consumer, price represents the value of the product as perceived by him. The key to pricing is, thus, the correct understanding of the value that the consumers perceive in a product. This value is governed by tangible factors as well as intangible factors. Thus, some people prefer a product with "low" price, some with "high" price, some would like to "bargain", some other would buy only during "sales", while some would buy only during "fairs" or in super markets, departmental stores, or duty-free shops or

in shops in specific areas in the city or town. Hence, price determination must be based on a sound analysis of the consumer behaviour.

The level of demand for a product sets the "ceiling" for the price of that product. It is not easy to estimate precisely the demand for a product. Hence, demand is taken as an uncontrollable variable in marketing. According to demand theory, as you know, price and demand are inversely related (though there are exceptions to this) i.e. a price decline is associated with rise in demand and a price increase results in fall in demand. Hence, a marketer must be aware not only of the absolute level of demand but, more particularly of the sensitivity of demand to price changes. A measure of this sensitivity is provided by the price elasticity of demand. **Price elasticity of demand is the relative change in the quantity demanded for a given change in price.** It is measured by dividing the percentage change in the quantity demanded by the percentage change in price. The formula is:

$$\text{Price elasticity of demand (E)} = \frac{(Q_1 - Q_2) \div (Q_1 + Q_2)}{(P_1 - P_2) \div (P_1 + P_2)}$$

Where Q_1 = Quantity demanded at the original price

Q_2 = Quantity demanded at the revised price

P_1 = Original price

P_2 = Revised price

Suppose demand increases by 10% when the price is lowered by 5% or demand falls by 10% when the price is raised by 5%, the price elasticity of demand is –2 (the negative sign indicates the inverse relationship between price and demand). In such cases, the demand is said to be elastic since a certain change (decrease or increase) in price has been accompanied by a more than proportionate change (increase or decrease) in demand. On the other hand, demand is said to be inelastic if a certain change (decrease or increase) in price is accompanied by less than proportionate change (increase or decrease) in demand. Thus, if the total revenue (quantity sold x price) remains the same or increases after a reduction in price, the demand for that product is price elastic and if it decreases, the demand is price inelastic. Conversely, during periods of price increase, if the total revenue remains the same or declines, demand is price elastic and if it increases the demand is inelastic. Hence, the less elastic the demand, the more it pays for the seller to raise the price and the more elastic the demand, the seller gains more by reducing the price. However, while reducing the price, the manufacturer must take care that the price of the product covers costs. In general, demand for products such as necessities and those for which no close substitutes exist is known to be price inelastic, since people have to buy them irrespective of price. There can also be rare cases where a rise in price is followed not by a decrease in demand but, on the contrary, by an increase and vice-verse. This may happen in the case of fad items or prestige or exclusive items where the customer segment is elitist and high price is associated with high quality and low price with low quality. This also happens when consumers start stocking items during periods of shortage (fearing further price increase) and wait in the wings during price fall (anticipating further fall in price). Therefore, to determine the price of the product, a marketer must be aware of absolute level of demand, elasticity of demand, and the value perception of the product by the consumer.

10.4.2 Product Costs

While the level of demand sets the 'ceiling' of price, costs set the 'floor' price since a product's price should enable the company to cover the costs and leave some margin as a fair return for the effort put in and the risk taken by the company. The 'costs'

must include not only the cost of manufacture but also the costs incurred in distribution, promotion and administration.

