

# Market Equilibrium

## 1 Mark Questions

1. State whether the following statement is true or false. Give reason.  
When equilibrium price of a good is less than its market price, there will be competition among the sellers. (Hots; Delhi 2013)

**Ans.** True, when equilibrium price of a good is less than its market price, there will be competition among the sellers. At a price lower than market price, there will be excess supply, i.e. supply will be more than demand.

2. Give the meaning of equilibrium. (All India 2009 c)

**Ans.** Equilibrium is a situation of the market in which demand for a commodity is equal to its supply, i.e. a situation, which is stable.

3. Define equilibrium price. (All India 2008,2006)

**Ans.** Equilibrium price is the price at which market demand is equal to market supply.

## 3 Mark Questions

4. Market for a good is in an equilibrium. There is an increase in demand for this good. Explain the chain of effects. (Delhi 2011)

or

At a given equilibrium in the market, explain the chain of effects, of increase in demand for a good. (All India 2010 C)

**Ans.** The given diagram shows a situation of increase in demand. The demand curve shifts to the right from DD to D<sub>1</sub>D<sub>1</sub>. An equilibrium point shifts from E to E<sub>1</sub>. Consequently, an equilibrium price and an equilibrium quantity rises from OP to OP<sub>1</sub>, and OQ to OQ<sub>1</sub> respectively.

**The chain effects of increase in demand** When there is a increase in demand it creates excess demand (equal to O Q<sub>2</sub>) at initial price OP and as a result of which price will rise. With rise in price, demand will start falling (according to Law of Demand) and supply will start rising (according to Law of Supply), this process will continue till the time we reach new equilibrium level at E<sub>1</sub> where there is no excess demand.

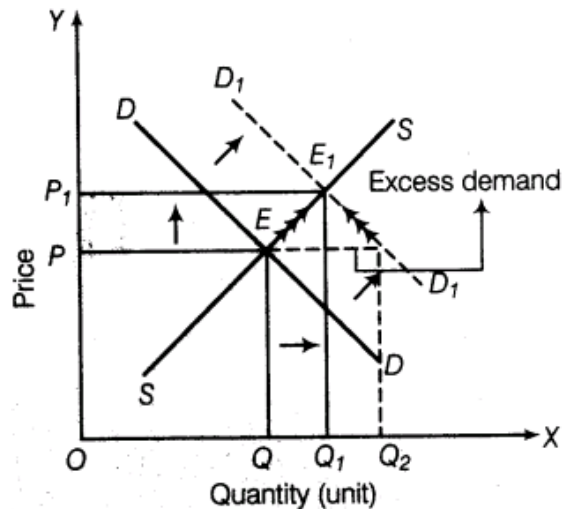


Diagram showing situation of excess demand

5. Explain the changes that will take place when in a market the demand for a good is greater than supply at the prevailing price. (Delhi 2010 c)

**Ans.** If at a prevailing price, quantity demanded is more than quantity supplied then supplier will motivate to increase the price of the commodity due to which demand decreases, till it reaches at the equilibrium price where quantity demanded is equal to quantity supplied.

6. Explain why an equilibrium price of a commodity is determined at that level of output at which its demand equals its supply. (Delhi 2010 c)

**Ans.** An equilibrium is a point where quantity demanded is equal to quantity supplied and an equilibrium can be attained only at that point. If at a given price, supply is more, it will show excess supply and if demand is more, it will show excess demand. Due to excess supply price will fall and due to excess demand price will rise. Hence, price will be stable only at an equilibrium level where demand and supply both are equal.

7. How is an equilibrium price of a commodity determined? Explain with the help of demand and supply schedule (Delhi 2009)

or

Explain how market price of a good is determined. Use diagram (All India 2009 c)

or

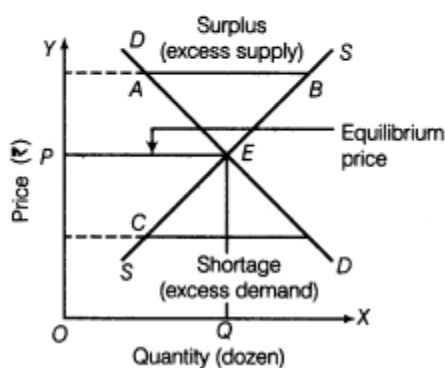
How is price determined under perfect competition? Explain briefly (All India 2006)

**Ans.** An equilibrium price is determined by the forces of market demand and market supply. Considering market demand schedule on the one hand and market supply schedule on the other hand, we identify an equilibrium price as the one where market demand is equal to market supply i.e. where market demand curve and market supply curve intersect each other.

**Market Equilibrium Price (Schedule)**

Price of commodity X (₹)	Quantity supplied of commodity X (Dozen)	Quantity demanded of commodity Y (Dozen)
5	50	10
4	40	20
3	30	30 Equilibrium
2	20	40
1	10	50

(1)



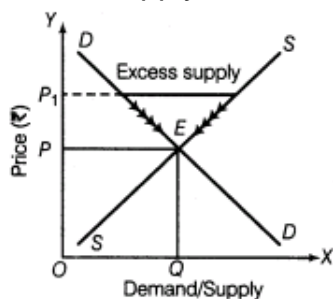
**Determination of equilibrium price**

(1)

**8. Suppose the price of a good is higher than equilibrium price. Explain the changes that will establish equilibrium price. (Delhi 2009 c)**

**Ans.** When price prevailing in the market is higher than that of equilibrium price, demand will be less than supply i.e. there is excess supply in the market. Excess supply will force the market price to slide down causing extension of demand and contraction of supply. The process of an extension and contraction would continue till the equilibrium between supply and demand is struck.

