

Q. 6. What is equilibrium? What are its different types. Explain briefly.

Or

Explain the difference between stable and unstable equilibrium.

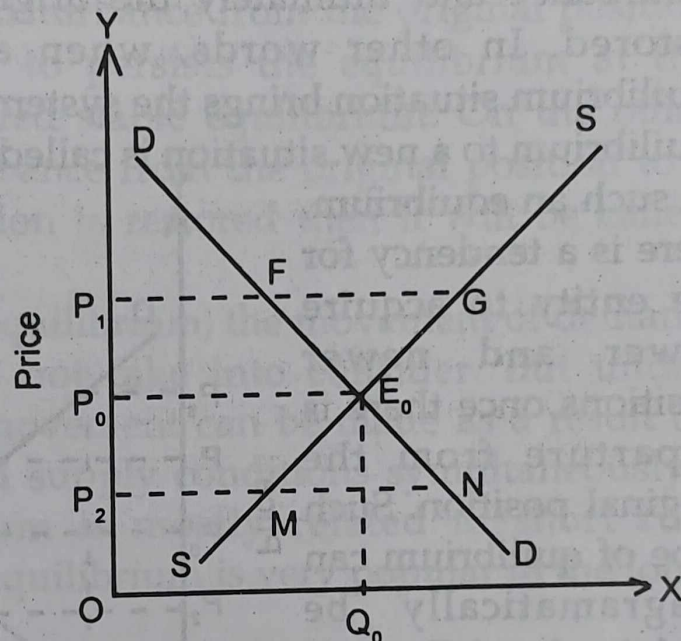
Answer :

An equilibrium refers to simply a state of balance where the internal or external forces are in balance. The state of equilibrium is said to exist when the opposite forces are exactly equal at a particular position. In such a specific position there is no change to move either in one direction

or the other. Therefore equilibrium implies such a unique magnitude of the economic variables that do not permit any departure of the system from a specific position. It should be noted that in equilibrium position, there arises a proper coordination and correspondence in between the variables. From the view of market, equilibrium is the condition which once achieved, tends to persist.

There are different types of equilibrium in economic system which can briefly be discussed as follows.

(a) **Stable Equilibrium** : Stable equilibrium is defined as a position which is restored at the original position even if there arises any disturbances. In case of such an equilibrium, there is a tendency for the system to revert to the old position even with the disturbances of economic forces in the equilibrium. When



Demand and Supply

Figure 1.2

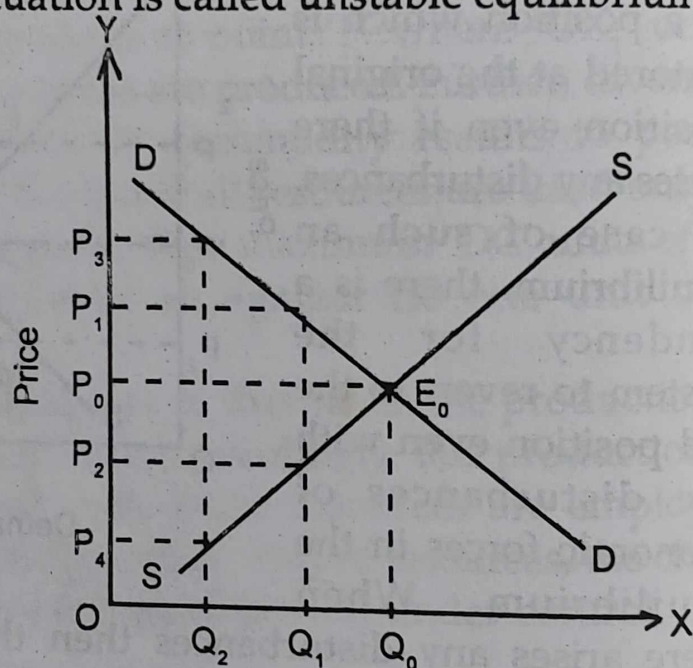
there arises any disturbances then there may either arise excess demand or may arise excess supply. As a result of which equilibrium will come back to the initial level where there arises market clearing situation. The determination such an equilibrium can be shown in figure 1.2.

