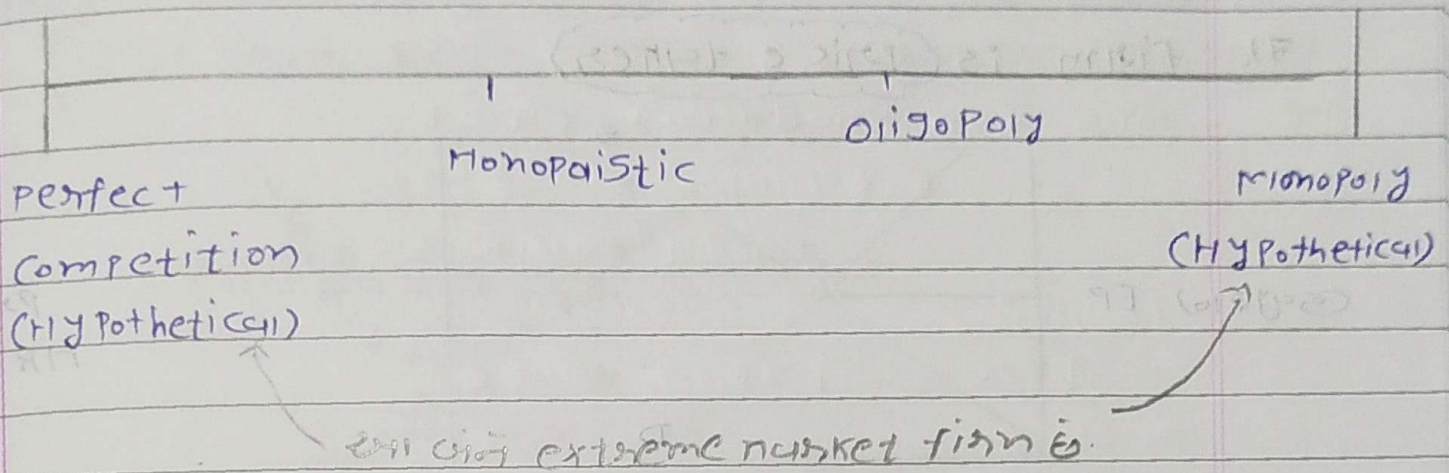
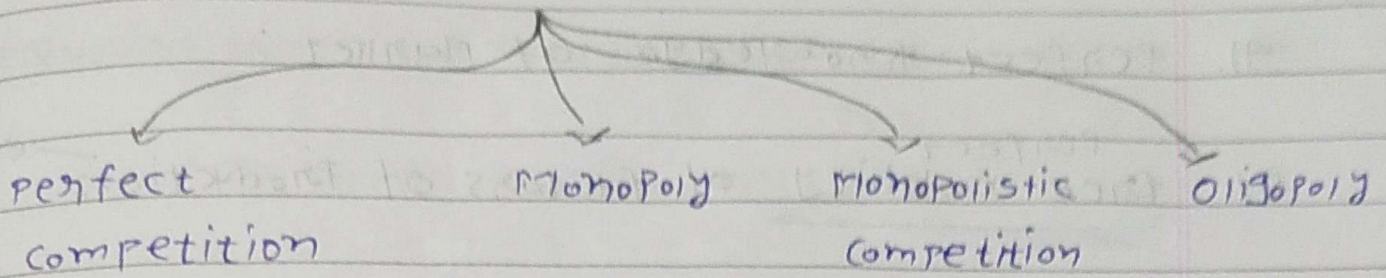




* Perfect competition:

Ex: Agricultural Products, Stocks (Bonds) metals etc.)

1) very large Number of buyers & seller:

=> individual buyer or individual seller cannot influence the price

2) Homogeneous Products:

=> Identical goods i.e. Perfect substitutes
So price remains constant.

3) free entry & exits of firms:

firms will earn normal Profits in long run.

