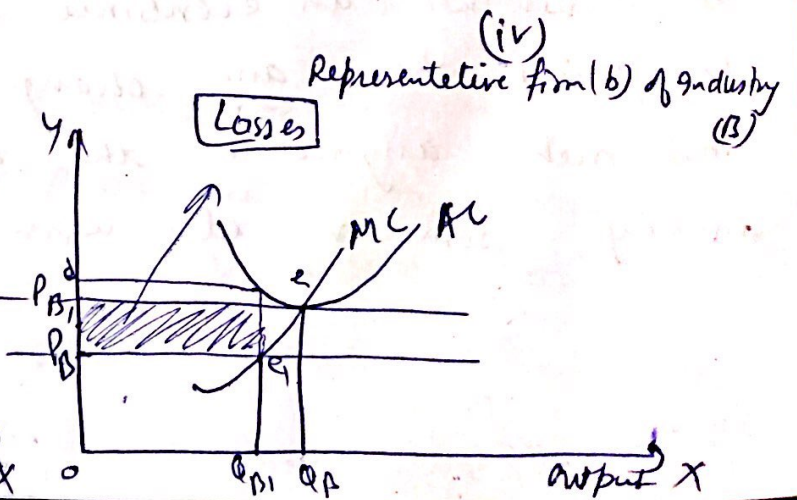
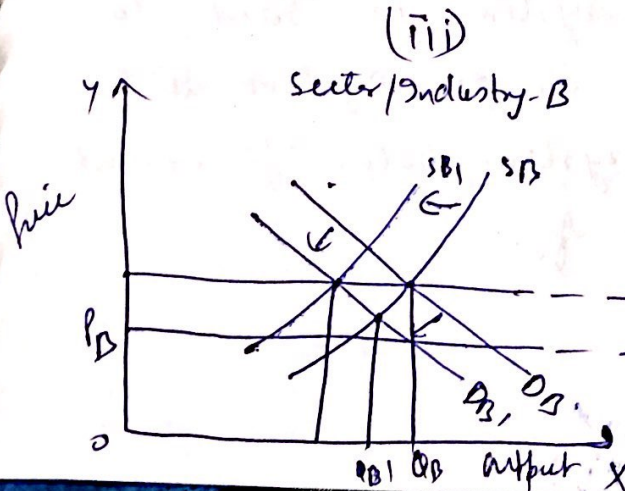
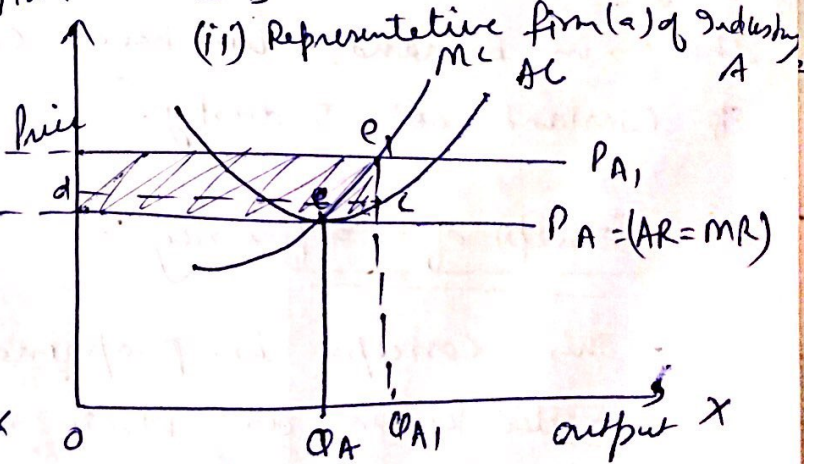
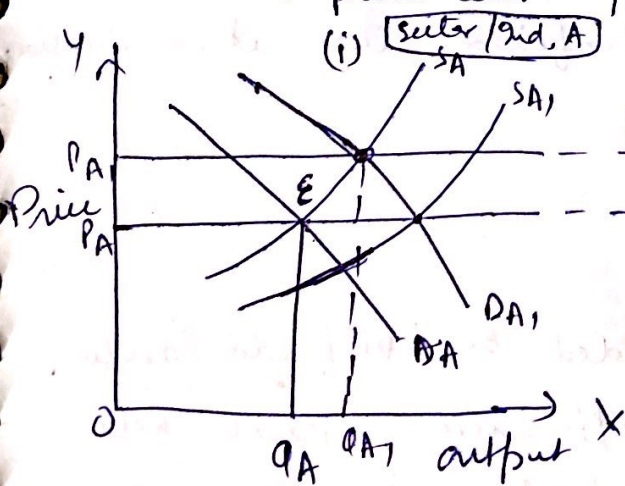


