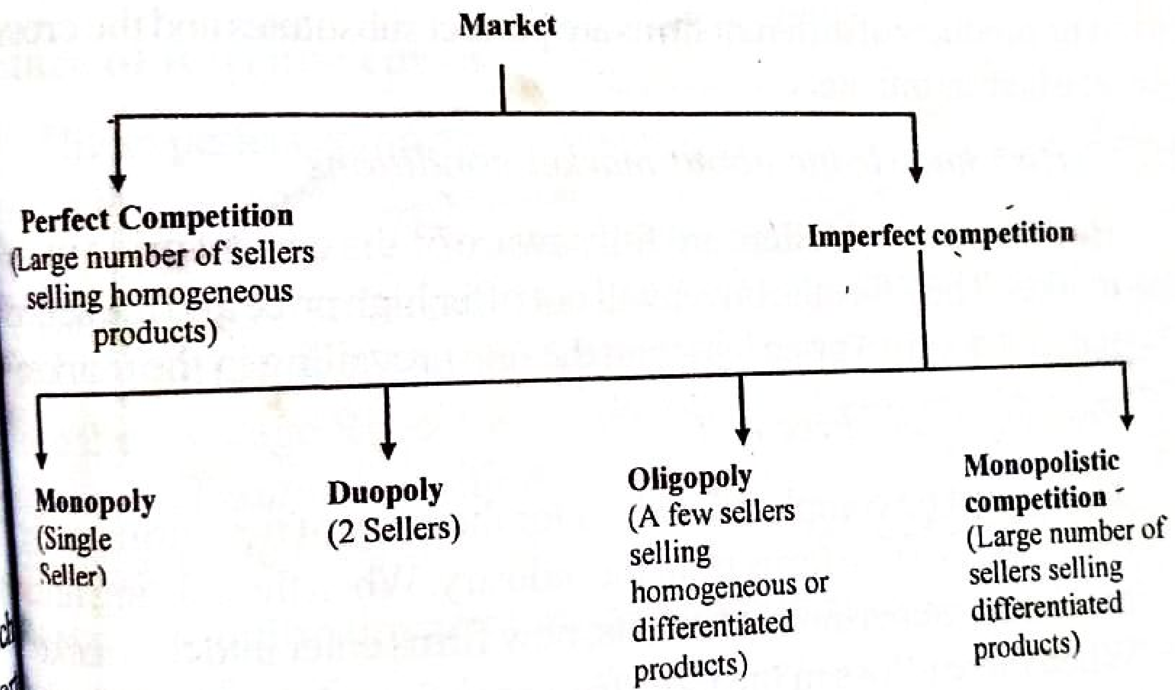
C) Market according to competition

These markets are classified according to the number of sellers in the market and the nature of the commodity. The classification of market according to competition is as follows.



Perfect Competition

Perfect competition is a market situation where there are infinite number of sellers that no one is big enough to have any appreciable influence over market price.

Features and Conditions of perfect competition

1. Large number of buyers and sellers

There are a large number of buyers and sellers in a perfect competitive market that neither a single buyer nor a single seller can influence the price. The price is determined by market forces namely the demand for and the supply of the product. There will be uniform price in the market. Sellers accept this price and adjust the quantity produced to maximise their profit. Thus the *sellers in the perfect competitive market* are *price- takers and quantity adjusters.*

2. *Homogeneous Product*

The products produced by all the firms in the perfectly competitive market must be homogeneous and identical in all respects i.e. the products in the market are the same in quantity, size, taste, etc. The products of different firms are perfect substitutes and the cross elasticity is infinite.

3. *Perfect knowledge about market conditions*

Both buyers and sellers are fully aware of the current price in the market. Therefore the buyer will not offer high price and the seller will not accept a price less than the one prevailing in the market.

