Introduction to Markets

Meaning:

Market refers to a place or point at which buyers and sellers negotiate their exchange of well-defined products or services.

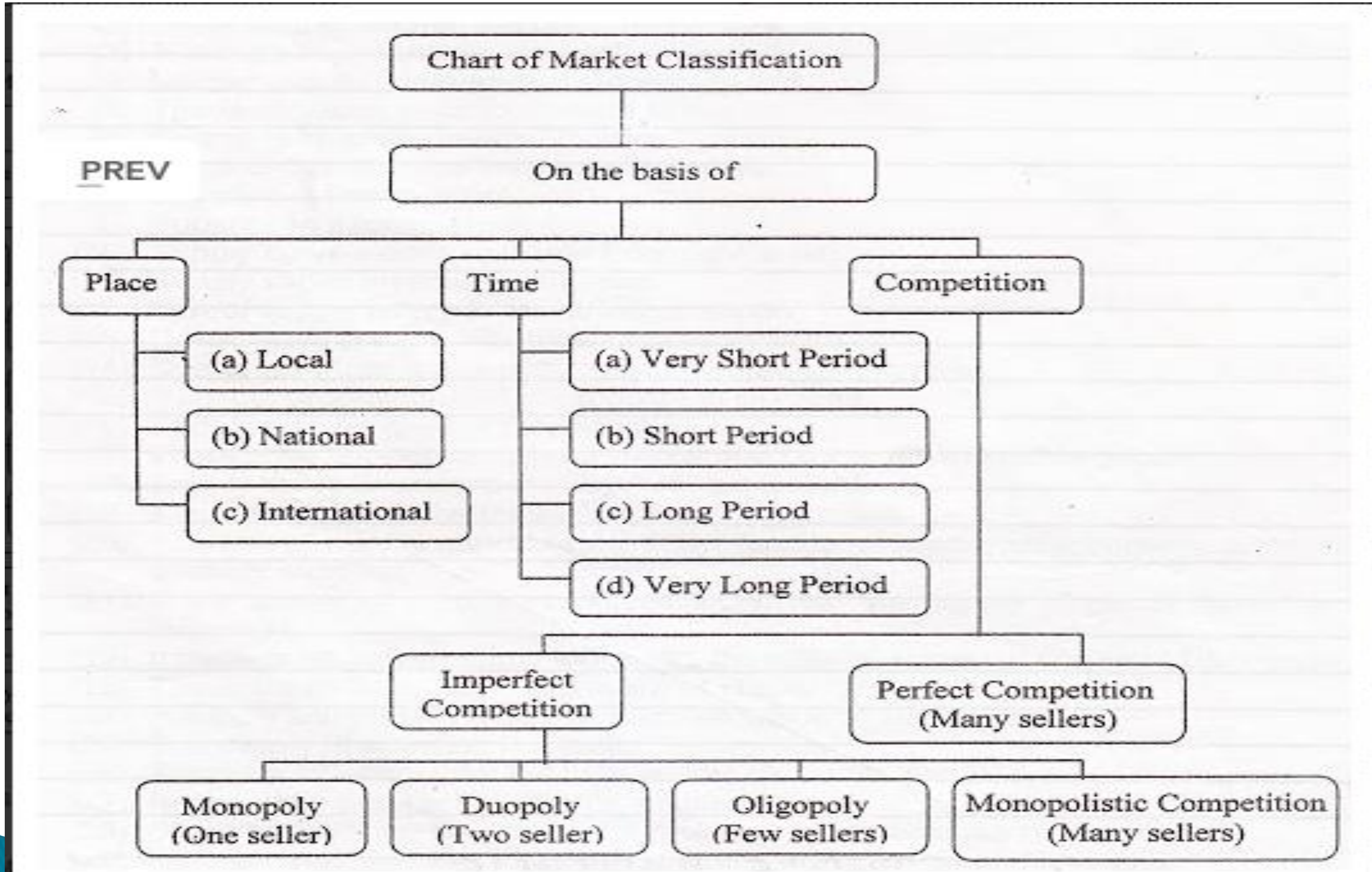
Definition:

According to Prof R. Chapman, "the term market refers not necessarily to a place but always to a commodity and The buyers and sellers who are in direct competition with one another".

Features of market:

- Area: it is an area where buyers and sellers of the commodity must reside i.e., local, national, international.
- Commodity: commodity is soul of market. every market must have commodity to be purchased and sold.
- Buyers and sellers: Buyers and sellers directly or indirectly in the market is essential for conducting business transactions.
- Free competition: Free competition among Buyers and sellers in the market.
- Price
- Close contact between buyers and sellers.

