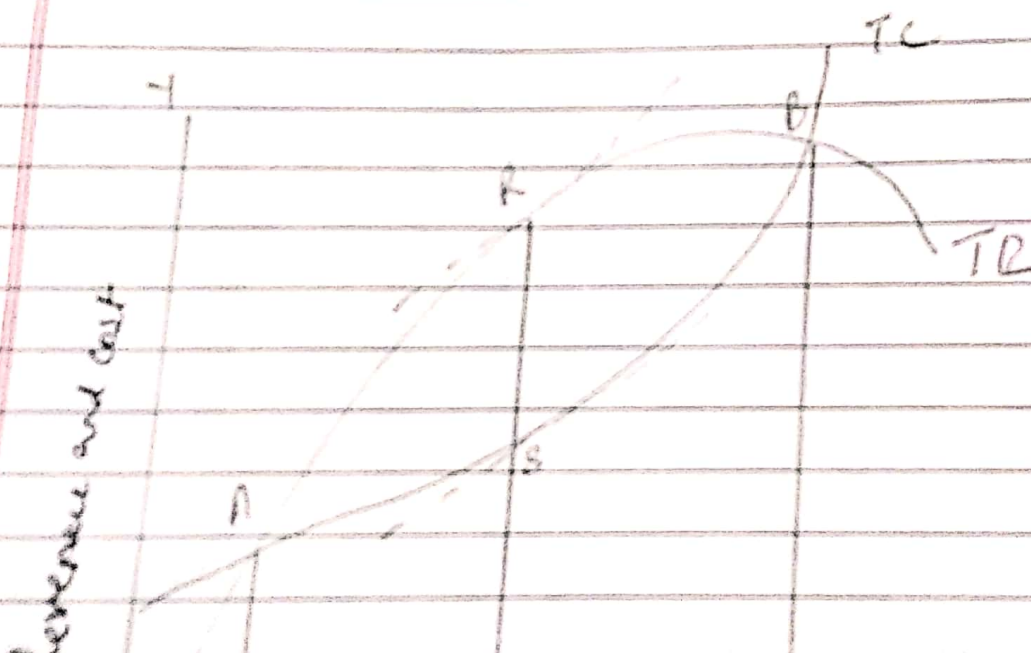


Short run price and output decisions of a monopoly firm or (Short run monopoly equilibrium)

The monopoly firm is said to be in equilibrium when it has no tendency either to expand or contract output. The aim of the monopoly firm is to secure maximum profit. The short run monopoly equilibrium is determined when the firm secures maximum profit.

Short run monopoly equilibrium can be explained through two approaches

- (1) Total Revenue - total cost approach.
- (2) Marginal revenue - marginal cost approach.
- (3) Total Revenue - total cost approach.



The monopoly equilibrium is determined at that level of output where the vertical distance between total revenue (TR) and the total cost (TC) curve is maximum.

In the fig (1) - output is measured along the horizontal axis and the revenue and cost are measured along the vertical axis.

TR is the total revenue curve and TC is the total cost curve. The intersection point of 'A' and 'B'. These are the break-even points. At these points TR = TC. The profit is zero. As output is raised above OQ, since the vertical distance between TR and TC curves