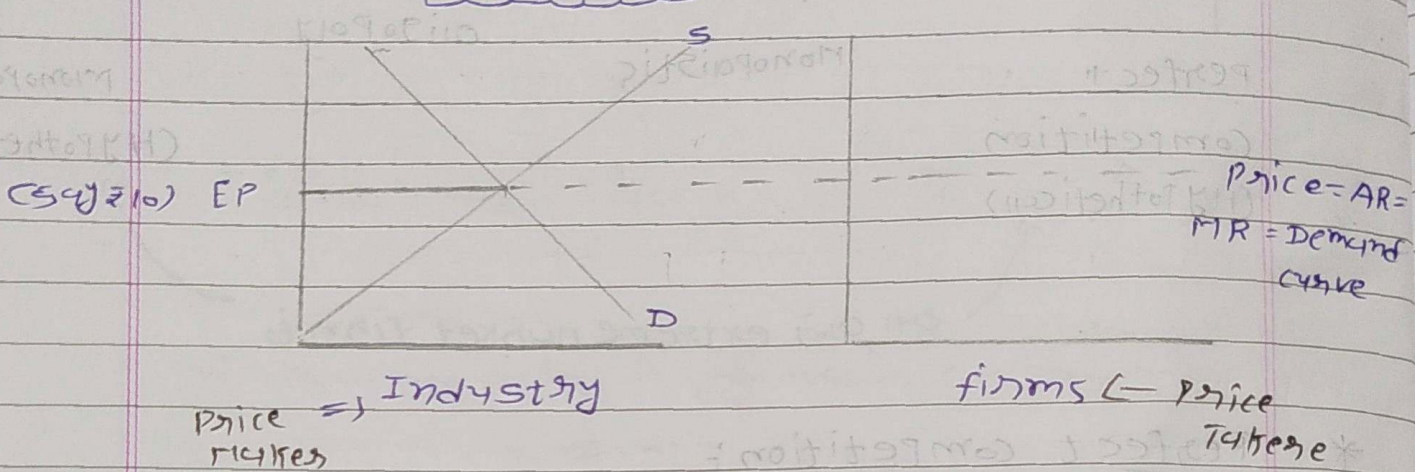
=> first 3 features are considered as Pure competition.

4). Perfect knowledge of Market :

5). Perfect free mobility of factors of Production — eg. Labour

6). No Transportation / Selling Cost is involved.
(Advertisement)

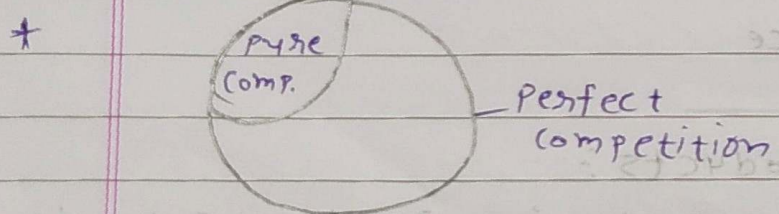
7). firm is price taker



Industry = group of firms

* Perfect market is also the IDEAL Market

Competitive Market



All Perfect competition are Pure comp. — Yes
All Pure competition are Perfect comp. — No

* In Perfect competition :

Price = AR = MR = Demand curve

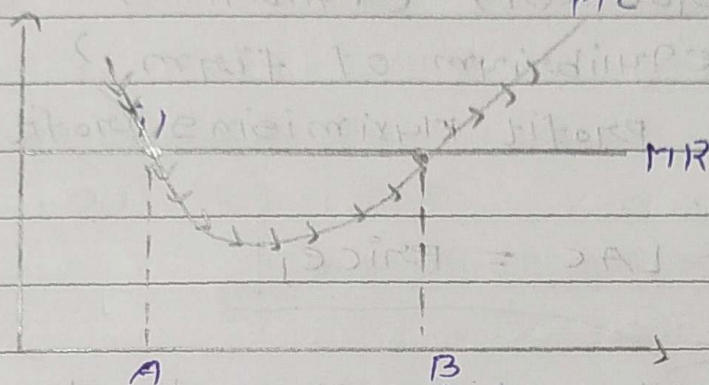
Ed = ∞ [Perfect Elastic]

* Equilibrium (Producer's equilibrium)

i.e. Profit maximising point).

