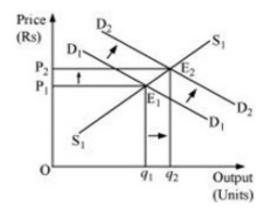


Q13. If the price of a substitute Y of good X increases, what impact does it have on the equilibrium price and quantity of good X?

Ans: X and Y being substitute goods, if the price of Y increases, then it will reduce the demand for Y and people will switch to X, which will raise the demand for X. Thus, the demand curve will shift from D_1D_1 to D_2D_2 . At the existing price P_1 , there will be an excess demand. Due to the pressure of excess demand, the existing price will increase. Consequently, the new equilibrium occurs at E_2 , where the new demand curve D_2D_2 intersects the supply curve S_1S_1 . The new equilibrium price is P_2 , which is higher than P_1 and equilibrium quantity is q_2 , which is higher than q_1 . Therefore, due to the increase in the price of substitute good Y, the equilibrium price of X will rise and equilibrium output of X will also be higher.



******* END *******