



Law of Diminishing Marginal Utility

The logo of the Punjab University of Agriculture, Peshawar (PUACP) is located in the upper left background. It features a circular emblem with a book and a torch, surrounded by the university's name in Urdu and English. The text "PUACP" is visible at the bottom of the emblem.

Definition

“If other things do not change and a consumer increases the use of a commodity, the utility of every new unit (MU) of the commodity will be less than the utility of the previous unit”

Table

TU increases at a decreasing rate, MU falls

When TU becomes Maximum, MU becomes Zero,
Point of saturation

When TU falls, MU becomes negative

| Apples | MU | TU |
|--------|----|----|
| 1 | 10 | 10 |
| 2 | 8 | 18 |
| 3 | 6 | 24 |
| 4 | 4 | 28 |
| 5 | 2 | 30 |
| 6 | 0 | 30 |
| 7 | -2 | 28 |

Diagram

TU increases at a decreasing rate, becomes maximum and then falls

MU successively falls

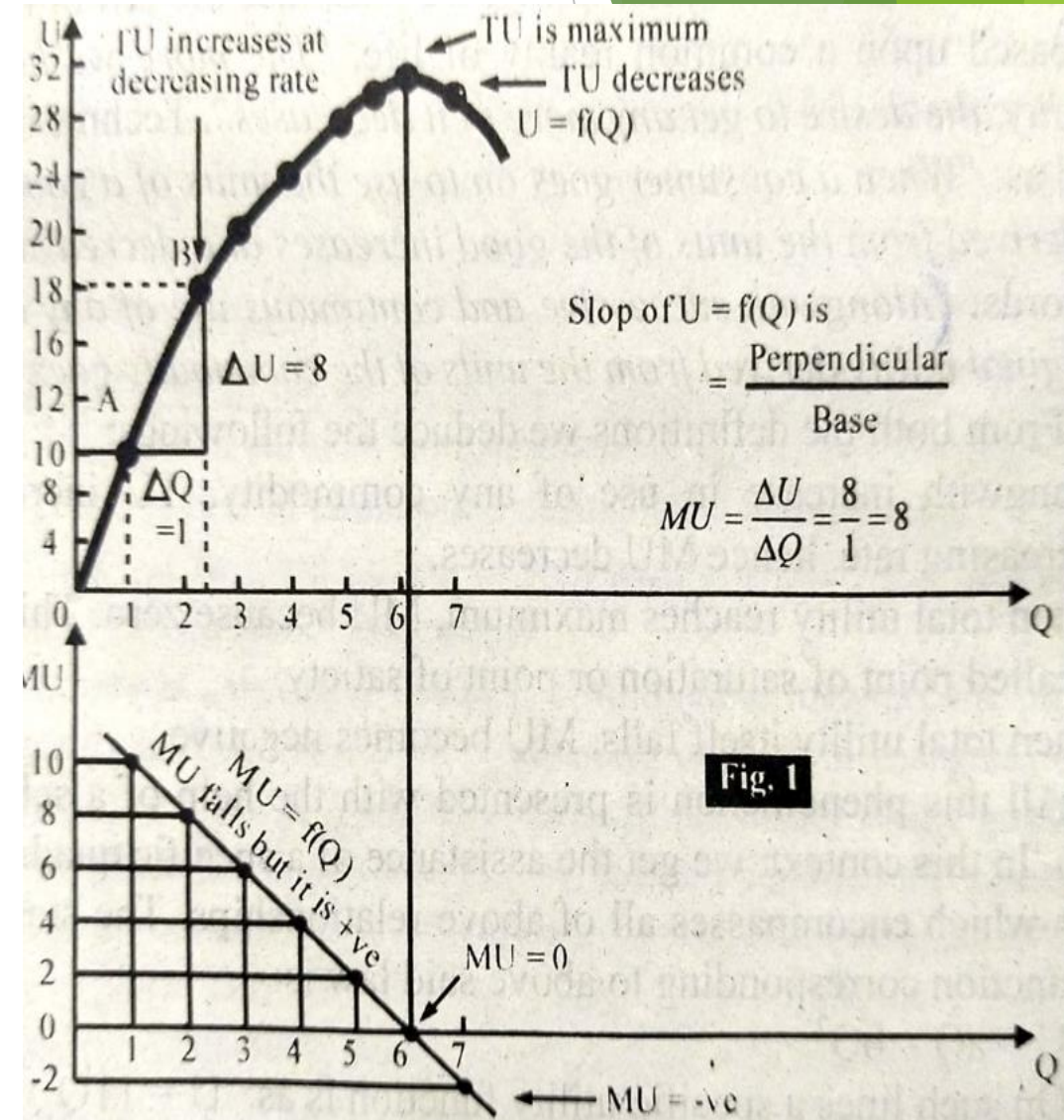
MU is +ve in the beginning, it becomes Zero and then becomes negative

MU = slope of TU curve

$$MU (A...B) = \frac{\text{Perpendicular}}{\text{Base}} = \frac{\Delta U}{\Delta Q} = \frac{8}{1} = 8$$

Relationship between TU and MU

- When TU increases...MU is positive
- When TU is maximum...MU is zero
- When TU is falling...MU is negative



Assumptions

- Continuous use of commodity
- All the units must be similar
- Suitable amount
- Taste of consumer must not change
- Income of the consumer should not change