Costs are broadly divided into two:)1) fixed costs and (2) variable costs. **Fixed costs** are, as the term indicates, those costs which do not increase or decrease with changes in production or sales level in the short run. Fixed costs are also referred to a overhead costs. A company will have to incur certain expenses such as rent for the building, expenditure on machinery, interest on the borrowed capital, salaries for some staff, etc., whether it produces to its full capacity or partial capacity or completely stops production. **Variable costs** vary directly with the level of production. These include costs of raw materials, power, packaging, etc., whose consumption is directly related to the volume produced. They remain the same for each unit produced. **Total costs** are the sum of the fixed and variable costs together for a certain production level. **Average total cost** refers to the total costs divided by the number of units produced. Generally a company would like to fix the price of a product to cover the average cost plus a reasonable profit margin. Thus, if the average cost of the product produced by a company is more than that of its competitors, it has to charge a higher price or make less profit than its competitors. Since fixed costs remain fixed irrespective of production level, it is obvious that the average cost of production will go on decreasing with increase in the production level till the production capacity is fully utilized.

The marketer must know in detail the fixed costs, variable costs, and average costs of the products before determining their prices.

10.4.3 Competition

While costs set the 'floor' and demand sets the 'ceiling', competition provides the 'reference point' for pricing a company's product. Under market conditions of **perfect competition** (many buyers and sellers trading in a uniform commodity, products tend to be priced low because buyers will not pay a higher price since there are a number of substitute products at a given price and the sellers need not reduce the price since there are many buyers at the going price. Under **monopolistic competition**, the market consists of many buyers and sellers. Therefore, exchange takes place over a range of prices rather than a single price because the sellers are able to differentiate their offers through product differences and/or varied services. Buyers do not think that the products are perfect substitutes and hence are prepared to pay different prices and sellers also try to develop differentiated offers for different customer segments. Under **oligopolystic competition**, there are a few sellers who are sensitive to one another's pricing and marketing strategies. Therefore, marketer has to be very careful about changing the price of his product since any change will invite retaliatory action by the competitors. A pure monopoly consists of only one seller. Theoretically, a monopoly producer can price his product as he wishes, but in practice, it may be difficult to charge a very high price as it may invite competition, government action and consumer resistance. Thus, a company must be aware of the competitive conditions in the market for the product before it decides on a price.

10.4.4 Company's Policies

Product pricing is generally tailored to the company's objectives and policies. If a company desires to project an image of producer of high quality goods for a quality conscious high-income group of consumers, then it will charge high prices for its products. On the other hand, if it wants to project an image of a producer of a product for the masses, then it will price its products low. Again, if it wants to be one of the many players in the market and does not want to influence the market, it will confine the price of its product to the level acceptable to the majority of customers

and try to make adjustments in product quality, size, etc. Some companies follow a policy of taking advantage of the psychology of the consumers to sell their products. In that case such companies fix prices at a level to make the products appear cheaper than what they really are (pricing a pair of shoes at Rs.199.99). Some companies engaged in producing more than one version of the same product, try to use lower prices of low quality products to promote sales of higher priced high quality products while some others want to sew up the market by offering different versions of the same product to different segments and pricing them differently.

10.4.5 Government Regulations

Since price is a sensitive issue, governments all over the world often try to ensure that marketers do not take undue advantage of factors such as periods of shortage or the company's monopoly position or financial muscle to drive away competition by charging high or low prices as the situation warrants. Law enforcing agencies of the Government are generally very active when it comes to the question of pricing products used regularly by the poor and vulnerable sections of the society. There are also consumer movements in many countries which keep a close watch on the activities of companies.

Nowadays there is a general tendency among industries in almost all countries to lay down standards of self-regulatory code of conduct for the member companies, and industry associations ensure that the "member companies" do not violate the self-imposed rules. Thus, there are government laws prescribing price floors and price ceilings; almost all products are supposed to carry the selling price or the maximum retail price (MRP) on the packages; laws against monopoly and restrictive practices are in place to ensure that the companies do not misuse their monopoly position and adopt practices which restrict competition. Since this is an external environment factor, over which a company has no control, the company must adjust its marketing strategy including pricing strategy to suit the regulations.

