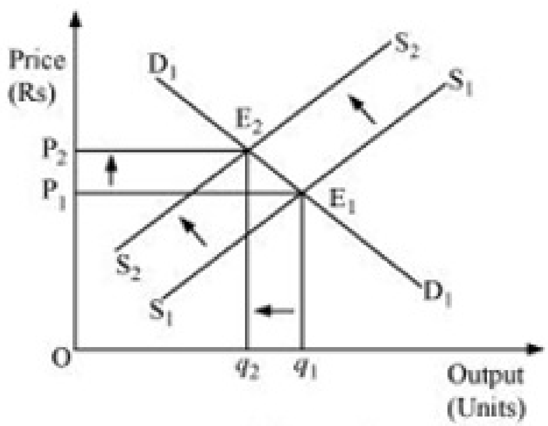
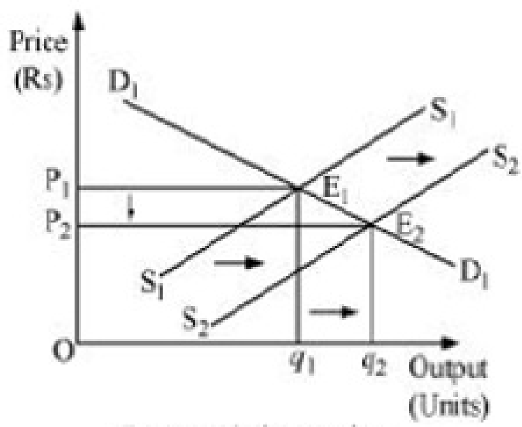
12. How do the equilibrium price and the quantity of a commodity change when price of input used in its production changes?
Ans: The change in the price of input alters the cost of production of a commodity.
Let us analyze the two different cases.
(a) Increase in input price: If the input price of a firm increase, the cost of production will also increase, which will discourage the firm's incentive to produce and supply the commodity. This will lead to a left upward shift of the marginal cost curve, which further will lead to a leftward parallel shift of an individual firm's supply curve and finally a leftward shift of the market supply curve. The demand curve remaining the same, the new equilibrium will occur at E_2 with higher equilibrium price P_2 and lower quantity of output (q_2)



Increase in input price

(b) Decrease in input price: If an input price of a firm decreases, then the cost of production will also decrease. This will shift the marginal cost curve rightward, which implies that the firm's supply curve will also shift rightward. Consequently, the market supply curve will shift rightward parallelly from $SS_1$to SS_2 . Demand curve remaining the same, the new equilibrium will occur at $E_2$with lower equilibrium price $P_2$and higher quantity level of output q2.



Decrease in input price

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