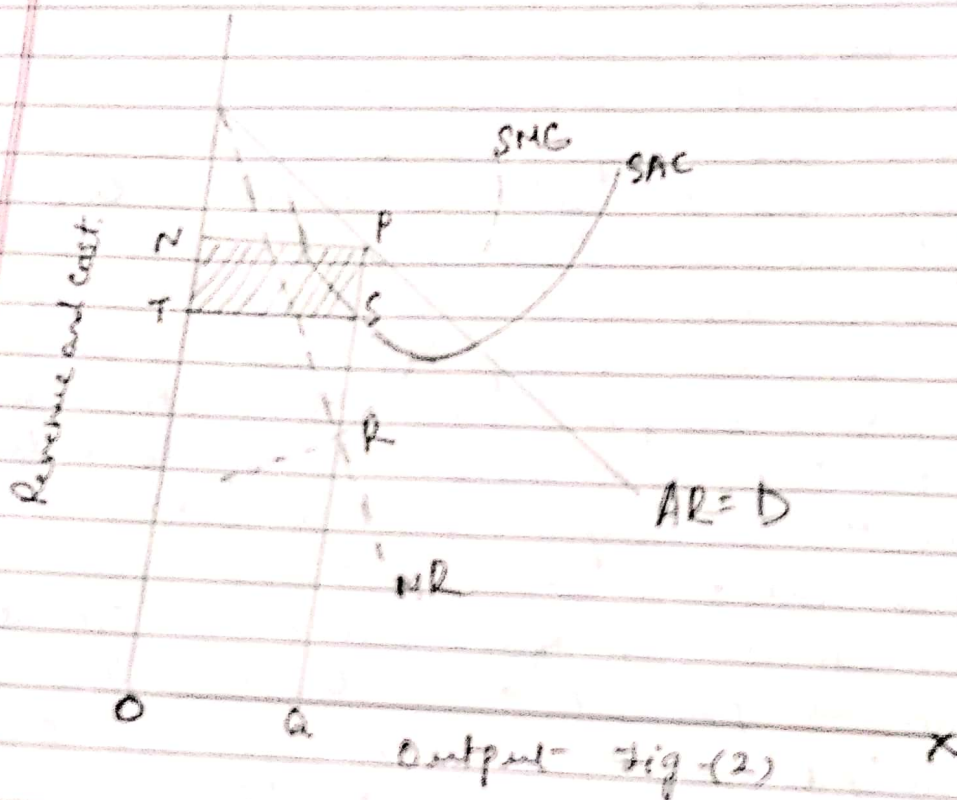
increases the monopoly firm will tend to expand output. At the point 'B' output is OQ and profits are zero. If the monopoly reduces output the vertical distance between TR and TC curve again increases. Consequently there is a tendency to reduce output. The vertical distance between TR and TC curve increases. This leads to reduction in output. When the output is OQ, the vertical distance between TR and TC curve is maximum i.e., profits are maximum. The tangent drawn at point R and is to TR and TC curve. At output OQ are exactly equal. At OQ the monopoly firm will have no tendency either to increase or reduce output. So the short-run monopoly equilibrium is determined at the output OQ where the profits are maximum. The monopoly price at this equilibrium output is measured by $\frac{TR}{\text{Output}} = \frac{OR}{OQ}$.

Marginal Revenue - Marginal Cost Approach

According to this approach the monopoly equilibrium is determined when

- ✓ (1) $MR = MC$
- ✓ (2) MC curve cuts MR curve from below

This can be explained by the fig below.

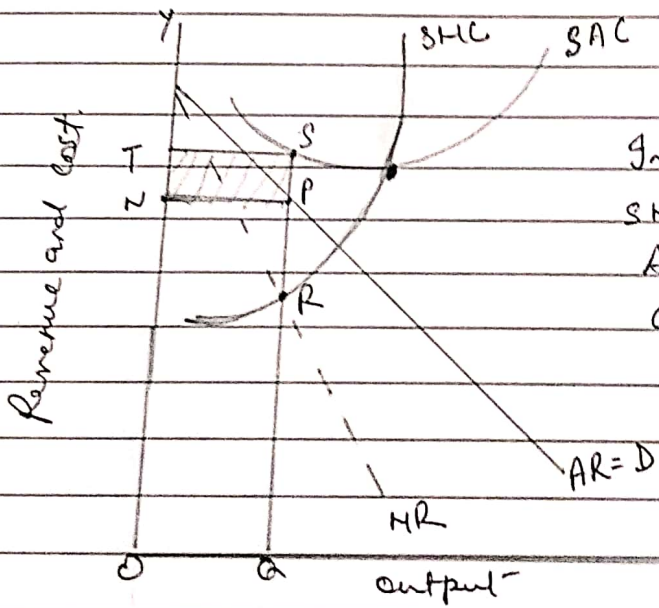


In the fig above AR is the average revenue curve or demand curve which slopes downwards because the producer can sell more quantity only if he reduces prices. Corresponding to AR, MR is the marginal revenue curve which slopes downward from left to right and lies below AR curve. SAC and SMC are the Short Run Average cost and marginal cost respectively.

The conditions of equilibrium are satisfied at 'R' where the average cost MR curve from below. The equilibrium output is OQ and price is PA. The total revenue is OAPN and the total cost is OAST. The amount of excess profit of the monopolist is $OAPN - OAST = NPST$. It is shown by the shaded area.

The monopolist firm makes excess profit in the short period:-

This notion that a monopoly firm makes excess profit in the short run is not always true. At times it faces losses also. The monopoly firm has control over supply but it does not have control over demand. In the conditions of depression there may be sharp fall in demand where the firm will be in losses in the short run. This is explained with the fig. below.



In the fig SAC and SMC are the short run Average cost and marginal cost respectively. If there is a decrease in demand the average revenue curve is AR and

Fig (3)

The corresponding marginal Revenue is MR. The equilibrium is at point 'R'. The equilibrium output is OQ and price is PA. The total revenue is OAPN falls short of cost OAST and the amount of loss is NPST.