10.4.6 Other Elements of Marketing

Your have already studied that price is one of the 4 Ps (marketing mix) of marketing. Like other three marketing mix elements, price is also influenced by and influences the remaining elements of marketing mix. Hence, decisions in respect of pricing cannot be taken in isolation of the decisions regarding the remaining marketing mix elements. For instance, the customer segment which the company targeted is a quality conscious well to do segment which also expects good after sales service. In that case, obviously, the costs incurred in meeting customer requirements can be recovered only by pricing the product appropriately high. Similarly, a personalized product such as perfume or soap or garment, which warrants heavy promotion has to be necessarily priced high. An intensive distribution channels and wide distribution means costs and the product price should cover the costs. On the other hand, a mass consumed product of low technology may be able to support only minimum costs. Hence, price of the product is very much dependent on quality, brand, package, service, distribution and promotion.

Check Your Progress B

1) What do you understand by "demand for a product is price elastic"?

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2) Give two reasons as to why a monopoly producer may find it not very easy to raise the price of his product indefinitely.

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3) What is the difference between "fixed costs" and "variable costs"?

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4) Are the following statements true or false?
   i) The consumer perception of value of a product is related only to the tangible attributes of the product.
   ii) Demand for products considered necessities is, generally known to be inelastic.
   iii) Costs incurred by a company on packaging the product is fixed cost.
   iv) Under conditions of perfect competition, it is difficult for a company to raise the price of its product.
   v) Pricing decisions have to be independent of decisions pertaining to other marketing mix elements.

10.5 BASIC METHODS OF PRICE DETERMINATION

You have already studied how government regulations and various other factors are important in price determination. Marketer also has to integrate its pricing policy with policies pertaining to other marketing mix elements, otherwise, he will not be able to remain in business. Similarly, the business enterprise cannot follow a pricing policy which is in conflict with or different from its overall policy and the corporate image it wants to project. Hence, in practice, companies set prices based on one or more of the remaining three sets of factors i.e. costs, the value of the product as perceived by the buyer (demand) and competition. The approaches to pricing based on the above three factors, are refereed to as (a) cost based pricing, (b) buyer based pricing, and (c) competition based pricing. Let us now study about them in detail.

10.5.1 Cost Based Pricing

As the name indicates, this method pricing refers to the practice of setting the price of a product on the basis of cost of the product and a certain profit margin. There are two methods which are based on the product cost. They are: (i) Cost-plus pricing, and (ii) Break-even-analysis and target profit pricing.

Cost-plus Pricing: This is perhaps the simplest method of pricing aggregating all the costs of the product (all the costs incurred in producing, distributing, promotion, branding, packaging, servicing the product, etc.) and adding the standard mark-up for profit. The following is an illustration of the cost plus pricing method in respect of Product X whose expected sales volume is 20,000 units.

Total manufacturing costs	Rs. 90,000
Packaging, branding, servicing, distribution and promotion costs	Rs. 20,000
Administration costs	Rs. 20,000
Total costs	Rs. 1,30,000

Cost per unit   Rs. 1,30,000 ÷ 20,000 = Rs. 6.50

Suppose the company desires Rs. 1.5 profit per unit sold, then the company will charge Rs. 8.00 per unit to the dealer. If the dealers want to earn 25 per cent profit then they will mark up the price to Rs. 10 per unit. This method which provides for taking into account the total costs, can be expressed as:

Selling price per unit = Variable costs per unit + fixed costs per unit + profit margin per unit.

Cost plus pricing method appears logical and fair to both sellers and buyers. At the same time, it is easy to comprehend and implement. However, it suffers from the limitation as it ignores both demand and competition. In the above example, for instance, the company based its unit price of the product at Rs. 8 on the expectation that there will be demand for 20,000 units, On the contrary, if there is demand for 10,000 units only, then it has to charge a higher price because the fixed costs will have to be spread over 10,000 and not 20,000 units. Similarly, if the demand exceeds 20,000 units, the unit costs will decline and if the profit margin remains the same, the price will have to be lowered. Moreover, if the total capacity of production of the company is 20,000 units, any excess demand will have to be met by expansion of capacity, in which case the cost per unit will increase or the market will have to be left dissatisfied which may lead to the consumers shifting their loyalty to the substitute brands. Thus, it must be remembered that costs and price are inter-related and price determines costs as much as costs determine price. Since costs vary with the level of output, price also have to change with every change in output level caused by changes in market demand, which is rather impractical. Similarly, in the above example, though costs may justify a unit price of Rs. 8, whether the company will be able to realize this amount will depend, to a great extent, on the nature and extent of competition in the market, which is totally ignored in cost plus approach.

