Unit- I : Market structure: Perfect competition and Monopoly, Monopolistic competition and Oligopoly

1. Explain the classification of the market structure?
2. What is a perfect competition? Explain its feature.
3. Illustrate the supply curve of a competitive firm
4. How can an industry attain short run under perfect competitions?
5. How can an industry attain long run under perfect competitions?
6. What does monopoly mean? What are the features of monopoly market?
7. What are the types / source of monopoly?
8. Explain price and output determination in the short run under monopoly.
9. Explain price and output determination in the long run under monopoly.

Q.1. Explain the classification of the market structure.

Market is a place where goods and services are bought and sold. It is the place where goods are traded in. market is classified into two major classifications. Perfect competition and Imperfect competition. Under imperfect competition monopoly, monopolistic and oligopoly market come.

1. **Perfect competition:**

It is a market structure where large number sellers and buyers are involved in buying and selling of goods at equilibrium price which is fixed by the industry. Good sold in this market are homogenous in nature and have no substitutes. Sellers are price takers as they sell their products at equilibrium price only. This market is hypothetical and is myth as no such market exists actually. It is based on number of hypothetical conditions like no transport cost, no advertisement cost, full knowledge of markets among buyers and sellers etc.

2. Imperfect competition:

a. Monopoly:

it is a market structure where only singer seller exists with number of buyers. The goods sold by monopolist have no close substitute so cross elasticity of demand is zero in this market. The goods sold are generally of special kind. Monopolist, being the single seller, carries price discrimination and sells the same product to many buyers at different rates. There are many types of monopoly such as legal, natural, technical, pure monopoly.

b. **Monopolistic competition:**

It is a market where are there are many sellers and buyers who are engaged in selling and buying goods. This market is a combination of perfect competition and monopoly. Prof. Chamberlin gave term' Group 'to this market as it has independent policies still competes in the open market. No entry is restricted in this market. This market deals in differentiation goods which are not exactly identical. Selling cost is the main feature of this market as without advertisement this market cannot sustain.

C. **Oligopoly:**

This market structure has a few sellers and many buyers. The sellers in this market have interdependence policies and compete with each other with competitive nature. Survival is difficult in this market as competition is tough and there is reaction of each seller for other seller's action of policies. Price rigidity is the main feature of this market. Cartel is an example of such as market.

Q.2.What is perfect competition and explains its features?

Perfect competition refers to the market structure where competition among the sellers and the buyers exists in its most perfect from. In such a market, there is a single price, which is determined by the interaction of demand and supply.

1.*Many Sellers* : There are many sellers or firms selling a commodity in the market. Their number is so large that any single seller or firm cannot influence a given market price. So an individual seller or a **firm is a price-taker.**

2.*Many Buyers* : There are many actual buyers. Their number is so large that any single buyer cannot influence a given market price. This is because his individual demand is a very small fraction in the total market demand so **buyer is also a price-taker.**

3.Homogeneous Products : All firms or producers produce and sell **identical products** i.e. same in respect of size, shape, color, packaging, etc. So there is no difference in between various products, which are perfect substitutes for each other.

4.Free Entry and Exit:-There is perfect freedom for new firms or sellers to enter a market or an industry without any legal, economic, or any other type of restrictions or barriers, Likewise, the existing producers or sellers are free to leave the market.

5.Perfect Knowledge: -There is perfect knowledge on the part of the buyers and sellers regarding the market conditions especially regarding the prevailing market price and quantity of supply. So a single price would prevail (exists) for a commodity in the entire market.

6.Perfect Mobility of Factors of Production: - The factors of production are perfectly free to move from one firm to another or from one industry to another or from one region to another or from one occupation to another. This ensures freedom of entry and exit for individuals and firms.

7.Transport Costs: -It is assumed that there are **no transport costs.** The transport costs incurred by buyers and sellers to take the advantage of price changes, in a market, are ignored.

8.Non-Intervention by the Government:-It is assumed that the **government does not interfere** with the working of a market economy**,** i.e. it does not interfere with the economic activities in the form of controls on the supply of raw materials, tariffs, subsidies, rationing, licensing etc.

Q.3. Illustrate supply curve of a competitive firm.

Supply curve can be divided into two parts as: Short run and Long run.

A. Short Run Supply Curve of a Firm :

Short run is a period in which supply can be changed by changing only the variable factors, fixed factors remaining the same. That way, if the firm shuts down, it has to bear fixed costs. That is why in the short run, the firm will supply commodity till price is either greater or equal to average variable cost. Thus a firm will continue supplying the commodity till marginal cost is equal to price or average revenue. Under perfect competition average revenue is equal to marginal revenue, so the firm will produce up to that point where marginal revenue and marginal cost are equal.

Short run supply curve of a perfectly competitive firm is that portion of marginal cost curve which is above average variable cost curve.

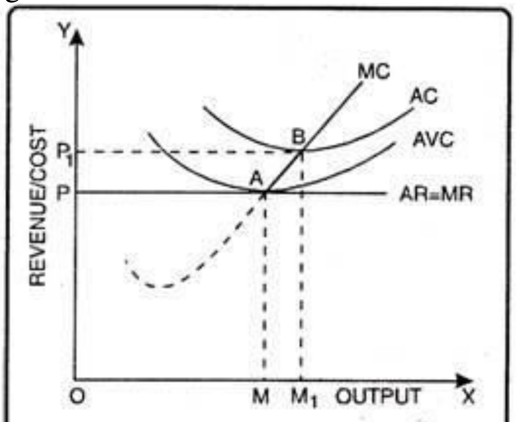


Fig. 1.

From above figure it is clear that there is no supply if price is below OP. At priceless that OP the firm will not be covering its average variable cost (AVC).At OP price OM is the supply. In this case firm's marginal revenue and marginal cost cut each other at A, OM is equilibrium output. If price goes up to OP_1 the firm will produce OM_1 output. This is firms short run supply curve starts from A upwards i.e. line AB.

