

A perfect competitive market structure arises when there are large no. of buyers / firms in an industry, all producing homogenous product, without any artificial restriction & possessing - possessing perfect knowledge of the mkt. at a time.

Characteristics :-

- i) There are very large no. of buyers and sellers in the market.
- ii) All the firms within an industry sell homogenous product.
- iii) All the buyers and sellers have complete & perfect knowledge of the condition of the market.
- iv) There is free entry and exit condition for all the firms.
- v) There is no govt. intervention in the mkt.
- vi) The goal of all firms is profit maximisation.
- vii) There is no transport cost. in carrying a product from one place to another.

There is perfect mobility of goods & factors in the market. Individual firm is a price taker. It must sell its output at the given price.

(64)

* Pure Competition v/s Perfect Competition :-

Pure competition differs from perfect competition only in degree. To be pure competition the conditions are :-

- (i) Large no. of buyers and sellers.
- (ii) Homogenous product.
- (iii) Freedom of entry & exit of a firm.

But in perfect competition, apart from above mentioned conditions, some other conditions are necessary.

Such as, P

- (i) Perfect knowledge about the mkt.
- (ii) Absence of transport cost.
- (iii) Perfect mobility of factors.

Therefore, pure competition is only a part of perfect competition. The scope of perfect competition is much wider than pure competition.

1. Q. Why firm under perfect competition is a price taker?

Ans: A perfect competitive mkt. is characterised by large no. of buyers & sellers, homogenous product, and perfect knowledge. Therefore no individual firm can influence the mkt. & its supply of a product. That is why a firm under perfect competition is a price

taken. Therefore, as price is constant, we have $P = AR = MR$.

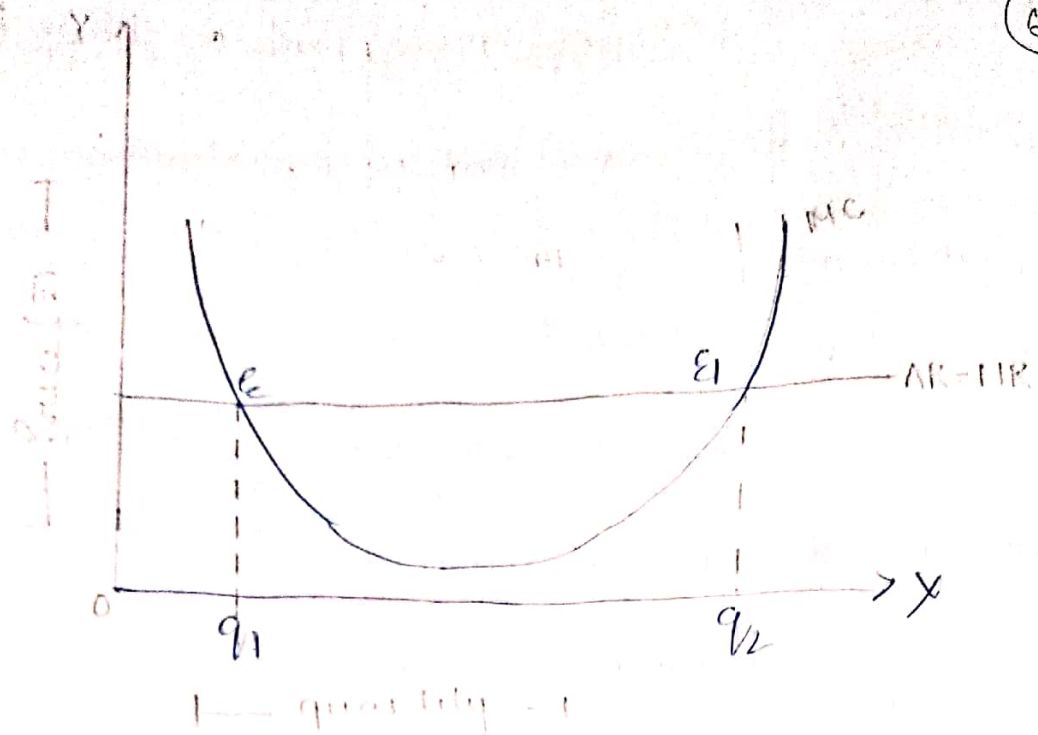
Equilibrium of a firm under perfect competition. 2—
(Short Run).

A In short run, atleast one factor is fixed and the other factors can be variable. Thus, in a short run the equilibrium of a firm is determined at a point where the following 2 conditions are satisfied:

- (i) $MC = MR$. (ii) The slope of MC is greater than MR. Or
MC cuts MR from below.

A firm's demand curve shows the AR for the firm different quantities sold. As we know a perfectly competitive firm is faced with a perfectly elastic demand curve. It has to sell all the output at a given price. It follows that AR of a firm at different levels of sales remains the same, and since every additional unit is sold at the given price, thus $MR = AR$. Thus,

The equilibrium of a firm under perfect competition can be explained by the figure 2—