Bread-even Analysis and Target-Profit Pricing: Break-even analysis or a target profit pricing, is another cost oriented approach to pricing. Companies, which want to ensure a certain return on their investment, first decide on the profit they want to earn and then determine the pricing that ensures them the budgeted profit. To arrive at the price, break-even analysis concept is used. **The break-even point is that level of production where the total revenue equals total cost**. This is the point where the firm neither earns profit nor suffers loss. Production above the break-even point leads to profits and production below the break-even point means the company has to suffer losses. The formula for arriving at the break-even point is:

$$\text{Break-even Point (BEP) in Volume} = \frac{\text{Total Fixed Costs}}{\text{Per unit contribution to fixed costs}}$$

$$= \frac{\text{Total Fixed Costs (F)}}{\text{Selling price per unit (P)} - \text{Variable costs per unit (V)}}$$

$$\text{BEP} = \frac{F}{P - V}$$

Figure 10.1 is a graphical presentation of the above formula. BEP is calculated in this paragraph using the earlier example relating to Product 'X' (in section 10.5.1 in this Unit).

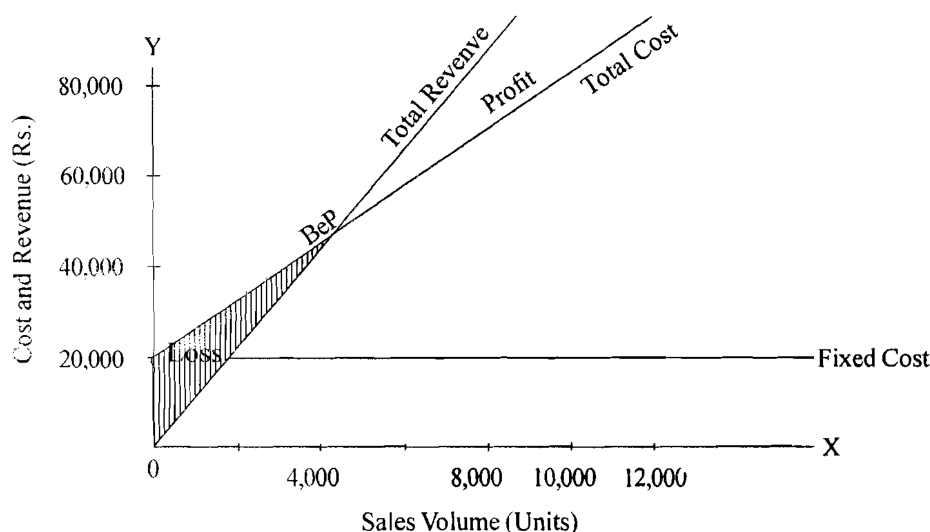

Fig. 10.1: Break-even chart

The total fixed costs (administration costs) are Rs. 20,000; the balance Rs. 1,10,000 are variable costs and the company desires to price the product at Rs. 8 per unit. Then variable costs per unit becomes Rs. 1,10,000 ÷ 20,000 = Rs. 5.50, because the company is producing 20,000 units. Then

$$\text{BEP} = \frac{\text{Total Fixed Cost}}{\text{Selling Price} - \text{Variable cost Per Unit}}$$

$$= \frac{\text{Rs. } 20{,}000}{\text{Rs. } 8 - \text{Rs. } 5.50} = \frac{\text{Rs. } 20{,}000}{\text{Rs. } 2.50} = 8000 \text{ units}$$

Thus, if the selling price is set at Rs. 8 per unit, the company must sell at least 8,000 units to break-even. At this point, the sales revenue will enable the company recover the fixed costs totally, besides the variable costs incurred upto that point. Sales beyond this level at the unit price of Rs. 8 will contribute to profit at Rs. 2.5 per unit of the product sold.