B. Long Run Supply Curve of Firm :

Long run is a period in which supply can be changed by changing all the factors of production. There is no distinction between fixed and variable factors. In the long run firm produces only at minimum average cost. In this situation long run marginal cost, marginal revenue, average revenue, and average cost are equal i.e. LMC=LMR=LAR=LAC**.**

So that position of marginal cost curve will determine the supply curve which is above the minimum average variable cost. The point where minimum average cost is equal to marginal cost is called optimum production. Thus long run supply curve of a firm is that portion of its marginal cost curve that lies above the minimum point of the average cost curve.

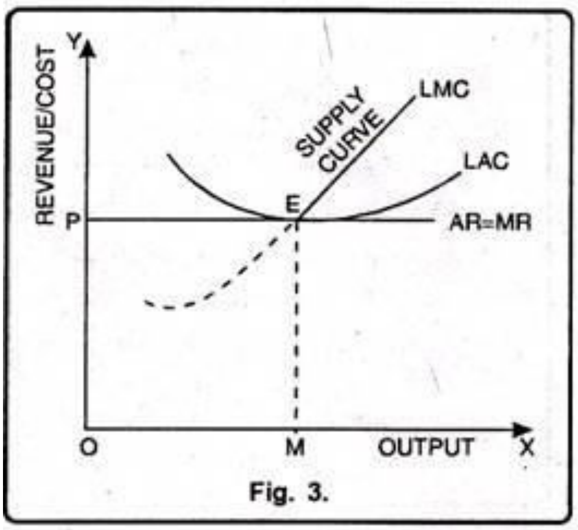


Fig. 3.

In the above figure firm is in equilibrium at point E where LMR=LMC=LAR. LAC is minimum corresponding to this point. This point E is also called point because at this point LMR=LMC=LAR minimum LAC. That portion of LMC which is above E is called long run supply curve.

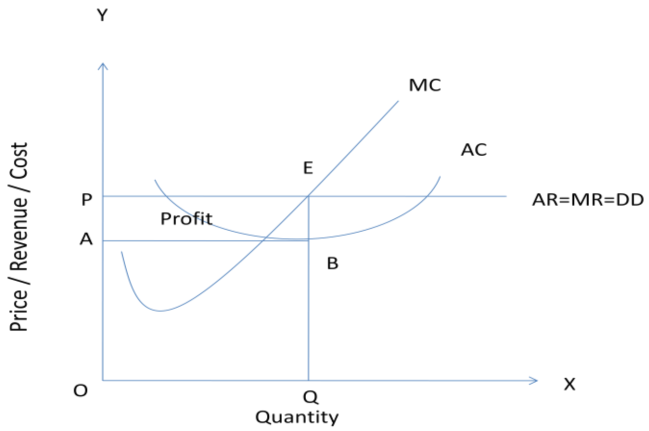
Q.4. How can an firm / industry attain Short run under perfect competitions?

Short Run equilibrium : Short-run is a period of time in which all factors of production cannot be changed. Some factor will remain fixed. In short period equilibrium following two conditions should be satisfied for the firm.

1. The Marginal Revenue (MR) is equal to Marginal Cost (MC) i.e. MR=MC
2. The Marginal Cost (MC) curve should cut Marginal Revenue (MR) curve from below.

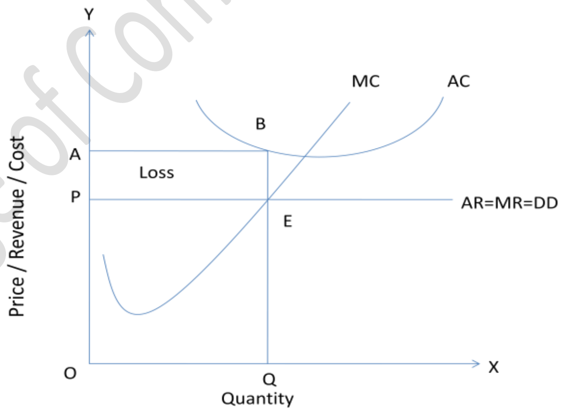
In the short run different following equilibrium position are settled down.

A. **Super Normal Profit (AR > AC):**Super normal profit is also known as Abnormal Profit. The firm is in equilibrium at point E where MR=MC. With OQ as the equilibrium output. OP is the price. Average Revenue is EQ and Average Cost is BQ. Therefore profit can be calculated as follow :



Profit	= Total Revenue (TR)–Total Cost (TC)
Total Revenue (TR)	= Average Revenue x Quantity
	= EQ x OQ
	= OPEQ
Total Cost (TC)	= Average Cost x Output
	= BQ x OQ
	= OABQ
Profit	= TR –TC
	= Area OPEQ – Area OABQ
Profit	**=Area APEB**

B. Loss (AR < AC) : When Average cost is more than Average Revenue firm makes loss. The loss of firm shown in following figure :



Loss = Total Cost (TC) – Total Revenue (TR)

Total Revenue (TR)	= Average Revenue x Quantity
	= EQ x OQ
	= OPEQ
Total Cost (TC)	= Average Cost x Output
	= BQ x OQ
	= OABQ
Loss	= TC –TR
	= Area OABQ – Area OPEQ
Loss	**= Area PABE**

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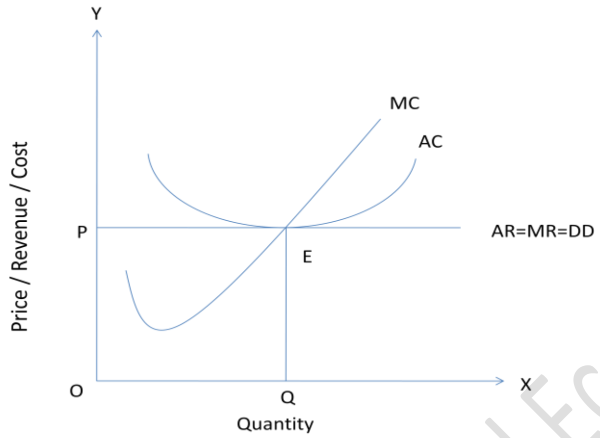
Prof. KARBHARI BHALCHANDRA

Average revenue is less than Average cost (AR < AC) the firm is making loss. Thus firn in above figure suffer losses which are PABE.