4. *Free entry and Free exit*

There must be complete freedom for the entry of new firms or the exit of the existing firms from the industry. When the existing firms are earning super-normal profits, new firms enter into the market. When there is loss in the industry, some firms leave the industry. The free entry and free exit are possible only in the long run. This is because the size of the plant cannot be changed in the short run.

5. *Perfect mobility of factors of production*

The factors of productions should be free to move from one use to another or from one industry to another easily to get better

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remuneration. The assumption of perfect mobility of factors is essential to fulfil the first condition namely large number of producers in the market.

Absence of transport cost

In a perfectly competitive market, it is assumed that there are no transport costs. Under perfect competition, a commodity is sold at uniform price throughout the market. If transport cost is incurred, the firms nearer to the market will charge a low price than the firms far away. Hence it is assumed that there is no transport cost.

Absence of Government or artificial restrictions or collusions

There are no government controls or restrictions on supply, pricing etc. There is also no collusion among buyers or sellers. The price in the perfectly competitive market is free to change in response to changes in demand and supply conditions.

ture of Revenue curves

Under perfect competition, the market price is determined by the arket forces namely the demand for and the supply of the products. nce there is uniform price in the market and all the units of the output e sold at the same price. As a result the average revenue is perfectly stic. The average revenue curve is horizontally parallel to X-axis. nce the Average Revenue is constant, Marginal Revenue is also nstant and coincides with Average Revenue. AR curve of a firm presents the demand curve for the product produced by that firm.

ort run equilibrium price and output determination under per- ct competition

Since a firm in the perfectly competitive market is a price-taker, it has to adjust its level of output to maximise its profit. The aim of any producer is to maximise his profit.

The short run is a period in which the number and plant size of the firms are fixed. In this period, the firm can produce more only by increasing the variable inputs.

3. As the entry of new firms or exit of the existing firms are not possible in the short-run, the firm in the perfectly competitive market can either earn super-normal profit or normal profit or incur loss in the short period.

Super-normal Profit

When the average revenue of the firm is greater than its average cost, the firm is earning super-normal profit.

Short-run equilibrium with super-normal profits

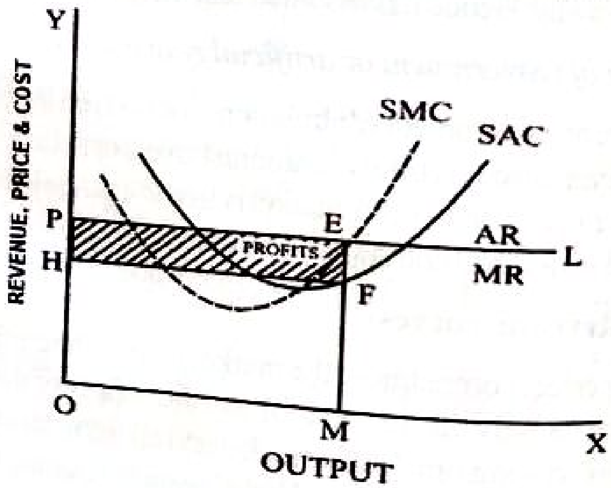

FIGURE 8.1

In figure 8.1, output is measured along the x-axis and price, revenue and cost along the y-axis. OP is the prevailing price in the market. PL is the demand curve or average and the marginal revenue curve. SAC and SMC are the short run average and marginal cost curves. The firm is in equilibrium at point 'E' where MR = MC and MC curve cuts MR curve from below at the point of equilibrium. Therefore the firm will be producing OM level of output. At the OM level of output ME is the AR and MF is the average cost. The profit per unit of output is EF (the difference between ME and MF). The total profits earned by the firm will be equal to EF (profit per unit) multiplied by OM or HF (total output). Thus the total profits will be equal to the area HFEP. HFEP is the supernormal profits earned by the firm.

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Long run equilibrium, price and output determination

In the long run, all factors are variable. The firms can increase their output by increasing the number and plant size of the firms. Moreover, new firms can enter the industry and the existing firms can leave the industry. As a result, all the existing firms will earn only normal profit in the long run.

