

lec-4

Theory of Utility

Utility means satisfaction

Why is discussion of Utility is important in Economics? \rightarrow Utility measurement is the primary step for dd creation.

Measurement of Utility

Cardinal

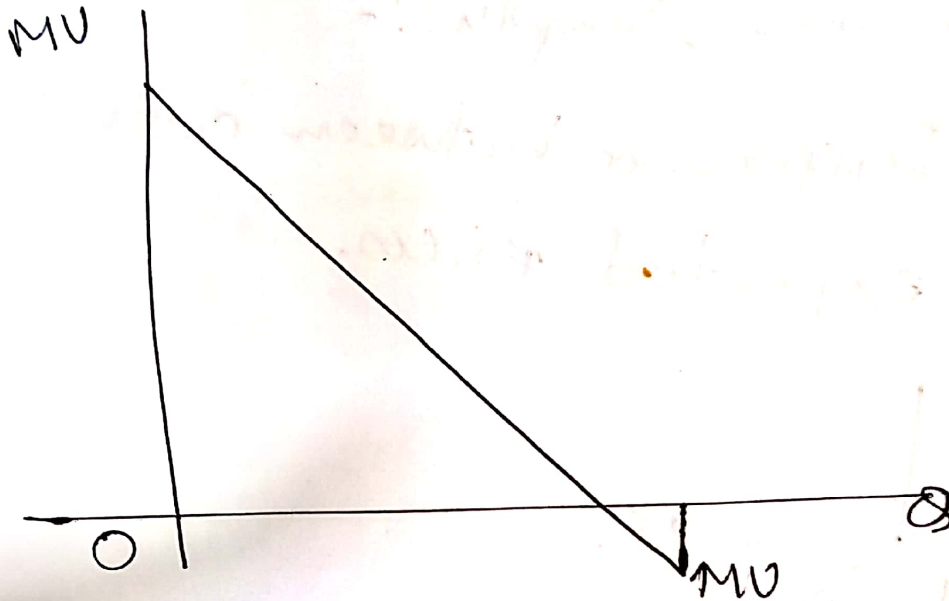
Ordinal

\Downarrow
Unit = money

\Downarrow
Tools $\left\{ \begin{array}{l} 1. \text{ Total Utility (TU)} \\ 2. \text{ Marginal " (MU)} \end{array} \right.$

Units of Production	TU	MU
0	0	0
1 st	4	4
2 nd	7	3
3 rd	9	2
4 th	10	1
5 th	10	0
6 th	8	-2

Graphically

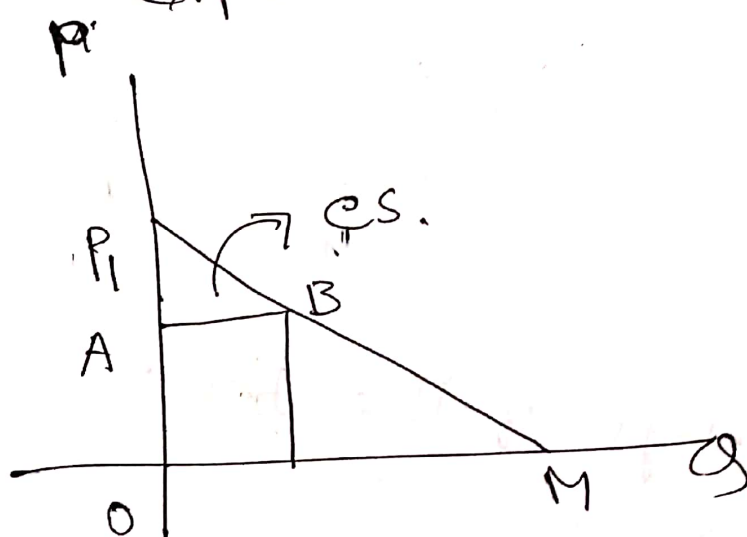


Shortcomings of the law:

- 1) Suitable time:
- 2) Suitable units:
- 3) Change of taste:
- 4) Collection:
- 5) Luxury goods:
- 6) MU of money is never less.

Consumer Surplus:-

Difference between actual and expected prices.



Given, Mathematically:

$$CS = \int_0^{Q_0} f_1(Q_1) dQ - P_0 Q_0$$

Given, $P_d = (Q-1)^2$ where $P_0 = 4$
 $Q_0 = 6$

Find CS.

$$CS = \int_0^{Q_0} f_1(Q_1) dQ - P_0 Q_0$$

$$= \int_0^6 (Q-1)^2 dQ - P_0 Q_0 = 18.$$