In the diagram, DD is the downward sloping demand curve and SS is the upward sloping supply curve. Both these two market forces intersect each other at point E_0 indicating that there does not arise any excess demand and excess supply. Consequently the equilibrium price is OP_0 and corresponding demand and supply are OQ_0 each. If there is any disturbance at equilibrium then price may either increase

to OP_1 or may reduce to OP_2 . At price OP_1 , due to excess supply as supply (P_1G) is more than demand (P_1F), price will come down to OP_0 . On the otherhand, at OP_2 price, due to excess demand as demand (P_2N) exceeds supply (P_2M), price will increase to OP_0 . Thus E_0 is considered as stable equilibrium where from the economy have not any tendency to change the position.

(b) Unstable Equilibrium : The unstable equilibrium is a situation when a slight disturbance induces further disturbance and ultimately the original position is never restored. In other words, when any disturbances in equilibrium situation brings the system away from the initial equilibrium to a new situation is called unstable equilibrium.

In such an equilibrium, there is a tendency for the entity to acquire newer and newer positions once there is departure from the original position. Such type of equilibrium can diagrammatically be explained as follows in figure 1.3



Demand and Supply

Figure 1.3

In the diagram, DD demand curve and SS supply curve intersects each other at point E_0 . Therefore OQ_0 is the equilibrium quantity where respective demand and supply price is OP_0 each. When output comes down to OQ_1 as a result of market disturbances then demand price (OP_1) is significantly higher than supply price (OP_2) so that initial equilibrium point E_0 is broken down. As demand price is higher than supply price, the producer or the firm or the entrepreneur can earn more profits. If the demand price increases with decrease in output there will be

no tendency to return to the original position at E_0 . Further in order to earn more profit output may again come down to OQ_2 . At OQ_2 output, demand price (OP_3) is also higher than supply price (OP_4). Such continuous movement further and further away from the position of original equilibrium reflects an unstable equilibrium.

The equilibrium in an economic system can be classified into two categories which are stable equilibrium and unstable equilibrium.

Thus when any disturbance from the original position of equilibrium results to persists the equilibrium at the original position is called stable equilibrium. On the other hand, when the disturbance from the original position to a new equilibrium position is restored then it will be called unstable equilibrium.

In case of stable equilibrium, the movement of demand and supply forces do not take into consider. But under unstable equilibrium movement can be made as a result of change in demand and supply conditions simultaneously.

Stable equilibrium is mostly related to short run analysis. But unstable equilibrium is very popular in the long run.

Q. 7. What do you mean by static equilibrium? Explain how does static equilibrium determine in a market economy.

Or

Explain briefly the concept of static equilibrium in a market economy.

Answer :

The concept of equilibrium in simple sense implies a state of balance. Generally the equilibrium is defined as such a position at where the opposite forces working on a particular situation are in balance. In other words, an equilibrium indicates a situation where there is no tendency on the part of that body to move not any direction.

Static equilibrium which is also known as stable equilibrium is one of the important form of equilibrium. A system is said to be in a state of stable equilibrium, when any disturbance from the original position of equilibrium results to restore. In other words, that equilibrium position at where demand and supply of goods and services are become equal to each other, is called static equilibrium. In a