C. Normal Profit (AR = AC) : The firm at equilibrium will make normal profit if at equilibrium point AR=AC i.e. AC curve is tangent to AR.



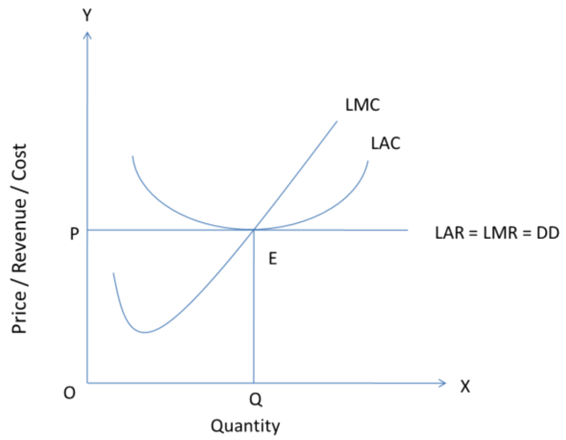
Total Revenue (TR) = Average Revenue x Quantity
= EQ x OQ
= OPEQ
Total Cost (TC) = Average Cost x Output
= EQ x OQ
= OPEQ

Hence Total Revenue (TR) = Total Cost(TC) i.e. Area OPEQ = Area OPEQ the firm is making normal profit.

Q.5. How can an firm/ industry attain long run under perfect competitions?

Long Run Equilibrium : Long run is a period on which all factors of production are variable. When some firms are earning super normal profit (AR > AC) in the short run it attracts large number of firms into the industry. As a result output increases resulting in fall in market price and supernormal profit will be wiped away and the normal profit will continue in the long run.

When some firm suffers losses (AR <AC) in the short run they start leaving industry in the long run. Reduction in the number of firms leads to contraction of industry's output. As a result price increases and due to this all losses will be wiped away and only normal profit will continue in the long run.



In long run the firm is in equilibrium at the point where the LMC = LMR at the same time LAC = LAR. If it is assumed that all the firms are facing the similar cost conditions all the firms are in equilibrium at the point where all will earn only normal profit with LAC = LMC = LAR = LMR

Q.6. What does monopoly mean? What are the features of monopoly market?

The word 'Monopoly' is derived from two words 'Mono' which means single and 'Poly' which means sellers. Hence monopoly is a market situation in which there is one seller of product who controls the entire market supply'

1. ***Single producer or seller:*** Monopoly is the market structure where only one seller is involved in business activities. He has full control over his business. He is the sole authority to take decision regarding production and pricing policies.
2. ***No Distinction between Firm and the industry:*** In this market there is no distinction between firm and industry as it is featured with one seller. There are no competitors. So the distinction between firm and industry disappears.
3. ***No close substitute:*** Monopoly market does not face competition there is no close substitute available for his product. The monopolist produces all the output in a market.
4. ***Absence of competition:*** There is no competition for monopoly. So the product sold by monopolist has no substitute or complementary product. **Cross elasticity of demand is zero in monopoly market**.
5. ***Price maker:*** Monopoly is a price maker being having control over his business. He does carry price discrimination by charging various prices to different consumers.
6. ***Complete control :*** Monopoly has complete control over the production and market supply. Decision about production is the sole decision of his. Entry to new firms are restricted.
7. ***Downward Sloping demand curve :*** Monopolist faces a downward sloping demand curve which indicates that it can sell more at a lower price.

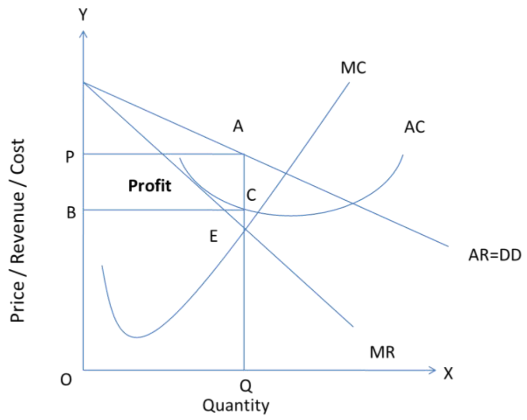
Q.7. Explain the types/ Sources of Monopoly in brief.

1. ***Pure/ Perfect Monopoly :*** A Pure or perfect monopoly is one, which has no close substitutes. Such type of monopoly is very rare.
2. ***Imperfect Monopoly :*** Imperfect monopoly is one, which has remote substitute in the market. Such type of monopoly is very common.
3. ***Legal Monopoly :*** Legal monopoly exists due to some statutory regulations like Patents, Trademarks, copyrights etc.
4. ***Natural Monopoly :***Natural monopoly arises as a result of natural advantages like good location, minerals, Natural resources, goodwill etc. E.g Tea of Assam
5. ***Technological Monopoly :*** It arises because of some technological advantages like use of capital goods, new methods of production etc.
6. ***Joint Monopoly :*** When many firms come together and form associations like pools, cartels, syndicates etc. it is termed as Joint Monopoly. They come together for mutual cooperation and carrying joint business.
7. ***Public Monopoly :*** When the production of goods and services are fully owned and controlled by the Govt. it is termed as Public Monopoly. However the main aim of the government is not to earn profits but to provide services. Hence they are also termed as Welfare monopolies. For e.g Indian Railways, M.S.E.B etc.
8. ***Private Monopoly:*** When the production is owned, managed &controlled by the private entrepreneurs, it is termed as the Private monopolies. The aim of such monopoly is to earn maximum profits.
9. ***Simple Monopoly :*** A Simple Monopoly charges uniform price (single price) to all customers. Monopolist cannot set a price to maximize his profit. It is termed as Simple Monopoly.
10. ***Discriminating Monopoly :*** Discriminating Monopoly charges different prices to different customers for the same products or service. For e.g M.S.E.B charges lower rate for domestic consumption and higher rate for commercial consumption.

Q.8. Explain price and output determination in the short run under monopoly.