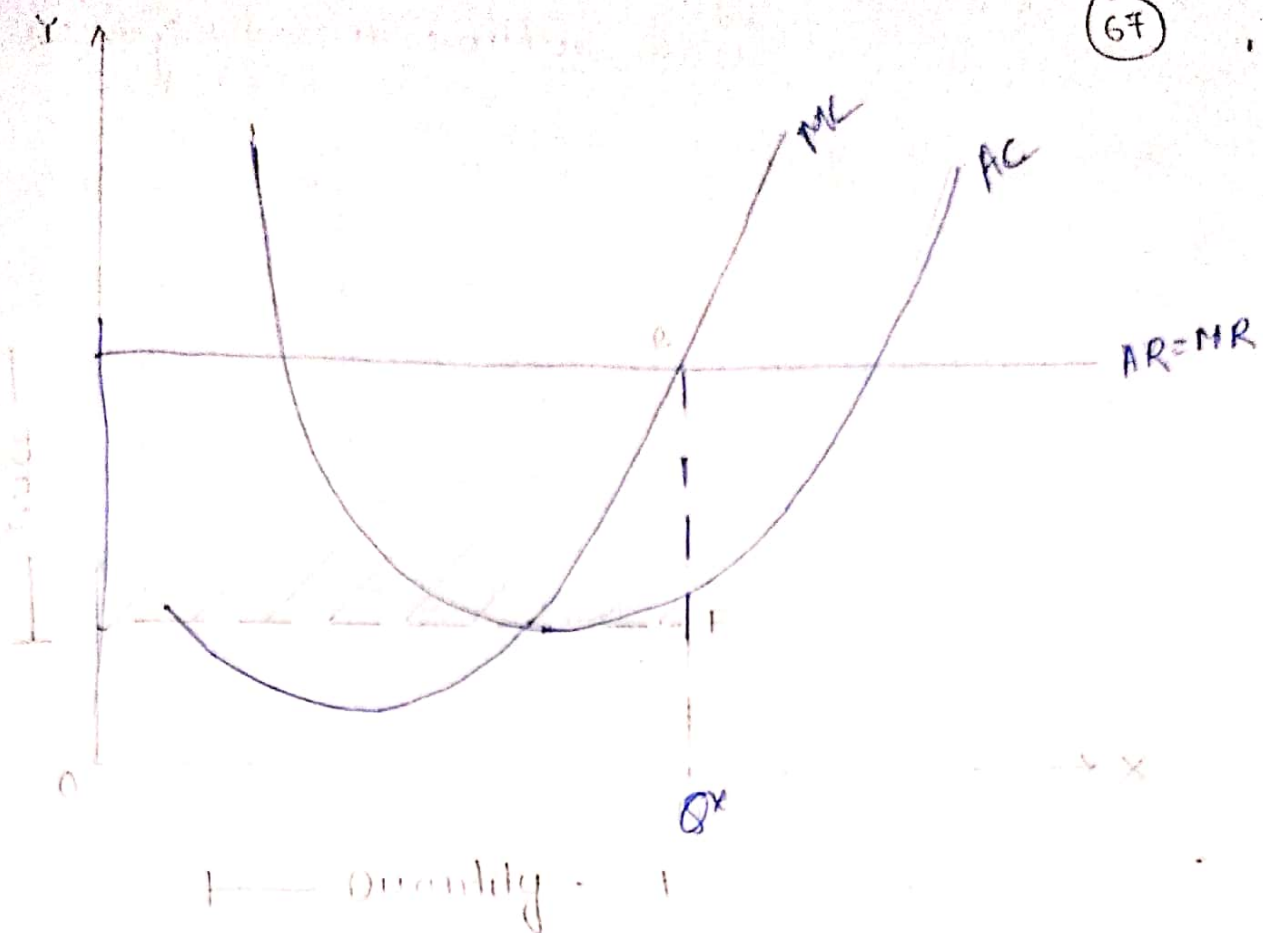


In the figure, $MC = MR$ is satisfied at 2 points i.e., e and e_1 , but at pt. e , MC cuts MR from above whereas at pt. e_1 , MC cuts MR from below. Therefore pt. e_1 is the equilibrium pt. because here both the conditions are satisfied.

In short run, equilibrium of a firm under Perfect Competition may :-

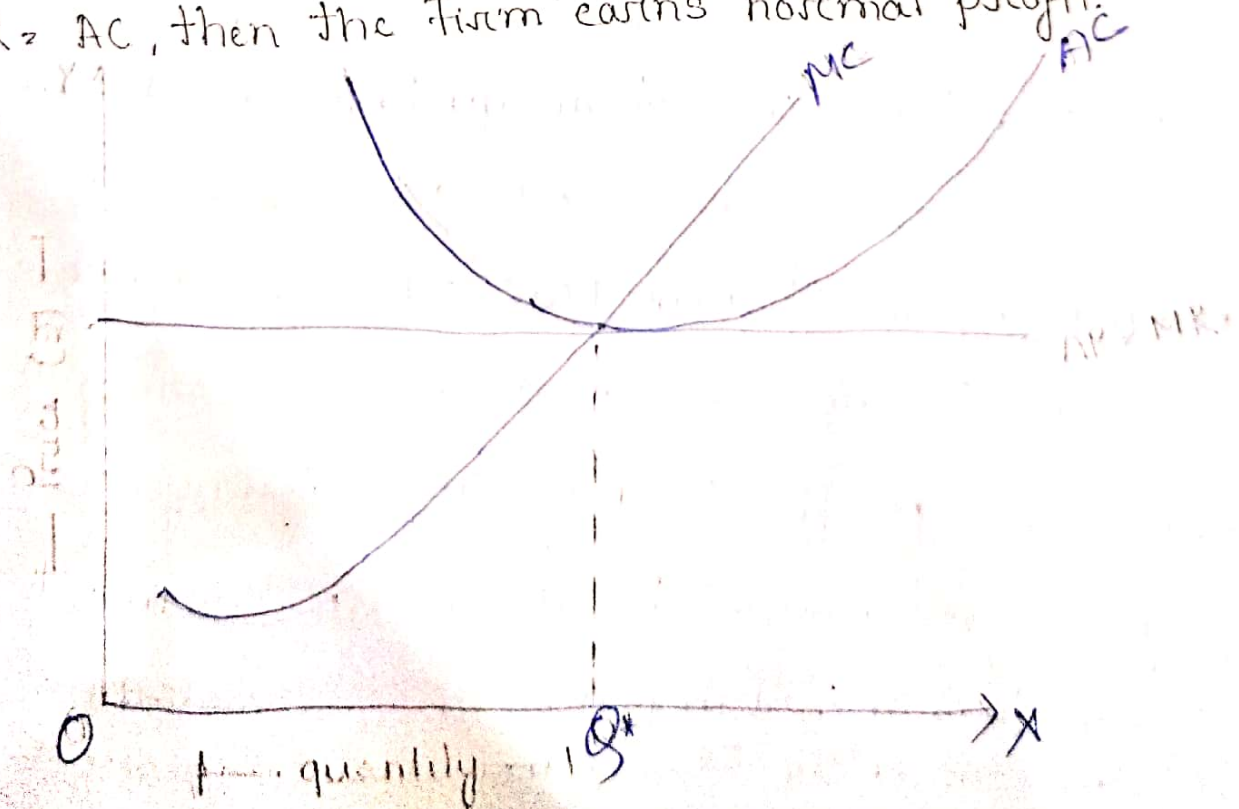
- (i) Earn super normal profit.
- (ii) Earn normal profit
- (iii) Earn Incure losses.

