

Unit II

Acc. to Bentham, "Market is an area over which buyers and sellers are in such close touch & each other, either directly or through dealers, that the prices obtainable in one part of the market affect the prices paid in other parts."

Characteristics of market -

- Area - area where buyer or seller deals together.
- Presence of Buyers and Sellers -
- Competition -
- Particular commodity -
- Specific Price -

factors affecting market -

- (1) Demand of commodity - If demand more, mkt would wider
- (2) Portability of commodity - light weight goods have a wider mkt instead of cheaper and weighty goods.
- (3) Durability of Commodity - durable goods wider market, than perishable goods.
- (4) Adequate Supply Of Commodity -
- (5) Availability of Substitutes
- (6) Means of Transport and communication
- (7) Peace and Security
- (8) Selling Techniques
- (9) Government Policies

## Market Structure

①

It refers to the number and size distribution of buyers and sellers in the market for a good or service.

### Types / Classification

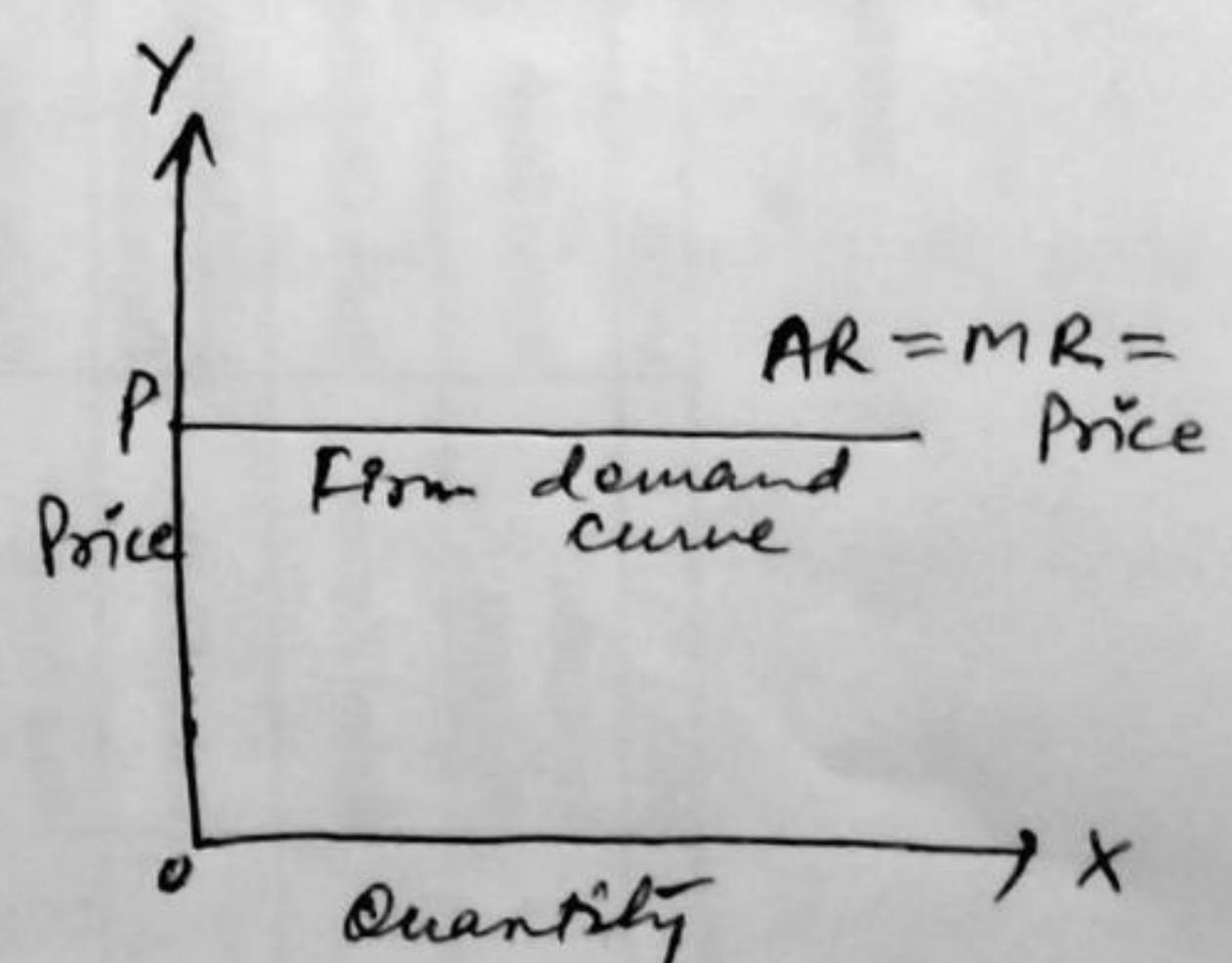
- ① Perfect competition
- ② Imperfect Competition
  - ↳ Monopoly
  - ↳ Monopolistic Oligopoly

#### ① Perfect competition

It is a market structure where large no. of buyers and sellers compete to each other to produce & sell similar and homogeneous products and each individual firm sells the product at a market determined price to a large no. of buyers. Buyers & sellers has no control over price.

#### Characteristics -

- ① Large no. of buyers and sellers
- ② Homogeneous Product
- ③ Limited share in market
- ④ Perfect knowledge of the market
- ⑤ Free entry or Exit of firms into industry.
- ⑥ Perfect Mobility among factors
- ⑦ Existence of only one price
  - ↳ Price taker