Short Run Equilibrium :

1. **Super Normal Profit :** If the Average Revenue (AR) is greater than Average Cost (AC) (AR > AC) the monopoly firm will earn supernormal profit. Profit of monopolist is shown in following diagram.



Profit = Total Revenue (TR) – Total Cost (TC)

Total Revenue (TR) = Average Revenue x Quantity
= AQ x OQ
= OPAQ

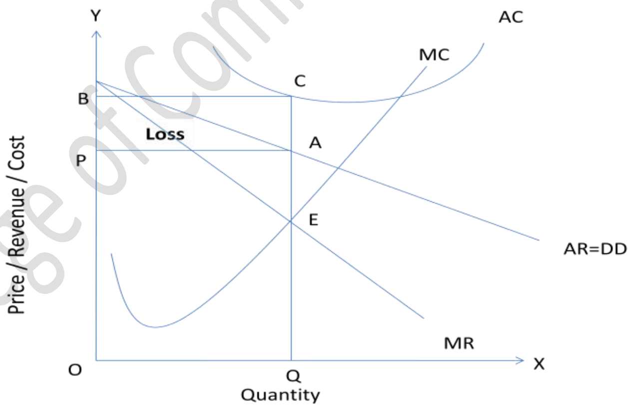
Total Cost (TC) = Average Cost x Output
= CQ x OQ
= OBCQ

Profit = TR –TC
= Area OPAQ – Area OBCQ

Profit = Area BPAC

Hence the monopolist enjoys supernormal profit of BPAC and this is also as monopoly profit.

2.Losses : If the Average Revenue (AR) is less than Average Cost (AC) (AR < AC) the monopoly firm will suffer from losses. Loss of monopolist is shown in following diagram.



Loss = Total Cost (TC) – Total Revenue (TR)

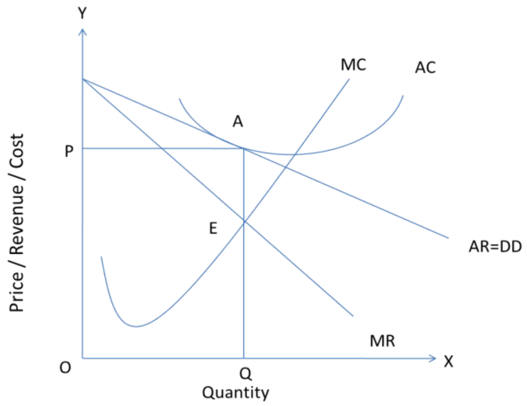
Total Revenue (TR) = Average Revenue x Quantity
= AQ x OQ
= OPAQ

Total Cost (TC) = Average Cost x Output
= CQ x OQ
= OBCQ

Loss = TC –TR
= Area OPAQ – Area OBCQ

Profit = Area PBCA

3. **Normal Profit :**The monopoly firm at equilibrium will make normal profit if at equilibrium point AR=AC i.e. AC curve is tangent to AR.



Total Revenue (TR) = Average Revenue x Quantity
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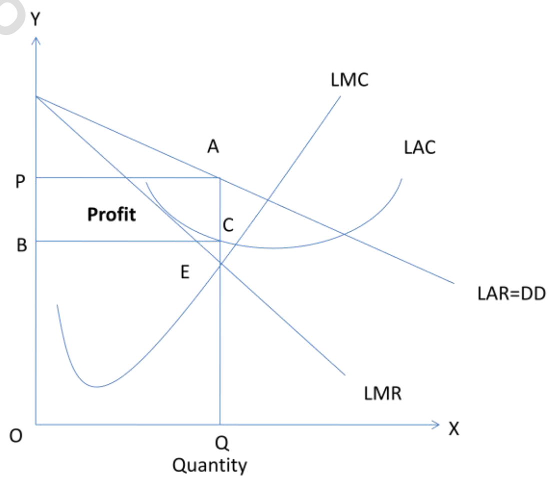
Total Cost (TC) = Average Cost x Output
= AQ x OQ
= OPAQ

Monopoly firm in short run may also earn normal profit if SAC is tangent to the AR at equilibrium point (E). If in short run monopolist firm earn normal profit monopolist will not produce the output. Monopolist always wants supernormal profit.

Q.9. Explain price and output determination in the long run under monopoly.

Long Run Equilibrium : Monopoly is associated with profits and it is called monopoly profit. This applies to the long run equilibrium under monopoly. The monopolist will always make profit in the long run where monopolist is not under pressure to operate on the existing plant scale.



Above diagram shows the profit of monopolist in long run. Monopolist produced and sold OQ quantity at price OP. For this output long run average cost (LAC) is CQ and total cost is OBCQ while total revenue OPAQ. In long run monopolist earn profit area BPAC.

Unit II. : Market structure: Pricing and Output Decisions under imperfect completion.

1. Explain features / characteristics of monopolistic competitions.
2. Explain the short run equilibrium of a firm under monopolistic competitions.
3. Explain the long run equilibrium of a firm under monopolistic competitions.
4. Discuss the role of advertising in monopolistic competition.
5. Explain the features of the oligopoly in brief
6. Explain the Price and Output Determination Under collusive oligopoly market. / Illustrate Cartel in the model oligopoly.
7. Explain the Paul Sweezy model of price rigidity. / Explain the kinked Demand Curve Model.
8. Explain the types of Price Leadership.
9. Distinguish between perfect competitions and monopolistic competitions.
10. Distinguish between Monopoly and monopolistic competitions.

Q.1. What are the features / characteristics of monopolistic competition?

Monopolistic competition was introduced by Prof. E.H. Chamberlin and Prof. Mrs. Joan Robinson. Monopolistic competition is the **type of market structure where there exist monopoly on one side and perfect competition on other side**. Simply we can also say that it is a mixture of monopoly and perfect competition.

1.Large number of firm : In a Monopolistic competition there **is relatively large number of firms** each satisfying a small share of the market demand for the product. As there are large number of firms there exists stiff competition between them. But the size of the firm will be relatively small.