① Super Normal Profit :- A firm will earn Super normal profit if at the level of equilibrium, the output $AR > AC$. This can be shown as follows :-

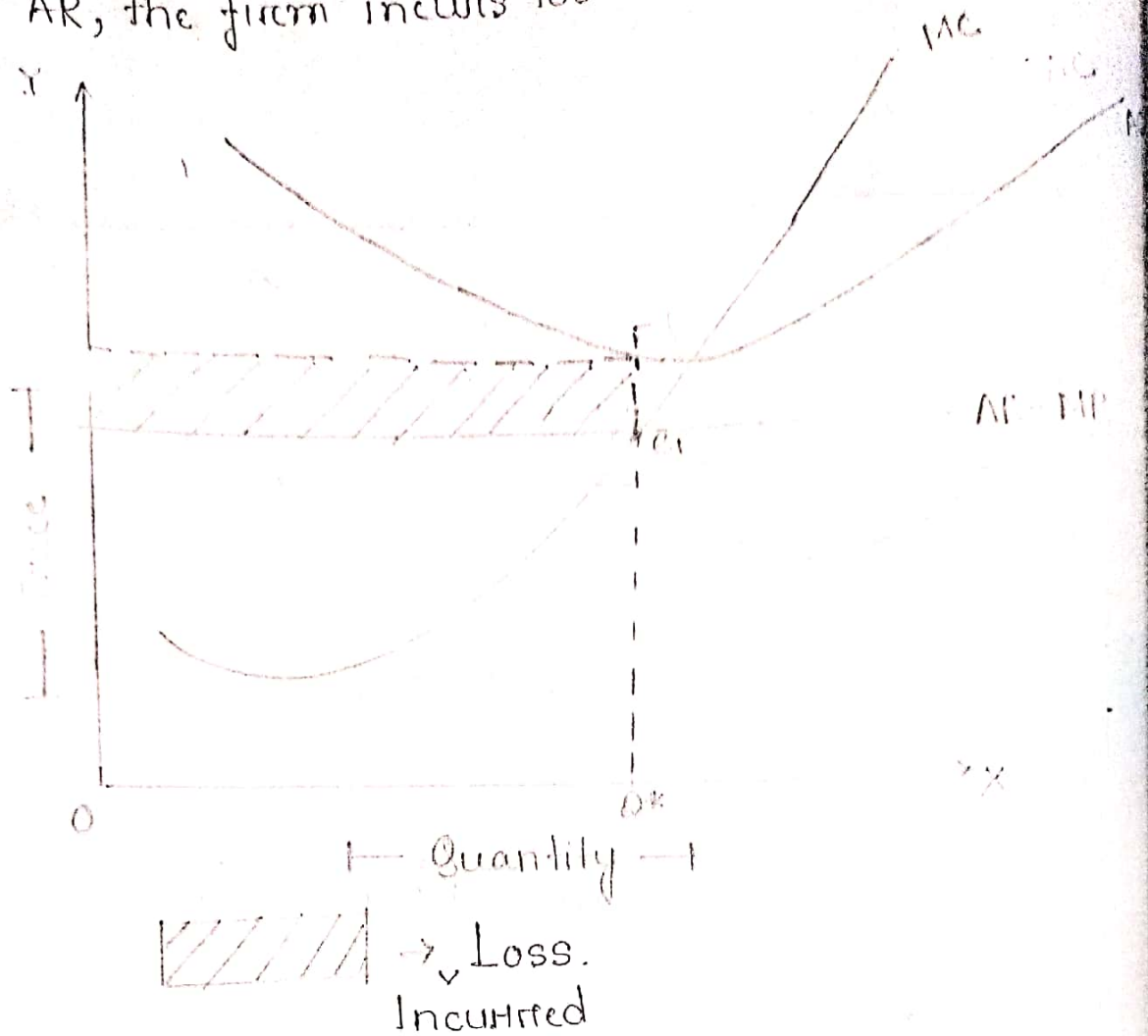


→ Super Normal Profit.

ii) Normal Profit :- If at the equilibrium level of output $AR = AC$, then the firm earns normal profit.