General Equilibrium and Efficiency of Perfect Competition

- General Equilibrium is a situation in which all markets in the economy are simultaneously in a state of equilibrium. There is equilibrium in the output markets, producing goods and services for their final users. And, at the same time, there is equilibrium in the input markets relating to land, labour and capital. Thus, all markets are continuously cleared and the entire economy is in a state of balance.

⇒ Inter-Industrial connections - Market Adjustments to changes in Demand.

o) 2-sector economy $\left\{ \begin{array}{l} \text{sector A or Industry - A} \\ \text{sector B or Industry - B} \end{array} \right.$, both have 'representative firm - a & b'



Initially, both the industries are assumed to be in a state of long-period equilibrium when $D_A = S_A$ and $D_B = S_B$, at equilibrium quantity and price ($OP_A = OP_B = OQ_A = OQ_B$) in sector A & B respectively.

At pt. 'e' equilibrium point state, when $(MR = MC)$ and $(AR = AC)$ and that in a state of equilibrium it is making zero profits, because it is a long period equilibrium.

and while, the shift in DD & SS curve in industry A will make profits to the firm^{eliminated} by $\uparrow DD$ & $\downarrow SS$, $P \uparrow$ from D_A to D_{A1} and S_A to S_{A1} and prices for $(P_A$ to $P_{A1})$ same as, sector B, losses are eliminated by backward shift in supply curve that would trigger a rise in the price level till it reaches its original level of P_B .

Thus, general equilibrium is restored only when both the sectors in the economy reach the state of zero profit equilibrium. and the market adjustment to changes in demand, we have confirmed that it is situation of constant-cost industry.

⇒ Concept of Efficiency :-

- This concept is propounded by 'Vilfredo Pareto'. It is better known as 'Pareto efficiency'. Pareto held the views that an economic system is said to be efficient when any change in the system will not make anyone in the system better off without making some one else worse off.

That is, if the redistribution of goods among individuals and households raises the welfare of one without lowering that of the other, the change is said to be 'Pareto efficient'.