If the existing firms earn supernormal profit, the new firms will enter the industry to compete with the existing firms. As a result, the output produced will increase. When the total output increases, the demand for factors of production will increase leading to increase in prices of the factors. This will result in increase in average cost.

On the other side, when the output produced increases, the supply of the product increases. The demand remaining the same, when the supply of the product increases, the price of the product comes down. Hence the average revenue will come down. A fall in average revenue and the rise in average cost will continue till both become equal. (AR = AC). Thus, all the perfectly competitive firms will earn normal profit in the long run.

Figure 8.2 represents long run equilibrium of firm under perfect competition. The firm is in equilibrium at point S where LMC = MR = AR = LAC. The long run equilibrium output is ON. The firm is earning just the normal profit. The equilibrium price is OP. If the price rises above OP, the firm will earn abnormal profit, which will attract new firms into the industry. If the price is less than OP, there will be loss and the tendency will be to exit. So in the long run equilibrium, OP will be the price and marginal cost will be equal to average cost and average revenue. Thus the firm in the long run will earn only normal profit. Competitive firms are in equilibrium at the minimum point of LAC curve. Operating at the minimum point of LAC curve signifies that the firm is operating at the minimum point of LAC curve signifies that the firm is of optimum size i.e. producing output at the lowest possible average cost.

Long run equilibrium of the firm

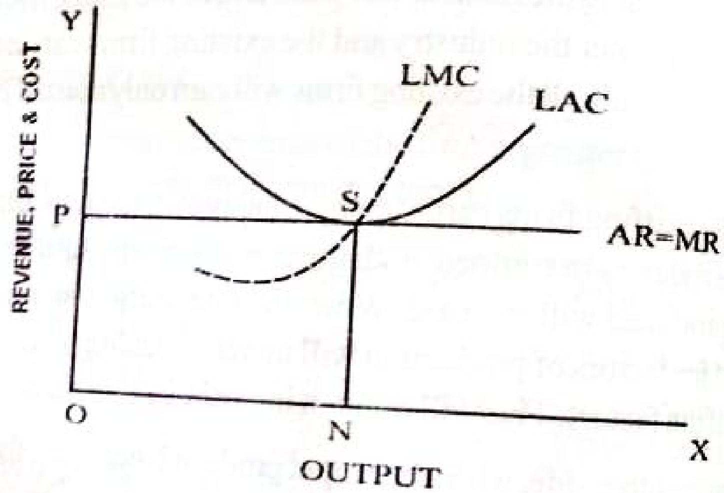

FIGURE 8.3

Advantages of perfect competition

1. There is consumer sovereignty in a perfect competitive mark The consumer is rational and he has perfect knowledge about market conditions. Therefore, he will not purchase the products a higher price.
2. In the perfectly competitive market, the price is equal to minimum average cost. It is beneficial to the consumer.
3. The perfectly competitive firms are price-takers and the produ are homogeneous. Therefore it is not necessary for the produ to incur expenditure on advertisement to promote sales. T reduces the wastage of resources.
4. In the long run, the perfectly competitive firm is functioning a optimum level. This means that maximum economic efficienc production is achieved. As the actual output produced by the is equal to the optimum output, there is no idle or unused or e capacity.

Monopoly

Monopoly is a market structure in which there is a single seller, there are no close substitutes for the commodity it produces and there are barriers to entry.