Types of Markets



What is perfect competition?

Perfect competition refers to a market structure where competition among the sellers and buyers is very large, all engaged buying and selling a homogeneous product, free entry/exit conditions and perfect knowledge of market at a time.

E.g: fruit and vegetable market

Features of perfect competition

- Large Number of buyers and sellers
- Homogeneous Products or services
- Freedom to enter or exit the market
- Perfect information available to the buyers and sellers
- Perfect mobility of factors of production
- Perfect knowledge of the market
- No transportation cost
- Sellers are price taker, not price makers
- Normal profits
- Existence of single price
- The market price is flexible over a period of time
- Full and unrestricted competition
- It is an ideal market situation
- It is a rare phenomenon which does not exist in reality

What is imperfect competition?

A competition is said to be imperfect when it is not perfect. In other words, when any or most of the above conditions do not exist in a given market it is referred to as an imperfect competition

Based on the number of buyers and sellers, the structure of market varies as below:

'*Poly*' refers to seller and '*Psony*' refers to buyer.

Imperfect competition markets are classified as:

- (a) Monopoly
- (b) Monopolistic Competition
- (c) Duopoly
- (d) Oligopoly
- (e) Monopsony
- (f) Duopsony
- (g) Oligopsony

What is Monopoly?

The term monopoly is derived from Greek words 'mono' which means single and 'poly' which means seller. So, monopoly is a market structure, where there only a single seller producing a product having no close substitute.

Characteristics / Features of Monopoly:

1. A single seller has complete control over the supply of the commodity.
2. There are no close substitutes for the product.
3. There is no free entry and exit because of some restrictions.
4. Large no of buyers
5. Monopolist is a price maker.
6. Since there is a single firm, the firm and industry are one and same i.e. firm coincides the industry.
7. Profit in the long period
8. Complete control over the supply of commodity.

9. Monopoly firm faces downward sloping demand curve. It means he can sell more at lower price and vice versa. Therefore, elasticity of demand factor is very important for him.

10. Can decide either the price or quantity, not both

11. Monopoly may be created through statutory grant of special privileges such as licenses, permit, patent rights, and so on.

Classification/kinds/types of Monopoly:

1. Perfect Monopoly: It is also called as absolute monopoly.

In this case, there is only a single seller of product having no close substitute; not even remote one. There is absolutely zero level of competition. Such monopoly is practically very rare.

2. Imperfect Monopoly: It is also called as relative monopoly or simple or limited monopoly. It refers to a single seller market having no close substitute. It means in this market, a product may have a remote substitute. So, there is fear of competition to some extent e.g. Mobile (Cell phone) telecom industry (e.g. voda phone) is having competition from fixed landline phone service industry (e.g. BSNL).

3. Private Monopoly: When production is owned, controlled and managed by the individual, or private body or private organization, it is called private monopoly. e.g. Tata, Reliance, Bajaj, etc. groups in India. Such type of monopoly is profit oriented.

4. Public Monopoly: When production is owned, controlled and managed by government, it is called public monopoly. It is welfare and service oriented. So, it is also called as 'Welfare Monopoly' e.g. Railways, Defence, etc.

5. Simple Monopoly: Simple monopoly firm charges a uniform price or single price to all the customers. He operates in a single market.

6. Discriminating Monopoly: Such a monopoly firm charges different price to different customers for the same product. It prevails in more than one market.

7. Legal Monopoly: When monopoly exists on account of trade marks, patents, copy rights, statutory regulation of government etc., it is called legal monopoly. Music industry is an example of legal monopoly.

8. Natural Monopoly: It emerges as a result of natural advantages like good location, abundant mineral resources, etc. e.g. Gulf countries are having monopoly in crude oil exploration activities because of plenty of natural oil resources.

9. Technological Monopoly: It emerges as a result of economies of large scale production, use of capital goods, new production methods, etc. E.g. engineering goods industry, automobile industry, software industry, etc.

10. Joint Monopoly: A number of business firms acquire monopoly position through amalgamation, cartels, syndicates, etc., it becomes joint monopoly. e.g. Actually, pizza making firm and burger making firm are competitors of each other in fast food industry. But when they combine their business, that leads to reduction in competition. So they can enjoy monopoly power in market.

Monopolistic competition:

- Another type of market structure is Monopolistic Competition, which is very realistic in nature.
- In this market, there are some features of monopoly and some features of perfect competition acting together.
- This mixture of two markets gives birth to a new form of market known as Monopolistic Competition, Prof. E.H. Chamberlin coined this concept in his book, "Theory of Monopolistic Competition" which was published, in 1933.

