For long run

Lec - 11

Profit = (P - AC) Q

If P > AC => Firm enter

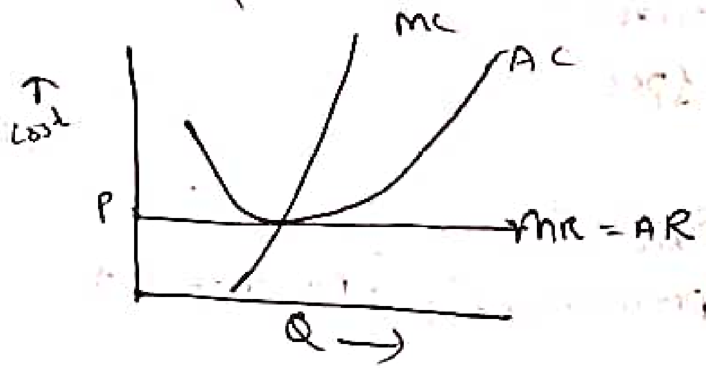
P < AC => Exit

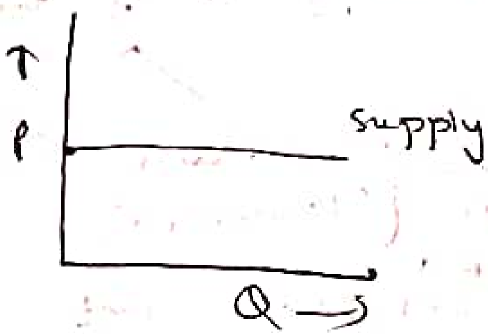
For '0' profit

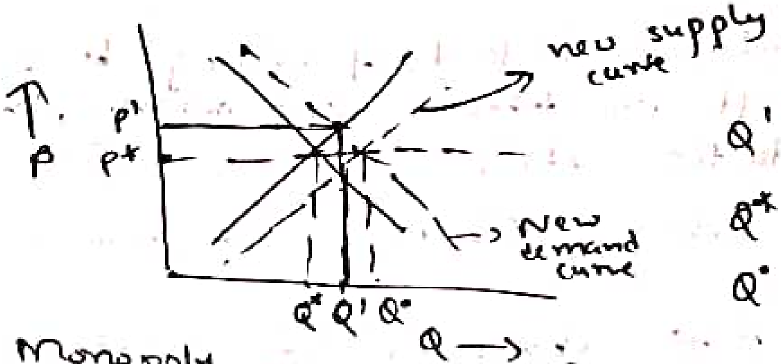
P = AC

=> P = AC = MR = AR

in perfect competition







Q' → new eq quantity after change in demand

Q* → old eq quantity

Q° → new eq quantity after change in supply curve

[First demand changed due to which new firms entered then, supply changed, again eq established]

Monopoly :-

* Only one seller
* Firm can influence the price => price maker

Ex:- Indian railway, Local cable TV network.

* TR = P×Q
* Barriers to enter the market
  1) Resources will be available only for one ~~person~~ firm in monopoly sellers.
  2) Government regulation (Arms, patent)
  3) Natural monopoly (A single firm can produce ~~mor~~ efficiently than others).

$C_Q < \sum_{i=1} C q_i$

↓ cost of production Q by single firm

$C_1 q_1 + C_2 q_2 + \ldots$ by many firms

Ex:- For indian railway,

revenue = 2 cost = 1.5

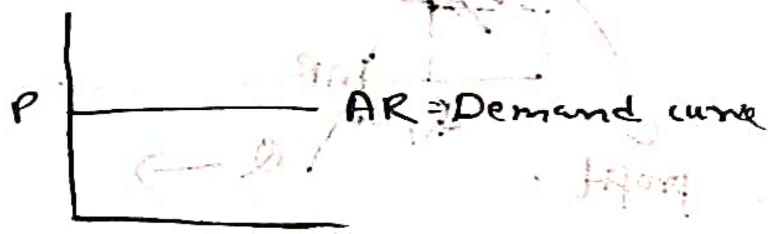
profit = 0.5

If new firm enter cost remain same while revenue becomes ~~as~~ '1', which result in loss.

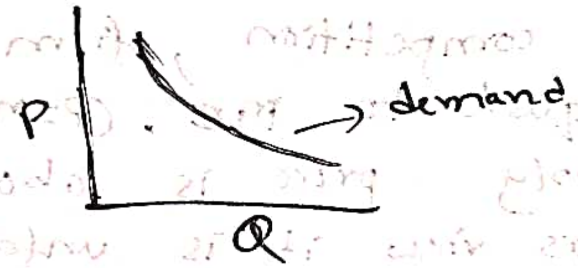
* Though they are price makers, if price ↑ demand fall.

* A part of MC curve represents supply curve and a part of AR curve represent demand curve.

* In perfect competition,



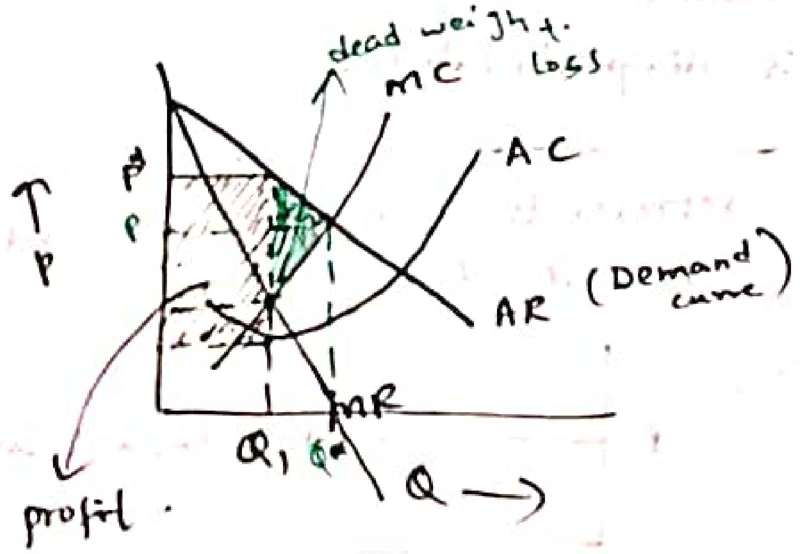
* In monopoly,



P & Q_d are negatively related.

* In monopoly, P = AR but MR is always the less than AR.

Q	P	TR (P×Q)	AR (TR/Q)	MR $\left(\frac{\Delta TR}{\Delta Q}\right)$
0	11	0	—	—
1	10	10	10	~~8~~ 10
2	9	18	9	8
3	8	24	8	6
4	7	28	7	4
5	6	30	6	2
6	5	30	5	0
7	4	28	4	-2
8	3	24	3	-4



* For profit maximisation MR = MC.

* To sell Q, quantity P* is the price which we get from demand curve.

* In perfect competition, firm charge a price which is equal to MC. (P=MC)
* In monopoly price is above MC. (P>MC)
* From buyers view it is unfair whereas sellers are happy as they are getting more amount the marginal cost.
* So, according to welfare point of view, the benefit is there for monopoly sellers

* green colour is for perfect competition. There we fix price by the intersection of demand (AR) and supply curves (MC).
* The ~~diff~~ green shaded portion indicates deadweight loss caused when we shift from perfect competition to monopoly.
* Hence, monopoly is not good as there is dead weight loss.

Extra topic

* Price ~~distribution~~ discrimination. by monopoly → u can read it from text book. Idk whether it comes in exam or not.