Characteristics of Monopoly

1. **Single Seller:** There is only one seller; he can control either price or supply of his product. But he cannot control demand for the product, as there are many buyers.
2. **No close Substitutes:** There are no close substitutes for the product. The buyers have no alternatives or choice. Either they have to buy the product or go without it.
3. **Price:** The monopolist has control over the supply so as to increase the price. Sometimes he may adopt price discrimination. He may fix different prices for different sets of consumers. A monopolist can either fix the price or quantity of output; but he cannot do both, at the same time.
4. **No Entry:** There is no freedom to other producers to enter the market as the monopolist is enjoying monopoly power. There are strong barriers for new firms to enter. There are legal, technological, economic and natural obstacles, which may block the entry of new producers.
5. **Firm and Industry:** Under monopoly, there is no difference between a firm and an industry. As there is only one firm, that single firm constitutes the whole industry. .

Causes for Monopoly

1. **Natural:** A monopoly may arise on account of some natural causes. Some minerals are available only in certain regions. For example, South Africa has the monopoly of diamonds; nickel in the world is mostly available in Canada and oil in Middle East. This is natural monopoly.

2. **Technical**: Monopoly power may be enjoyed due to techno reasons. A firm may have control over raw materials, techno knowledge, special know-how, scientific secrets and formula enable a monopolist to produce a commodity. e.g., Coco Cola
3. **Legal:** Monopoly power is achieved through patent righ copyright and trade marks by the producers. This is called leg monopoly.
4. **Large Amount of Capital**: The manufacture of some good requires a large amount of capital or lumpiness of capital. A firms cannot enter the field because they cannot afford to inve such a large amount of capital. This may give rise to monopol For example, iron and steel industry, railways, etc.
5. **State:** Government will have the sole right of producing and selli some goods. They are State monopolies. For example, we ha public utilities like electricity and railways. These public utili are undertaken by the State.

Price and Output Determination

A monopolist like a perfectly competitive firm tries to maximi his profits.

A monopoly firm faces a downward sloping demand curve, th is, its average revenue curve. The downward sloping demand cu implies that larger output can be sold only by reducing the price. marginal revenue curve will be below the average revenue curve

The average cost curve is 'U' shaped. The monopolist will be equilibrium when MC = MR and the MC curve cuts the MR cu from below.

In figure 8.4, AR is the Average Revenue Curve and MR is t Marginal revenue curve. AR curve is falling and MR curve lies bel AR. The monopolist is in equilibrium at E where MR = MC. produces OM units of output and fixes price at OP. At OM output, average revenue is MS and average cost MT. Therefore the profit

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Advantages

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unit is MS-MT = TS. Total profit is average profit (TS) multiplied by output (OM), which is equal to HTSP. The monopolist is in equilibrium at point E and produces OM output at which he is earning maximum profit. The monopoly price is higher than the marginal revenue and marginal cost.

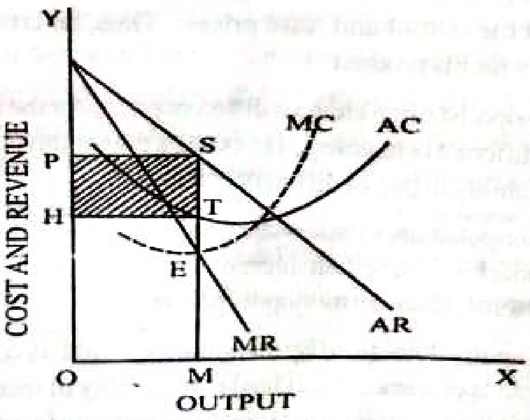

FIGURE 8.4

Advantages

1. Monopoly firms have large-scale production possibilities and also can enjoy both internal and external economies. This will result in the reduction of costs of production. Output can be sold at low prices. This is beneficial to the consumers.
2. Monopoly firms have vast financial resources which could be used for research and development. This will enable the firms to innovate quickly.
3. There are a number of weak firms in an industry. These firms can combine together in the form of monopoly to meet competition. In such a case, market can be expanded.

Although there are some advantages, there is a danger that monopoly power might be misused for exploiting the consumers.

Disadvantages

1. A monopolist always charges a high price, which is higher than the competitive price. Thus a monopolist exploits the consumers.