→ Perfect competition is Pareto efficient :-

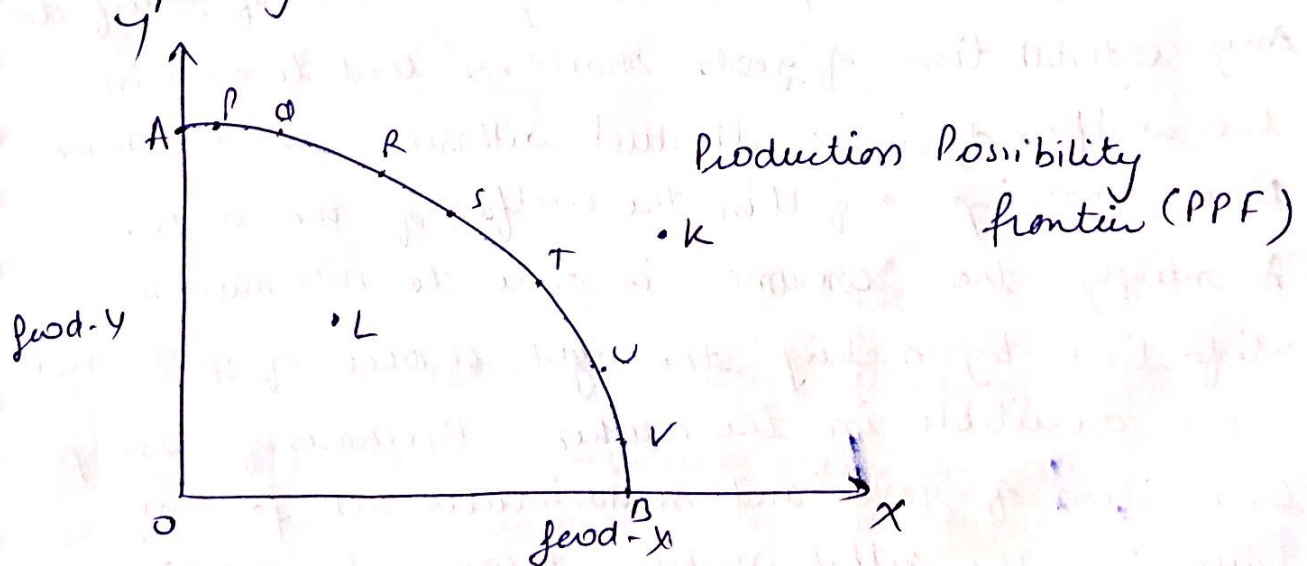
by focusing on 3 basic observations :-

(i) Perfect competition ensures optimum allocation of Resources :-

Optimality in resource allocation has 2 aspects :-

(a) Resources are allocated across different uses in a manner ^{such} that their reallocation cannot increase output in one use without a cut in output in the other use.

(b) each producing unit in the economy is operating at the lowest unit cost of production.



This point can be explained with this diagram which shows that when the production takes place on the PPF curve from P to V points shows optimum level of production at which resources are fully and efficiently utilized, and the point lies

Inside the PPF (i.e. L) and outside the PPF (i.e. K) shows under-utilisation and over-utilisation of Resources respectively.

Since, Perfect competition is assumed to exist across all markets, this is a factor that till a point of equality b/w the Price of the factor and its MRP, value added by the last unit of the factor hired must be same across all firms in the market.

(ii) Perfect competition leads to efficient distribution of outputs among individuals and households.

Efficiency of a system requires that the produced goods and services are so distributed across individuals and households that each one ends up maximising his level of satisfaction. Any redistribution of goods should not lead to a rise in the welfare of one individual without, at the same time, causing a fall in the welfare of the other.

Accordingly, the consumer is able to maximise his satisfaction by making the right choice of goods and services available in the market. Purchases of wrong combination of goods and services is ruled out for any buyer in the output markets, because all markets are equally accessible to all the buyers, and a uniform price structure prevails across all the output markets.

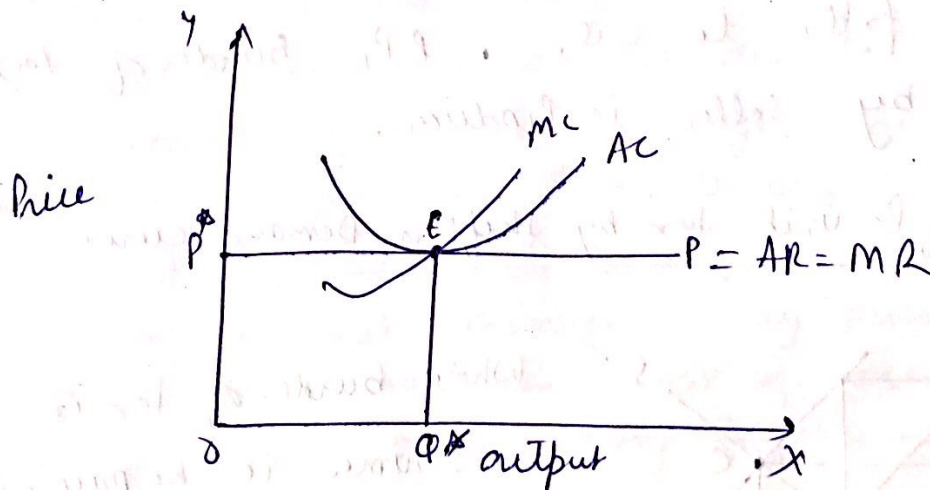
(iii) Perfect competition leads to the optimum mix of output (ie. product mix)

That is, the system ought to produce only those goods and services which the households want.

