CBSE Class–12 economics

Important Questions - Micro Economics 04

The Theory of the Firm under Perfect Competition

VERY SHORT ANSWER QUESTIONS (1 Mark)

Q1. Define perfect competition

Ans. Perfect competition is a market with large number of buyers and sellers, selling homogeneous product at same price.

Q2. Define Monopoly.

Ans. Monopoly is a market situation dominated by a single seller who has full control over the price.

Q3. Condition for producer equilibrium is

1) TR=TVC

2) MC=MR

3) None of above

4) TC=TSC

Ans. (2)

Q4. _____ is an ideal market?

1) Monopolistic competition

2) Oligopoly

3) Monopoly

4) Perfect competition

Ans. (4)

Q5. Under which market situation demand curve is linear and parallel to X-axis?

1) Monopoly

2) Perfect competition

3) Oligopoly

4) Monopolistic competition

Ans. (2)

Q6. If under perfect competition, the price lies below the average cost curve, the firm would?

1) Incur losses

2) Make abnormal profits

3) Make only normal profits

4) Profit cannot be determined

Ans. (1)

Q7. What are the conditions for the long run equilibrium of the competitive firm?

1) P=MR

2) LMC = LAC=P

3) SMC=SAC=LMC

4) All of the above

Ans. (2)

Q8. A firm can sell as much as it wants at the market price. The situation is related to?

1) Monopoly

2) Monopolistic competition

3) Perfect competition

4) Oligopoly

Ans. (3)

Q9. What is oligopoly?

Ans. Oligopoly is defined as a market structure in which there are few large sellers who sell either homogenous or differentiated goods.

Q10. What is product differentiation?

Ans. Product differentiation means close subsittues offered by different productes to show their output differs from other output available in the

market. Differntiation can be in colour, size packing, brand name etc. to attract buyers.

Q11. What is the shape of marginal revenue curve under monopoly?

Ans. Under monopoly market, marginal revenue cuve is downwards sloping from left to right and it lies below the average revenue curve.

Q12. What is break – even price?

Ans. In a perfectly competitive market, break-even price is the price at which a firm earn normal profit (Price = AC). In the long run, break-even price is that price where P = AR =MC.

Q13. Globalization has made Indian Market as?

1) Buyer market

2) Monopsony market

3) Seller market

4) Monopoly market

Ans. (1)

Q14. When AR=Rs. 10 and AC=Rs. 8, the firm makes?

1) Gross profit

2) Normal profit

3) Net profit

4) Supernormal profit

Ans. (4)

Q15. A competitive firm in the short run incurs losses. The firm continues production, if?

1) P>AVC

2) P=AVC

3) P>=AVC

4) P<AVC

Ans. (3)

SHORT ANSWER QUESTIONS (3/4 Marks)

Q16. Why is the demand curve facing monopolistically competitive firm likely to be very elastic?

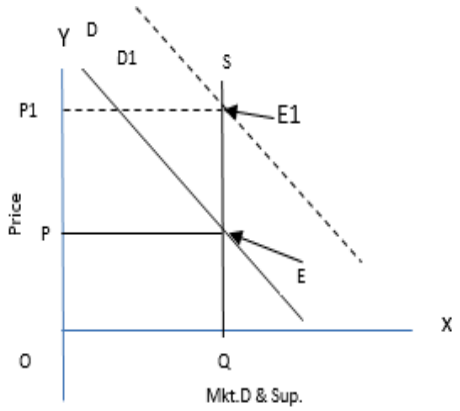
Ans. The reason for this is the product produced by monoplistically competitive firms are close substitue to each other. If the products are closer substitutes to each other thenthe ealsticity of dmenad is high which makes the firm's demand curve elastic.

Q17. Explain the implication of free entry and free exit of a firm in perfect competitive market?

Ans. If there is free entry and free exit of firms, then no firm can earn abnormal profit in the long run. That is firm earn zero abnormal profit. Each firm earns just normal profit.

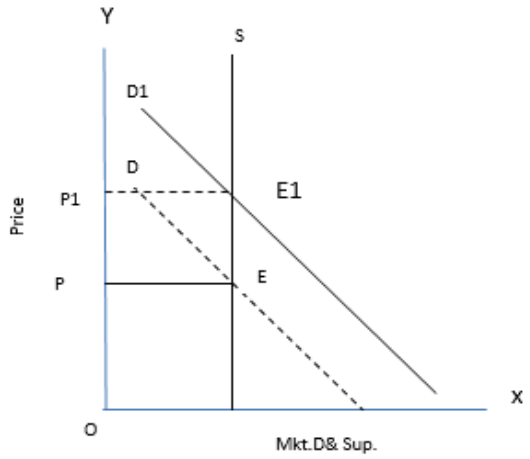
Q18. With the help of the diagram, show the effect on equilibrium price and quantity when supply is perfectly inelastic and demand increases & decreases.