2.Product Differentiation ***:*** In a Monopolistic competition the products produced by various firms are not identical but **slightly different from each other**, which means the products are not same but are similar and hence their prices are not much different. They are close substitutes of each other.

3.Selling Cost ***:*** Firms in Monopolistic competition incur expenditure to promote sales, which is called as 'Selling Cost'. **Selling cost is incurred in the form of advertisement** like on T.V., Radio, Press, Exhibitions, free samples ***e***tc. Selling cost tries to influence consumers demand and promote sales.

4.Free entry and exist *:* In a Monopolistic competition it is easy for the new firms to enter and the existing firm to leave it. Free entry means that when in the industry existing firms are making supernormal profit new firms enter in the industry and the losses will compel them to leave the industry or group.

5.Absence of Interdependence *:* Under Monopolistic competition firms are large but not their size. They are too small. It means every firm has its own policies like production, output, price policy etc. Thus **the policy of an individual firm cannot influence the policy of other firms** which means all firms are independent but not interdependent.

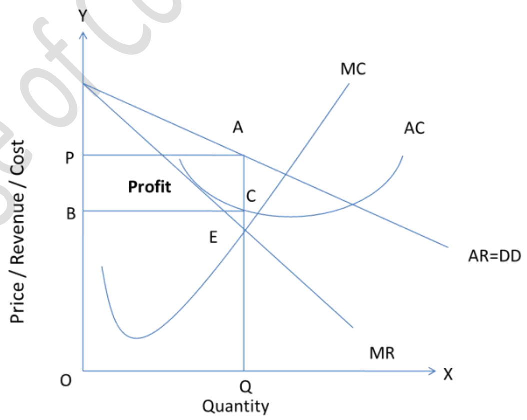
6.Concept of Group : In Monopolistic Competition the word 'industry' loses its significance as **Prof. Chamberlin has used the word 'Group'** which means number of producers whose goods are fairly close substitutes.

7.Nature of Demand Curve :-In a Monopolistic competition the demand curve slopes downward from left to right, which an individual firms can sell more by lowering price. **DD curve of monopolistic always slopes negatively.**

Q.2. Explain the Short Run Equilibrium under Monopoly Market.

A firm under monopolistic completion faces three situations i.e. supernormal profit, loss, and normal profit.

1. **Super Normal Profit :** If the Average Revenue (AR) is greater than Average Cost (AC) (AR > AC) the monopoly firm will earn supernormal profit. Profit of monopolistic firm is shown in following diagram.



Profit = Total Revenue (TR) – Total Cost (TC)

Total Revenue (TR) = Average Revenue x Quantity

= AQ x OQ = **Area OPAQ**

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Profit = TR –TC

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Hence the monopolist enjoys supernormal profit of BPAC and this is also as monopoly profit.

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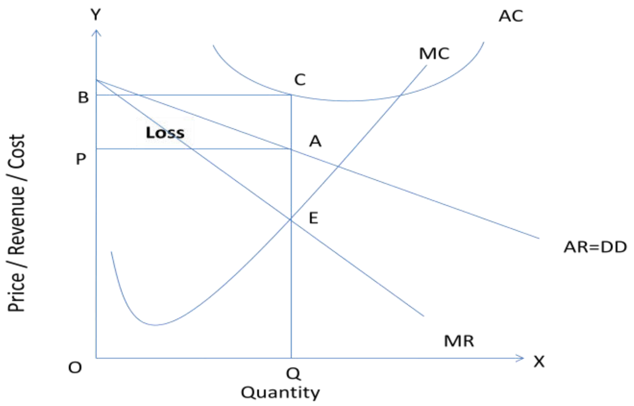
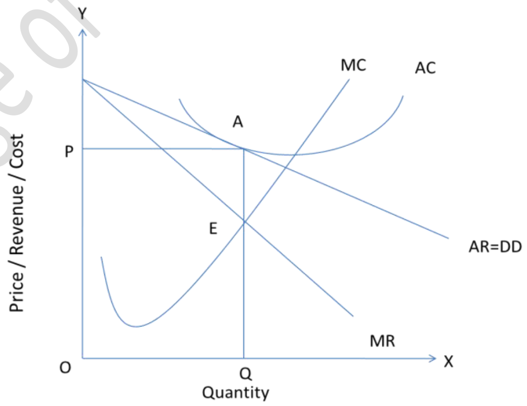


Loss = Total Cost (TC) – Total Revenue (TR)

Total Revenue (TR) = Average Revenue x Quantity
= AQ x OQ
= OPAQ
Total Cost (TC) = Average Cost x Output
= CQ x OQ
= OBCQ
Loss = TC –TR
= Area OPAQ – Area OBCQ
Profit = Area PBCA

4. Normal Profit : The monopolistic firm at equilibrium will make normal profit if at equilibrium point AR=AC i.e. AC curve is tangent to AR.

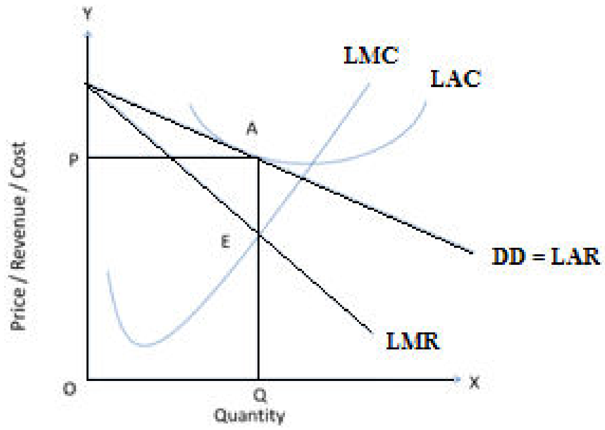


Total Revenue (TR) = Average Revenue x Quantity
= AQ x OQ **= Area OPAQ**
Total Cost (TC) = Average Cost x Output
= AQ x OQ **= Area OPAQ**

Monopolistic firm in short run may also earn normal profit if SAC is tangent to the AR at equilibrium point (E). If in short run monopolist firm earn normal profit monopolist will not produce the output. Monopolist always wants supernormal profit.

