PERFECT COMPETITION.

Q.1) Define market price?

It is temporary price that is related to day to day market. It is settled by supply and demand within a day. It is of perishable commodities and is also called short period price.

Q.2) Define normal price.

It is also called long run price. It is settled by stable equilibrium of demand and supply. It is associated normally with durable commodities

Q.3) Write types of markets according to time period.

i- Day to day market.
ii- Short period market
iii- Long period market.

Q.4) What are types of market according to nature of competition.

i- Perfect competition
ii- Monopoly.
iii- Duopoly.
iv- Oligopoly.
v- Monopolistic Competition

Q.5) Define perfect competition.

A market where following five conditions/assumptions are fulfilled is known as perfect competition.

i- Homogeneity of the product.
ii- Large number of buyers and sellers.
iii- Free entry and exit.
iv- Elastic supply of factors of production
v- Perfect knowledge of market.

Q-6) Define monopoly.

Monopoly is a market where a single person or organization (firm) has fully control over production or sale of a good or service. There is no close substitute available in the market. e.g WAPDA or Pak Railway.

Q-7) What is monopolistic competition?

A such market when there are many sellers are competing with each other on the basis of product differentiation. Present market is a clear example of monopolistic competition.

Q-8) Write the conditions of firm's equilibrium.

There are two conditions of firm's equilibrium:

i- Marginal Cost (MC) = Marginal Revenue (MR)

ii- MC curve must intersect MR curve from below.

Q-9) How many types of firm's equilibrium under perfect competition in short run?

i- Super normal profit.

ii- Normal profit.

iii- Normal Loss.

iv- Abnormal Loss / Shut down point.

Q-10) Define shut down or close down point of a firm.

It is a situation of firm's equilibrium in which price is equal to firm's average variable cost. It means only variable costs are covered and firm's loss is equal to total fixed costs.

2. MARGINALISTIC APPROACH, WHERE MC = MR

Another approach relating to the equilibrium of a firm is the Marginalistic approach, which is based on marginal cost (MC) and marginal revenue (MR). Price is used as an explicit variable.

The firm is in equilibrium at the level of output at which the MC curve intersects the MR curve from below. So that

a) If MC > MR, P has not been maximized and it pays the firm to expands its output.
b) If MC < MR, P is reduced and it pays the firm to cut its production.
c) If MC = MR, π is maximized.

Conditions for Equilibrium

There are two conditions of a firm equilibrium which are as:

i) **Necessary Condition**
At equilibrium point MC = MR

ii) **Sufficient Condition**
At equilibrium point
Slope of MC > Slope of MR or MC curve cuts MR curve from below

The slope of MC is positive while the slope of MR is always zero in perfect competition. Therefore, 0<slope of MC which is positive. In short-run a firm in equilibrium does not necessarily mean that it makes excess profits. Therefore, there are various possible situations relating to its profits or losses because AR and AC of the firms determine profit or loss. There are two types of equilibrium regarding the time period.

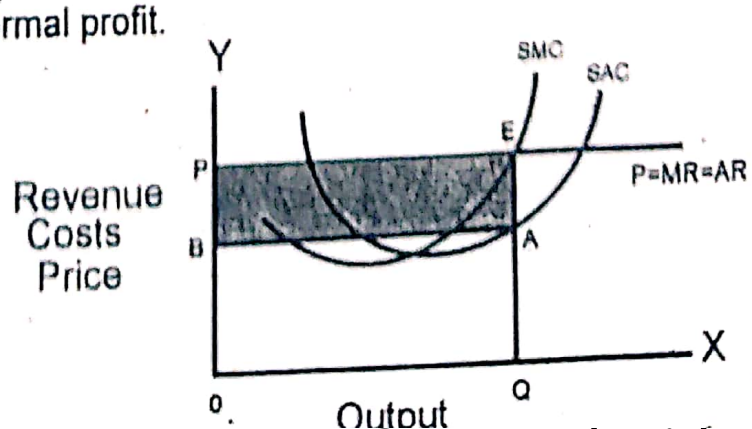
A. Short-run Equilibrium

These are the various possible situations of firm's equilibrium relating to its profits or losses in short run.