Thus, an equilibrium price will be restored through the free play of market forces of demand and supply.



**Diagram showing the situation of excess supply**

**9. The demand and supply of a commodity both decreases in the same proportion. Explain its effects on an equilibrium price and quantity with the help of a diagram.(All India 2008)**

**Ans.** When decrease in supply is equal to decrease in demand, an equilibrium price will remain the same but an equilibrium output will decrease.

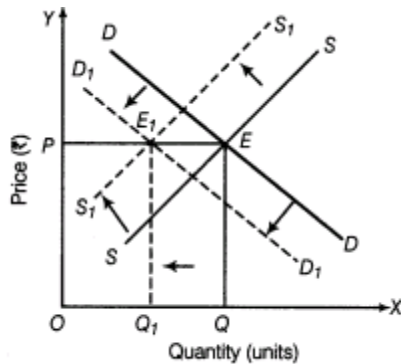


Diagram showing effects on equilibrium price and quantity

In the given diagram, actual demand curve  $DD$  and actual supply curve  $SS$  intersect at point  $E$  (i.e. an equilibrium point). At this point,  $OP$  is equilibrium price and  $OQ$  is equilibrium quantity. When demand decreases to  $D_1D_1$  and supply decreases to  $S_1S_1$  The new curves intersect each other at point  $E_1$  It shows that an equilibrium price remains constant because both demand and supply have decreased in the same proportion. However, an equilibrium quantity decreases to  $OQ_1$

#### 4 Mark Questions

**10. Equilibrium price of an essential medicine is too high. Explain what possible steps can be taken to bring down an equilibrium price, but only through the market forces. Also explain the series of changes that will occur in the market.(All India 2013)**

**Ans.** If an equilibrium price of an essential medicine is too high, then its price can be reduced by opting two ways:

- (i) Increase the supply of the commodity.
- (ii) Government should provide such an essential medicines on subsidised rates.

But as per the question option, (i) would be more appropriate.

Changes that will occur in the market is mentioned below:

In figure, it is clearly depicted that due to an increase in supply, the supply curve shifts to the right from  $SS$  to  $S_1S_1$ . The new supply curve  $S_1S_1$  intersects the demand curve at point  $E_1$ . An equilibrium price decreases from  $OP$  to  $OP_1$ , and quantity increases from  $OQ$  to  $OQ_1$  Thus, it is clear that by increasing the supply of the medicines, its

equilibrium price can be brought down as by doing so, competition will be increased among the producers and consequently, they would be forced to sell their output at lower cost.

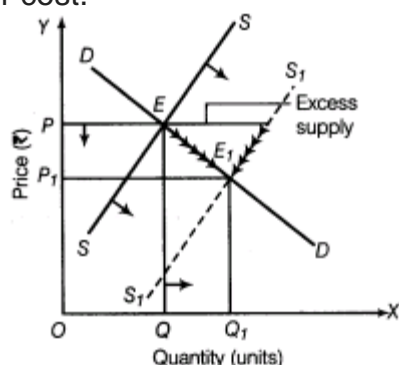


Diagram depicting the situation of excess supply

**11. Explain the sequence of changes that will take place when there is excess demand of the commodity. (All India 2011)**

or

**At a given price, there is an excess demand for a good. Explain how the equilibrium price will be reached. (Delhi 2007)**

**Ans.** In a situation of excess demand, consumers are willing to buy greater amount of a commodity than what the producers are willing to sell. Accordingly, price of the commodity will be pushed up. This will cause expansion of supply and contraction of demand. This process will continue till demand becomes equal to supply and the equilibrium is struck in the market. The market will reach the point of an equilibrium at a higher price than in a situation of \$n\$ excess demand.

**12. Explain the effects of increase in income of buyers of normal commodity on its equilibrium price. (Delhi 2010)**

**Ans.** For a normal commodity, increase in an income of the consumer” means an increase in its demand. Accordingly, demand curve shifts rightward and both an equilibrium price and an equilibrium quantity tends to increase.

In the given diagram, actual demand curve  $DD$  and actual supply curve  $SS$  intersect at point  $E$  (i.e. equilibrium point). When income of buyer increases, the demand of normal goods also rises and demand curve shifts rightward  $DD$  to  $D_1D_1$ . As a result, an equilibrium price and quantity both are increases  $OP$  to  $OP_1$ , and  $OQ$  to  $OQ_1$ , respectively. Equilibrium point will shift to rightward i.e.  $E$  to  $E_1$



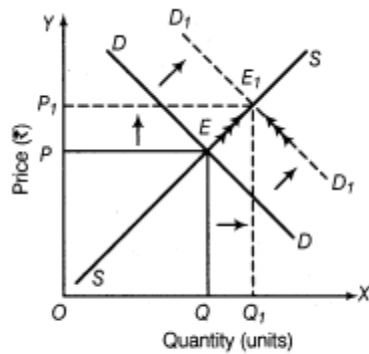


Diagram showing rightward shift in demand curve

13. How does an equilibrium price of a normal commodity change when income of its buyers falls? Explain the chain of effects. (All India 2010)

or

A product market is in an equilibrium. Suppose the demand for the product decreases. What changes will take place in the market? Use diagram.

(Delhi 2006 C)

**Ans.** For a normal commodity, decrease in income of the buyers means decrease in its demand. Accordingly, demand curve shifts leftward and both an equilibrium price and an equilibrium quantity tends to decrease.