Definition: According to Chamberlin, "Monopolistic competition refers to competition among a large number of sellers producing close but not perfect substitute."

- "When markets, which have a large number of producers producing differentiated products which are close substitute to each other, engage in non price competition, we call it as a Monopolistic Competitive market."

Features of monopolistic competition:

1. Large Number of Sellers: There are large number of sellers producing differentiated products. So, competition among them is very keen. Since number of sellers is large, each seller produces a very small part of market supply. So no seller is in a position to control price of product. Every firm is limited in its size.

2. Product Differentiation: It is one of the most important features of monopolistic competition. In perfect competition, products are homogeneous in nature. On the contrary, here, every producer tries to keep his product dissimilar than his rival's product in order to maintain his separate identity. This boosts up the competition in market. So, every firm acquires some monopoly power.

3. Products offered are close substitutes: In Monopolistic Competition goods have close substitute to each other. For e.g. Gold spot is close substitute to Limca.

4. Freedom of Entry and Exit: This feature leads to stiff competition in market. Free entry into the market enables new firms to come with close substitutes. Free entry or exit maintains normal profit in the market for a longer span of time.

5. Selling Cost: It is a unique feature of monopolistic competition. In such type of market, due to product differentiation, every firm has to incur some additional expenditure in the form of selling cost. This cost includes sales promotion expenses, advertisement expenses, salaries of marketing staff, etc.

6. Absence of Interdependence: Large numbers of firms are different in their size. Each firm has its own production and marketing policy. So no firm is influenced by other firm. All are independent.

7.Two Dimensional Competition: Monopolistic competition has two types of competition aspects viz.

Price competition i.e. firms compete with each other on the basis of price.

Non price competition i.e. firms compete on the basis of brand, product quality advertisement.

8.Concept of Group: In place of Marshallian concept of industry, Chamberlin introduced the concept of Group under monopolistic competition. An industry means a number of firms producing identical product. A group means a number of firms producing differentiated products which are closely related.

9. Falling Demand Curve: In monopolistic competition, a firm is facing downward sloping demand curve i.e. elastic demand curve. It means one can sell more at lower price and vice versa.

What is Duopoly:

- Duo means two; Poly means sellers.
- If there are two sellers, duopoly is said to exist.
- Sell homogeneous or heterogeneous product.
- For example; let's assume that we have only two soft drink manufacturing companies like Pepsi and Coke this market is said called Duopoly.
- Basic facilities for satellite communication are presently provided by Mahanagar Telephone Limited (MTNL) and Videsh Sanchar Nigam Limited (VSNL).

FEATURES OF DUOPOLY:

- Two firms in the industry
- Strong control over price.
- Uses Non price competition to compete
- Very strong Barriers to entry

What is Oligopoly?

- The term oligopoly is derived from two Greek words: ‘oligos’ means few and ‘pollen’ means to sell.
- Oligopoly is a market structure in which there are only a few sellers (but more than two) of the homogeneous or differentiated products. So, oligopoly lies in between monopolistic competition and monopoly.

- The examples are the car manufacturing companies such as (Maruti-Suzuki, Hindustan Motors, Daewoo, Toyota and so on.)Newspapers such as (The Hindu, Indian Express etc..) telecom such as (Airtel, Idea, BSNL, Reliance)

Features of oligopoly:

- Few firms: there only few firms in the industry either homogeneous or differentiated products.
- Homogeneous or heterogeneous product: sell the homogeneous or heterogeneous product.
- Interdependent: as all firms are interdependent in their business policies about fixing the price and determination of output.
- Important role on advertising and selling costs: advertising and selling costs have strategic importance to oligopoly firms.
- In determine demand curve: due to interdependence, an oligopoly firm cannot make an accurate estimate of its sales because when one firm reduces price, the other firm also will make a cut in their prices. Therefore the demand curve of the firm is indeterminate.
- Price rigidity and price war: in the oligopoly market and price war are common features. So the price of each firm unchanged.
- It is not easy to enter the industry.

