Utility Analysis

EXERCISE [PAGE 16]

Exercise	Q 1.1	I Page 16
----------	-------	-----------

Complete the following statement by choosing the correct alternatives:
--

In the law of diminishing marginal utility, Alfred Marshall assumes that the marginal utility of money _____.

- 1. increases
- 2. remains constant
- 3. decreases
- 4. rises and then falls

Solution: In the law of diminishing marginal utility, Alfred Marshall assumes that the marginal utility of money <u>remains constant</u>.

Exercise | Q 1.2 | Page 16

Complete the following statement by choosing the correct alternatives:

As per the law of diminishing marginal utility, the measurement of utility is assumed to be _____.

- 1. ordinal
- 2. cardinal
- 3. both ordinal and cardinal
- 4. none of the above

Solution: As per the law of diminishing marginal utility, the measurement of utility is assumed to be **cardinal**.

Exercise | Q 1.3 | Page 16

Complete the following statement by choosing the correct alternatives:

MU of the commodity becomes negative when TU of a commodity is _____.

- 1. rising
- 2. constant
- 3. falling
- 4. zero

Solution: MU of the commodity becomes negative when TU of a commodity is falling.

Exercise | Q 1.4 | Page 16

Complete the following statement by choosing the correct alternatives:

Point of Satiety means _____

- 1. TU is rising and MU is falling
- 2. TU is falling and MU is negative
- 3. TU is maximum and MU is zero
- 4. MU is falling and TU is rising

Solution: Point of Satiety means TU is maximum and MU is zero.

Exercise | Q 1.5 | Page 16

Complete the following statement by choosing the correct alternatives:

When MU is falling, TU is _____.

- 1. rising
- 2. falling
- 3. not changing
- 4. maximum

Solution: When MU is falling, TU is rising.

Exercise | Q 2.1 | Page 16

Choose the correct option:

Column A	Column B
1) Time utility	a) Transport
2) Place utility	b) Blood bank
3) Service utility	c) Mobile phone
4) Knowledge utility	d) Doctor

Solution:

1-b, 2-a, 3-d, 4-c

Column A	Answer
1) Time utility	b) Blood bank
2) Place utility	a) Transport
3) Service utility	d) Doctor
4) Knowledge utility	c) Mobile phone

Exercise | Q 2.2 | Page 16

Choose the correct option:

Statement indicating consumer equilibrium:

- a) MU is greater than price
- b) MU is equal to price
- c) MU is less than price
- d) Price is less than one
- 1. a and b
- 2. a, b, c and d
- 3. a, b and c

4. only b

Solution: only b

Exercise | Q 3.1 | Page 16

Identify and explain the concept from the given illustration:

Salma purchased sweater for her father in winter season.

Solution: Relative concept

Explanation:

The utility is related to time and place. It varies from time to time and place to place.

For example:

woollen clothes have a greater utility in the winter.

Exercise | Q 3.2 | Page 16

Identify and explain the concept from the given illustration:

Nilesh purchased ornaments for his sister.

Solution: Subjective concept

Explanation:

It is a psychological concept. Utility differs from person to person. This is due to differences in taste, preferences, likes, dislikes, nature, habits, profession.

Exercise | Q 3.3 | Page 16

Identify and explain the concept from the given illustration:

Kavita consumed five units of oranges one after the other.

Solution: Total utility or continuity

Explanation:

Total utility (TU):

Total utility refers to the aggregate of utility derived by the consumer from all units of a commodity consumed. It is an aggregate of utilities from all successive units of a commodity consumed.

• continuity:

All units of commodity are consumed in quick succession without any lapse of time.

Exercise | Q 3.4 | Page 16

Identify and explain the concept from the given illustration:

Bhushan refused to eat fifth chapati after eating four chapatis.

Solution: Point of satiety

Explanation:

After reaching the point of satiety, a rational consumer should stop his consumption since the maximum limit of satisfaction is reached and there is no addition to total utility by any further increase in the stock of a commodity.

Exercise | Q 3.5 | Page 16

Identify and explain the concept from the given illustration:

Lalita satisfied her want of writing an essay by using pen and notebook.

Solution: Utility

Explanation:

The utility is the capacity of a commodity to satisfy human wants. In other words, utility is the want satisfying power of a good.

Pen and notebook have utility to satisfy lalita's want an essay. Thus the concept is utility.

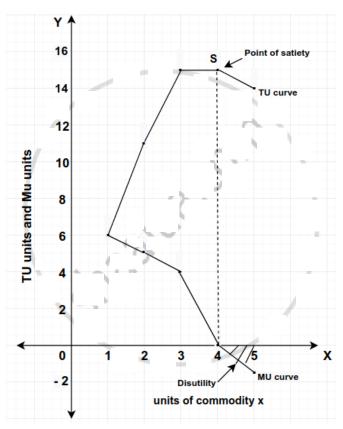
Exercise | Q 4.1 | Page 16

Observe the given table and answer the question:

Units of a commodity	TU units	MU units
1	6	6
2	11	5
3	15	4
4	15	0
5	14	-1

Draw total utility curve and marginal utility curve.

Solution:



Exercise | Q 4.2 | Page 16

Observe the given table and answer the question:

Unit of a commodity	TU unit	MU unit
1	6	6
2	11	5
3	15	4
4	15	0
5	14	-1

When total utility is maximum marginal utility is . .

Solution:

When total utility is maximum marginal utility is zero.

Exercise | Q 4.2 | Page 16

Observe the given table and answer the question:

Unit of a commodity	TU unit	MU unit
1	6	6
2	11	5
3	15	4
4	15	0
5	14	-1

When total utility falls, marginal utility becomes _____.

Solution:

When total utility falls, marginal utility becomes **negative**.

Exercise | Q 5 | Page 16

Answer in detail:

State and explain the law of Diminishing Marginal Utility and explain its exceptions.

Solution:

The law of diminishing marginal utility states that: "As a consumer consumes more and more units of a commodity at succession, the Marginal Utility derived from the consumption of each additional unit of the commodity falls." The law of diminishing marginal utility fails to operate in the following situations.

i. Hobbies - Hobbies such as jewellery collection by women, stamp collection, old coins, antiques etc. violate the law.

- **ii. Misers -** In case of misers, MU increases with the increase in the total amount of money available to him, violating the law.
- **iii. Drunkards -** The consumption of products like liquor and cigarettes violates the law. As people tend to consume more of these products, the thirst utility for additional units is greater. This is the reason for the violation.
- **iv. Power -** The law also fails in case of acquiring power. An individual feels more pleasure and derives higher level of utility, with a greater degree of power.
- v. Listening to music In the initial phase, listening to good music again and again violates this law. However; after a certain limit, listening to the same music becomes boring. As a result, the marginal utility tends to diminish. Thus, it is only in the initial period when listening to good music violates the law of diminishing marginal utility.
- vi. Reading More and more reading gives an individual more pleasure and a higher level of utility. This happens because, with more and more reading, an individual acquires a greater degree of knowledge and higher education.
- **vii. Money -** The law of diminishing marginal utility fails in case of earning money. Due to the greed of earning money, people tend to earn as much money as they can