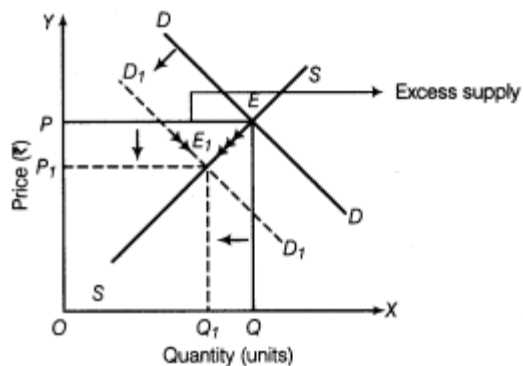


Diagram showing leftward shift in the demand curve

In the above diagram, actual demand curve  $DD$  and actual supply curve  $SS$  intersect at point  $E$  (i.e. equilibrium point). When an income of buyer decreases, the demand of normal goods also decreases and demand curve shifts leftward from  $DD$  to  $D_1D_1$ . As a result, an equilibrium price and an equilibrium quantity both are increases from  $OP$  to  $OP_1$ , and  $OQ$  to  $OQ_1$ , respectively. Equilibrium point will shift to leftward from  $E$  to  $E_1$ .

**14. How is an equilibrium price of a commodity affected by a leftward shift of the demand curve? Explain it with the help of a diagram. (All India 2007)**

**Ans.** Effect of decrease in demand of a commodity on an equilibrium price and quantity is discussed below, with reference to the figure.

In the figure,  $DD$  and  $SS$  are an initial demand curve and supply curve respectively.  $E$  is initial equilibrium point,  $OQ$  is an equilibrium quantity and  $OP$  is an equilibrium price. Decrease in demand implies a shift in demand curve to the left. It is indicated by  $D_1D_1$ . This sets the following chain of effects:

Decrease in demand implies that less is demanded at the existing price causing excess supply. Price of the commodity will tend to decrease from  $OP$  to  $OP_1$ , due to which there will be expansion in demand and contraction in supply. This will bring to an equilibrium price again.

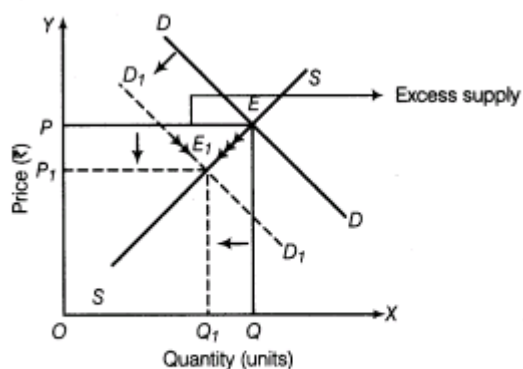


Diagram showing leftward shift in the demand curve

**15. Explain the changes that take place when at a given price of a commodity, there is excess supply of it. Use diagram. (Delhi 2006 C)**

**Ans.** When price prevailing in the market is higher than that of equilibrium price, demand will be less than supply i.e. there is excess supply in the market. Excess supply will force the market price to slide down causing extension of demand and contraction of supply. The process of an extension and contraction would continue till the equilibrium between supply and demand is struck.

Thus, an equilibrium price will be restored through the free play of market forces of demand and supply.

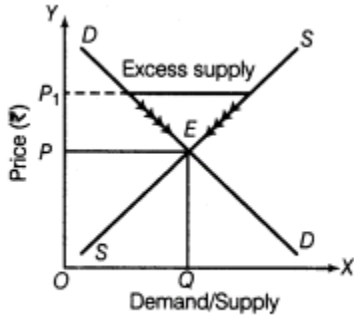


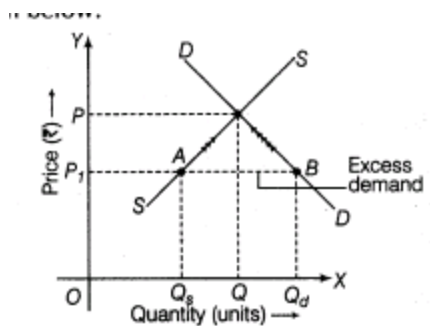
Diagram showing the situation of excess supply

## 6 Mark Questions

**16. What is excess demand for a good in a market? Explain its chain of effects on the market for that good use diagram.(Foreign, 2014)**

**Ans.** Excess demand refers to the situation in which market demand exceeds market supply corresponding to a particular price. By definition, equilibrium price refers to the price at which market demand equals market supply, excess demand in the market will create competition among the buyer, which will push price upwards, causing contraction in demand (by Law of Demand) and extension in supply (by Law of Supply).

This process will continue till the equilibrium is achieved, where again market demand equals market supply. Thus, an equilibrium price will be restored through the free play of market forces. As shown in the diagram below:

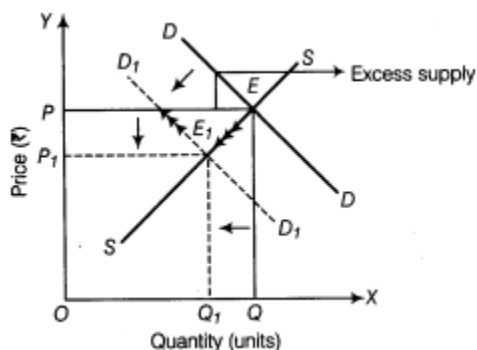


In the above diagram DD and SS are demand and supply curves respectively and equilibrium is at point e where demand equals supply with equilibrium price OP and quantity OQ. Any price below OP will create excess demand S of OP1 where demand equals  $OQ_d$  and supply is  $OQ_s$ , creating excess demand equal to  $Q_d - Q_s$ , causing price to rise to reach at OP



**17. Market for a product is in equilibrium. Demand for the product decreases. Explain the chain of effects of this change till the market again reaches equilibrium. Use diagram.(Delhi 2014, All India 2014)**

**Ans.** Effects of decrease in demand of a commodity on equilibrium price and quantity is discussed below with reference to the given figure.