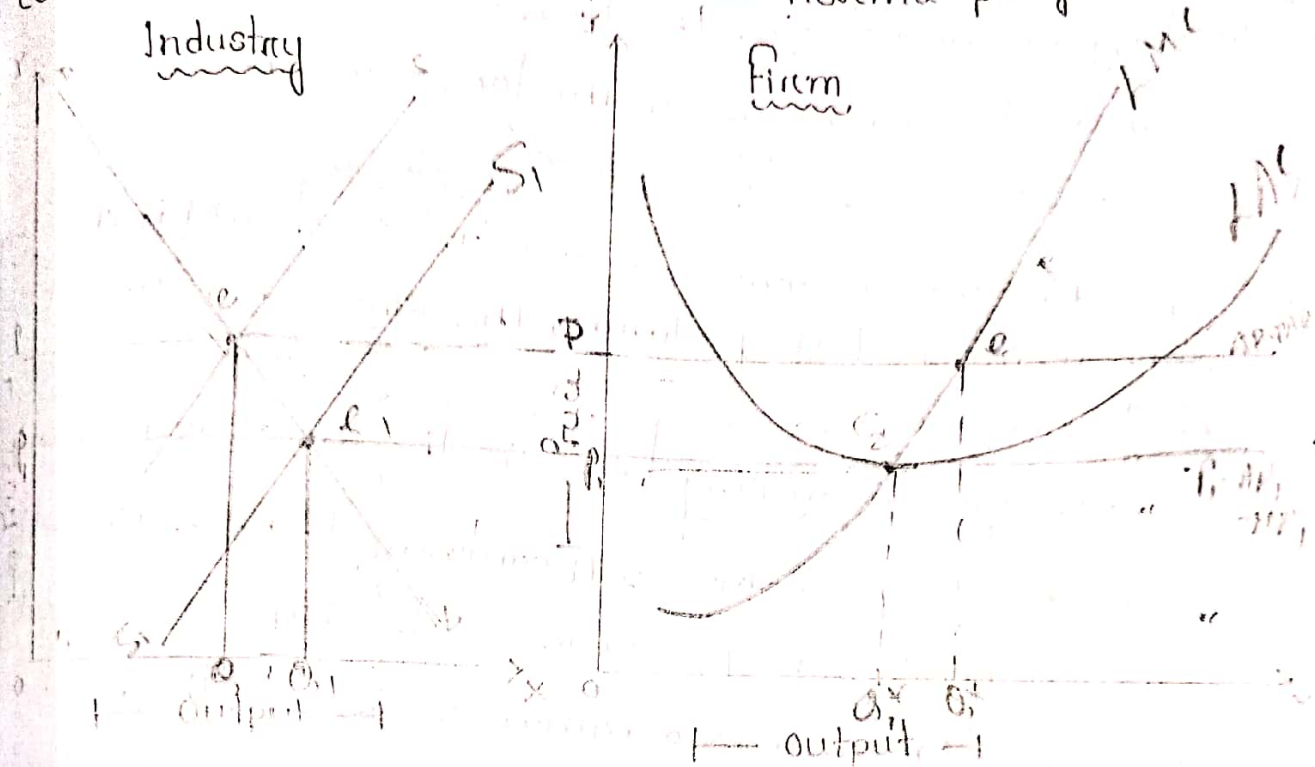
(57) Incur losses :- If at an equilibrium level of output, (58)
 $AC > AR$, the firm incurs losses.



* Long run equilibrium of firm under perfect competition :-

In the long run, firms are in equilibrium when they have adjusted their plans so as to produce at the minimum point of their LAC, which is tangent to the DD curve. In the long run, a firm will be earning only normal profit. If they start earning excess profit, new firms will be attracted in the industry; this will lead to fall in prices and an upward shift of the cost curve. This change will continue until the

AC is tangent to the curve define by the mkt. price. If the firms makes losses, in the long run, they will leave the industry which will in turn increase the prices of the commodity and reduce the cost of production. This will continue until the firm experiences normal profit.

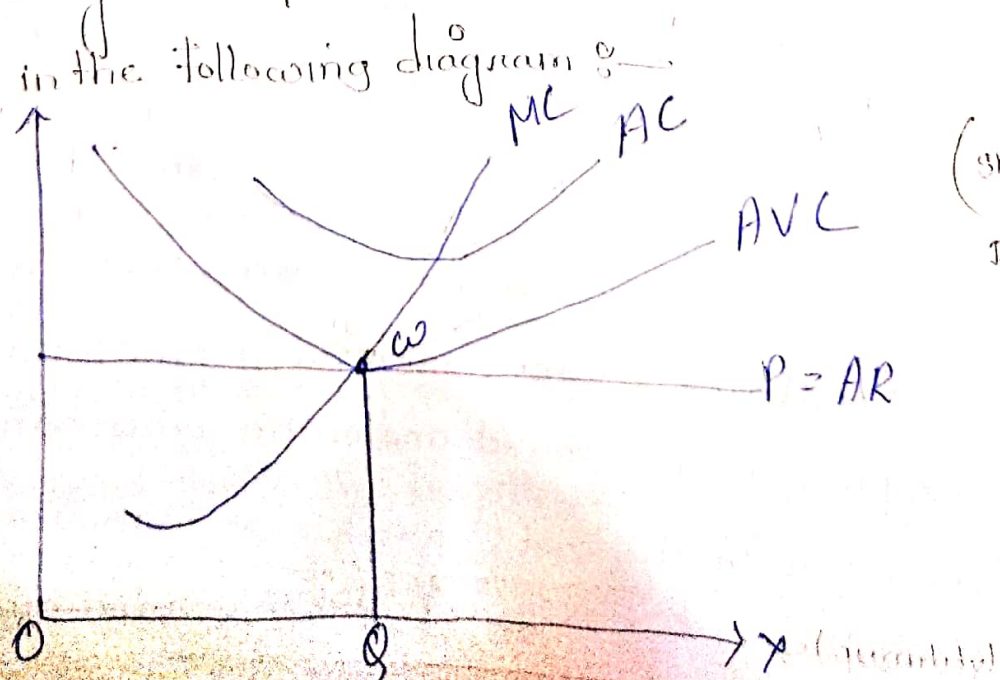


In the figure, if the price is P , the firm is making excess profit. Seeing this new firm will enter the industry and push up the Supply. This will cause the Supply Curve to shift from S to S_1 . The new equilibrium point thus will be e_1 , and the new equilibrium price will be P_1 . Thus, on one hand, the ushering of new firms has reduced the price in the market and on the other hand, has also increased the cost of production to increase by increasing the demand for factors. This in turn has caused

(iii) The firm to experience normal profit at price P_1 has LMC and the new average revenue curve are tangent to each other at the pt. of equilibrium. Thus, in the long run, the firms are at equilibrium at point E_2 , earning normal profit. In other words, the firm reaches its equilibrium in the long run when $LMC = LAC = P$.