Q.3. Explain the Long Run Equilibrium under Monopolistic competition.

In long run firms working under monopolistic completion earn only normal profits. The equilibrium of a firm under monopolistic completion is shown in the figure below.



Above diagram shows the normal profit of monopolistic firm in long run. Monopolistic firm produced and sold OQ quantity at price OP. For this output long run average cost (LAC) is AQ and total cost is OQAP while total revenue OQAP. In long run monopolist earn profit area BPAC.

Q.4. Discuss the role of advertising in monopolistic competition.

A monopolistic firm produces close substitute products and therefore each firm in order to attract consumers towards their product and increase their market share invests heavily on advertisement. It may result in increase in profits. Firms that sell highly differentiated consumer goods such as perfumes, soft drinks etc. spend between 10 to 20 % of revenue on advertising.

Debate over role of advertising in monopolistic completion.

The Critique of Advertising : It is criticized that firms advertise in order to influence consumer's tastes. Much advertising is psychological rather that informational.

Example. Advertisement of a brand of wrist watch. The advertisement shown in newspaper and television does not tell the viewer about the price or quality of product. Instead it might show a group of youngsters wearing the watch in their friends groups and they make impression on others. The goal of the advertisement is to convey a subconscious massage "You too can impress others and be happy, if only you wear our product" Critics says that such a advertisements creates a desire in the consumers unnecessary and increases the completion in the market.

The Defence of Advertising : Defenders of advertisement says that firms use advertising provides information to consumers. Advertising also convey the message about price of product, location of store etc. which is convenient to consumer.

Advertising makes consumers more fully informed about product and firm. In addition advertisement allows new firms to enter more easily because advertisement gives entrants a way to attract customers from competitors.

Q.5. Explain the features of the oligopoly in brief.

Oligopoly is a market situation where there are only few sellers in a given line at production. **Mr. Feller defines Oligopoly as "Competition among the few".** In this type of market the firm may be producing either homogeneous products or may be having product differentiation in the given line of production.

Features:-

1. Few Sellers:-Under Oligopoly there are few sellers producing or supplying either homogeneous products or differentiated products.

2. Interdependence:-The firms have a high degree of interdependence in their business policies about fixing of price and determination of output.

3. Advertisement & selling cost :-Advertisement and selling cost have strategic importance to the firms under oligopoly. Each firm tries to attract maximum number of consumers towards its products by spending huge amount of money on advertisement and publicity.

4. High Cross elasticity's of demand:-Under Oligopoly the firms have a high degree of cross elasticity's of demand. So there is always a fear of retaliation by the rivals. For e.g. if coke reduces its price by 2 Rs. Pepsi may retaliate by reducing its price by 3 Rs.

5. Constant *Struggle:-*Competition is of unique type in a Oligopolistic market. Here competition consists of constant struggle of rivals against rivals (competitors).

6. Lack of Uniformity:-In Oligopoly the size of the firms are not uniform. Some firms are very big in size and some firms are very small in size. Uneven sizes of firms are found in this market.

7. Price Rigidity:-In Oligopoly market each firm sticks to its own price. This is because it is in constant fear of retaliation by the rivals if it reduces the price.

8. Kinked Demand Curve:-According to Mr. Paul Sweezy firm is an Oligopolistic market have Kinky demand curve. This is because when a firm changes its price the other firms also change their price. Hence the demand curve of an Oligopolistic is not definite it goes on changing.

Three Important Models of Oligopoly are as :

(1) Price and output determination under collusive oligopoly.
(2) Price and output determination under non-collusive oligopoly.
(3) Price leadership model.

Q.6. Explain the Price and Output Determination Under collusive oligopoly market. / Illustrate Cartel in the model oligopoly.

Collusive Oligopoly : The term ***'collusion'*** implies to 'play together'. When firms under oligopoly agree formally not to compete with each other about price or output, it is called ***collusive oligopoly***. The firms may agree on setting output quota, or fix prices or limit product promotion or agree not to 'poach' in each other's market. The completing firms thus from a 'cartel'. The members of firms behave as if they are a single firm.

There are two forms of cartel:

1. Cartel aiming at joint profit maximization

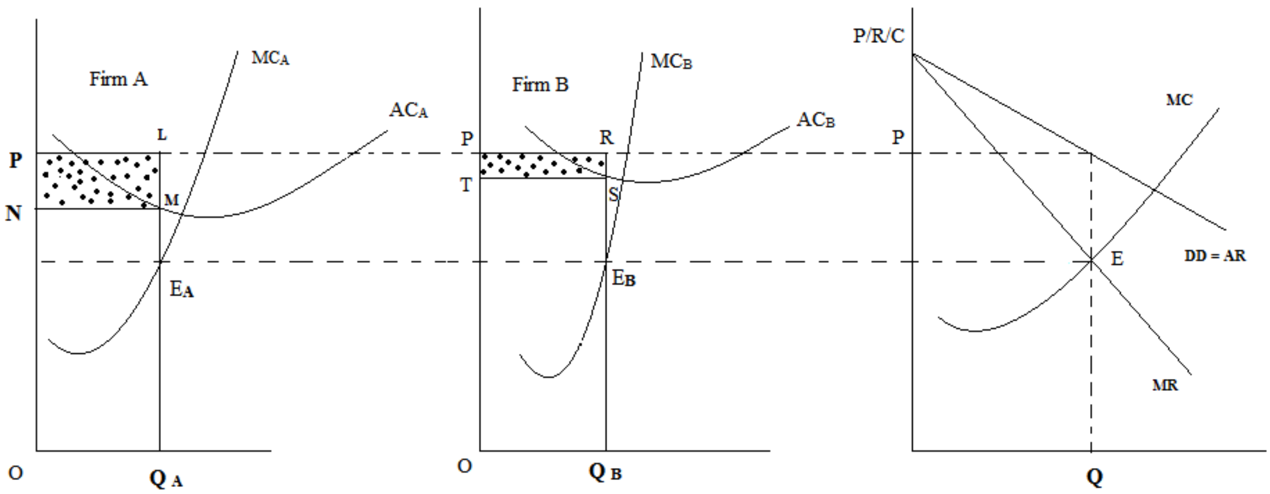
2. Cartel aiming at sharing of the market

Each of the form of the model is discussed below :

1. Cartel aiming at joint profit maximization :

In this form of cartel the aim is to maximize joint industry profits. A **central administrative agency decides total quantity to be produce, price, allocation of output among each firm and distribution of profit** among each firm.