In the given figure, DD and SS are the initial demand curve and supply curve respectively. E is the initial equilibrium point, OQ is the equilibrium quantity and OP is the equilibrium price. Decrease in demand implies a shift in demand curve to the left. It is indicated by This sets in the following chain of effects.

Decrease in demand implies that less is supplied at the existing price. Given the supply, price of the commodity will tend to decrease from OP to OP1. Fall in price will cause tend to decrease from OP to OP1. Fall in price will cause extension of demand and contraction of supply. Here, equilibrium quantity also decreases from OQ to OQ1.

**18. Market for a good is in an equilibrium. Suppose supply decreases. Giving reasons,**

**explain its effects on equilibrium price and quantity. Use diagram.(Foreign 2014; Delhi 2009 C)**

**Ans.** A fall in supply will shift the supply curve to the left. These causes a situation of deficiency of supply (or a situation of excess demand). Accordingly, price tends to rise. In response to rise in price, demand tends to contract and supply tends to extend. This process (of contraction of demand and extension of supply) will continue till, price is reached where quantity demanded is equal to quantity supplied. This occurs at new equilibrium point E1.



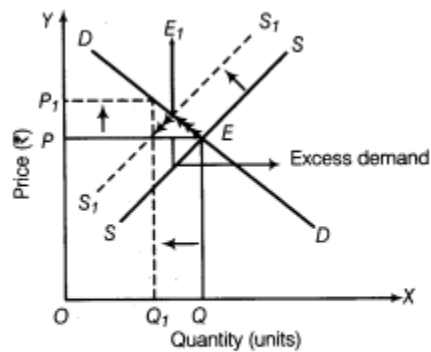


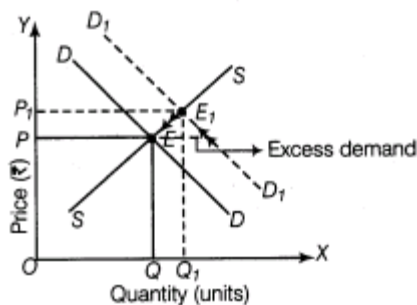
Diagram showing effects on equilibrium price and quantity

**19. Market of a commodity is in equilibrium. Demand for the commodity 'increases.' Explain the chain of effects of this change till the market again reaches equilibrium. Use diagram. (Delhi 2014; All India 2014)**

**Ans.** Effects of increase in demand of a commodity on equilibrium price and quantity is discussed below with reference to the given figure.

In the above figure, DD and SS are the initial demand curve and supply curve respectively. E is the initial equilibrium point, OQ is the equilibrium quantity and OP is the equilibrium price. Increase in demand implies a shift in demand curve to the right. It is indicated by D1D1. This sets in the following chain of effects.

Increase in demand implies that more supplied at the existing price. Given supply, price of the commodity will tend to increase from OP to OP1. Rise in price will cause contraction of demand and extension of supply. Here, equilibrium quantity also increases from OQ to OQ1.



**20. At a given price of a commodity, there is an excess supply. Is it an equilibrium price? If not, how will an equilibrium price be reached? Use diagram. (Compartment 2014; All India 2006)**

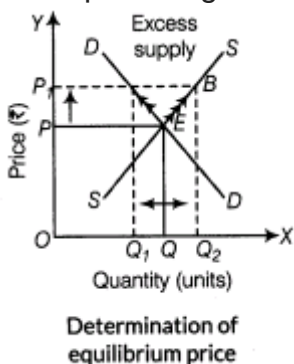
or

**What is 'excess supply of a good in a market? Explain its chain of effects on the market for that good. Use diagram. (Foreign, 2014)**

**Ans.** By the definition, an equilibrium price refers to the price at which market demand is equal to market supply (i.e. there is no excess demand or excess supply).

When price prevailing in the market is higher than an equilibrium price, demand will be less than supply i.e. there is excess supply in the market. Excess supply will force the market price to slide down causing an extension of demand and contraction of supply. The process of an extension and contraction would continue till the equilibrium between supply and demand is struck. Thus, an equilibrium price will be restored through the free play of market forces.

No, the price with excess supply is not an equilibrium price. This can be illustrated with the help of the given diagram.



**21. If an equilibrium, price of a good is greater than its market price, explain all the changes that will take place in the market. Use diagram. (hots; All India 2013)**

**Ans.** If the price prevailing in the market is above an equilibrium price then the firms will supply more quantity of the commodity and the consumer will demand less quantity of the commodity. Thus, it will distort the situation of an equilibrium in the market. There will be situation of an excess supply, this situation is shown in the following schedule and diagram.

Price (₹)	Demand	Supply	
1	500	100	Excess demand
2	400	200	
3	300	300	Equilibrium
4	200	400	Excess supply
5	100	500	

In such a case, competition among the sellers will pull down the market price to equilibrium price, by the way of expansion in demand and contraction in supply. As it can be seen from the schedule that at prices Rs 4 and Rs 5, supply exceeds demand.

As shown in the diagram DD is the demand curve and SS is supply. Equilibrium is attained at point E, where demand equals supply with OP equilibrium price and OQ quantity. Now supply is market price is greater than equilibrium price at OP1. In this case a fall in price, hence expansion in demand and contraction in supply will continue till the time equilibrium is not achieved.

