UTILIY THEORY

Two types of utility theory:

1. Law of Diminishing Marginal utility
2. Law of Equi Marginal utility

MARGINAL

The term marginal refers to the effects of a small change in consumption.

'Marginal considerations are considerations which concern a slight increase or reduction of the stock of anything which we possess.'

UTILITY

The consumption of various unit of commodity.

TOTAL UTILITY(TU)

The sum total of satisfaction which a consumer receives by consuming the various unity of the commodity.

(The more unit of a commodity he consumes, the greater will be his total utility)

MEASUREMENT OF UTILITY

- 1. INITIAL UTILITY
- 2. TOTAL UTILITY
- 3. MAGINAL UTILITY

RELATIONSHIP B/W TOTAL UTILITY & MARGINAL UTILITY

QUANTITY	TOTAL UTILITY	MARGINAL UTILITY	
1	10	10	INITIAL UTILITY
2	18	18-10=8	
3	24	24-18=6	POSITIVE
4	28	28-24=4	
5	30	30-28=2	
6	30	30-30=0	ZERO
7	28	28-30=-2	NEGATIVE

Marginal utility(MU)

The concept of marginal utility grew out of attempts by economists to explain the determination of price.

- Marginal utility can be defined as a measure of relative satisfaction gained or lost from an increase or decrease in the consumption of that good or service.
- Examples- A motor vehicle or A haircut

Definition

- The law of diminishing marginal utility describes a familiar and fundamental tendency of human behavior.
- "The law of diminishing marginal utility states that, "as a consumer consumes more and more units of a specific commodity, utility from the successive units goes on diminishing".

Assumptions of the Law:-

These assumptions are –

- Various units of goods are homogenous.
- There is no time gap between consumption of the different units.
- Consumer is rational

(So aims at maximization of utility of the product)

- Tastes, preferences, and fashion remain unchanged.
- Consumers posses perfect knowledge of the price in the market
- No price change
- It assumes Law of marginal diminishing Utility
- Utilities of different commodities are independent of each other

Law based upon three facts:

The law of diminishing utility is based upon three facts.

- Firstly

  The wants of a man are unlimited but single want can be satisfied. As a man gets more and more units of a commodity, the desire of his want for that good goes on falling. A point is reached when the consumer no longer wants any more units of that good,

- Secondly

  Different goods are not perfect substitutes for each other in the satisfaction of various particular wants.

- Thirdly

  There is no change in the tastes of the consumers.

Example

- **Explanation of the Law:**

Suppose a person is thirsty and the price of water is zero. He takes one glass of water which gives him great satisfaction. We can say the first glass of water has great utility for him.

He then takes second glass of water. The utility of the second glass of water is less than that of first glass of water. The utility declines because the edge of his thirst has been blunted to a great extent.

If he drinks third glass of water, the utility of the third glass will be less than that of second and so on. The utility goes on diminishing with the consumption of every successive glass of water till it drops down to zero.

It is the position of consumer's equilibrium or maximum satisfaction.

If the consumer is forced further to take a glass of water, it leads to disutility causing total utility-to decline. The marginal utility will become negative. A rational consumer will stop taking water at the point at which marginal utility becomes negative even if the good is free.

In short, when a good is free, a consumer increases consumption of a good so long its additional units provide him positive marginal utility.

The following table will make the law of diminishing marginal utility more clear.