i) Abnormal profit

The firm is in equilibrium at point 'E' where SMC = MR and OQ, output is determined, as shown in the diagram. The SMC curve cuts the (MR=AR=P) curve at point E from below. A perpendicular is drawn on X-Axis from equilibrium point 'E' and SAC curve cuts output perpendicular at point A. Therefore OQ is the quantity sold. Price (P) is higher than the average cost, so the firm is obtaining abnormal profit.

$TR = P \times Q$
$TR = OP \times OQ$
$TR = OQEP$
$TC = AC \times Q$
$= AQ \times OQ$
$= OQAB$
$\pi = TR - TC$
$= OQEP - OQAB$
$= ABPE$

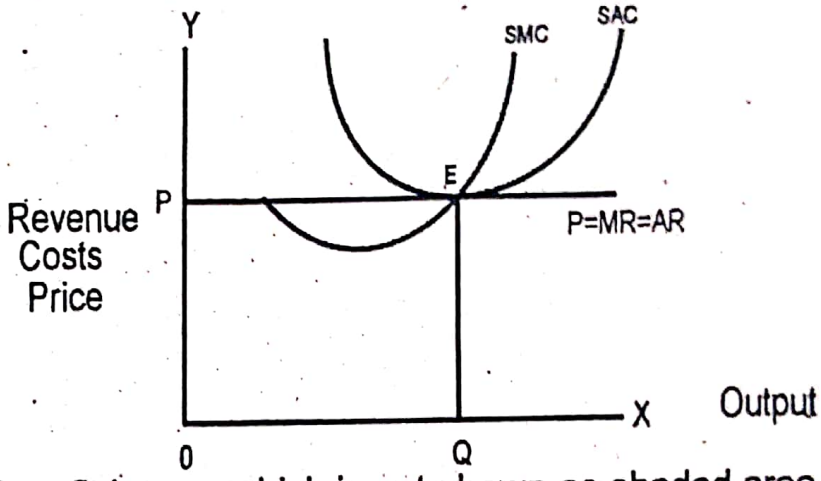


Therefore ABPE is an abnormal profit which is shown by the shaded area in the above diagram.

ii) Normal profit

The firm is in equilibrium at point E, where SMC curve cuts the MR curve from below. Therefore, OQ is an equilibrium output determined at OP price. The MR curve is tangent of SAC at point E. Therefore, firm is obtaining normal profit included in cost of production. So that, at point E, SMC = SAC = P = MR = AR

$TR = P \times Q$
$= OP \times OQ$
$= OQEP$
$TC = AC \times Q$
$= EQ \times OQ$
$= OQEP$
$\pi = TR - TC$
$= OQEP - OQEP$
$= 0$

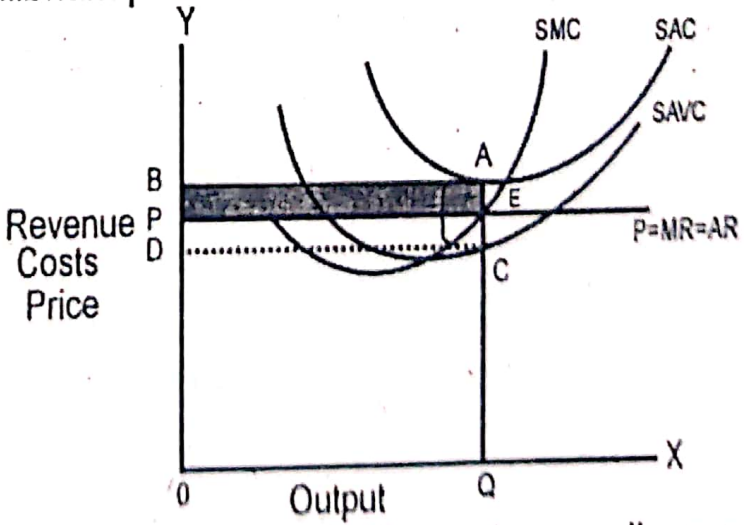


So that, the abnormal profit is zero which is not shown as shaded area in the diagram. Then the firm obtains the normal profit, which is included in SAC.