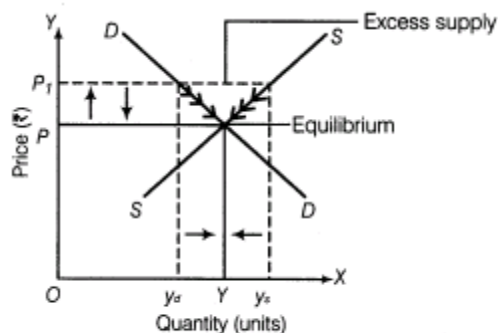


Diagram showing situation of excess supply

**22. Market for a good is in equilibrium. There is simultaneous increase both in demand and supply of the good. Explain its effects on market price. (Delhi 2012; All India 2008)**

**Ans.** There can be three situations in this respect which are as follows:

**(i) Increase in demand is greater than increase in supply** If the increase in demand is more than the increase in supply, both an equilibrium price and quantity will increase.

From the figure, it is clear that the (rightward) shift in demand curve from DD to  $D_1D_1$  is proportionately more than the (rightward) shift in supply curve from SS to  $SS_1$ . The new equilibrium point is  $E_1$ . Equilibrium price rises from OP to  $OP_1$  and an equilibrium quantity rises from OQ to  $OQ_1$ . Increase in quantity is greater than increase in price.

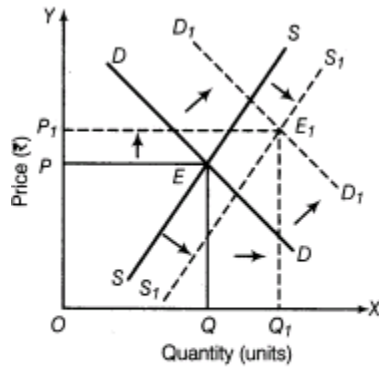
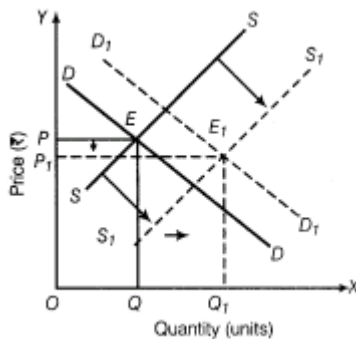


Diagram showing rise in equilibrium price and quantity

**(ii) Increase in demand is equal to increase in supply** When increase in demand is equal to an increase in supply, the price will remain the same and an equilibrium output will increase.

From the figure, it is clear that the (rightward) shift in demand curve from DD to D1D1, is proportionately equal to the (rightward) shift in supply curve from SS to SS1. The new equilibrium point is E1. Equilibrium price remains the same, but an equilibrium quantity rises from OQ to OQ1.



**(iii) Increase in demand is lesser than increase in supply** If an increase in demand is less than an increase in supply, an equilibrium price falls and an equilibrium quantity goes up.

From the figure, it is clear that the (rightward) shift in demand curve from DD to Dp is proportionately less than the (rightward) shift in supply curve from SS to S1S1. The new equilibrium point is E1. Equilibrium price falls from OP to OP1 and an equilibrium quantity rises from OQ to OQ1. Increase in quantity is greater than decrease in price.

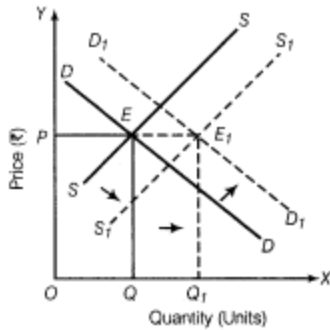


Diagram showing increase in equilibrium output

**23. Market for a good is in equilibrium. There is simultaneous decrease both in demand and supply of the good. Explain its effects on market price. (Delhi 2012)**

**Ans.** There can be three situations in this respect, which are as follows:

**(i) Decrease in demand is greater than decrease in supply** If decrease in demand is greater than the decrease in supply, an equilibrium price and quantity will fall.

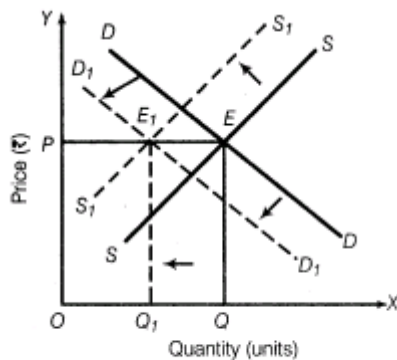


Diagram showing fall in equilibrium price and quantity

From the figure, it is clear that the (leftward) shift in demand curve from  $DD$  to  $D_1D_1$  is proportionately more than the (leftward) shift in supply curve from  $SS$  to  $S_1S_1$ . The new equilibrium point is  $E_1$ . Equilibrium price falls from  $OP$  to  $OP_1$  and an equilibrium quantity falls from  $OQ$  to  $OQ_1$ . Decrease in quantity is greater than decrease in price.

**(ii) Decrease in demand is equal to decrease in supply** When decrease in demand is equal to decrease in supply, an equilibrium price will remain the same and an equilibrium quantity will increase.

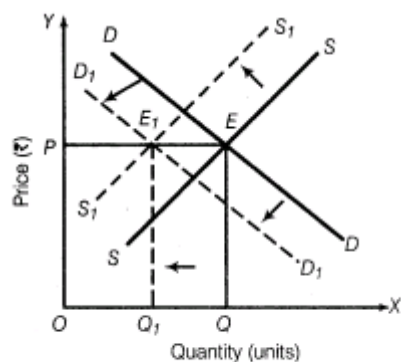


Diagram showing fall in equilibrium price and quantity

From the figure, it is clear that the (leftward) shift in demand curve from  $DD$  to  $D_1D_1$  is proportionately equal to the (leftward) shift in supply curve from  $SS$  to  $S_1S_1$ . The new equilibrium point is  $E_1$ . Equilibrium price remains the same, but an equilibrium quantity falls from  $OQ$  to  $OQ_1$ .