Q. Should a firm continue to produce or should it shut down when it incurs losses, during the short run under perfect competition?

Ans. Even after incurring losses in the short run, a firm under perfect competition will continue to produce when it covers its variable cost. Otherwise, it will go close down so as to minimize its losses. The point at which the firm covers its variable cost is called the closing down point or shut-down point. This is shown in the following diagram:-

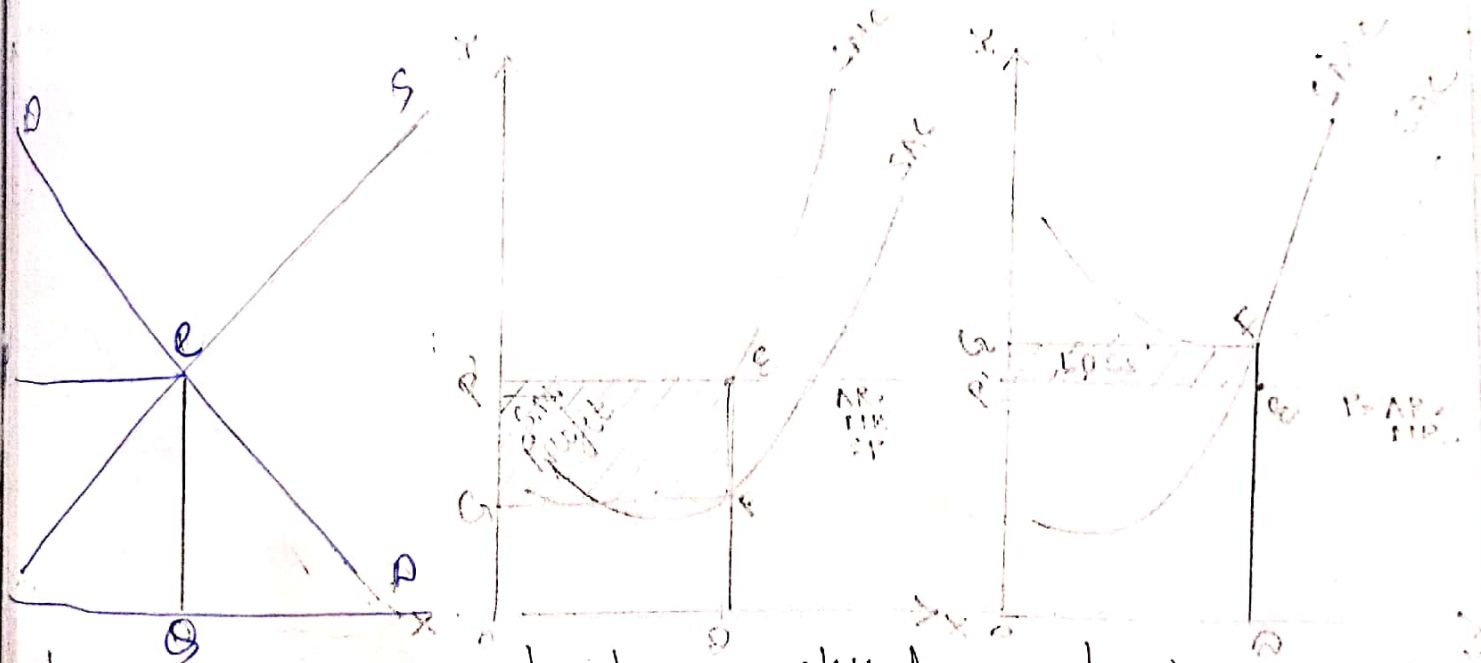


(Shut down also known as Break-even point)
($AR = MC$)

in the fig., the closing down of the point of the firm is denoted by (C), where ($P = AVC$) If price falls below P , then the firm does not cover its variable cost, (i.e. $P < AVC$) & is better off if it closes down.

* Short run industry equilibrium at P.C. :-

Given the mkt. dd & the mkt. supply curve the industry is in equilibrium at the price which clears the mkt. i.e., the price at which the qty^d is equal to qty. supplied.



Short run industry equilibrium (fig. A).

Short run equilibrium of firm (A) (fig. B) earning excess profit.

Short run equilibrium of a firm (B) (fig. C) incurring loss.

In fig. A, industry is in equilibrium at price P at which the qty. dded & supplied is (Q). However this will be a short run equilibrium, if at the prevailing price firms are making excess profit or incurring losses as shown in fig. (B) and (C) respectively.

* Long Run Industry Equilibrium :-

The Industry is in long run equilibrium when a price is reached at which all firms are in equilibrium that is all firms are producing at the minimum point of their LAC & making just normal profit.

Under this conditions, there is no further entry or ^{exit} exist of firm in the industry given the technology & factor prices.