Equilibrium of a firm under perfect competition:

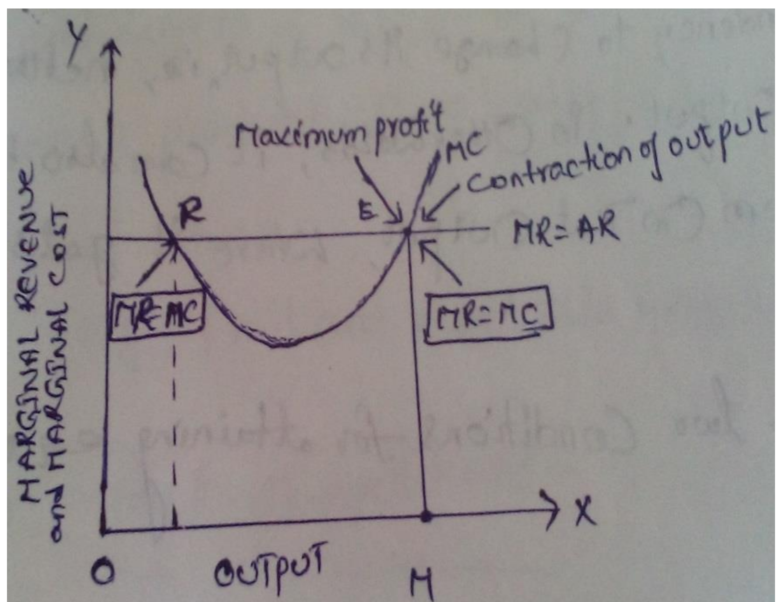
Meaning of equilibrium:

- A firm is said to be in equilibrium when it has no tendency to change its output, i.e., neither it wants to increase nor decrease its output.
- in other words a firm will be in equilibrium on that output, where it gets maximum profit at minimum cost.
- There are two conditions for attaining equilibrium by a firm. They are:

1. *Marginal cost must be equal to Marginal revenue i.e., MC=MR*.
2. *Marginal cost curve cuts the marginal revenue curve from below*.

- Suppose a firm is working under perfect competition, its AR=MR and both will be constant.
- It can be explain with the help of following schedule and graph.

Units of a commodity	TR (in Rs)	AR/MR(in Rs)	TC (in Rs)	MC (in Rs)
1	8	8	10	10
2	16	8	18	8
3	24	8	22	4
4	32	8	27	5
5	40	8	35	8
6	48	8	45	10



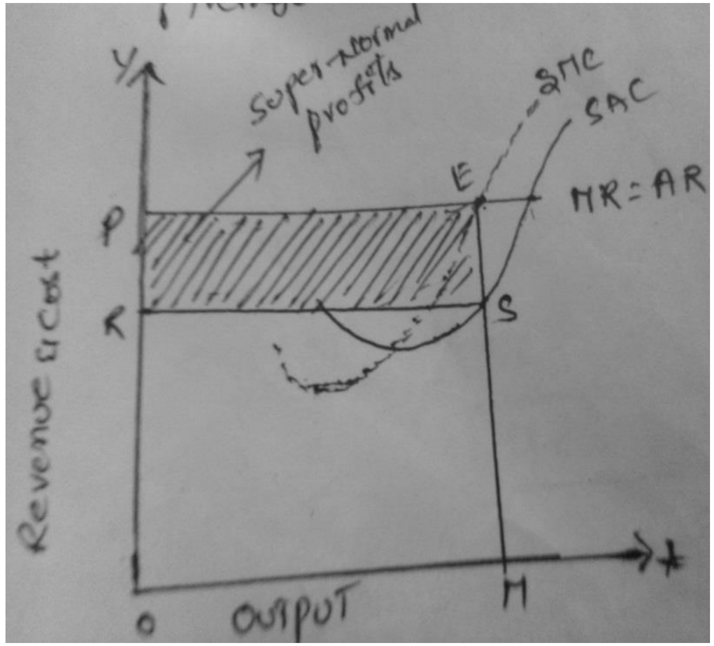
Price-output determination under perfect competition:

Short run equilibrium of a firm:

- in the short period the firm cannot change its fixed factors and size of plant. It can change its output only by changing variable factors of production.
- in this period entry or exit by the firms is also not possible.
- in the firms short run equilibrium both profits or loss are possible
- Firms equilibrium under different situations has been explained below

1. super normal profits:

The firm enjoys super normal profit when its average revenue (AR) is greater than average cost (AC).



In the diagram, firm is in equilibrium at point E, where SMC cuts MR from below.

It produces OM output. At this output firms average revenue is EM and average cost is SM, thus it gets ES per unit of profit.

So, its total super normal profit will be equal to PESR which is shown as shaded area in the diagram.