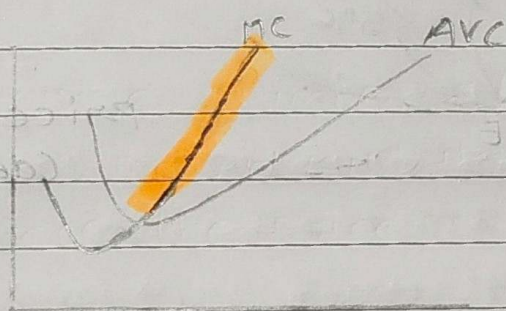
i). $MC = MR$

ii). MC should have positive slope i.e. MC should cut MR from below (After intersection $MC > MR$).



Producer's equilibrium

* Supply curve (Perfect competition).



The rising portion (after intersection) of MC is Supply curve.

* Profit of competitive firm (Perfect competition)

→ Abnormal profits (Super Normal) $AR > AC$

→ Normal Profit $AR = AC$

→ Losses $AR < AC$

* Price = ₹20
 AC = ₹22
 AVC = ₹9

Analysis

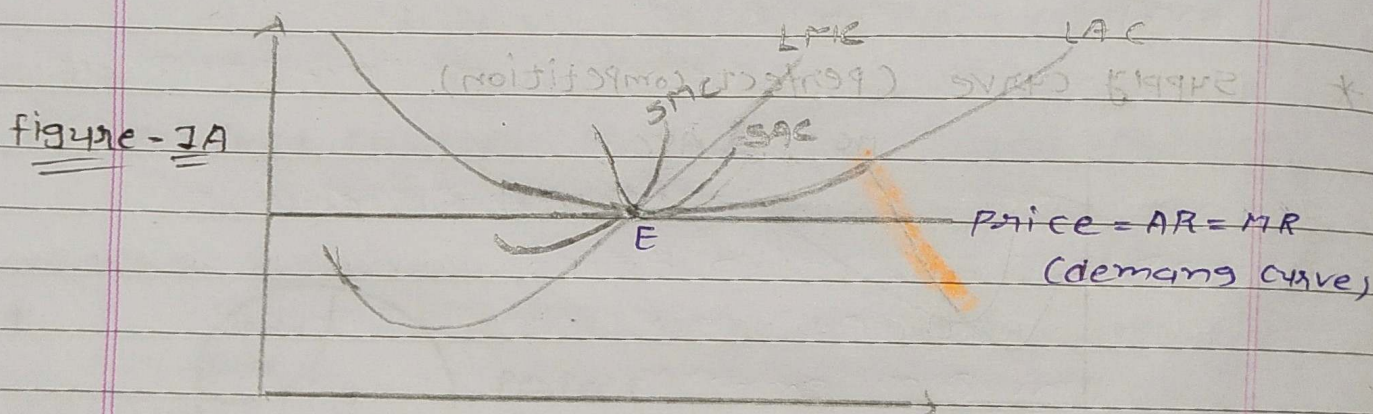
Should the firm should continue??

Ans: Yes, the firm should continue. Price > AVC

Long Run Producer's equilibrium
 (equilibrium of firm)
 Profit maximising profit

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

i.e. minimum point of LAC should be tangent to demand curve (AR curve) i.e. price



Also $SMC = SAC = LMC = LAC = \text{Price} = MR$.

- (=) minimum of LAC & SAC coincide
- (=) Point E shows Optimum cost
- (=) firm producing @ level of output at optimum cost is called optimum cost firm.

* Long Run equilibrium of industry

- when all the firms earn normal profits
And
- No further entry or exit takes place

=> figure - 2A Chart explanation:

i). Point E denotes

$$a). MC = MR$$

Consumer pays minimum price

$$b). MC = AC$$

Plants are used at full capacity
i.e. No wastage of Resources.

$$c). AC = AR$$

Firm earns normal profit

$$d). MC = MR$$

Firm earns maximum profit

X — X — X — X — X —

★

Mo No Poly

Single

Seller

- => Monopoly means "alone to sell"
- => Here firm and industry is one & the same thing

industry = group of firm (1)

+ features:

1). Single seller:-

Price maker i.e. Substantial control over supply.