A perfectly competitive system, allowing the free play of the forces of DDSS, ensures that the output-mix reverberates with the needs of the people, so that their welfare is maximised.

$$P_x = MC_x$$

ie. $AR = MR$ in Perfect competition and in the equilibrium condition $MR = MC$



E pt. is the point of product mix, when $(P_x = MC_x)$

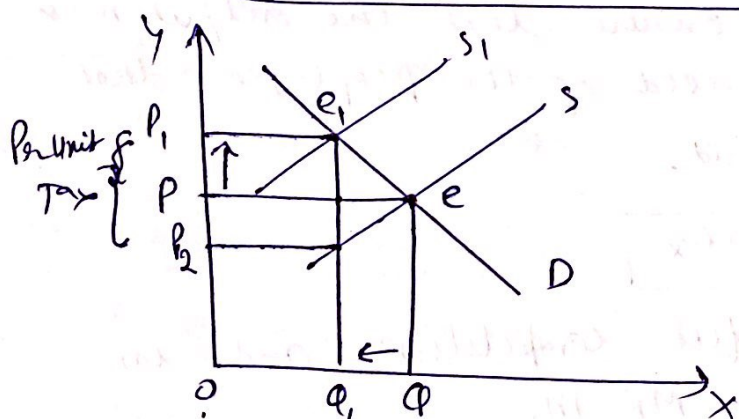
① If $P_x > MC_x$, the value placed by society on an additional unit of x is greater than the opportunity cost of producing an additional unit of x . So, there is need to produce more x goods.

② If $P_x < MC_x$, less of x to be produced, and at optimum point, $P_x = MC_x$ which is pareto optimum or efficient.

Consumer and Producer Theory in Action

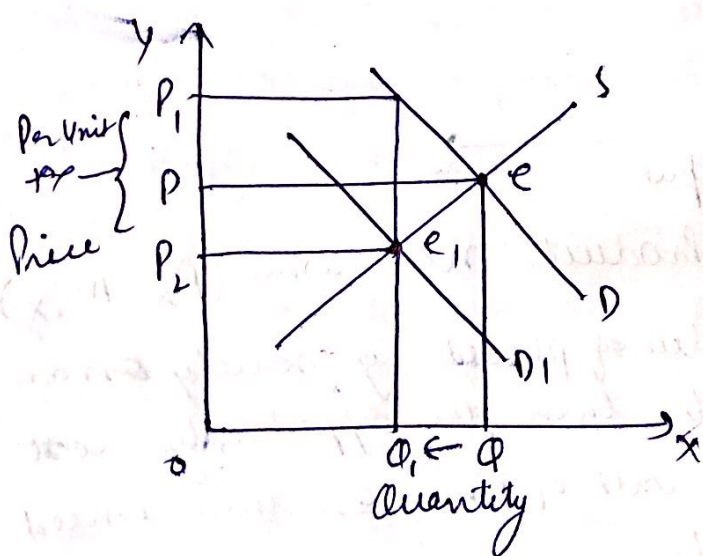
→ Effect of Taxation on the supply side and Demand side of the economy.

(i) Effect of Per unit Tax by the shift in supply curve



Initially, $DD = SS$ and OP price and OQ quantity with the fall in the supply of goods, prices rise to OP_1 and quantity falls to OQ_1 , P_1 , burden of tax is paid by seller i.e. producer.

(ii) Effect of Per unit tax by shift in Demand curve



Whole burden of tax is consumer i.e. he pays OP_1 price for OQ_1 quantity and seller sells at OP_2 price.

→ Implications of a tax on the returns to capital are as follows:

(i) Firms operating under perfectly competitive market conditions will pay such taxes even in the long-run equilibrium because, they are repetitive and must earn enough money to pay a return on it.

(ii) The tax will affect cost differently in different industries.

⇒ Principel- Agent Theory

Today, in most firms owners have been separated from managers, owners want profit maximisation and managers want sales revenue maximisation.

i.e. owners (principel) cannot monitor everything that managers (agents) do. managers are better informed than owners. This, imperfect information creates a principel- Agent problem.

The Problem is that managers may pursue their own goals, even at the cost of obtaining lower profits for owners. It is costly for the owners of the firms to monitor accurately the behaviour of the firm's manager.

Practice Questions

Ques 1: Elaborate Principel Agent Theory with the help of example.

Ques 2: Explain with the help of diagram of the Perfect competition that lead to the optimum Mix of output.

Ques 3: What do you mean by Pareto efficient / optimality.