iii) Normal loss

The normal loss of a firm is explained in the following diagram, which is equal to a portion of average fixed cost.In the diagram, SMC = MR at point E. SAC curve is above the point E but SAVC cuts AQ at point C, which is below the equilibrium point E.

$TR = P \times Q$
$= OP \times OQ$
$= OQEP$
$TC = AC \times Q$
$= AQ \times OQ$
$= OQAB$
$\pi = TR - TC$
$= OQEP - OQAB$
$= -(ABPE)$

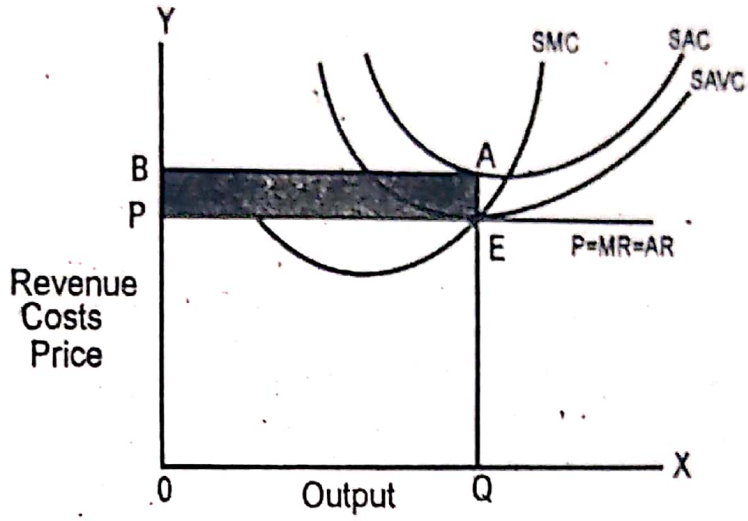


Therefore, the firm is covering average variable cost as well as a portion of AFC which is equal to a portion of AFC which is shown as shaded area in the figure.

iv) Shut-down

The firm is in equilibrium at point E Where SMC curve cuts the MR curve from below but the SATC curve is above the MR curve. as shown in the diagram.

$TR = P \times Q$
$= OP \times OQ$
$= OQEP$
$TC = AC \times Q$
$= AQ \times OQ$
$= OQAB$
$\pi = TR - TC$
$= OQEP - OQAB$
$= -(ABPE)$



So that at equilibrium output Q, the firm is bearing loss which is a loss equal to AFC because firm is covering its variable cost. Now point E is also called the shut - down point, if the price falls below OP, the firm does not covers its variable costs and is better off if it closes down It is equal to AFC as shown in the shaded area of the diagram.

B: Long-run Equilibrium

Long-run is a period in which fixed costs of the firm also become variable costs. The firm can adjust its plant so as to produce at the minimum point of its long-run average cost curve and demand curve is tangent to the LAC as shown in the diagram. In the long-run the firm will be earning normal profits which are in LAC.

At pint E, $LMC = LAC = P = MR$

The plant is working at its optimal capacity that is the minimum of LAC which touches the MR curve or demand curve of a firm. From the diagram the normal profit of a firm is calculated as,

$TR = P \times Q$
$= OP \times OQ$
$= OQEP$
$TC = AC \times Q$
$= EQ \times OQ$
$= OQEP$
$\pi = TR - TC$
$= OQEP - OQEP$
$= 0$