

Isoquants

Isoquant curve is called production indifference curve since it is an extension of indifference curve analysis from the theory of consumption to the theory of production. An isoquant shows that if the firm have ability to substitute between the two different inputs (labour and machines) in order to produce the same level of output

If the distance between isoquants increases (curve shifting upward) output increases. Example $q = 1000$ to $q = 1500$ shift in the curve shows increase in the quantity produced where $q =$ quantity produced.

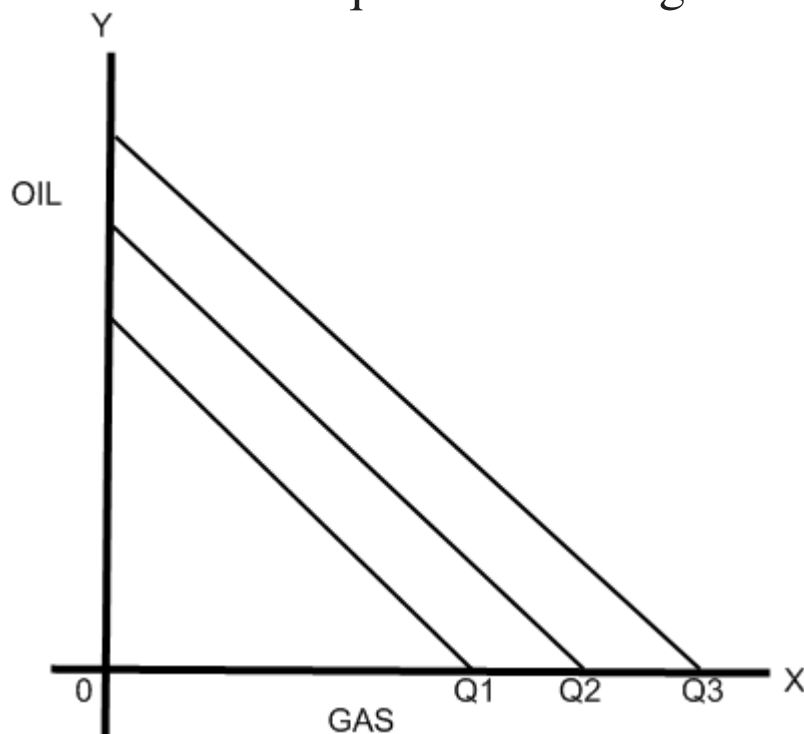
By the isoquant curve we came to know that if we want to produce certain quantity of good ($q=1000$) ie 1000 goods, we can employ more labour and we can use less machinery. In the same way for the same output that is ($q=1000$) we can use more number of machinery and we can employ less number of labour in the firm for production of same quantity. Here according to the budget and the financial position of the firm the producer can switch between the alternative production systems.

Eg: for producing 1000 goods we can use 60 machines and 20 labours. OR we can use 20 machines and 60 labours for same production.

Linear isoquants

This linear isoquant is drawn if there is a perfect substitutability in the inputs of production. For example

Power plant equipped to burn either oil or gas, various amounts of electric power can be produced by burning gas only or oil only. Gas and oil are perfect substitutes here. Hence isoquants are straight lines.



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