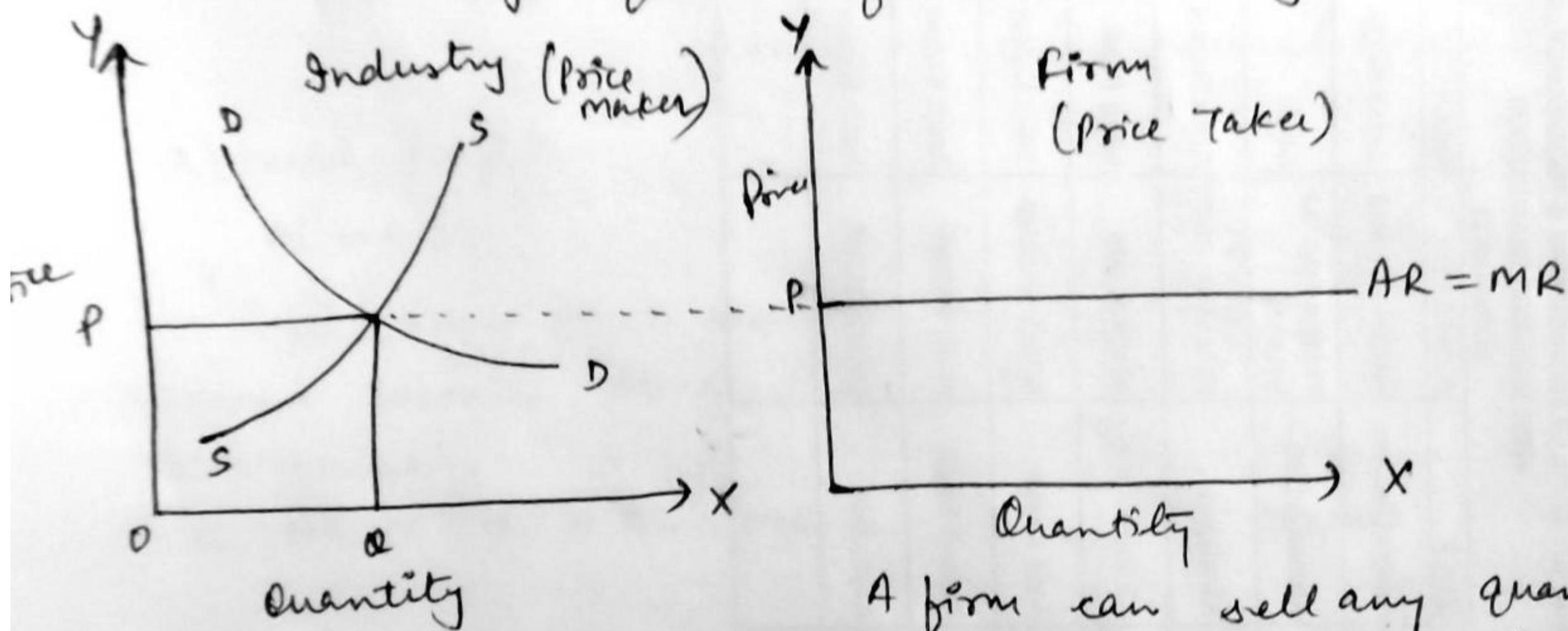


③

## Firm - Industry Relation Under Perfect competition

Perfect competition is a market in which large no. of unorganised buyers and sellers compete to one another in the purchase and sale of a commodity without having any influence over the market price of the commodity.

Price is fixed by demand and supply forces in the market and this determined price is accepted by each and every firm of the industry.



A firm can sell any quantity of its product at given price.

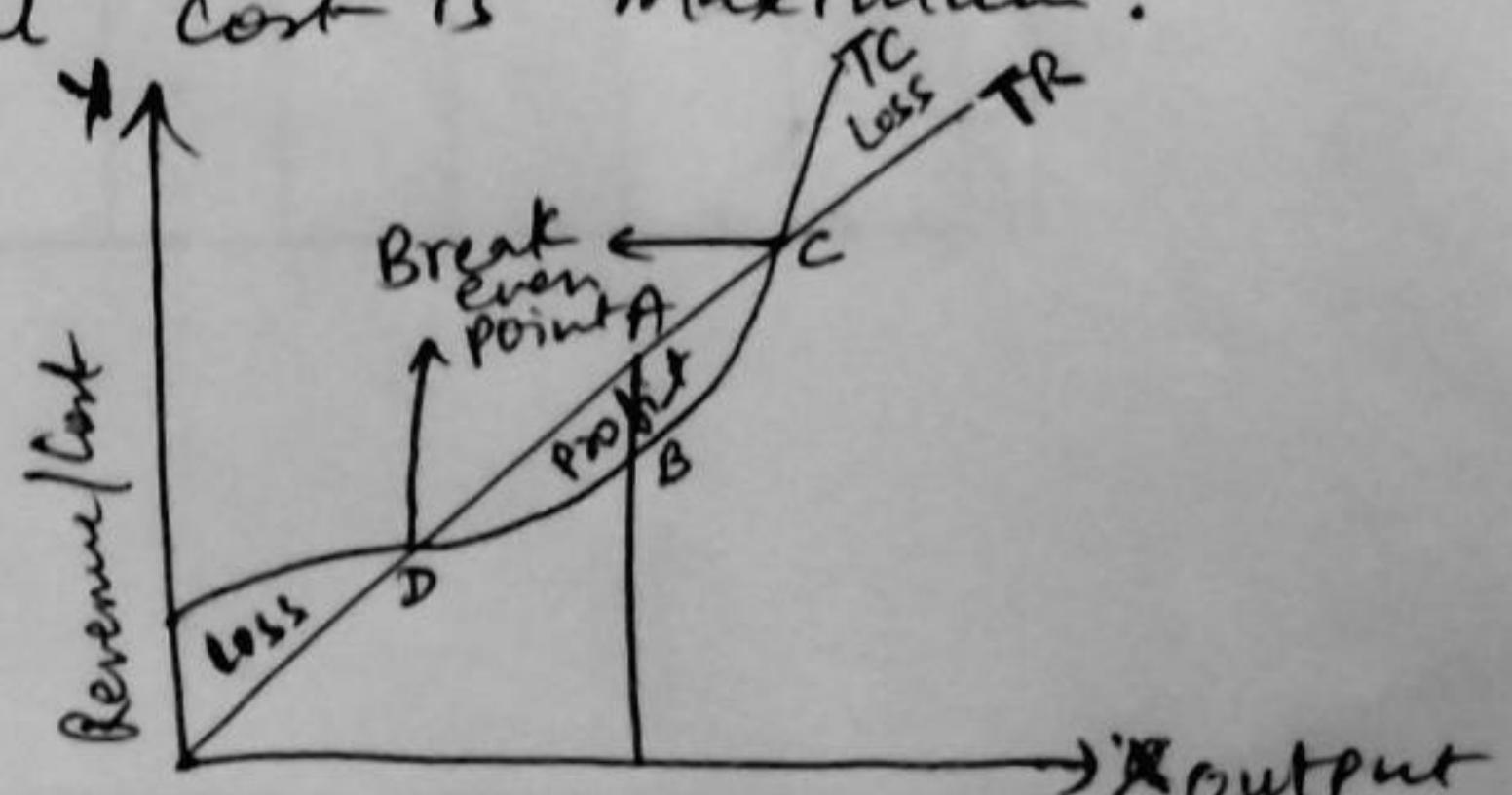
Therefore, average revenue and marginal revenue of a firm are always equal ( $MR = AR$ ). It is equal to price also ( $AR = MR = P$ ).

Equilibrium of competitive firm under perfect competition.

(a) Total Revenue Total Cost Approach - acc to this approach, a firm maximizes its profit where difference b/w total revenue and total cost is maximum.

$$\text{Profit} = TR - TC$$

$AB$  is profit at equilibrium level of output.



- (b) Marginal Revenue Marginal Cost Approach -
- $$MR = MC$$
- MC should cut MR from below.

(i) Situation of Profit

abnormal profits may occur to a firm in the short run if average revenue exceeds the av. cost of production.

$$MR = MC$$

$AR > AC$  hence firm is availing supernormal profits.