2. A monopolist is interested in getting maximum profit. He may restrict the output and raise prices. Thus, he creates artificial scarcity for his product.

3. A monopolist often charges different prices for the same product from different consumers. He extracts maximum price according to the ability to pay of different consumers.

4. A monopolist uses large-scale production and huge resources to promote his own selfish interest. He may adopt wrong practices to establish absolute monopoly power.

5. In a country dominated by monopolies, wealth is concentrated in the hands of a few. It will lead to inequality of incomes. This is against the principle of the socialistic pattern of society.

Methods of Controlling Monopoly

1. **Legislative Method:** Government can control monopolies by legal actions. Anti-monopoly legislation has been enacted to check the growth of monopoly. In India, the Monopolies and Restrictive Trade Practices Act was passed in 1969. The objective of this Act is to prevent the unwanted growth of private monopolies and concentration of economic power in the hands of a small number of individuals and families.

2. **Controlling Price and Output:** This method can be applied in the case of natural monopolies. Government would fix either price or output or both.

3. **Taxation:** Taxation is another method by which the monopolistic power can be prevented or restricted. Government can impose lump-sum tax on a monopoly firm, irrespective of its level of output. Consequently, its total profit will fall.

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4. **Nationalisation:** Nationalising big companies is one of the solutions. Government may take over such monopolistic companies, which are exploiting the consumers.

5. **Consumer's Association**: The growth of monopoly power can also be controlled by encouraging the formation of consumers associations to improve the bargaining power of consumers.

Comparison between Perfect Competition and Monopoly

The main aim of firms both under monopoly and perfect competition is to maximise profit. In both the market forms, the firms are in equilibrium at the output level where MC = MR. The differences are as follows:

Perfect Competition	Monopoly
1. Average revenue curve is a horizontal straight line parallel to X axis .Marginal revenue is equal to average revenue and price	Both average revenue curve and marginal revenue curve are downward falling curves. Marginal revenue is less than average revenue and price.
2. At the equilibrium, MC = MR = AR. That is price charged is equal to marginal cost of production	At the equilibrium, MC = MR < AR that is price charged is above marginal cost
3. The firm in the long run comes to equilibrium at the minimum point or the lowest point of the long run average cost curve. The firm tends to be of optimum size operating at the minimum average cost.	Even in the long run equilibrium the firm will be operating at a higher level of average cost. The firm stops short of optimum size.
4. Equilibrium can be conceived only under increasing cost and not under decreasing or constant cost conditions	Equilibrium situation is possible at increasing, decreasing or constant cost conditions.
5. The firm can earn only normal profit in the long run and may earn super profit in the short run	But monopoly firm earns super normal profit both in short run and long run
6. Price will be lower and the output is larger	Price is higher and the output will be smaller

Price Discrimination

Price discrimination means the practice of selling the same commodity at different prices to different buyers. If the monopolist charges different prices from different consumers for the same commodity, it is called price discrimination or discriminating monopoly.

Definition

Price discrimination may be defined as "*the sale of technically similar products at prices which are not proportional to marginal cost*". For example, all cinema theatres charge different prices for different classes of people.

Conditions of Price Discrimination

Price discrimination is possible only if the following conditions are fulfilled.

1. The demand must not be transferable from the high priced market to the low priced market. If rich people do not buy the high-priced deluxe edition of the book, but wait for the low-priced popular edition to come out, then personal discrimination will fail.

2. The monopolist should keep the two markets or different markets separate so that the commodity will not be moving from one market to the other market. If it is possible to buy the product in the cheaper market of the monopolist and sell it in the dearer market, there can never be two prices for the commodity. If the industrial buyer of cheap electricity uses it for domestic consumption, then trade discrimination will fail.

The above two conditions are essential to adopt price discrimination.