2). Restriction in entry

★ 3). No close substitutes:-

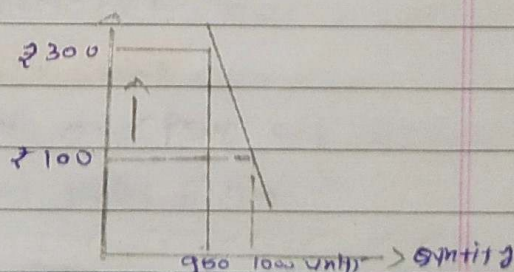
Cross elasticity is zero (0)

$$E_{AB} = 0$$

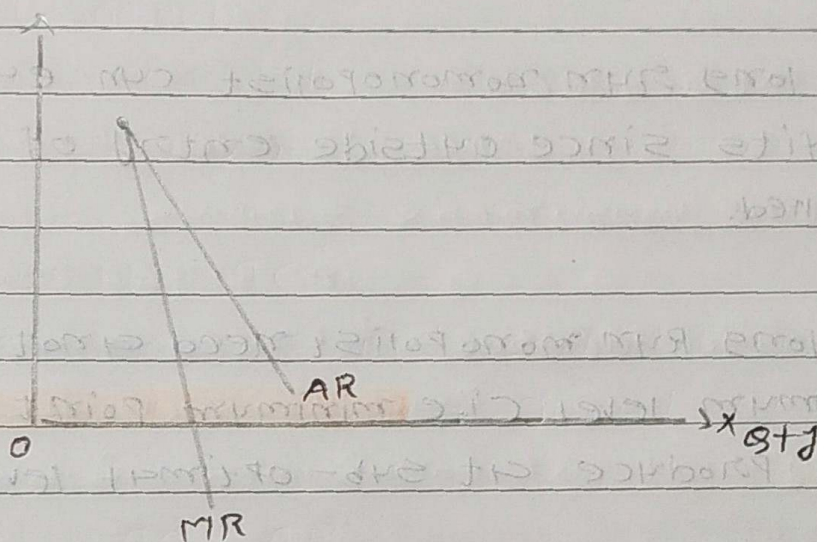
$$\frac{\% \text{ change in Quantity}}{\% \text{ change in sub. goods}}$$

=> Demand curve on AR curve is negatively sloped & STEEPER curve

$E_d < 1$
(inelastic)



- 4). Monopolist has market power i.e. charging price above MC
- 5). Monopolist may adopt price discrimination.
- 6). A monopolist can also incur losses ($AR < AC$)
- 7). Relation of AR & MR



- => AR & MR curve both are negatively sloped.
- => MR curve lies half way between AR curve & y-axis
- => AR curve can not be zero but MR curve can be zero on negative

* Equilibrium (Profit Maximisation)

$$MR = MC$$

* Profits

- Abnormal Profit $\therefore AR > AC$
- Normal Profit $\therefore AR = AC$
- Losses $\therefore AR < AC$

* Long Run:

- =) In long run monopolist can earn abnormal profits since outside entry of new firm is blocked.
- =) In long run monopolist need not produce at optimum level (i.e. minimum point of LAC) He can produce at sub-optimal level also.

* How do monopoly arise??

- =) Strategic Control over Resources
- =) Government granting exclusive rights (patents or copyright)
- =) Business combinations (cartel)
- =) Extremely large Startup Costs.
- =) firm may use anti competitive practice like

predatory / limit pricing.

* Price discrimination

=> objectives:-

=> to earn maximum profits

=> to capture foreign markets

=> to enjoy economies of scale / dispose excess stock.