(ii) Normal Profits

$$AR = AC$$

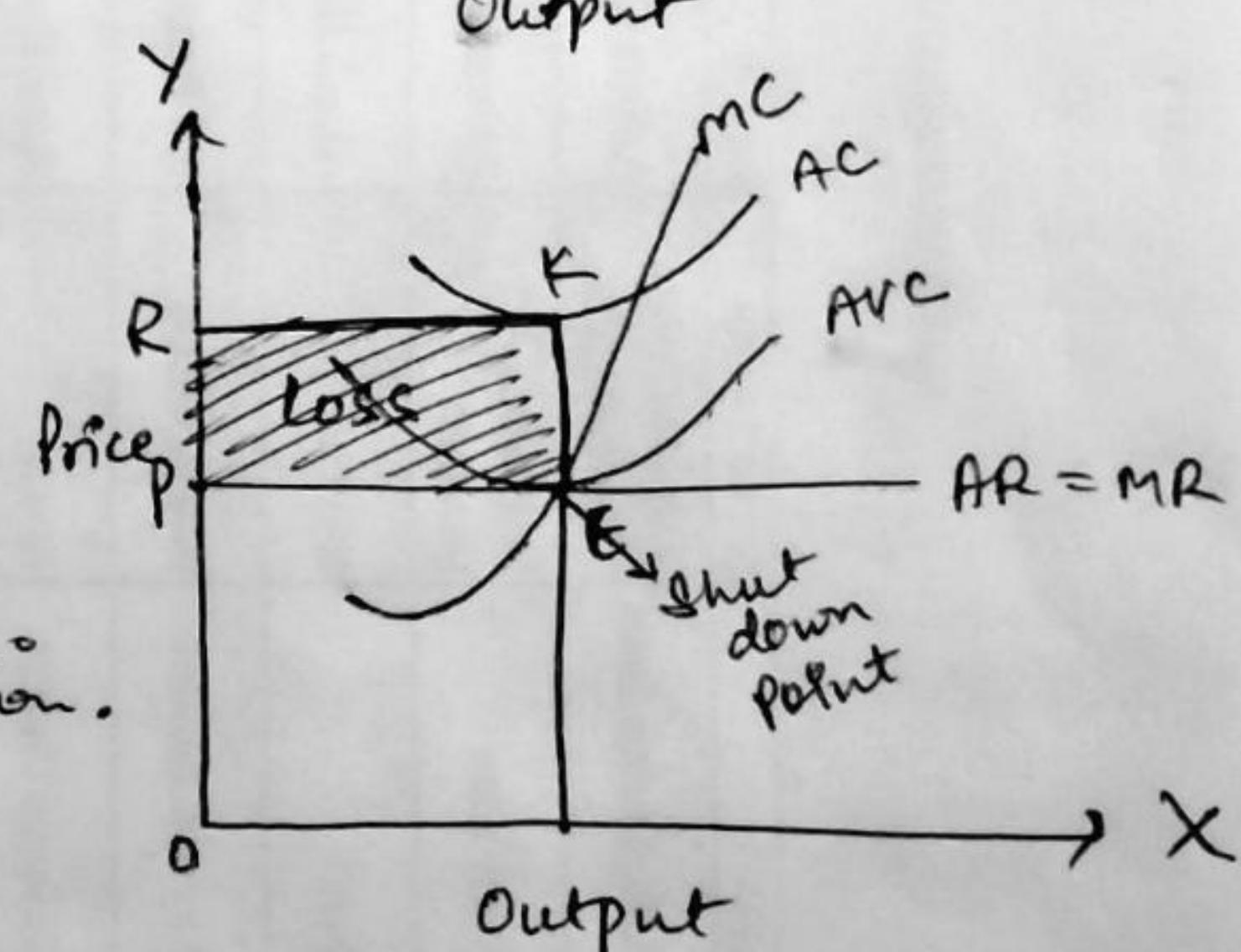
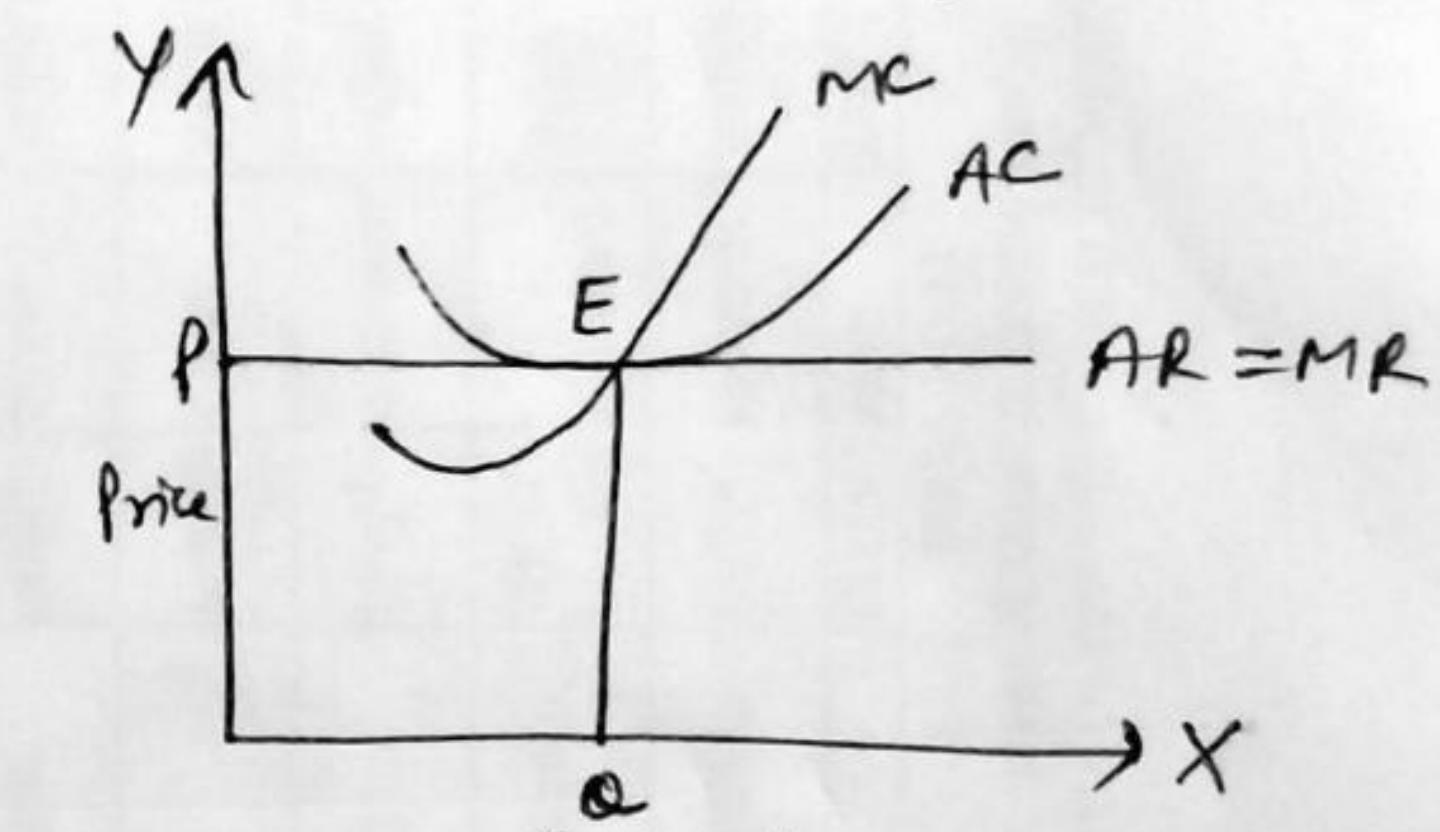
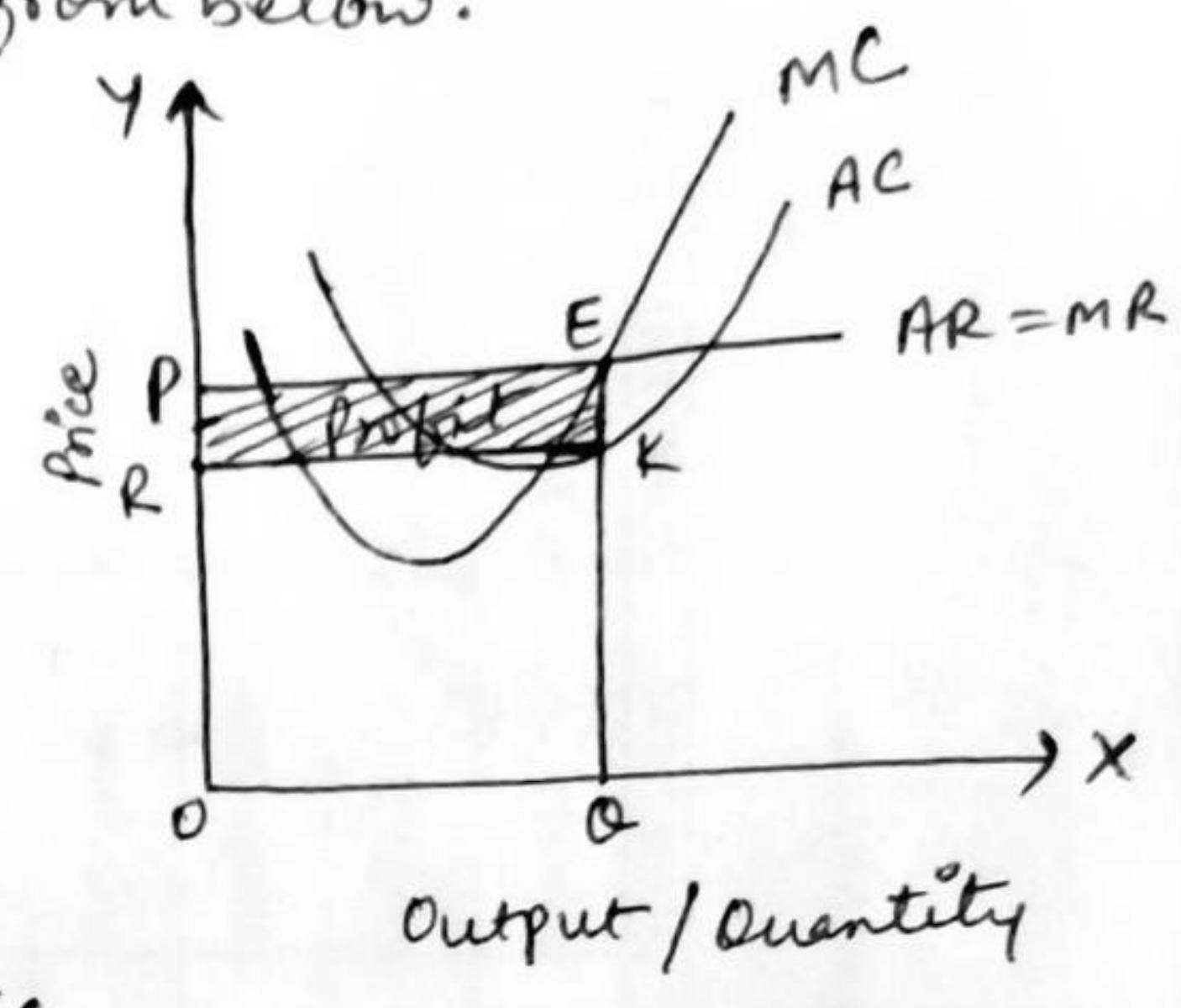
E - Equilibrium point where AR curve becomes tangent to AC curve.