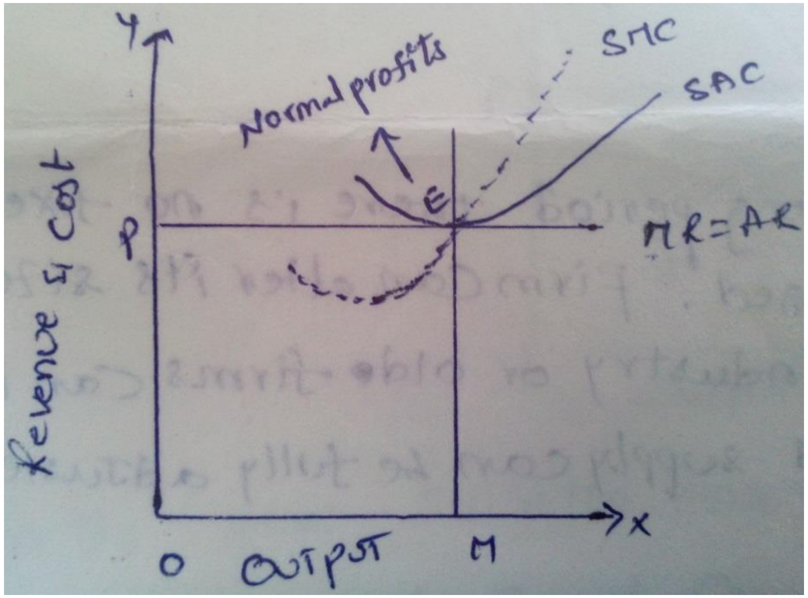
Here, in the situation of equilibrium:

i) MC=MR=AR ii) AR>SAC

Thus, price (AR) will be equal to MC but greater than SAC.

2. Normal profits:

The firm earns normal profit when its average cost (AC) is equal to Average revenue (AR).



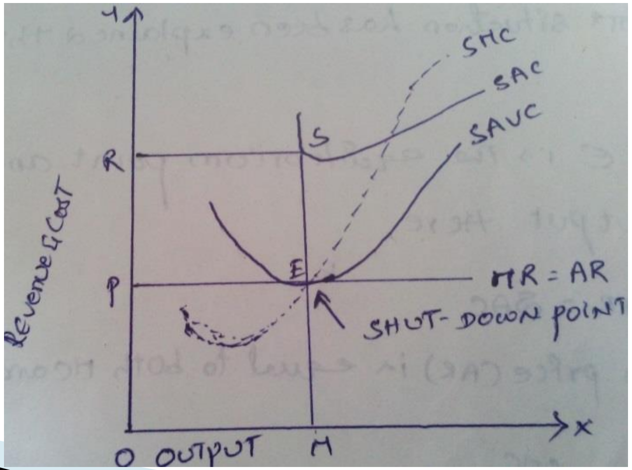
In the diagram E is the equilibrium point and OM is the equilibrium output. Here,

SMC=MR=AR=SAC

In this situation price (AR) is equal to both MC and AC

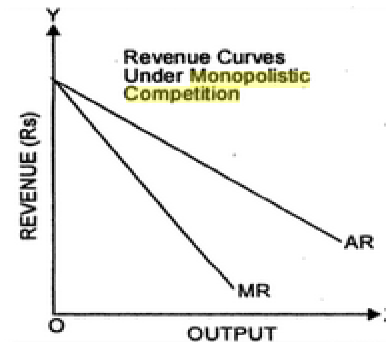
3. Losses and shutdown point:

- In the below figure E is the equilibrium point which is the maximum point of SAVC (short run average variable cost).
- Here firm is getting its variable cost but not fixed costs, so it is in loss but it will continue its production.
- OM is its equilibrium output and OP is its equilibrium price. In this situation firms losses are equal to PESR which are minimum under the given conditions.
- If price further declines firm will prefer to close down its production in order to save the losses of variable costs. So E (point of minimum SAVC) is shut down point.



PRICE-OUTPUT DETERMINATION UNDER MONOPOLY:

- A firm under monopoly faces a downward sloping demand curve or average revenue curve.
- Further, in monopoly, since average revenue falls as more units of output are sold, the marginal revenue is less than the average revenue.
- In other words, under monopoly the MR curve lies below the AR curve.



- The Equilibrium level in monopoly is that level of output in which marginal revenue equals marginal cost.
- The producer will continue production as long as marginal revenue exceeds the marginal cost.
- At the point where MR is equal to MC the profit will be maximum and beyond this point the producer will stop producing.

- **Study of price and equilibrium determination under monopoly is conducted in two time periods:**
- (i) Short Period, and
- (ii) Long Period.
- In the short run, a monopolist has to work with a given existing plant. He can expand or contract output by varying the amount of variable factors. He cannot adjust the size of plant in the short run.
- **A monopolist in equilibrium may face three situations in the short run:**
- 1. Excess Profit.
- 2. Normal Profit.
- 3. Minimum Losses.
- **The process of price determination under monopoly has been explained as follows:**
- **1. Super Normal Profit:**
- If the average revenue (AR) fixed by monopolist in equilibrium is more than the average cost (AC) than monopolist will earn excess profits.
- The revenue and cost conditions faced by monopolist firm are presented in the below fig.