**(iii) Decrease in demand is lesser than decrease in supply** If decrease in demand is lesser than decrease in supply, an equilibrium price will rise and an equilibrium quantity will fall.

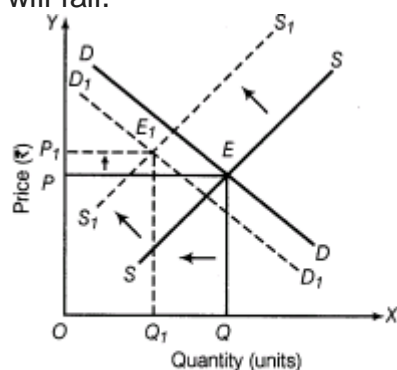


Diagram showing rise in equilibrium price and fall in Equilibrium Quantity

From the figure, it is clear that (leftward) shift in demand curve from  $DD$  to  $D_1D_1$ , is proportionately less than the (leftward) shift in supply curve from  $SS$  to  $S_1S_1$ . New equilibrium point is  $E_1$ . Equilibrium price increases from  $OP$  to  $OP_1$  and an equilibrium quantity decreases from  $OQ$  to  $OQ_1$ . Decrease in quantity is greater than increase in price.

24. Market for a good is in an equilibrium. There is simultaneous decrease both in demand and supply, but there is no change in market price. Explain with the help of a schedule, how is it possible.(All India 2012)

Ans. Decrease in demand is greater than decrease in supply If decrease in demand is greater than the decrease in supply, an equilibrium price and quantity will fall.

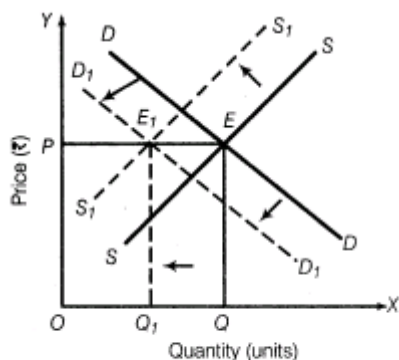


Diagram showing fall in equilibrium price and quantity

From the figure, it is clear that the (leftward) shift in demand curve from DD to D1D1 is proportionately more than the (leftward) shift in supply curve from SS to S1S1. The new equilibrium point is E1. Equilibrium price falls from OP to OP1 and an equilibrium quantity falls from OQ to OQ1. Decrease in quantity is greater than decrease in price.

Price of commodity X (₹)	Quantity of commodity X (Demand) (Dozen)	Quantity of commodity X (Supply) (Dozen)
5	50	50
5	40	40
5	30	30
5	20	20
5	10	10

25. Market for good is an equilibrium. Explain the chain of reactions in the market if the price is (i) Higher than an equilibrium price (ii) Lower than an equilibrium price (All India 2012)

Ans.(i) Higher than an equilibrium price:

When price prevailing in the market is higher than that of equilibrium price, demand will be less than supply i.e. there is excess supply in the market. Excess supply will force the market price to slide down causing extension of demand and contraction of supply. The process of an extension and contraction would continue till the equilibrium between supply and demand is struck.





Thus, an equilibrium price will be restored through the free play of market forces of demand and supply.

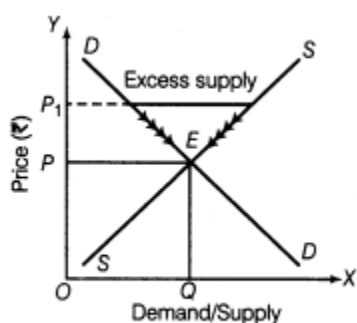


Diagram showing the situation of excess supply

**(ii) Lower than an equilibrium price:** In a situation of excess demand, consumers are willing to buy greater amount of a commodity than what the producers are willing to sell. Accordingly, price of the commodity will be pushed up. This will cause expansion of supply and contraction of demand. This process will continue till demand becomes equal to supply and the equilibrium is struck in the market. The market will reach the point of an equilibrium at a higher price than in a situation of  $\$n$  excess demand.

**26. Market for a good is an equilibrium. There is an increase in supply for this good.**

**Explain the chain of effects of this change. Use diagram (All India 2011)**

**Ans.** If there is increase in supply and demand remains unchanged as a result that equilibrium price will decrease but equilibrium quantity will increase. The figure shows a situation of increase in supply. The supply curve shifts to the right. Consequently, equilibrium price decreases from OP to OP1. Equilibrium quantity increases from OQ to OQ1.

Due to increase in supply at the equilibrium price 'P' now there will be excess supply. Excess supply will force prices to come down and hence there will be contraction in supply and expansion in demand, this process will continue till the time we reach new equilibrium at E, with lower price and greater quantity.

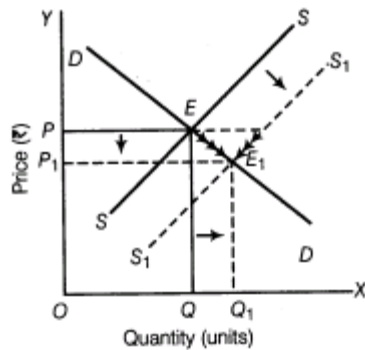


Diagram showing a situation of excess supply

27.X and Y are complementary goods. Explain the sequence of effects of a fall in the price of X on an equilibrium price and quantity of Y.(All India 2011)

**Ans.** In case of complementary goods, when the price of X falls, demand for commodity Y increases. As a result, demand curve of commodity Y will shift towards right, but supply curve remains constant. Due to increase in demand of commodity Y due to competition amongst the buyers there will be an excess demand.

Therefore, supplier will motivate to increase the price of commodity Y due to competition amongst the buyers. An equilibrium price and quantity would tend to increase.