$$E = AR = MR = AC = MC$$

(iii) Situation of Loss

This losses happen when the firm cannot cover the full average cost of production.

$$AR < AC$$



## Equilibrium of firm in long period -

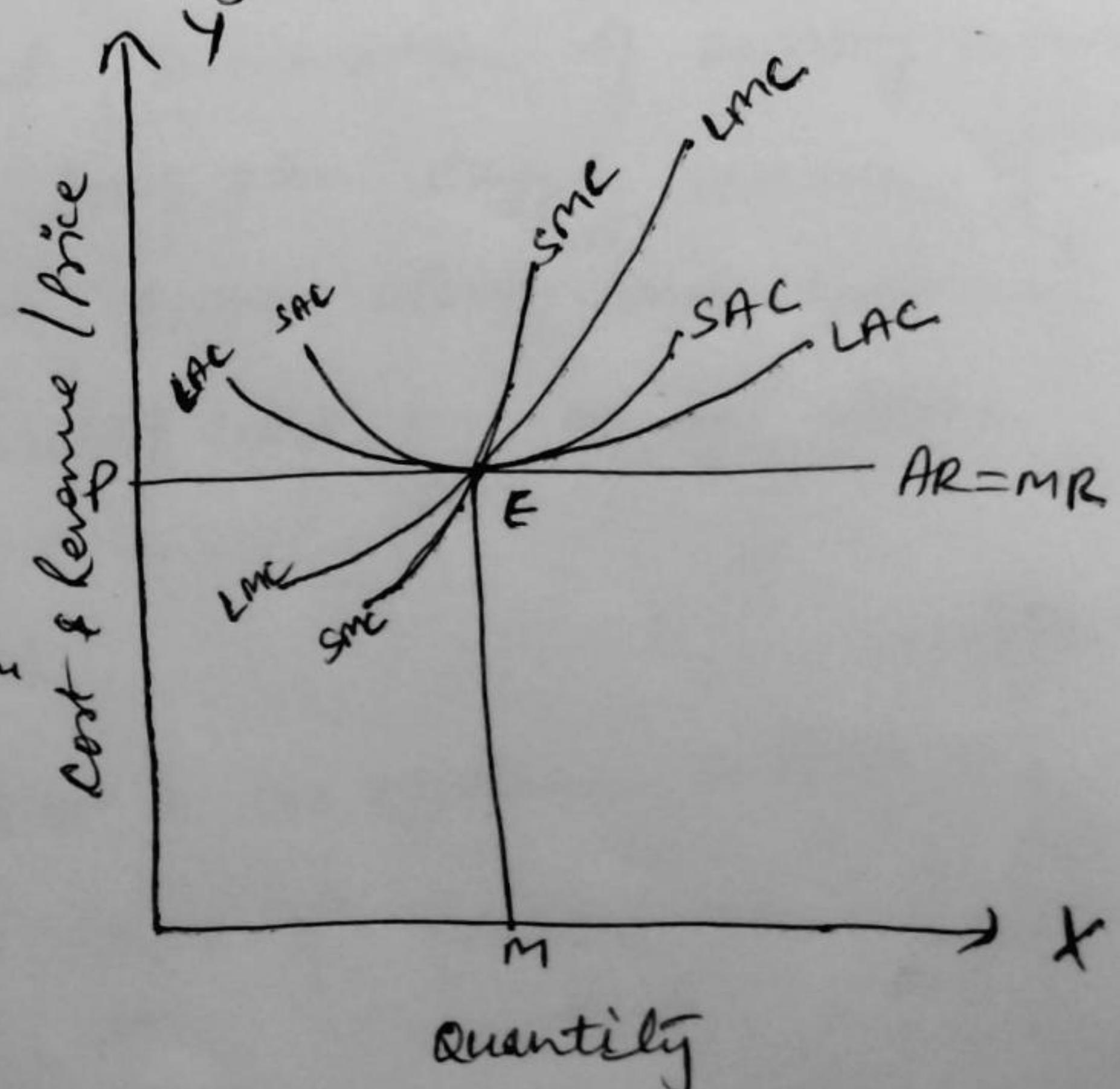
- In long period, a firm is in position to change the quantities of all factors of production acc. to their requirements.
- In order to continue production in long run, it is necessary that firm's price is such that it covers the long run average cost of production.  
 $P = AC$ .

