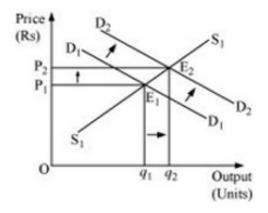


Q13. If the price of a substitute Y of good X increases, what impact does it have on the equilibrium price and quantity of good X?

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 \*\*\*\*\*\*\*\*