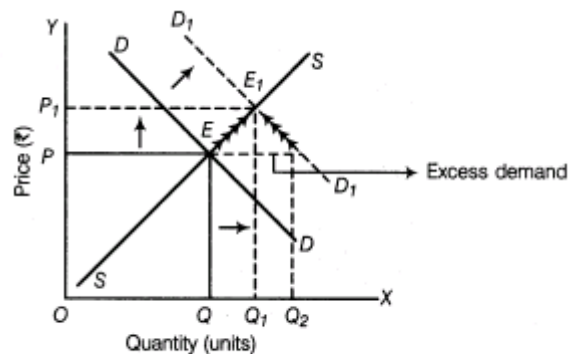


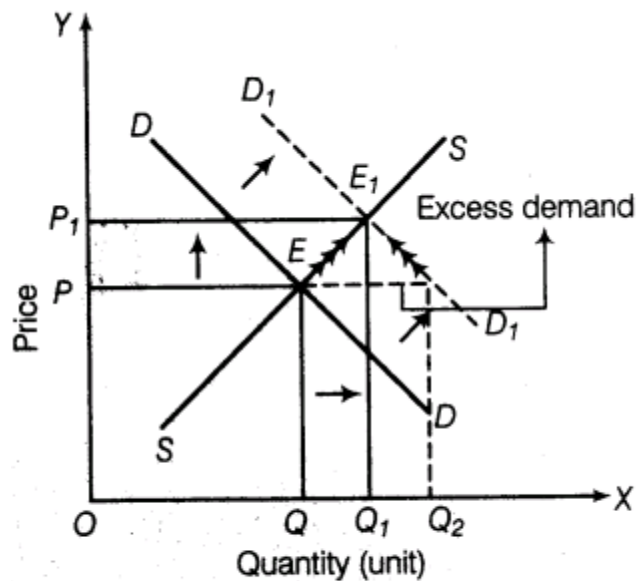
Diagram showing a situation of excess demand

The above figure shows a situation of increase in demand. The demand curve shifts to rightward. Consequently, equilibrium price and quantity both are increasing from OP to OP<sub>1</sub>, and OQ to OQ<sub>1</sub>

**Effects of increase in demand :**

The given diagram shows a situation of increase in demand. The demand curve shifts to the right from  $DD$  to  $D_1D_1$ . An equilibrium point shifts from  $E$  to  $E_1$ . Consequently, an equilibrium price and an equilibrium quantity rises from  $OP$  to  $OP_1$ , and  $OQ$  to  $OQ_1$  respectively.

**The chain effects of increase in demand** When there is a increase in demand it creates excess demand (equal to  $OQ_2$ ) at initial price  $OP$  and as a result of which price will rise. With rise in price, demand will start falling (according to Law of Demand) and supply will start rising (according to Law of Supply), this process will continue till the time we reach new equilibrium level at  $E_1$  where there is no excess demand.



**Diagram showing situation of excess demand**

**28. How will a fall in the price of tea affects an equilibrium price of coffee? Explain the chain of effects (Delhi 2011 c)**

**Ans.** With a fall in the price of tea, the demand of coffee (substitute of tea) decreases. As a result, demand curve of coffee shifts to the left. Accordingly, an equilibrium price would tend to decrease and also an equilibrium quantity tends to decrease.

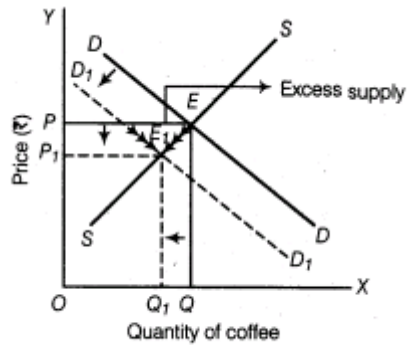


Diagram showing the decrement in equilibrium price and quantity

The figure shows a situation of decrease in demand. The demand curve shifts to left side. Consequently, equilibrium price and quantity, both are decreasing from OP to OP1 and OQ to OQ1.

**29.Explain the term market equilibrium. Explain the series of changes that will take place if market price is higher than an equilibrium price. (Delhi 2011 c)**

**Ans.** Equilibrium is a situation of the market in which demand for a commodity is equal to its supply, i.e. a situation, which is stable.

When price prevailing in the market is higher than that of equilibrium price, demand will be less than supply i.e. there is excess supply in the market. Excess supply will force the market price to slide down causing extension of demand and contraction of supply. The process of an extension and contraction would continue till the equilibrium between supply and demand is struck.

Thus, an equilibrium price will be restored through the free play of market forces of demand and supply.

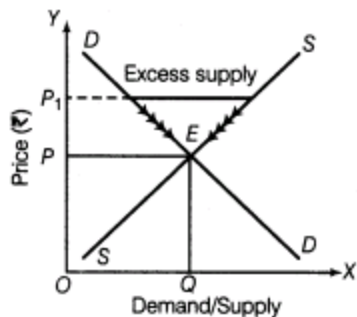


Diagram showing the situation of excess supply

**30.With the help of diagram, explain the effects of decrease in demand of a**

**commodity on its equilibrium price and quantity. (Delhi 2009)**

**Ans.** Effect of decrease in demand of a commodity on an equilibrium price and quantity is discussed below, with reference to the figure.

In the figure, DD and SS are an initial demand curve and supply curve respectively. E is initial equilibrium point, OQ is an equilibrium quantity and OP is an equilibrium price. Decrease in demand implies a shift in demand curve to the left. It is indicated by  $D_1D_1$ . This sets the following chain of effects:

Decrease in demand implies that less is demanded at the existing price causing excess supply. Price of the commodity will tend to decrease from OP to  $OP_1$  due to which there will be expansion in demand and contraction in supply. This will bring to an equilibrium price again.