Price will neither higher nor lower than average cost. If price is lower than average cost, the firm will incur losses. If price is higher than average cost, firms will earn abnormal profits. Such profits will attract new firms leading to increased output and lower prices.

$$LMC = LAC = \text{price}$$

$$SMC = LMC = SAC = LAC = P_+ \\ = AR = MR$$

~~LMC cuts LAC at minimum point~~ and SMC cuts SAC at its minimum point at at min. pt of LAC, the equality b/w short run and long run cost is satisfied.



## long Run Supply Curve of an Industry

In long run, industry's supply curve is determined by supply curve of firms in the long run. Long run supply curve in long run is not lateral summation of short run supply curves. Industry's long run supply curve depends upon the change in optimum size of firms and change in no. of firms.

It is account of 2 reasons -

- (1) In long run, firms continue to enter into and exit from the industry.
- (2) firms get economies and dis-economies of scale. This displaces the long run marginal cost (LMC).

Due to these reasons, long run supply curves of industry is not lateral summation of supply curve of firms. In reality long run supply curve of industry can be known from long run optimum production of firms multiplied by no. of firms in an industry.

$$L.R.S_i = Q \times N$$

long run supply  
curve of industry

~~Q~~ is the optimum output of a firm  
N is no. of firms.

## Monopoly

It is a form of market in which there is a single seller of a product & barriers to entry of others. The product has no close substitute.