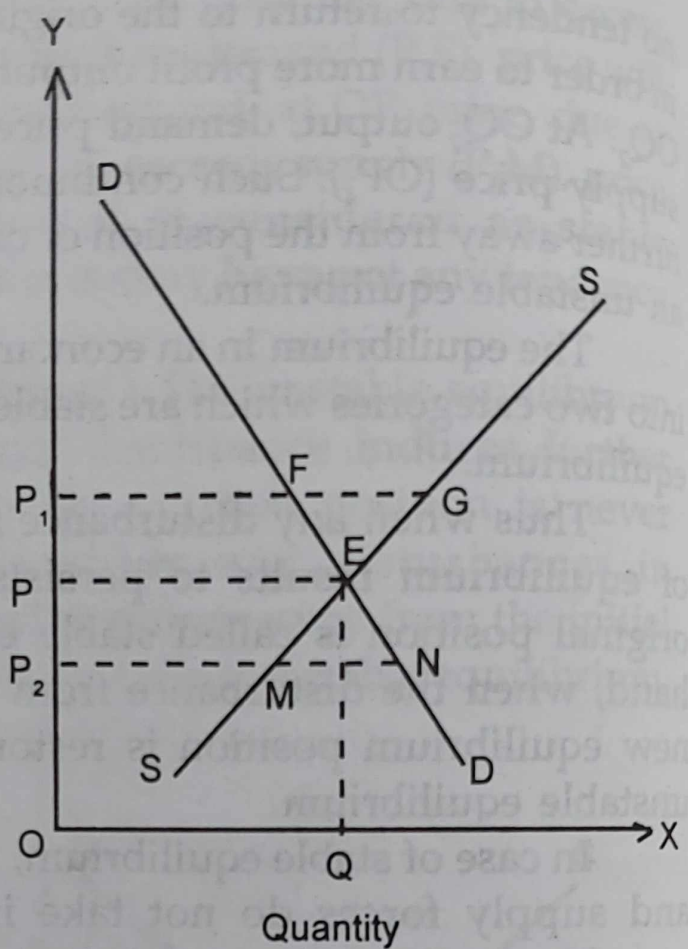


Figure 1.4

position of static equilibrium, there does not arise any excess demand and excess supply. The determination of such an equilibrium can be shown as follows in figure 1.4

In the diagram DD and SS are respectively the demand and supply curves of a commodity. Both these two curves intersect each other at point 'E' and hence E is the equilibrium point. Consequently, OP is the equilibrium price and OQ is equilibrium quantity. At 'E', there does not arise any difference between demand for and supply commodity of any other price except OP can not be considered as equilibrium. It is because if price increases to OP_1 , then there is excess supply as supply of the commodity (P_1G) is more than demand for the commodity (P_1F). As a result, price comes down to OP. On the other hand, at OP_2 price, the demand for the commodity (P_2N) is more than supply of it (P_2M). Therefore, due to such excess demand price increases to OP. Thus, OP is that price at where neither excess demand

nor excess supply prevails and hence stable equilibrium is established.

Q. 8. How does equilibrium determine under comparative static equilibrium? Explain.

Or

Write a short note on comparative static equilibrium.

Answer :

Comparative static analysis compares one equilibrium position with another when there is changed in data. In other words, the change in equilibrium position from initial situation due to change in demand condition is called comparative static. Therefore, in such type of equilibrium concept, the equilibrium position are compared corresponding to different sets of data.

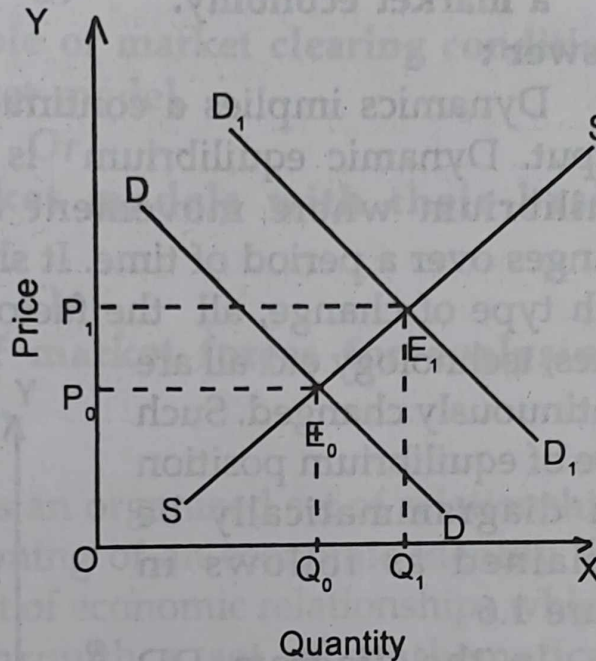


Figure 1.5

Under comparative static, with the increase in income, the effect on equilibrium due to change in demand is studied. When demand changes as a result of the change in income, the supply of the commodity would adjust itself and finally a new equilibrium is achieved. The determination of such an equilibrium can be explained in figure 1.5.

In the figure 1.5, DD and SS are respectively the demand for and supply of the commodity curves. Both these two curves intersect each other at point 'E₀'. Therefore, 'OP₀' is the equilibrium price and OQ₀ is the equilibrium quantity. When income of the people increases, then demand for goods and services increase. Consequently, the demand curve has shifted rightward direction to 'D₁D₁'. With the given supply,

SS, the new point of equilibrium is achieved at ' E_1 '. Therefore, OP_1 is the new equilibrium price and OQ_1 is the new equilibrium quantity. Therefore, the movement from original equilibrium to a new equilibrium is called comparative statics.