Ans.



When supply is perfectly inelastic and demand increases. Demand curve shift to towards right. The new demand curve D_1 intersects the supply curve at point E_1.

Result : Price increases from OP to OP_1 and quantity demand remains unchanged.



In the above diagram demand curve shift left wards from D to D_1 Price falls from OP to OP_1 , but quantity remains same.

Q19. Which features of monopolistic competition are monopolistic in nature?

Ans. The features are as below:

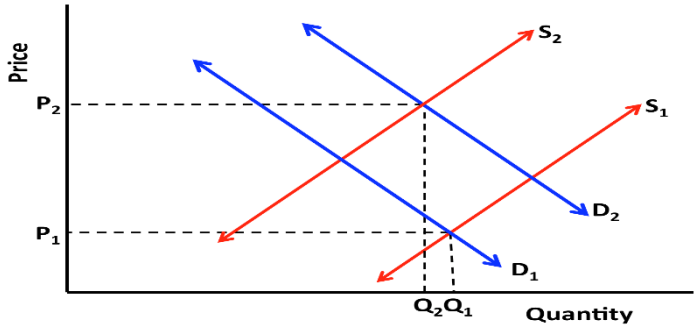
1) Product Differentiation

2) Control over price

3) Downward sloping demand curve

Q20. When will equilibrium price not change even if demand and supply increases?

Ans. When proportionate increase in demand is just equal to proportionate increase in supply, equilibrium price will not change. It can be shown in the following diagram.



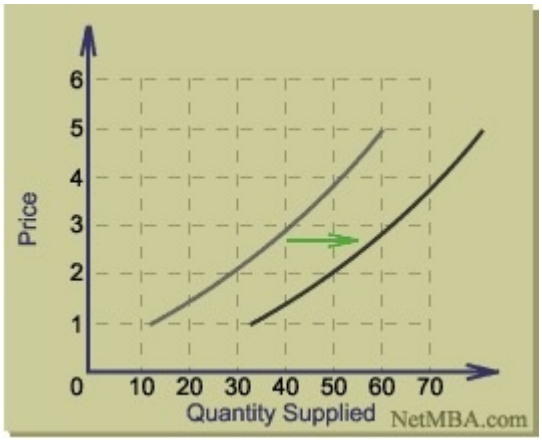
In the above illustrative diagram, increase in demans is just equal toincrease in supply. Demand curve shift form D to D1 and supply curve shift from S to S1 which intersect at point E. Thus equilibrium price remain unchanged at OP though equalibriumquantity increased from OQ to OQ1.

LONG ANSWER QUESTIONS (6 Marks)

Q21. Distinguish between change in supply and change in quantity supplied. State two factors responsible for change in supply.

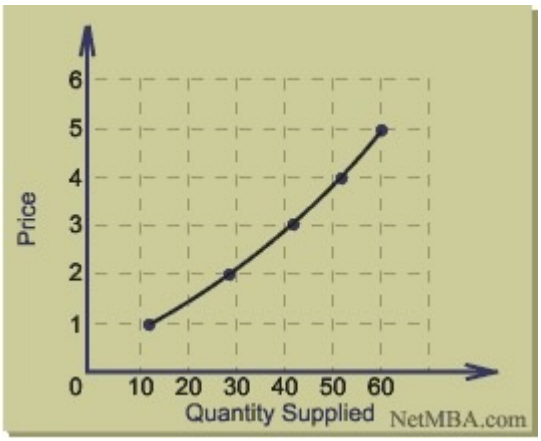
Ans. A change in supply is a change in the relationship between price and how much suppliers make, whereas a change in quantity supply is *any* change in the amount that gets bought and sold. Difference between change in supply and change in quantity supplied occurs due to changes in factors affecting supply. When price of the commodity supplied changes then there is change in quantity supplied. There is a movement along the same supply curve. When factors other than the price of the commodity changes, for say prices of related commodities, prices of inputs, technology etc. there is a change in supply. The supply curve shifts, either left or right.

Right below is the diagram of Change in supply:



Again, the supply curve is isolated. A change in supply means a shift in the entire curve. In this case, supply has expanded because it has shifted to the right. If we had a demand curve here we would observe a higher quantity supplied at a lower equilibrium price after the shift in supply.

A change in quantity supplied would be shown on a graph as such:



Note that this is the supply curve isolated on the graph. At each point on the curve there is a different quantity supplied. So, if we change from p = 1 to p = 2, there is a change in quantity supplied of 20 units since we have gone from q = 10 at p = 1 to q = 30 at p = 2.