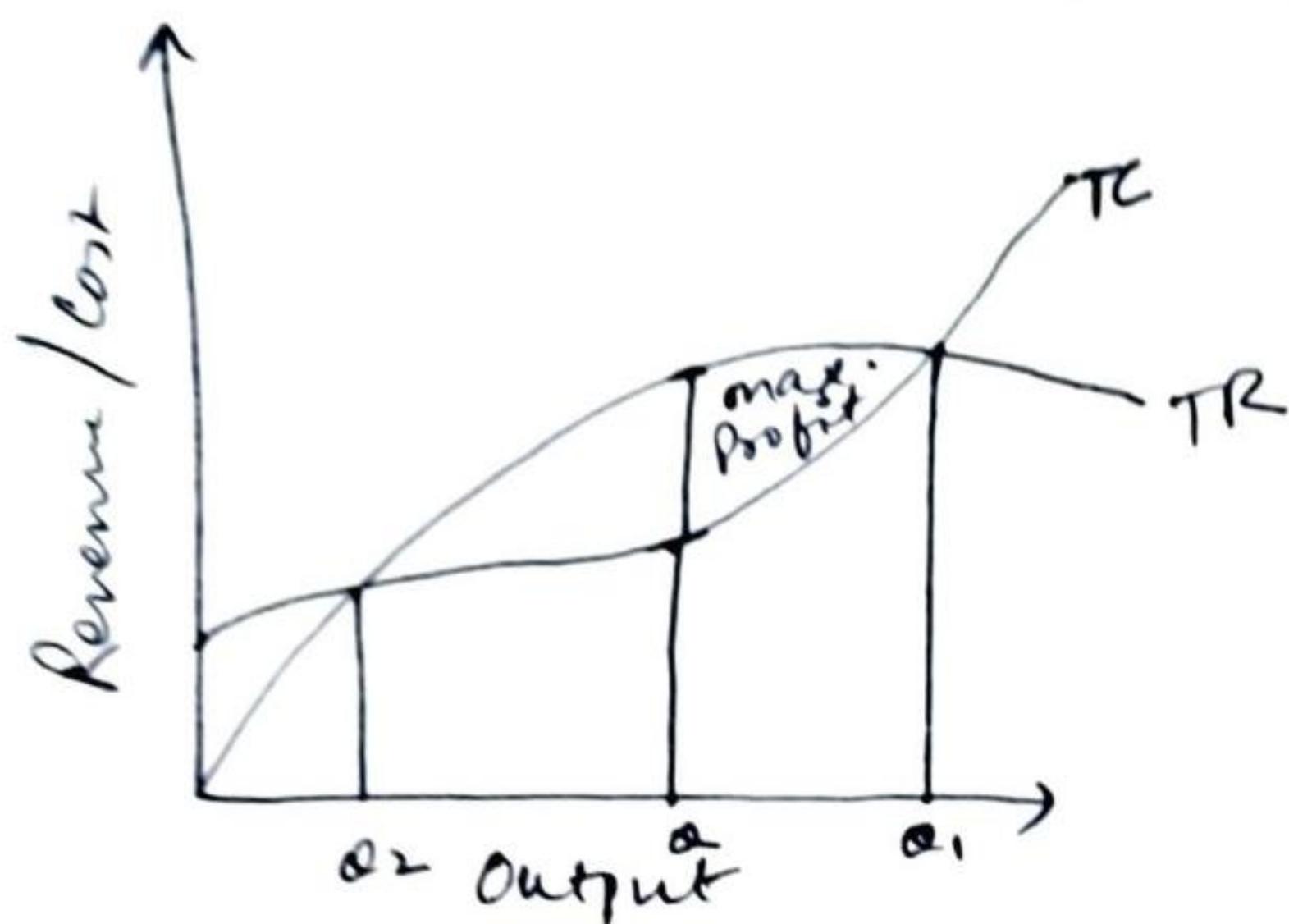
Ex. Railways in India

### Characteristics / Features

- (1) One seller and large no. of buyers
  - (2) Restrictions on the entry of new firms
  - (3) NO close substitutes
  - (4) Full control over price
  - (5) Price discrimination - refers to practice of charging different prices from different buyers from the same good.
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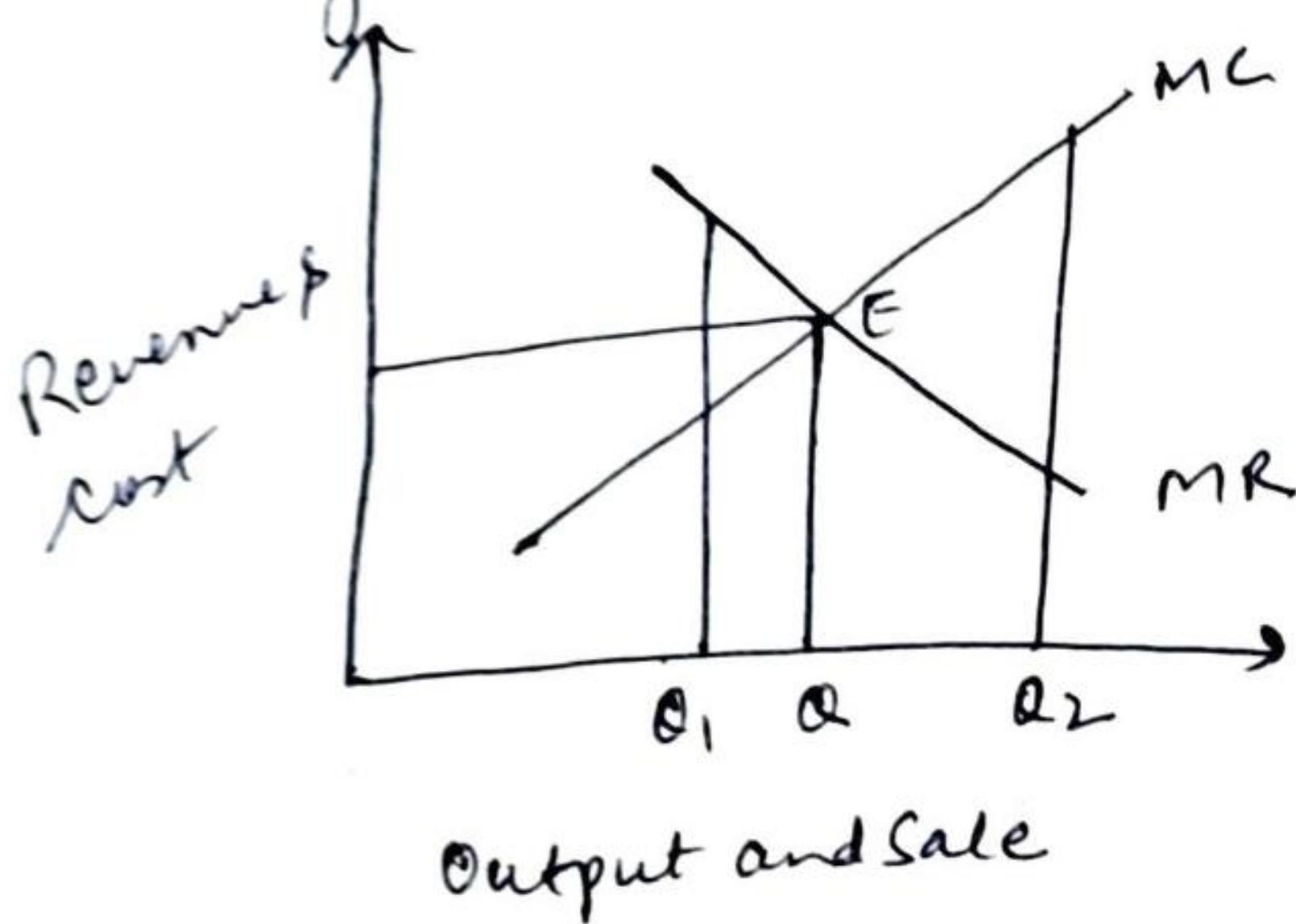
## Price and Output Determination under Monopoly

- Total Cost and Total Revenue Approach



Here, the monopolist earns maximum profit at that output at which positive difference b/w its TR and TC is greatest.

## Marginal Cost and Marginal Revenue Approach



maximizes profit by producing and selling that output at which its marginal cost equals marginal revenue.

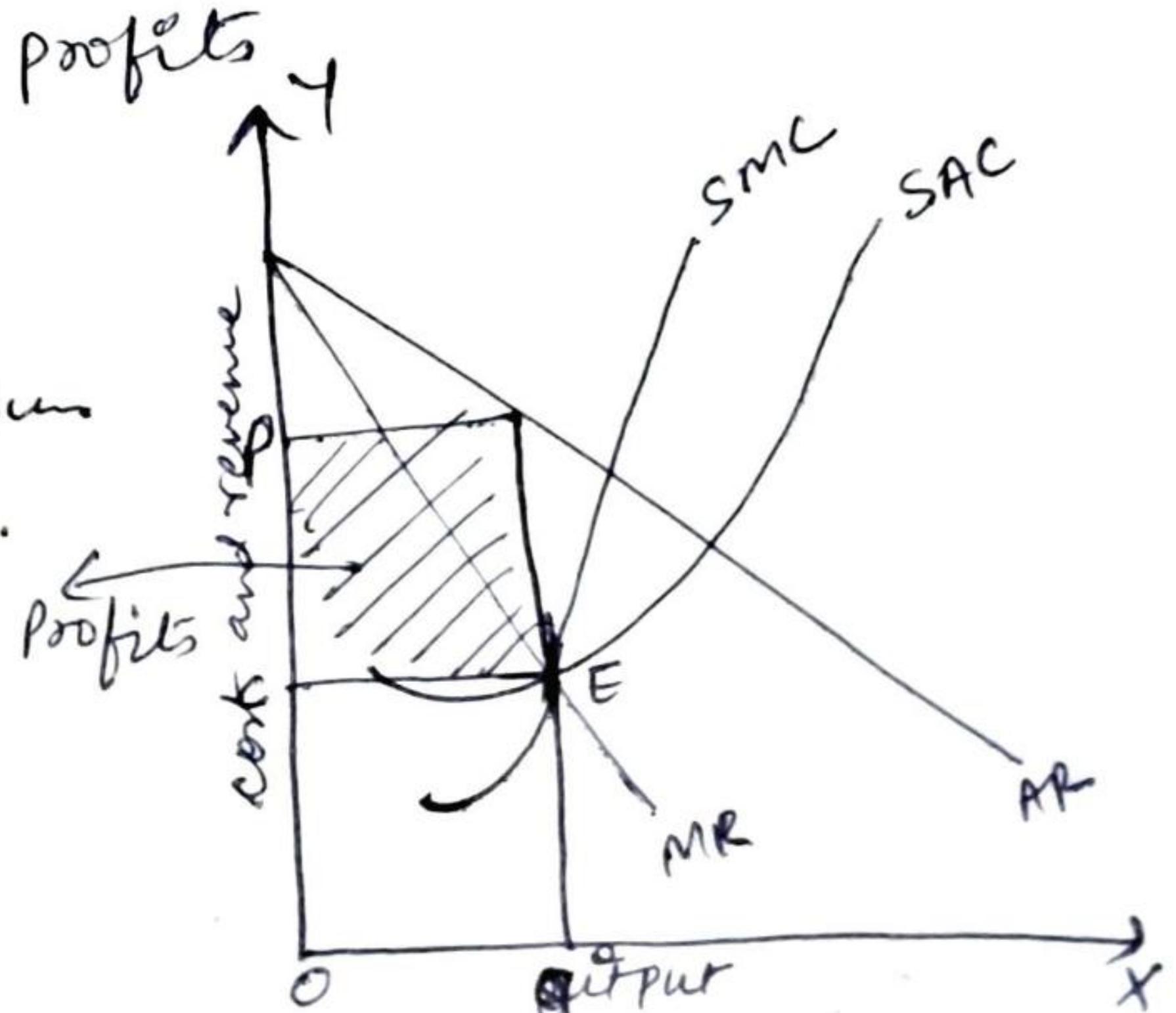
MR curve intersects marginal cost curve at point E.