In order to maximize joint profits central agency will apply marginal list rule i.e. equate industry marginal cost and industry marginal revenue curve.



In above figure the industry demand curve DD consisting of two firms. Marginal cost curve (MC) is obtained by the horizontal summation of MC_A and MC_B. So the MR curve and MC curve which are identical. The cartel's MR curve intersects the MC curve at point E. Profits are maximized at output OQ, where MC = MR. The cartel will set a price OP, at which OQ, output will be produced and demanded.

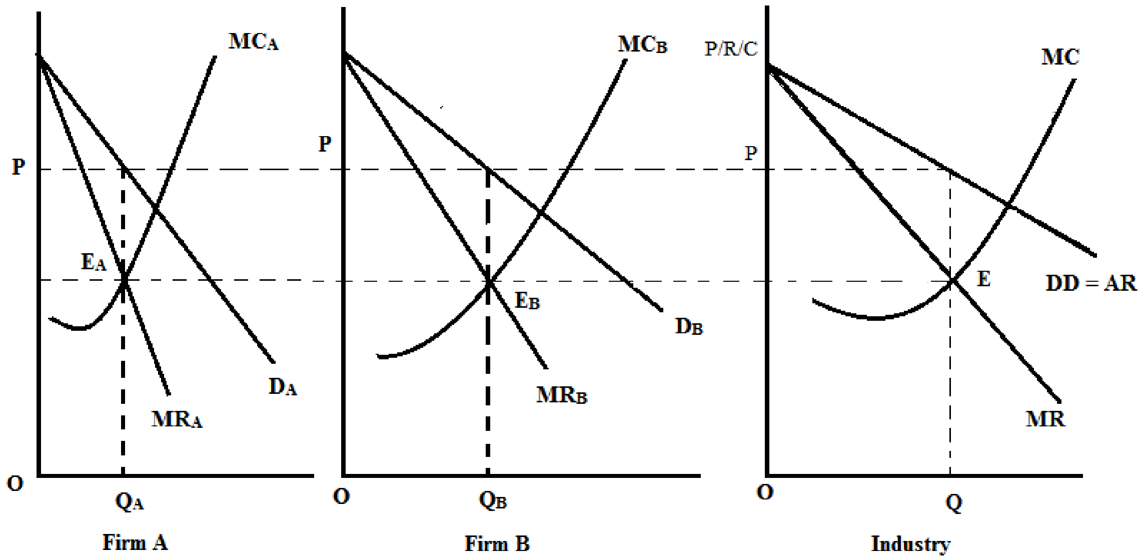
Once the allocation is done in such a way that the marginal cost o each firm is equal, i.e. $MC_A = MC_B = MR$. The total output produced by firm A and B would be determined points E_A and E_B respectively. Thus firm A produce OQ_A and firm B produce OQ_B level of output. Therefore total output is the sum of individual output of A and B i.e. $OQ = OQ_A + OQ_B$.

It is considered that firm A is low cost firm then firm A makes profits equal to PNML while firm B makes profit PRST. The maximum joint profit is obtained by summing the individual profit of the firm.

2. Cartel aiming at sharing of the market :

In this form of cartel members firms agree not only to a **common price but also agree on the quantity** which they can sell in the market.

If there is are only two firms in the cartel each firm will sell half of the total market demand at that price. The quotas of market share are decided by bargaining between the firms. This is graphically shown below.



Consider two firms A and B form a cartel in industry. DD is the market demand curve and MR is the corresponding marginal revenue curve. MC curve obtained by the horizontal summation of MC_A and MC_B. at the equilibrium point E, where MC=MR the cartel will achieve maximum profits. The total equilibrium output will be OQ and price OP.

The total output of firm A will be OQ_A and of firm B will be OQ_B. Thus total output in the industry will be,

$$OQ = OQ_A + OQ_B$$

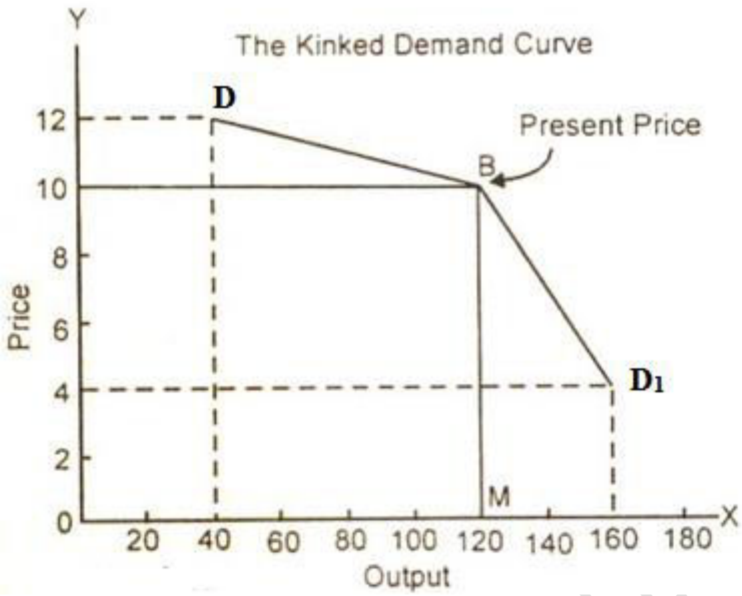
The total output OQ is obtained by drawing a line parallel to X- axis from point E that intersect MC_A at point E_A and MC_B at point E_B. Thus each firm sells output at monopoly price OP. This is called as market sharing cartel.

Q.7. Explain the Paul Sweezy model of price rigidity. / Explain the kinked Demand Curve Model.