Monopolistic Competition

Monopolistic competition, as the name itself implies, is a blending of monopoly and competition. Monopolistic competition refers to the market situation in which a large number of sellers produce goods which are close substitutes of one another. The products are similar but not entical. The particular brand of product will have a group of loyal consumers. In this respect, each firm will have some monopoly and at the same time the firm has to compete in the market with the other firms as they produce a fair substitute. The essential features of monopolistic competition are product differentiation and existence of many sellers.

The following are the examples of monopolistic competition in Indian context.

1. Shampoo - Sun Silk, Clinic Plus, Ponds, Chik, Velvette, Kadal, Head and Shoulder, Pantene, Vatika, Garnier, Meera

2. Tooth Paste - Binaca, Colgate, Forhans, Close-up, Promise, Pepsodent, Vicco Vajradanti, Ajanta, Anchor, Babool.

Characteristics of Monopolistic Competition

(i) Existence of Large Number of firms: Under monopolistic competition, the number of firms producing a commodity will be very large. The term 'very large' denotes that contribution of each firm towards the total demand of the product is small. Each firm will act independently on the basis of product differentiation and each firm determines its price-output policies. Any action of the individual firm in increasing or decreasing the output will have little or no effect on other firms.

(ii) Product differentiation: Product differentiation is the essence of monopolistic competition. Product differentiation is the process of altering goods that serve the same purpose so that they differ in minor ways.

Product differentiation can be brought about in various ways. Product differentiation is attempted through (a) physical difference; (b) quality difference; (c) imaginary difference and (d) purchase benefit difference. It may be by using different quality of the raw material and different chemicals and mixtures used in the product. Difference in workmanship, durability and strength will also make product differentiation. Product differentiation may also be effected by offering customers some benefits with the sale of the product. Facilities like free servicing, home delivery, acceptance of returned goods, etc. would make the customers demand that particular brand of product where such facilities are available. Product differentiation through effective advertisement is another method. This is known as sales promotion. By frequently advertising the brand of the product through press, film, radio, and TV, the consumers are made to feel that the brand produced by the firm in question is superior to that of other brands sold by other firms.

(iii) Selling Costs: From the discussion of 'product differentiation', we can infer that the producer under monopolistic competition has to incur expenses to popularise his brand. This expenditure involved in selling the product is called selling cost. According to Prof. Chamberlin, selling cost is "the cost incurred in order to alter the position or shape of the demand curve for a product". Most important form of selling cost is advertisement. Sales promotion by advertisement is called non-price competition.

(iv) Freedom of entry and exit of firms: Another important feature is the freedom of any firm to enter into the field and produce the commodity under its own brand name and any firm can go out of the field if so chosen. There are no barriers as in the case of monopoly.

Monopolistic competition presupposes that customers have definite preferences for particular varieties or brand of products. Hence pricing is not the problem but product differentiation is the problem and competition is not on prices but on products.

Thus in monopolistic competition, the features of monopoly and perfect competition are partially present.

Determination of Equilibrium price and output under monopolistic competition

The monopolistic competitive firm will come to equilibrium on the principle of equalising MR with MC. Each firm will choose that price and output where it will be maximising its profit. Figure 8.5 shows the equilibrium of the individual firm in the short period.