## Short Run Equilibrium under Monopoly

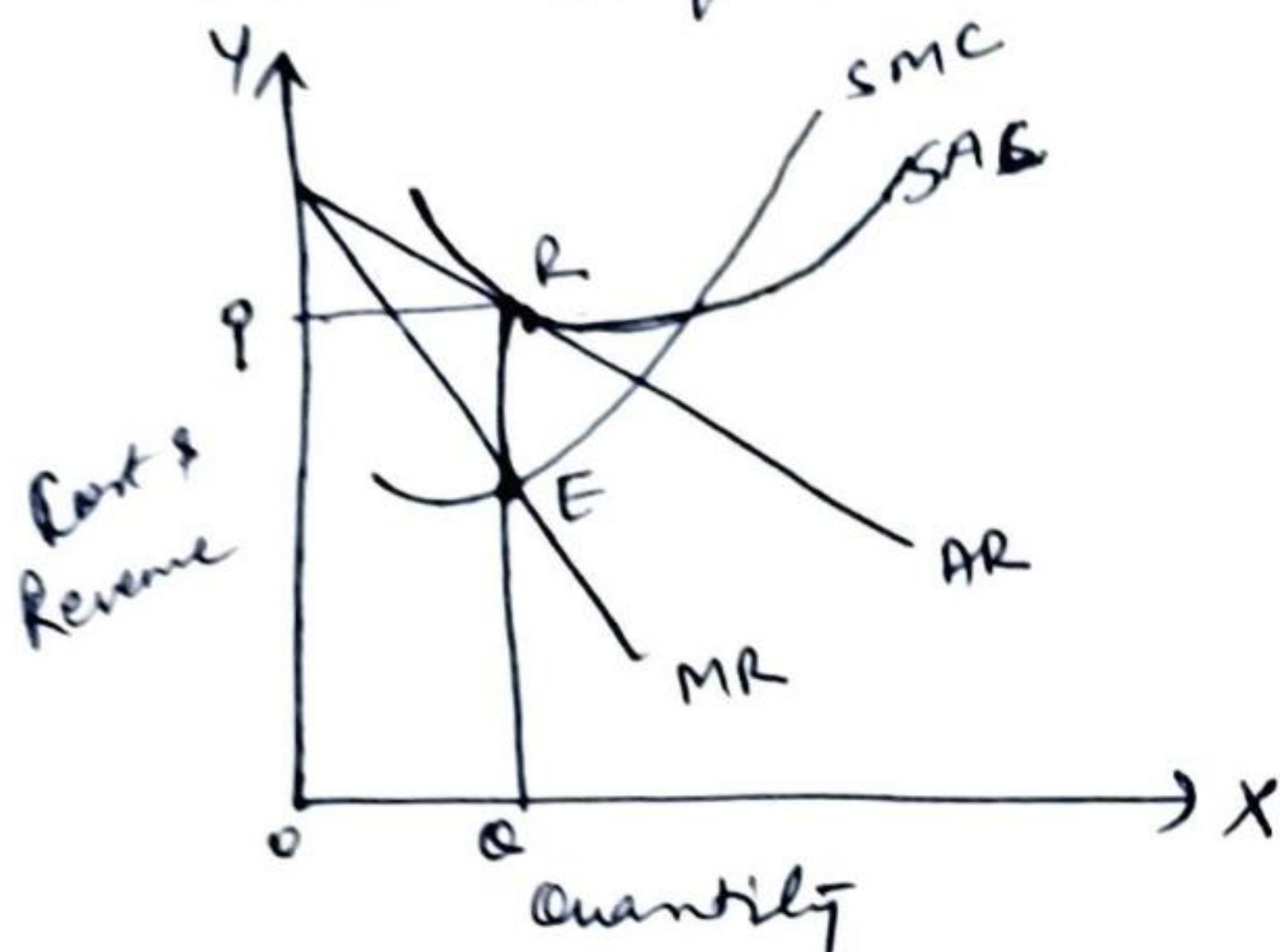
- Super Normal profits

SAC cut at point E.  
and SMC

so E is short run equilibrium point at which  $SMC = MR$ .