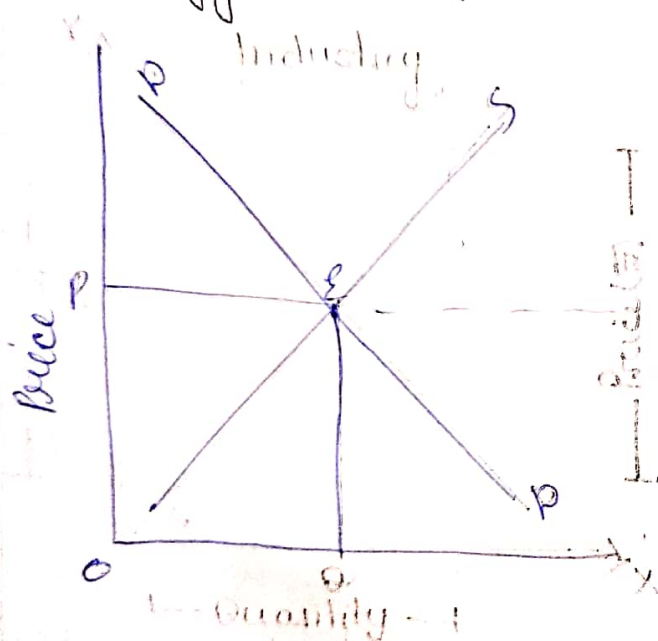


Fig. (A)

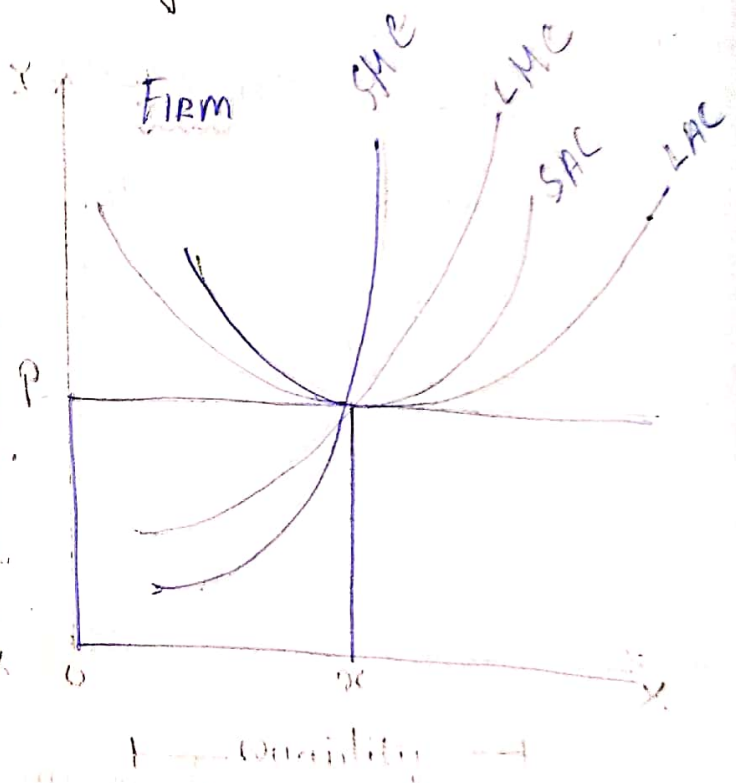


Fig. (B)

In the figure, B, at the market price (P) the firms produce at their minimum cost, earning just normal profits. The firm is in equilibrium because at the level of output (Q).

$LMC = SMC = P = MR$. This equilibrium equality ensures that the firm maximises its profit. At the

price 'P' the industry is in equilibrium because ^(F3) profits are normal and all costs are covered. So that there is no incentive for entry or exit, thus the firms earn just normal profit (neither excess profit nor losses) is shown by the equality.

$$LAC = SAC = P.$$

which is observed at the minimum point of LAC curve. With all firms in the industry being in equilibrium with no entry & exit. The industry supply remains stable, given the mkt. dtd in fig. (A), the price (P) is a long run equilibrium price. //

*** UNIT-4 MONOPOLY ***

Date: 13/8/19.

The term Monopoly refers to that mkt. srm in which there is a single seller of a commodity, with no close substitute.

Under Monopoly, we have the following features:-

- (i) There is only one producer of the product & there is no substitute.
- (ii) The ~~p.~~ firm is the industry in case of monopoly.
producer
- (iii) Entry of new firm is difficult.
- (iv) The producer under monopoly always experiences super normal profit in short run as well as long run.
- (v) There is an option of price discrimination.

P.T.O

(vi) Under monopoly, monopolist has full control over the supply of the commodity. (74)

(vii) In monopoly, there is informative selling cost.

* Causes of monopoly market:
investment

(i) Huge capital and specialized input may be required.

(ii) A firm may own a patent for the exclusive right to produce a commodity or to use a particular production process.

(iii) Govt. licensing or imposition of foreign trade barriers to exclude foreign competitors.

(iv) P determination

* Price discrimination under Monopoly in short run: —

Equilibrium of firm under monopoly in short run.

In the short period, the monopoly behaves like any firm.

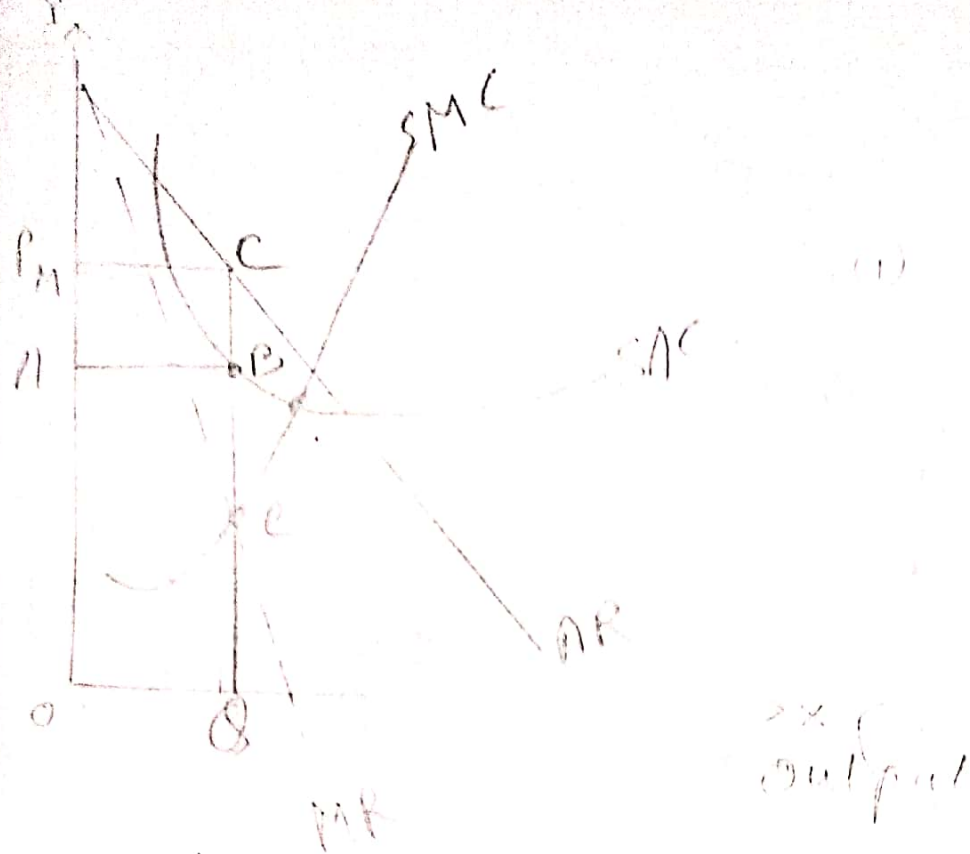
Its aim is to maximise its profit and minimise of