To earn a target profit of Rs. 25,000, then the firm should be able to sell 18,000 units (8,000 units plus 10,000 units). If the total capacity of production of the company is 20,000 units and if it is able to sell the entire production, it will make a total profit of Rs. 30,000.

Break-even analysis is useful for financial analysis and product pricing since one can use this technique to ascertain the profit or loss at different prices if a reasonable estimate can be made of demand for the product at each price.

Though the break-even analysis is an useful tool for price fixation, it suffers from certain limitations. First, the theory it may be possible to divide costs into fixed and variable costs, but in practice, it will be difficult to divide costs exclusively as fixed and variable. There may be certain costs which may not clearly fall into one or the other categories. For instance, part of costs incurred on labour, power, servicing and distribution may be fixed and part variable. Fixed costs are assumed to remain constant till full capacity utilization. But in practice, they may not be. Anyway, all costs are variable in the long term. Assumption regarding constant unit variable costs may not also hold true since it is likely that, with bulk purchase of inputs like raw materials (as the demand for the final product increases), the unit price of the inputs may decline leading to decline in variable costs. Similarly, selling price per unit may also vary within the total quantum sold at a particular level of demand due to bulk selling. Fourth, break-even analysis may enable the company to arrive at the number of units required to be sold to break-even at different price levels, it cannot guarantee

that the company can actually sell as many units at those price levels. Finally, the demand at different price levels is extremely difficult to arrive at with 100% correctness. It is, at best, an estimate and due to sudden contingencies, the estimate clan turn out to be even totally incorrect. However, the break-even analysis shows the likely effect of different prices, costs and demand on the break-even point and, hence, on profits. Table 10.1 is such an exercise in relation to Product 'X'.

Table 10.1: Break-even Volume and Profit at Different Prices

Price of Product (Rs.) (Rs.)	*Contri-bution per unit* (units)*	*Sales required to break even (units)*	*Demand at the given price*	*Total revenue [1×4] (Rs.)*	*Total** cost (Rs.)*	*Profit (Rs.) [5-6]*
1	2	3	4	5	6	7
6	0.50	40,000	25,000	150,000	137,750	12,250
8	2.50	8,000	20,000	160,000	130,000	30,000
10	4.50	4,445	15,000	150,000	102,500	47,500
12	6.50	3,077	10,000	120,000	75,000	45,000

*Product Price–Variable Cost per Unit

** Assumes fixed cost of Rs. 20,000 and constant variable cost of Rs. 5.50 per unit.

Table 10.1 shows that, with every increase in the price of the product, the break-even level declines and it is logical to assume that the demand for the product will also decline with rise in price. It will be noticed that (i) the maximum revenue is not earned either at the lowest price (highest demand) or at the highest price (lowest demand) levels but at Rs. 8 per unit, (ii) the total cost declines with every decline in sales, and (iii) the maximum profits are earned not at the highest or lowest prices, but at a price of Rs. 10 per unit.

Assume that the manufacturer has invested Rs. 5,00,000 in the business and has targeted a minimum profit of Rs. 50,000. None of the prices would enable him to achieve that target. He will have to find out the price demand relationship to arrive at the break-even point which will give him the targeted profit of Rs. 50,000.

You may learn more about Break-even analysis in MCO-5: Accounting for Managerial Decisions, under Unit 16.