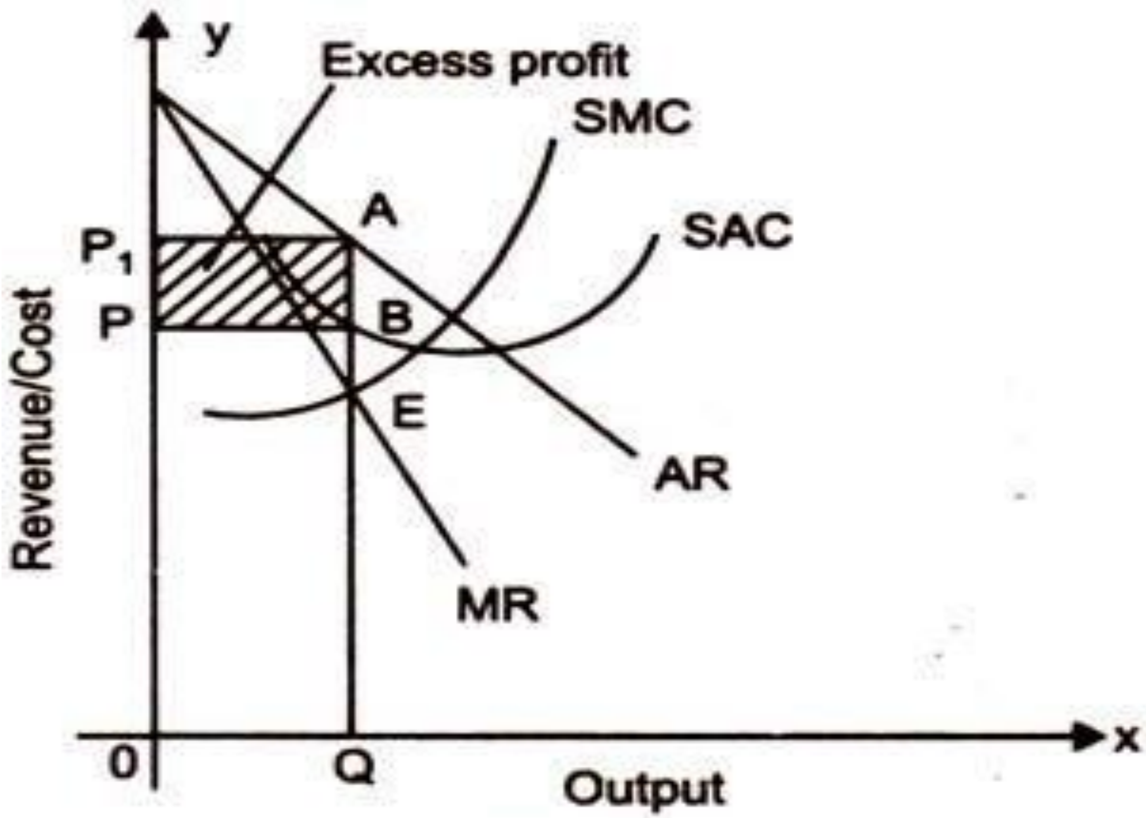
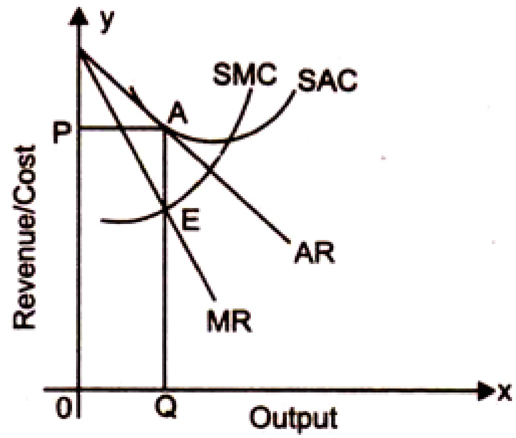


Fig. 9.2

- AR and MR are the average and marginal revenue curves of the firm, respectively.
- SAC and SMC are the short run average cost and marginal cost curves of the firm, respectively.
- To maximize profits, the monopolist firm chooses a price and output combination for which SMC = MR, and SMC curve cuts MR from below.
- As shown in the above Fig., E is the equilibrium where monopolist SMC curve cuts MR curve from below. A perpendicular parallel to y-axis is drawn at point E connecting the x-axis at Q and the demand curve at A. OQ is the equilibrium output. OP_1 is the equilibrium price, because the price is determined by demand curve or average revenue curve.
- The average cost is BQ, because line AQ cuts SAC curve at point B. Thus, the monopolist's per unit excess profit is AB, which is the difference between the price (AQ) and the corresponding average cost of production (BQ) The $ABPP_1$ represent total monopolist's profit.
- The total profit of the monopolist will be maximum only at OQ level of output.

