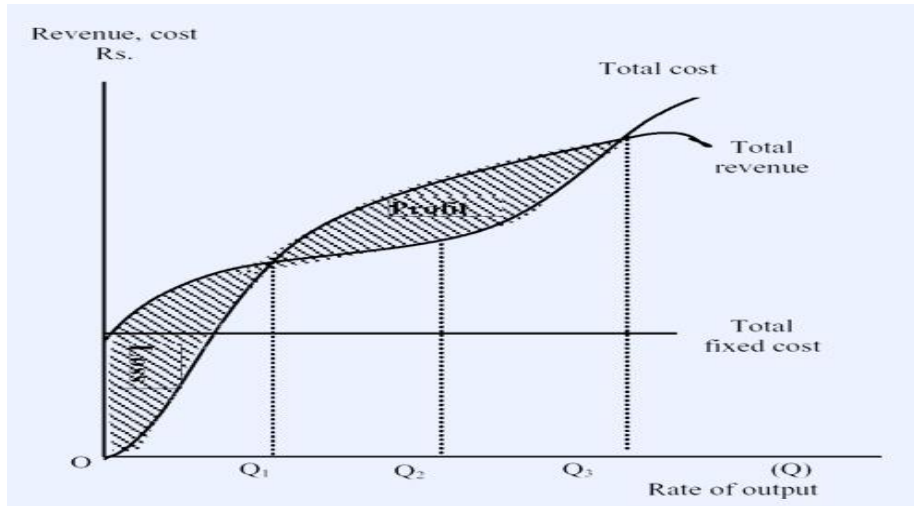


BREAK EVEN ANALYSIS: Break-even analysis is a very useful and relatively simple tool for managerial decision making. It can be used for dealing with unknown variables like demand. By specifying the levels of known variables, such as cost or profit, a required or minimum level can be found for the unknown variable. The revenue-output and cost output functions form the basis of break even analysis (Ref figure). Total revenue is the product of the number of units sold and the price per unit. If the firm is able to sell more units by reducing the price, the total revenue (TR) curve will be concave. The total cost (TC) function is a short run function, which shows the relationship between costs and output for a production process in which one or more of the factors of production are fixed. Short run cost comprises of both fixed and variable cost components



Merits of Break-even Analysis:

- It is an inexpensive method.
- It helps the managers to decide whether it's worthwhile to go in for amore intensive (a costly) analysis.
- It helps in designing product specifications as each design has its own implications for cost.
- It serves as a substitute for estimating the unknown factors that may arise in the future. By deciding that operating profit must at least be zero i.e. the break-even point a fair demand can be estimated.

Demerits of Break-even Analysis

- In break even analysis, it is assumed that the selling price and the variable costs per unit are known for each level of production. However, in practice these are not known. Thus, the relevance of break even analysis depends upon the degree of accuracy in determining the costs of production.
- It does not permit a proper evaluation of cash flows.It is generally accepted in basic financial theory that the value of a proposed project's anticipated cash flows must be considered toarrive at sound decisions. If the discounted value of the cash flows exceeds the required investment outlay in cash, then the project is acceptable.

Quantity required to break even (Qb) = Fixed cost/P – AVC

Total revenue at which the break-even is equal to the product price and the break even quantity.