10.5.2 Buyer Based Pricing

This method of pricing is based on the belief that it is more logical to price a product not on the basis of seller's cost or the competitors actions, but on the basis of demand. Two methods of pricing based on demand are: (i) Perceived Value Pricing, and (ii) Differential Pricing.

Perceived Value Pricing: Since price represents the value perception of the product by the consumer, it is better to build a perceived value in the buyers' minds about the product and then match the perceived value by price. For instance, different restaurants charge different prices for the same product because buyers assign different values for the same product at different places. For this technique to be successful, the company must be able to correctly assess the value perception of the buyers for different offers. Over-pricing or under-pricing will produce less revenue than planned. Perceived value pricing will succeed more in the case of non-branded personalized items.

Differential Pricing: This method acknowledges the fact that the intensity of demand for the same product differs from person to person, place to place, time to time and product version to product version. Hence, different prices are charged on the basis of person, place, time and product version. For instance, different prices are charged in a cinema hall or drama hall or music concert hall for tickets for different classes of seats (person and place) though the performance is the same. Similarly, the same product (fruits, candies, soft drinks, etc.) is priced differently depending on the place of sale, whether it is a shop in the market or railway station or airport or neighbourhood shop. Telephone rates are different on different days and at different times on the same day. Hotels, lodges, airlines etc. charge different prices for the same service during peak and off-seasons. Refrigerators and air-conditioners are cheaper during winter season as compared to summer season and different versions of the same product (with different packaging, for instance) are priced differently.

10.5.3 Competition Based Pricing

Since competition provides a reference point, pricing a product with reference to the price of a similar or substitute product charged by the competitor is another pricing technique. Two versions of this technique are: (i) Going-Rate Pricing, and (ii) Sealed-Bid Pricing.

Going-Rate Pricing: Under this method the company bases the price of its product largely on competitor's prices for the same product or similar products without bothering much about the product costs or the value perception of the product in the consumer's mind or the differences in the intensity of demand for the product among different consumer groups. Though the basis for pricing in this case, is the "going-rate" in the market for the same product or similar products, it does not necessarily mean that the price charged by a company would exactly be the same as the one charged by competitors. It may charge the same as competitor's price or more than competitor's price or less than competitor's price, depending on the market conditions. The important point to be noted is that the company does not change the price when the demand for its product or the product costs change, but it changes only when the "going rate" changes.

The main logic behind this method of pricing is that, the "going rate" represents the collective wisdom of the industry regarding the demand conditions and the price so decided will yield the optimum return under such demand conditions, Moreover, it is not easy to exactly measure the consumers' value perception or demand elasticity or consumer reaction to price differences. This approach also avoids unnecessary price wars and heart burning among member firms of the industry. Going-rate pricing is widely prevalent among sellers of homogeneous products involving low technology in production and are bought frequently.

Sealed-bid Pricing: As you know, organisational buyers procure goods and services by tender method. In this method, buyer gives the technical description of the product required (to be bought) and invites bids by sellers. Each seller submits a sealed cover containing the technical description of the product he would like to sell, its price and terms of sale. The buyer opens all the bids (sealed covers) on a specified date in the presence of the bidders. Then the buyer decides to buy from the seller who had quoted the lowest price, if the technical specifications of that product matches his requirements.

When the company bids for contracts, it quotes a price which is generally based on its assessment of what the competitors prices would be for the same bid, rather than on its own cost or demand. This is referred to as sealed-bid pricing. Since the main objective in bidding is winning the contract, pricing is deployed as the main weapon to achieve the objective.

When a company bids for a contract, it has to balance two opposite pulls; on the one hand it should quote the price as low as possible to win the contract, on the other hand the price so quoted should be high enough to cover the costs and yield desired profit margin. Price quotation under a a sealed bid is quite a difficult job. Firms which bid only occasionally or for whom winning a bid is a question of survival, generally quote the lowest price. On the other hand, firms which participate in bids regularly and are not deficient in resources try for lone term profits rather than win every bid by quoting the lowest price or make money in every bid.