its losses. The monopolist is in equilibrium when the following 2 conditions are fulfilled :-

(i) $MC = MR$.

(ii) MC cuts MR from below.

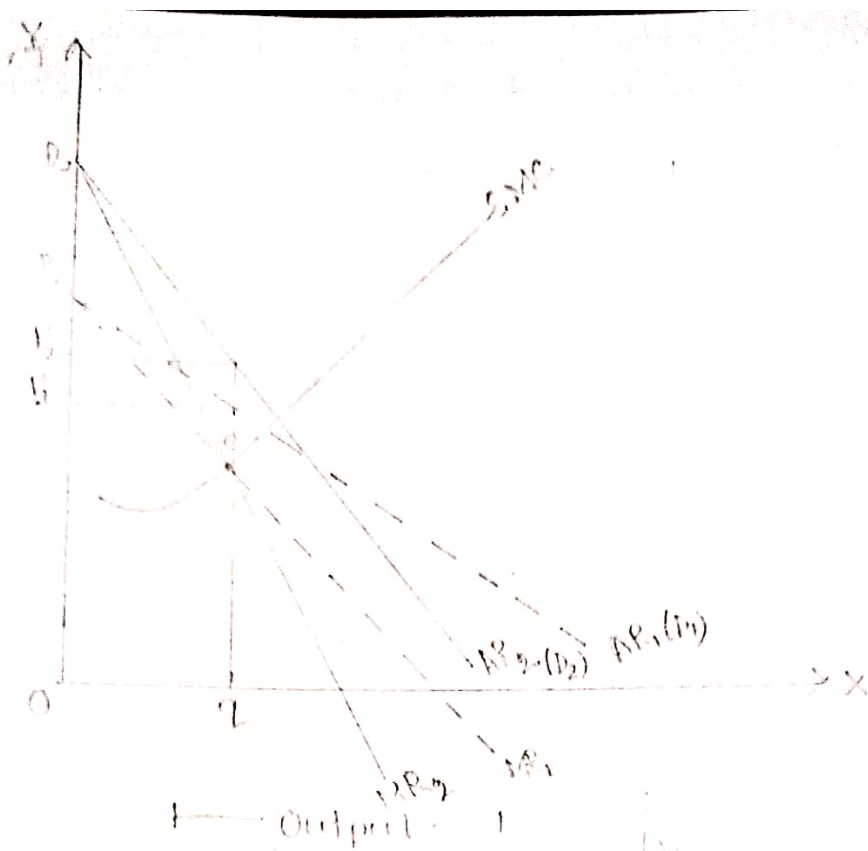
In the fig., the monopolist is in equilibrium at pt. E where MC intersects MR from below. Thus, both the conditions for equilibrium are satisfied at pt. E. The equilibrium price is set as P_m and the equilibrium quantity is Q. The monopoly at this equilibrium is earning supernormal profit equal to the shaded area. ($P_m C B A$).



Why monopoly does not have a unique supply curve?

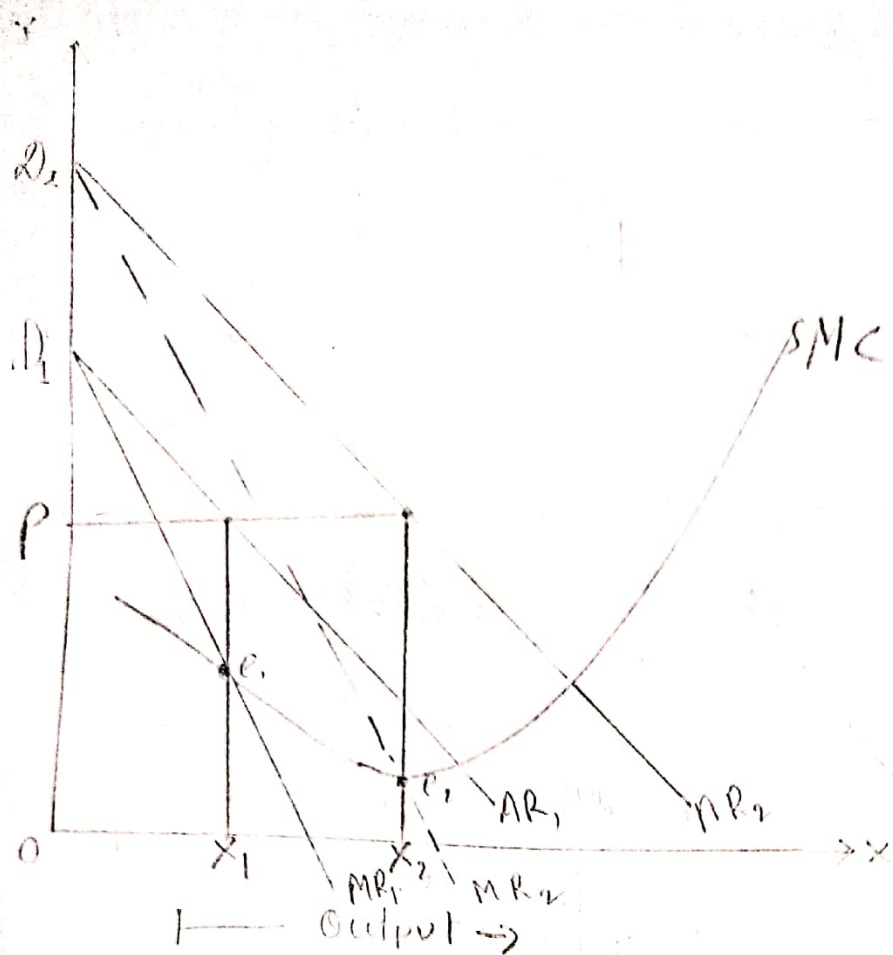
In a monopoly mkt, a monopolist is faced with 2 decisions: setting his price and output. The monopolist can't decide both the quantity and the price at which he wants to sell his output.