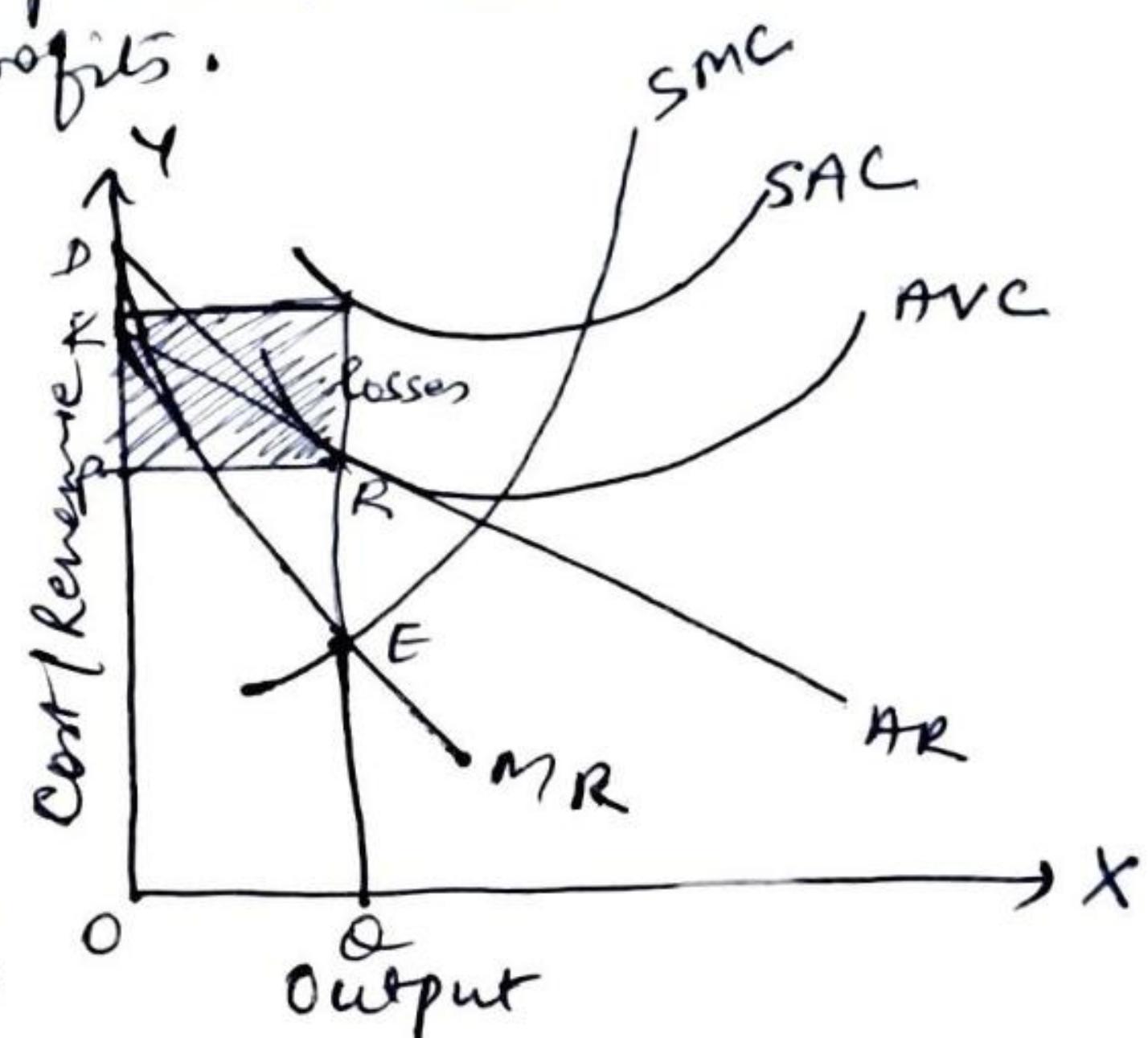
- Normal Profits



SAC is higher than AR curve

SMC curve and MR curve at pt E determines OQ output which is sold at OP price.

SAC curve is tangent to AR curve at this level of output and earns normal profits.



- Minimum losses

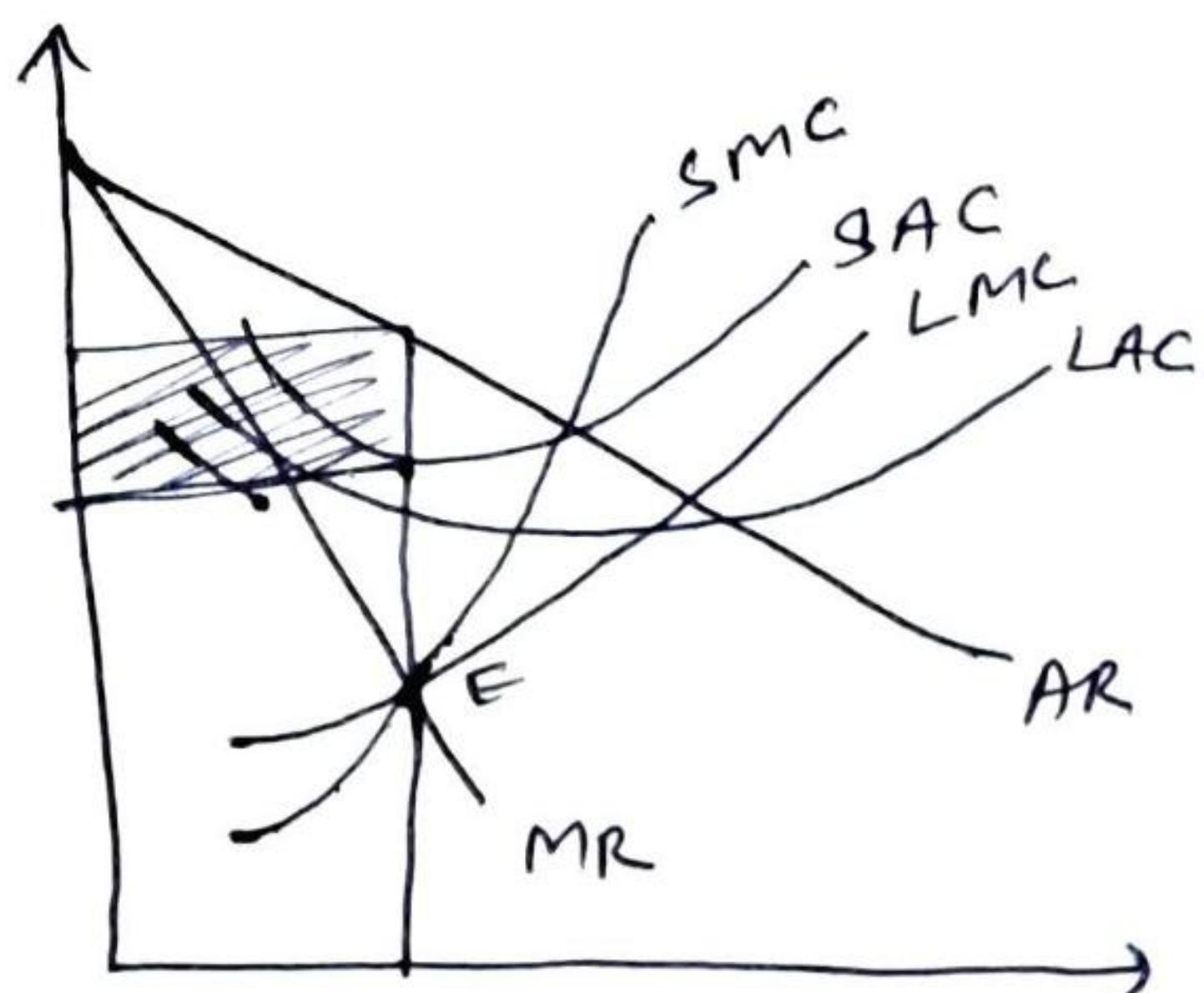
Equilibrium pr is determined by equality of SMC and MR.  
But fixed by demand conditions, does not cover the short run average costs of production.

R is a shut down point for this firm.

- \* Long Run Monopoly Equilibrium

this is a period of time which offers the time where expand his plant.

Super normal profits earned by industry in long run.



## Multi-Plant Monopoly

The homogeneous product of a monopolist may be produced in different plants. Such a monopolist is known as multi-plant monopolist.

Let us assume multiplant monopolist operates two plants A & B. Each plant has a different cost structure.

- The monopolist has to take 2 decisions -
  - how much output to produce altogether and at what price to sell this output in order to earn a maximum profit.
  - how to allocate this profit maximising output upon his two plants.

- The market demand and corresponding marginal revenue curve is known as monopolist. Cost structure of different plants is also known to him. The total overall marginal cost curve is horizontal sum of marginal cost curves of his individual plants.

$MC = MC_1 + MC_2$

maximize its profits when

$$MC_1 = MR = MC_2$$

Multi plant monopolist will need to decide whether to produce in both plants or just in one plant. This decision depends on each plant's marginal costs. If it has increasing marginal costs, the multi plant monopoly will produce in either <sup>two</sup> plant, taking into account the MC of both firms. If decreasing MC, it will produce in one plant, one is steepest marginal cost curve, provided it has equal or lower fixed costs than the other plant.

If MCs are constant and equal in both plants, then produce in either plant, as long as capacity allows it.