=> Price discrimination is possible only under the following conditions:

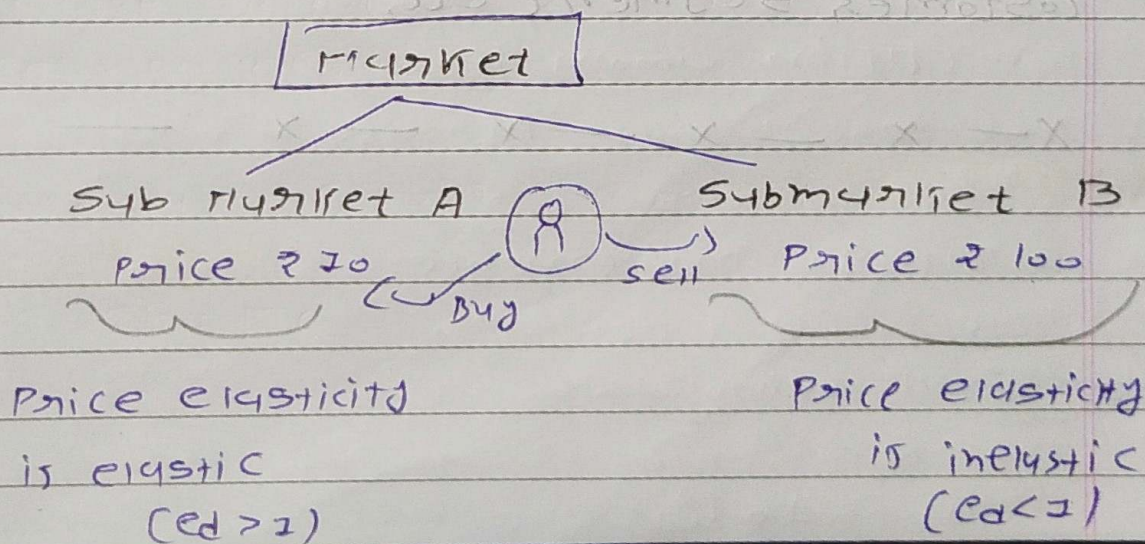
- Monopoly must exist

- Seller should be able to divide the market.

- Price

=> Price elasticity is different in different sub market

- No market arbitrage



+ Higher Prices where demand is inelastic.

=> Price discrimination may relate to:

a). time

b). size of purchase

c). income etc. etc.

★ => Degrees of price discrimination (A.C. Pigou)

• first degree:-

Price is such that it takes away entire consumer's surplus.

• Second degree:-

Price is such that it takes away only part of consumer's surplus.

• Third degree:-

e.g. popcorn in cinema hall

Price varies because of location or customer segment etc.

X — X — X — X — X — X —

Monopolistic competition

- =) This market is a blend of monopoly - Perfect competition
- =) eg: Shop industry.

* Features:-

- 1. Large number of buyers & sellers:-

Individual buyer or seller has a very small share in market

- * 2. Product differentiation:-

Heterogeneous products (similar products)

- Products are close substitutes.

- * 3. Free entry & exist of firms:-

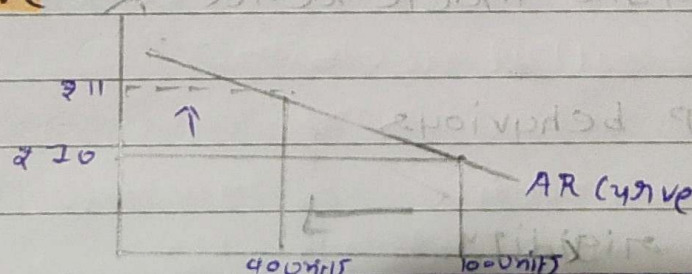
Normal profits in long run ($AR = AC$)

- 4. Selling / Advertising cost is involved

Higher cost

- 5. Non price competition + ~~Price war~~

- * 6. Demand curve (AR curve) is Downward Sloping flatter curve



$Q > 1$

* Equilibrium (Profit maximisation)

• $MC = MR$

• MC should cut MR from below.

* Profits;

- Abnormal Profit $\therefore AR > AC$
- Normal Profit $\therefore AR = AC$
- Losses $\therefore AR < AC$

* Long Run:

In long run all the firms earn **zero super normal profits** (i.e. normal profits)

— X — X — X — X — X — X — X

★ OLIGOPOLY

(eg. cold drink industry)

- 1). Competition among few
- 2). Strategic independence
- 3). Group behaviour
- 4). Price rigidity.