10.6 LET US SUM UP

Pricing objectives must be decided in accordance with the company's overall marketing objectives. Pricing objectives may be broadly classified under three heads: (1) profitability objectives (including profit maximisation and target return on investment), (2) sales volume objectives (including sales maximisation and market-share maximisation), and (3) other objectives (including price stabilisation, survival, market penetration for prevention of competitor's entry into the market, and building image as a supplier of quality goods).

While determining the basic price of the product, marketer must keep in mind several factors such as the perceived value of the product to the buyer, costs of production of the product, competitors' products and their prices, Government regulations, company's own policies and the other three elements of marketing mix.

While deciding selling prices of goods and services, business enterprises may adopt any one of the following three approaches: (1) cost-oriented approach, (2) demand-oriented approach, and (3) competition-oriented approach.

In cost-oriented approach, cost is the major basis of fixing price. In this approach there are two methods: (1) 'cost-plus' pricing, and (2) target-profit pricing. Cost plus price is arrived at by aggregating the relevant costs and adding to it a margin of profit. Target profit pricing is based on the break-even analysis.

Major consideration in price setting under demand-oriented approach is the buyer's demand intensity and perception of the product's value and utility, rather than the product costs. There are two distinctive methods under this approach: (1) differential or discriminatory pricing, and (2) perceived-value pricing.

The decisions and actions of competitors, rather than the company's product costs or demand levels, form the basis for setting the price under competition-oriented approach. The firm neither maintains its own cost records nor seeks to measure the demand intensity nor buyer's perceptions towards the product. Going rate price comes under this approach.

10.7 KEY WORDS

Break-even Point: The point of sales at which a company's total revenue equals total costs.

Contribution: The difference between per unit price of the product and the variable cost per unit.

Fixed Costs: Costs that do not vary with the level of production or sales.

Monopolistic Competition: A market condition where there are many buyers and sellers trading over a range of prices.

Oligopolistic Competition: A market condition where there are a few sellers who are sensitive to one another's pricing and marketing strategies.

Price: Amount of money charged for a product or service.

Price Elasticity: A measure of the sensitivity of demand to price changes.

Pure Competition: A market condition where many buyers and sellers trade in a uniform commodity.

Pure Monopoly: A market in which only one seller operates.

Variable Costs: Costs that vary with the level of production.

10.8 ANSWERS TO CHECK YOUR PROGRESS

A. 1) (a) Price is the only marketing mix element that generates revenue.

(b) Price is the most flexible of all marketing mix elements.

2) (a) Current profit maximisation.

(b) Achieving desired return on investment.

3) i) False ii) True iii) False iv) True v) True

B. 1) A certain change in price has resulted in a more than proportionate change in demand in the opposite direction.

2) (a) High price itself may invite competition.

(b) High price may invite government intervention and/or consumer resistance.

3) Fixed costs remain fixed irrespective of the level of production or sales while variable costs vary with production level.

4) i) False ii) True iii) False iv) True v) False

10.9 TERMINAL QUESTIONS

1) Discuss, in detail, the objectives of pricing.
2) What are the different methods in price determination? Explain them in detail listing out the advantages and limitations of each method.
3) Write brief notes on the following:
   i) Perceived-value pricing
   ii) Differential pricing
   iii) Sealed-bid pricing
   iv) Price-demand relationship
4) Explain the various product-price adjustment strategies.
5) A company manufacturing a product 'X' has the following costs:

   Variable cost = Rs. 10 Fixed cost = Rs. 3,00,000

   The company expects to sell 50,000 units and wants to earn 25% profit on average cost of production.

   i) What will be the break-even point in terms of volume of production?
   ii) In case the demand at break-even point is 42,000 units, calculate the total revenue, total costs and the profit.

Note: These Questions will help you to understand the unit better. But do not submit your answers to the University. These are for your practice only.