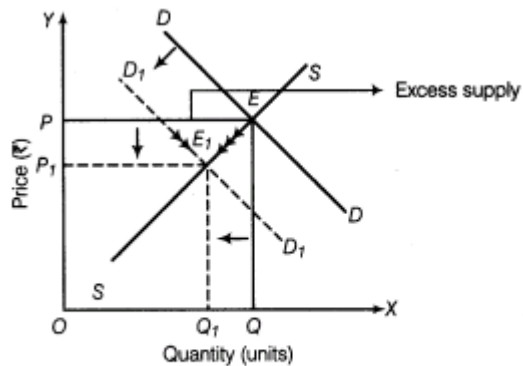


Diagram showing leftward shift in the demand curve

**31. With the help of demand and supply schedule, explain the meaning of excess demand and its effects on price of a commodity. (All India 2009)**

**Ans.** In a situation of excess demand, consumers are willing to buy greater amount of a commodity than what the producers are willing to sell. Accordingly, price of the commodity will be pushed up. This will cause expansion of supply and contraction of demand. This process will continue till demand becomes equal to supply and the equilibrium is struck in the market. The market will reach the point of an equilibrium at a higher price than in a situation of excess demand.

**Schedule Showing Excess Demand**

Price (Per unit)	Quantity demanded (units)	Quantity supplied (unit)
1	100	30
2	80	40
3	60	60
4	40	80
5	30	100

Excess demand

**32. Define an equilibrium price of a commodity. How is it determined? Explain with the help of a schedule. (All India 2009)**

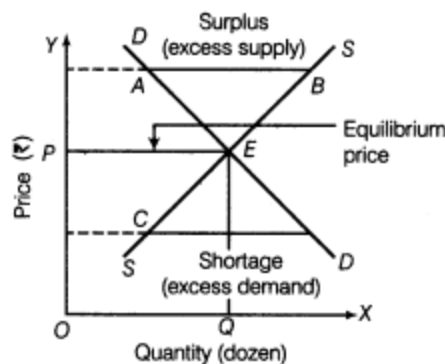
**Ans.** Equilibrium price is the price at which market demand is equal to market supply.

An equilibrium price is determined by the forces of market demand and market supply. Considering market demand schedule on the one hand and market supply schedule on the other hand, we identify an equilibrium price as the one where market demand is equal to market supply i.e. where market demand curve and market supply curve intersect each other.

**Market Equilibrium Price (Schedule)**

Price of commodity X (₹)	Quantity supplied of commodity X (Dozen)	Quantity demanded of commodity Y (Dozen)
5	50	10
4	40	20
3	30	30 Equilibrium
2	20	40
1	10	50

(1)



**Determination of equilibrium price**

(1)

**33. How is an equilibrium price and an equilibrium quantity of a normal commodity affected by an increase in an income of the buyers? Explain with the help of a diagram. (Delhi 2006)**

Ans. When an income of the consumers rises, demand curve for normal good would shift to the right. Supply curve remains unaffected. However, when consumers are willing to pay higher price for the same quantity (because of increase in their income), price would tend to rise. Consequently, quantity supplied by the producers would tend to rise.

Thus, increase in demand and the consequent shift in demand curve to the right impacts producer's decisions by way of extension of supply in response to increase in price. Finally, you would end up in a situation when an equilibrium price as well as an equilibrium quantity tend to rise, in response to an increase in demand.

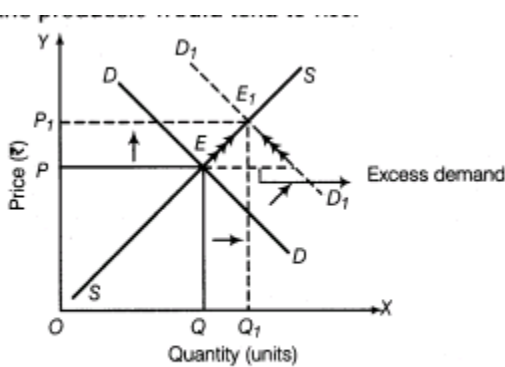


Diagram showing the effects on equilibrium price and quantity

OP = Initial equilibrium price

OQ = Initial equilibrium quantity

OP1 = New equilibrium price

OQ1 = New equilibrium quantity

**34. How will an increase in an income of the buyers of an inferior good, affect its equilibrium price and equilibrium quantity? Explain with the help of a diagram. (All India 2006)**

Ans. When income rises, demand for an inferior good falls. Hence, demand curve shifts to the left. Decrease in demand will disturb the market equilibrium.

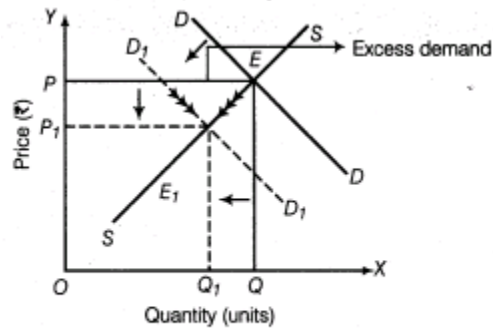


Diagram showing the effects on equilibrium price and quantity

The given equilibrium price and quantity are  $OP$  and  $OQ$  respectively. Increase in an income results a downward shift of demand curve ( $D_1D_1$ ). At price  $OP$  now, quantity demanded is  $OQ_1$  which is less than the quantity supplied ( $OQ$ ). This will result in competition among suppliers leading to a fall in price. The price now settle at an new equilibrium. It is lower than it was before. As well as a new equilibrium quantity is also less than an old equilibrium quantity.