51. product may be **Homogeneous or heterogeneous.**

61. difficult entry

71. Heavy selling & advertising cost

⇒ Types of oligopoly:

11. Pure (or Perfect):

deals in homogeneous products.

21. Differentiated (or imperfect):

deals in heterogeneous products

31. Open - New firm can enter

41. Closed - Entry is restricted

51. Collusive - commonly decide price & output.

61. Non collusive (competitive) - Compete with each other

71. Partial - industry is dominated by one large firm.

81. Full - No leadership

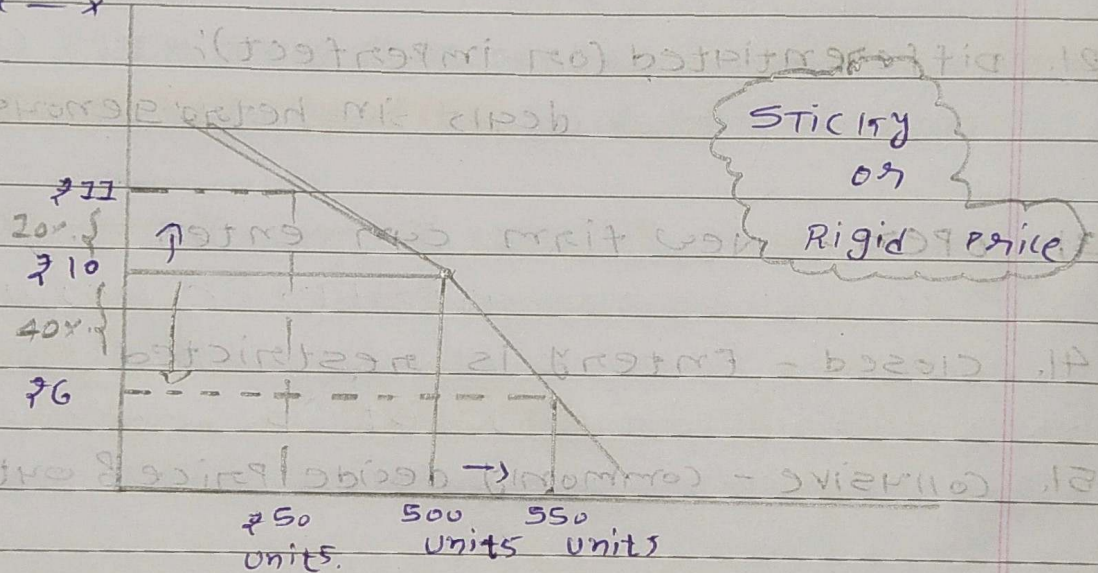
91. Syndicated - Small group control it is a centralised body

101. organised - all firm decide their output centrally organised

* Demand curve:

• because of price rigidity demand curve is kinked

• Diagram



⇒ Response to Price increase is more than response to price decrease.

* Price & output decision.

i). interdependence is ignored then output is determined by $MC = MR$

ii). oligopolist tries to predict the relation of his competitor.

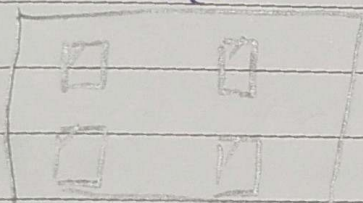
Cournot model	Stackelberg's model	Bertrand model
each firm decides its output	Leaders decides output	each firm decides its price

=> oligopoly firm acts as monopoly organisation and fix their prices to enjoy maximum profits.

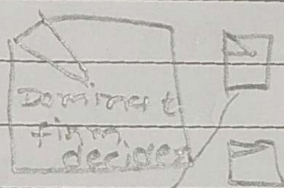
* Price leadership

- Barometric price leadership
- Price leadership.

Cartel



1 unit



fringe firms

old experienced
most respected
firm becomes
price leaders.

* Other market forms:

1). Duopoly: Two seller (firms).

2). Monopsony: single buyer.

3. Oligopoly - few large buyers

4. Bilateral monopoly - single seller & single buyer.