It is remarkable that there is no unique supply curve for the monopolist. derived from his MC. Given, his MC, the same qty. may be offered at diff'n prices depending on elasticity of dd.



In the figure, we see that the producer sold the Q quantity at price (P_1), when dd is (d_1), while the same Q will be sold at (P_2) when dd is (d_2), so we can say that in a monopoly mkt. the producer can sell same Q in diffn prices according to the dd in the short run.

Similarly, given MC of the monopolist various Q may be supplied at one price depending on the mkt. dd and the corresponding MR curve in the short run.



In the figure, we can see that the monopolist supply various Qty. at any one price. given the cost of the monopolist (represented by MC curve) he would supply OX_1 , if the dd is D_1 while at the same price he would supply OX_2 if the dd is D_2 .

Allocative Inefficiency of Monopoly. (Dead-weight loss) (89)

The loss of consumer surplus as well as the producer surplus in imperfect market is referred as Dead-weight loss. The higher the price, the larger the welfare loss caused by market power. As elasticity of AD decreases, monopoly charges higher prices and the dead-weight loss increases.

The monopoly output level is less than the output level of ^{perfect} competitive market, while monopoly price is higher than the price existing in perfect competitive market. As a result, consumer surplus is diminished, and producer surplus is increased. Thus, the other imperfect competitive market firms, monopoly is allocatively inefficient because it does not maximise the sum of producer and consumer surplus. This can be shown with the help of a diagram :-

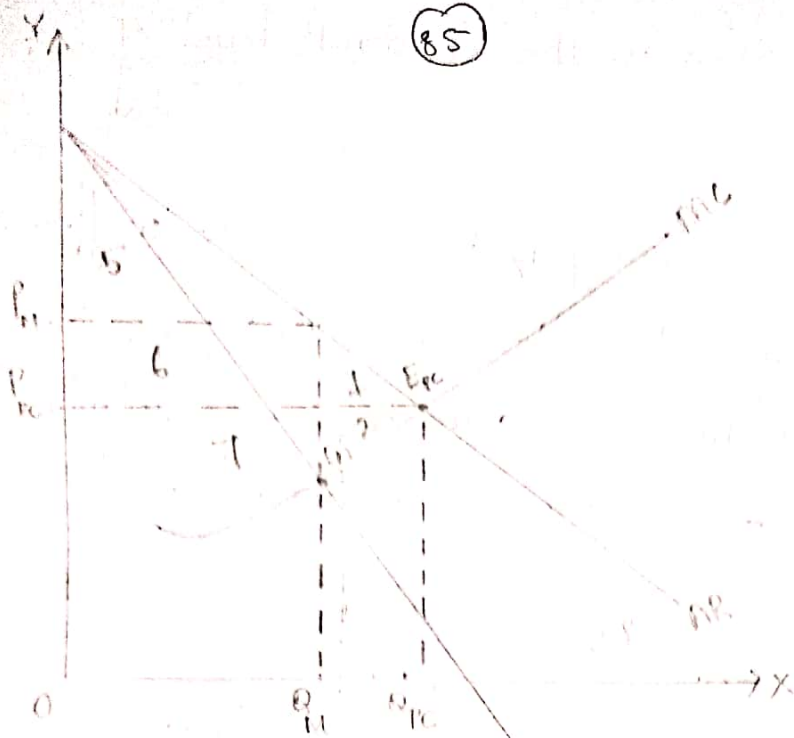
In the above diagram, the perfect competitive equilibrium is established at pt. E_c and the corresponding consumer surplus is sum of the area 1, 5 and 6, when the industry is brought under monopoly, price rises to P_m and the consumer surplus falls to area covered by 3 only.

(85)

$$PC > AP > MC$$

$$M = LR, MC$$

monopoly



Consumer loses area 1 because that output is not produced. Consumer also loses area 6 as area 6 has been transferred to the monopoly as increase in producer surplus due to price.

Producer surplus in the perfect competitive eqⁿ is given by the area 7 and 2. When the mkt. is monopolized, and price rises to P_M the producer surplus corresponding to area 2 is loss due to reduction in product.

Instead, the monopolist gains area 6 from consumer in form of increase producer surplus.

Area 1 & 2 are loss to the society and they are known as deadweight loss. This Deadweight loss has

come up due to cut in the production level of output by Q_m and Q_{pc} .

To be precise monopoly is allocatively inefficient. By restricting output less than the competitive output level it transfers some consumer surplus to its own profit and also causes dead weight loss to the society.

Date: 27/8/19.