2. Normal Profit:

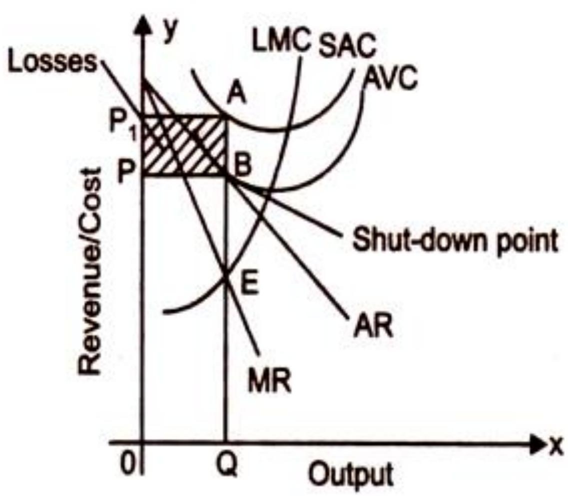
- In the short period, it is possible that monopolist may earn normal profit. This happens only when the average cost curve of the monopolist is tangent to its average revenue curve.



- In Fig., the monopolist is the equilibrium at 0Q level of output, because at this level of output his marginal cost curve (SMC) cuts MR curve at point E. Also at same level of output (0Q) the monopolist SAC curve touches his AR curve at point A.
- Thus AQ or 0P is the monopolist price (which is determined by AR curve) is also equal to the cost per unit (AQ).
- The monopolist will earn only normal profit and the normal profit is included in the average cost of production.

3. Loss Minimization in the Short Period:

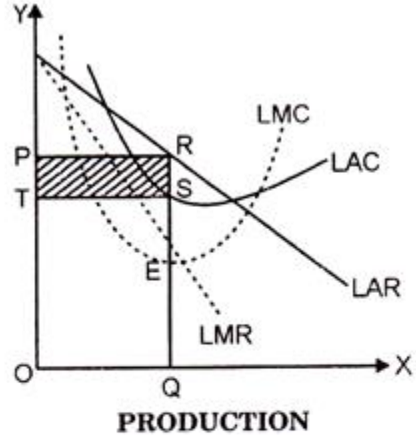
- In the short run, the monopolist may incur losses also.
- The monopolist may continue his production so long as price of his product is high enough to cover his average variable cost.
- If the price falls below average variable cost, the monopolist prefers to stop production. Accordingly, a monopolist in equilibrium, in the short run, may bear minimum losses equivalent to fixed costs.
- The situation of minimum losses has been illustrated in the below Fig.



- The monopolist is in equilibrium at point E, where SMC = MR and SMC curve cuts MR curve below.
- 0Q is the equilibrium level of output.
- The price of equilibrium output 0Q is fixed at BQ or 0P.
- At this price, average variable cost (AVC) curve AR curve at point B.
- It means firm will set at only average variable cost from the prevailing price.
- The firm will bear the loss of fixed cost equivalent to AB per unit.
- The firm will bear total loss equivalent to $ABPP_1$.
- If its price falls below (BQ) the monopolist will prefer to stop the production. The point B is also known as 'shut-down point'.

Long Run Equilibrium:

- In the long run a monopolist is in equilibrium when the following two conditions are satisfied:
- i. Long run marginal cost curve (LMC) must be equal to MR *i.e. LMC = MR at the point of*
- equilibrium.
- ii. Long run marginal cost curve (LMC) must cut MR from below *i.e. MC < MR at the point of*
- equilibrium.
- Unlike in the short run where the monopolist may face situations of extra normal profit, normal profit
- and loss; in the long run it will only earn extra normal profit. It is due to restriction to entry of other
- firms into the market. Since all costs are variable in the long run, a monopolist may able to adjust supply of output to changes in demand in the market.
- In the long run, a monopolist always charge price higher than its average cost production otherwise, it is better for it to close down the business instead incurring losses. Thus, in the long run a monopolist generally earns extra normal profits.
- Though in the long run a monopolist operate with super normal profit, it is not necessary for it to utilize its full capacity of plants and machineries.
- It is due restriction to enter into the market and lack of availability of substitute products in the market. Whether a monopolist will utilize its full capacity or not is entirely depends on the market demand for the goods it produced. Accordingly, it can operate at optimal level or suboptimal level or more than optimal level in the long run.
- Below Figure drawn below explains long run equilibrium of a monopoly firm.