Short Period Equilibrium of a Monopolistic competitive firm with Profit

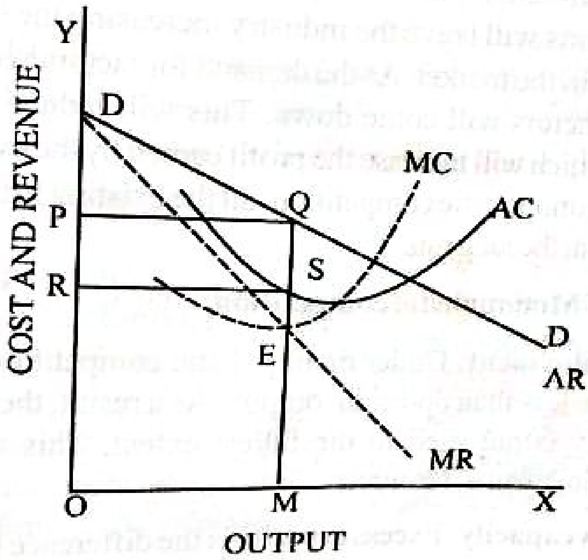

FIGURE 8.5

MC and AC are the short period marginal cost and average cost curves. The sloping down average revenue and marginal revenue curves are shown as AR and MR. The equilibrium point is E where MR = MC. The equilibrium output is OM and the price of the product is fixed at OP. The difference between average cost and average revenue is SQ. The output is OM. So, the supernormal profit for the firm is shown by the rectangle PQSR. The firm by producing OM units of its commodity and selling it at a price of OP per unit realizes the maximum profit in the short run.

The different firms in monopolistic competition may be making either abnormal profits or losses in the short period depending on their costs and revenue curves.

In the long run, if the existing firms earn super normal profit, the entry of new firms will reduce its share in the market. The average revenue of the product will come down. The demand for factors of production will increase the cost of production. Hence, the size of the profit will be reduced. If the existing firms incur losses in the long run, some of the firms will leave the industry increasing the share of the existing firms in the market. As the demand for factors becomes less, the price of factors will come down. This will reduce the cost of production, which will increase the profit earned by the existing firms. Thus under monopolistic competition, all the existing firms will earn normal profit in the long run.

Wastages of Monopolistic competition

1. **Unemployment:** Under monopolistic competition, the firms produce less than optimum output. As a result, the productive capacity is not used to the fullest extent. This will lead to unemployment of resources.

2. **Excess capacity**: Excess capacity is the difference between the optimum output that can be produced and the actual output produced by the firm. In the long run, a monopolistic firm produces an output which is less than the optimum output that is the output corresponding to the minimum average cost. This leads to excess capacity which is regarded as waste in monopolistic competition.

3. **Advertisement:** There is a lot of waste in competitive advertisements under monopolistic competition. The wasteful and competitive advertisements lead to high cost to consumers.

4. **Too Many Varieties of Goods:** Introducing too many varieties of a good is another waste of monopolistic competition. The goods differ in size, shape, style and colour. A reasonable number of varieties would be desirable. Cost per unit can be reduced if only a few are produced.

5. **Inefficient Firms:** Under monopolistic competition, inefficient firms charge prices higher than their marginal cost. Such type of

inefficient firms should be kept out of the industry. But, the buyers' preference for such products enables the inefficient firms to continue to exist. Efficient firms cannot drive out the inefficient firms because the former may not be able to attract the customers of the latter.

Oligopoly

Oligopoly refers to a form of imperfect competition where there will be only a few sellers producing either homogenous or differentiated products.

Characteristics of Oligopoly

1. **Interdependence:** The most important feature of oligopoly is interdependence in decision - making. Since there are a few firms, each firm closely watches the activities of the other firm. Any change in price, output, product, etc., by a firm will have a direct effect on the fortune of its rivals. So an oligopolistic firm must consider not only the market demand for its product, but also the possible moves of other firms in the industry.

2. **Group Behaviour**: Firms may realise the importance of mutual co-operation. Then they will have a tendency of collusion. At the same time, the desire of each firm to earn maximum profit may encourage competitive spirit. Thus, co-operative and collusive trend as well as competitive trend would prevail in an oligopolistic market.

Price Rigidity: Another important feature of oligopoly is price rigidity. Price is sticky or rigid at the prevailing level due to the fear of reaction from the rival firms. If an oligopolistic firm lowers its price, the price reduction will be followed by the rival firms. As a result, the firm loses its profit. Expecting the same kind of reaction, if the oligopolistic firm raises the price, the rival firms will not follow. This would result in losing customers. In both ways the firm would face difficulties. Hence the price is rigid.