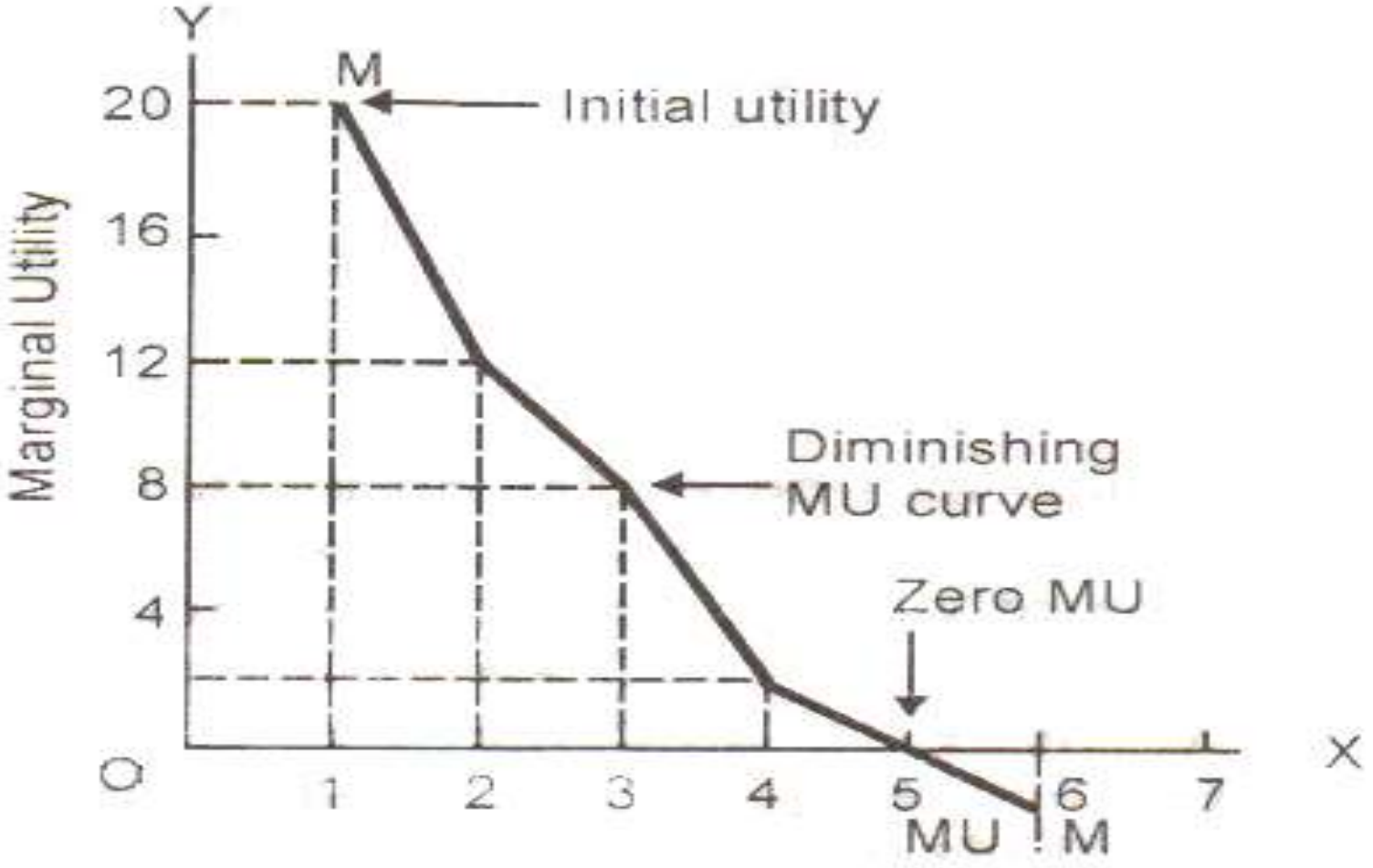
Units	Total Utility	Marginal Utility
1st glass	20	20
2nd glass	32	12
3rd glass	40	8
4th glass	42	2
5th glass	42	0
6th glass	39	–3

From the above table,

It is clear that in a given span of time :-

- The first glass of water to a thirsty man gives 20 units of utility.
- When he takes second glass of water, the marginal utility goes down to 12 units.
- When he consumes fifth glass of water, the marginal utility drops down to zero and if the consumption of water is forced further from this point, the utility changes into disutility (–3).
- Here it may be noted that the utility of the successive units consumed diminishes not because they are of inferior in quality than that of others. We assume that all the units of a commodity consumed are exactly alike.

The graph will make the law of diminishing marginal utility more clear.



In the above figure,

OX we measure units of a commodity consumed and OY is shown the marginal utility derived from them. The marginal utility of the first glass of water is called initial utility. It is equal to 20 units. The MU of the 5^{th} glass of water is zero. It is called the satiety point. The MU of the 6^{th} glass of water is negative –3.

Tie MU curve here lies below the OX axis. The utility curve MM falls from left down to the right showing that the marginal utility of the success units of glasses of water is falling.

- When a good is scarce and so priced the consumer will increase the consumption of a commodity up to the extent where his marginal utility for the good equals the price which he has to pay, i.e. Mu = P.

Limitations of the law

- Case of intoxicants.

(Consumption of liquor defies the law for a short period. The more a person drinks, the more he likes it)

- Application to money.

(The law equally holds good for money. It is true that more money the man has the more greedy)

- Rare collections.

(If there are only two diamonds in the world, the possession of 2nd diamond will push up the marginal utility.)

Example: collection of the rare stamps and coins

- Utility is subjective
- Cardinal measurement of utility is not possible
- Every commodity is not an independent commodity
- Marginal utility can't be estimated for all commodities
- Doesn't explain Giffen paradox

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End