- As per the above diagram, the monopolist attends equilibrium at point E where both the conditions of equilibrium are satisfied i.e. LMC = MR and LMC cut MR from below.
- Accordingly, OP is the equilibrium price and OQ is the equilibrium output.
- It has been shown in the figure that the AR curve lies above the AC curve indicating AR > AC corresponding to equilibrium point E. Since average revenue is greater than average cost there is more than normal profit for the monopolist.
- The unit profit is shown by RS in the diagram which is the gap between average revenue and average cost curves *i.e. QR – QS = RS.*
- *The* shaded area RSTP in the figure shows total extra normal profit accrued to the monopolist which is possible in the long run because of restriction to entry to the new players into the market and non availability of substitute products in the market.

Price – Output Determination under Monopolistic Competition

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

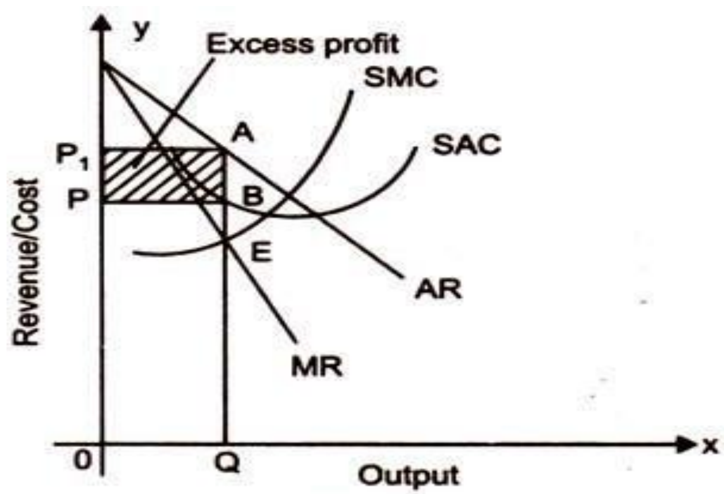


Fig. 9.2

- In the short-run the firm is in equilibrium when marginal Revenue = Marginal Cost.
- In above Fig AR is the average revenue curve.
- MR marginal revenue curve, SMC short-run marginal cost curve, SAC short-run average cost curve, MR and SMC interest at point E where output in OM and price MQ (i.e. OP).
- Thus the equilibrium output or the maximum profit output is OQ and the price QA or OP1. When the price (average revenue) is above average cost a firm will be making supernormal profit.
- From the figure it can be seen that AR is above AC in the equilibrium point. As AR is above AC, this firm is making abnormal profits in the short-run.
- The abnormal profit per unit is AB, i.e., the difference between AQ and BQ at equilibrium point and the total supernormal profit is AB X PP_1.
- This total abnormal profits is represented by the rectangle $ABPP_1$.

- If the demand and cost conditions are less favorable the monopolistically competitive firm may incur loss in the short-run below fig Illustrates this.
- A firm incurs loss when the price is less than the average cost of production. MQ is the average cost and OS (i.e. MR) is the price per unit at equilibrium output OM. QR is the loss per unit.
- The total loss at an output OM is QR X PS. The rectangle PQRS represents the total loses in the short run.

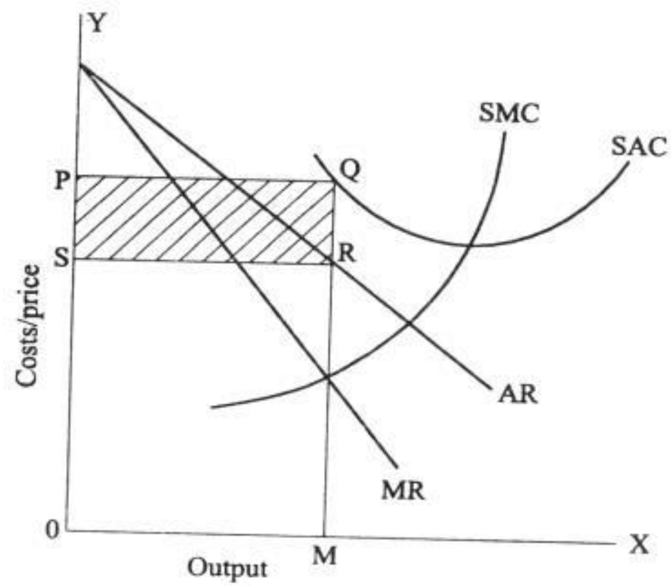


Fig. 6.16

Long – Run Equilibrium of the Firm:

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