So, changes in supply make producers able and willing to sell more (or less) at a given price. By contrast, changes in quantity supplied are caused by changes in price, causing producers to sell more (or less) at a different price.

Factors responsible for change in supply are as follows:

1. **Production costs: Input prices and resulting production costs are inversely related to supply. In other words, changes in input prices and production costs cause an opposite change in supply. For example, if wages or labour costs increase, the supply of the good decreases.**
2. **Technology: Technological improvements in production shift the supply curve. Specifically, improvements in technology increase supply — a rightward shift in the supply curve.**

3. **Prices of other goods: Price changes for other goods are a little complicated. First, in order to affect supply, producers must think the goods are related. What consumers think is irrelevant. For example, ranchers think beef and leather are related; they both come from a steer.**

Q22. Explain the conditions of a producer's equilibrium in terms of Marginal Cost and Marginal Revenue. Use diagram.

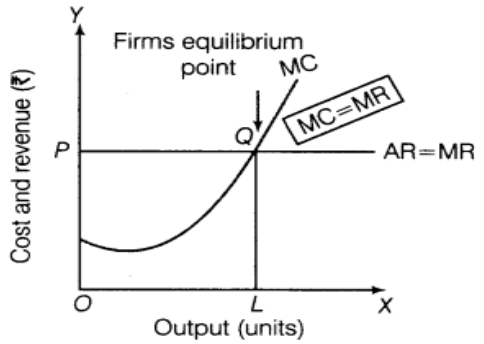
Ans. Producer's equilibrium refers to a situation, where a producer is producing that level of output, at which its profits are maximum. It is a situation of profit maximisation. Under MR-MC approach producer will only strike at equilibrium at that level of production where following conditions are satisfied. That is:-

1. **MR=MC**
2. **MC must rise after MR=Mc**

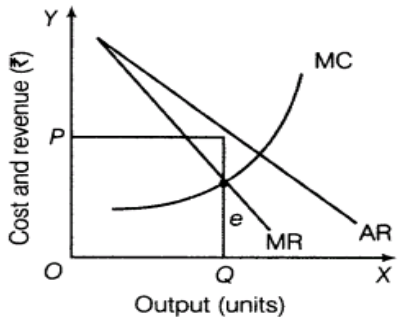
MC must be rising at the point of equilibrium or MC curve must cut MR curve from below.

MR is the addition to TR from the sale of one more unit of output and MC is the addition to TC for increasing the production by one unit. In order to maximise ; .profits, firms compare its MR with its MC

As long as the addition to revenue is greater than the addition to cost. It is profitable for a firm to continue producing more units of output.In the diagram, output is shown on the X-axis and revenue and cost on the Y-axis.The Marginal Cost (MC) curve is U-shaped and P ~ MR = AR, is a horizontal line parallel to X-axis.



Producer's equilibrium in terms of MR and MC approach (when price remains constant)



Producer's equilibrium in terms of MR and MC approach (when price fall with rise in outrput)

MR < MC When output level is more than O Q, MR < MC, which implies that firm is making a loss on its last unit of output. Hence, in order to maximise profit, a rational producer decreases output as long as MC > MR. Thus, the firm moves towards producing O Q units of output.

Q23. When a price of a commodity rises from Rs. 10 to Rs. 11 per unit, its quantity supplied rises by 100 units. Its price elasticity of supply is 2. Calculate its quantity supplied at the increased price.

Ans.

It is given in the question that:-

$$\mathbf{P = 10,\ P_1 = 11,\ thus\ \Delta P = 11\text{-}10 = 1}$$

$$\mathbf{Q = ?\quad \Delta Q = 100\ units,\ E_s = 2}$$

$$\textbf{Price elasticity of supply } (E_s) = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

$$2 = \frac{100}{1} \times \frac{10}{Q}$$

$$Q = \frac{100 \times 10}{2}$$

$$Q = 500$$

Therefore, quantity supplied at the increase price = Q+ΔQ=500+100=600 units.

Q24. A firm supplies 500 units of a good at a price of Rs. 5 per unit. The price elasticity of supply of good is 2. At what price will the firm supply 700 units?

Ans.

It is given in the question that:-

P = 5, ΔP=?

Q = 500 units, Q_1 = 700 units, thus ΔQ = 700-500 = 200 units,

$E_s = 2$

$$\text{Price elasticity of supply } (E_s) = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

$$2 = \frac{200}{\Delta P} \times \frac{5}{500}$$

$$\Delta P = \frac{200 \times 5}{500 \times 2}$$

$$\Delta P = 1$$

New price = P+ ΔP = 5+1=6

Therefore, firm will supply 700 units at Rs.6 per unit.