The ***Kinked demand curve*** model was developed by Paul Sweezy (1939). According to him, the firms under oligopoly try to avoid any activity which could lead to price wars among them. The firms mostly make efforts to operate in non price competition for increasing their respective shares of the market and their profit. An analytical device which is used to explain the oligopolistic price rigidity is the Kinked Demand Curve.

Mr. Paul Sweezy used two demand curve concepts to explain the model. These are reproduced below:

Diagram:



In the above diagram DD is a kinked demand curve. It is made up or two segments DB and BD. The demand curve is kinked or has a bend at point B. The kink is formed at the prevailing market price level BM (10) . The segment of the demand curve above the prevailing price level is highly elastic (DB) and the segment of the demand curve below the prevailing price level is fairly inelastic (BD_1). This is explained now in brief.

Explanation:

Price increase. If an oligopolistic raises the price of his products from 10 per unit to 12 per unit, he loses a large part of the market and his sale comes down to 40 units from 120 units. There is a loss of 80 units in sale as most of his customers are now purchasing goods from his competitor firms who are selling the goods at 10 per units. So an increase in price above the prevailing level-shows that the demand curve to the left of and above point B is fairly elastic.

Price reduction. If an oligopolistic reduces the prices of its goods below the prevailing price level BM (10 per unit) for increasing his sales, his competitors will also match price changes so that their customers do not go away from them. Let us assume that Oligopolist has lowered the price to 4 per unit. Its competitors in the industry match the price cut. The sale of the oligopolist with a big price cut of 6 per unit has increased by only 40 units (160 - 120 = 40). The firm does not gain as the total revenue decreases with the price cut. The $BD^/$ portion of the demand curve which lies on the right side and below point B is fairly inelastic.

Rigid Prices. The firms in the oligopolist market 'have no incentive to raise or lower the prices of the goods. They prefer to sell the goods at the prevailing price level due to reaction function. The price BM (10 per unit) will, therefore, tend to remain stable or rigid, as every member of the oligopoly does not see any gain by lowering or raising the price of his goods.

8. Explain the types of Price Leadership.

Price leadership is a form of collusion in which one firm sets the price and other firms in the market follow it. Hence it is called as price leadership.

Assumptions:

(a) There are two firms A and B in the market.

(b) The output produced by the two firms is homogeneous.

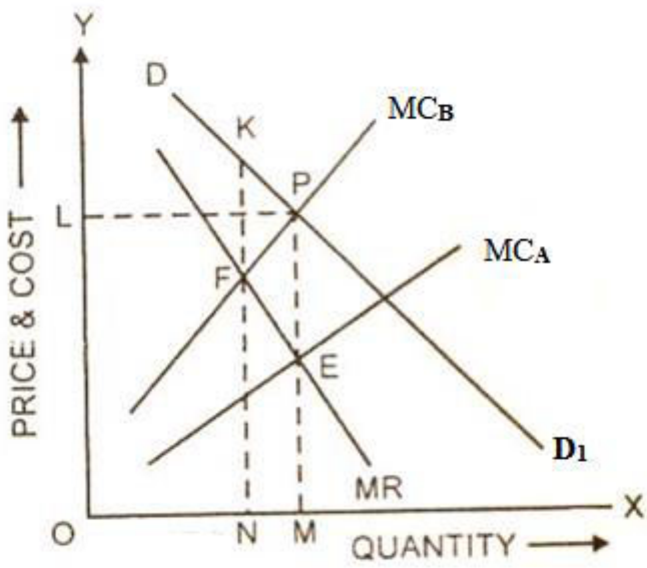
(c) The firm 'A being the low cost firm or a dominant firm acts as a leader firm.

(d) Both of the firms face the same demand curve.

(e) Each of the two firms has an equal share in the market.

The price and output determination under price leadership is now explained with the help of the diagram below.

Diagram:



In above figure DD_1 is the demand curve which is faced by each of the two firms. MR is the marginal revenue curve of each firm. MC_A is the marginal cost of firm A and MC_B is the marginal cost of firm B. It is assumed that the firm A is a low cost firm than firm B. As such the MC_A lies below MC_B.

The leader firm using the marginalistic rule of MC = MR is in equilibrium at point E. The firm A maximizes profits by selling output OM and setting price MP. The firm B is in equilibrium at point F where MC_B = MR. The firm B maximizes profits by producing ON output and selling it at NK price. The firm B has to compete firm A in the market, if the firm B fixes the price NK per unit, it will not be able to compete with firm A which is selling goods at MP price per unit.

Hence, the firm B will be compelled to follow the leader firm A. The firm B will also charge MP price per unit as set by the firm A. The firm B will also produce QM output like the firm A. Thus both the firms will charge the same price MP and sell each of them OM output. The total output will thus be twice of OM.

The firm A being the low cost firm will maximize profits by selling OM output at MP price. The profits of the firm B is lower than of firm A because its costs of production is higher than of firm A.

Q.9. Distinguish between perfect competitions and monopolistic competitions.

Q.10. Distinguish between Monopoly and monopolistic competitions.

MARKETS STRUCTURE

	Perfect Competition	**Monopoly**	**Monopolistic competition**	**Oligopoly**
Numbers	Large sellers and large buyers	Single seller and large buyers	Many sellers and many buyers	A few sellers and large buyers
Product	Homogeneous	Particular or specialist	Heterogeneous	Homogeneous or heterogeneous
price	Equilibrium price(fixed by industry where Demand =Supply	Price discrimination	Independent pricing policy	Interdependent pricing policy
Seller	A price taker	A price maker	A price dictator	Price imitator
Demand curve	Horizontal to X axis	Slopes downward (Steeper)	Slopes downward(Flatter)	Kink demand curve(Price Rigidity)
Known as	Perfect competition	Imperfect competition	Imperfect competition	Imperfect competition
existence	It is unreal market	It is restricted	It is in existence	It is existence
Entry and exit	Free entry and exit	No entry	Free entry and exit	Entry prohibited
Special feature	Assumption based	Remote competitors	Group concept (Chamberlin)	Price rigidity (to stop competitors)
Substitutes	Number of	No substitute	Number of	A few