

Chapter 2: Consumer's Behavior

Question: 1

Fill in the blank with appropriate alternatives given below :

_____ refers to want satisfying power of a commodity.

Options

- Usefulness
- Utility
- Satisfaction
- Happieness

Solution

Utility refers to want satisfying power of a commodity.

Explanation: Utility is the satisfaction that a consumer expects to derive from the consumption of a particular unit of a good. It is expressed in subjective terms as 'utils'. For example, we can say that utility derived from one cold drink is 4 utils.

Question: 2

Fill in the blank with appropriate alternatives given below:

Marginal utility diminishes, as consumption of commodity _____.

Options

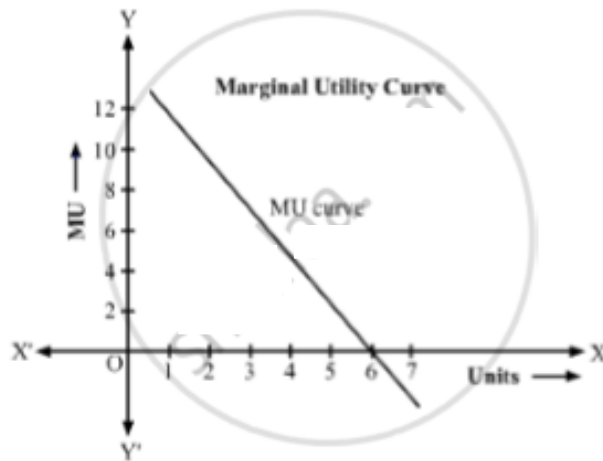
- increases
- decreases
- remains constant
- become zero

Solution

Marginal utility diminishes as consumption of commodity **increases**.

Explanation: When a consumer consumes more and more units of a commodity, the marginal utility derived from the consumption of each

additional unit of the commodity tends to fall. Further, the utility may become zero and even negative. This is known as the Law of Diminishing Utility.



Question: 3

Fill in the blank with appropriate alternatives given below:

_____ utility is the utility derived from the last unit of the commodity consumed.

Options

- Average
- Total
- Marginal
- Zero

Solution

Marginal utility is the utility derived from the last unit of the commodity consumed.

Explanation: Marginal utility is the addition to the total utility, due to the consumption of an additional unit of a commodity. In other words, it is the utility derived from the last unit of the commodity consumed.

Algebraically, $MU_n = TU_n - TU_{n-1}$

Question: 4

Fill in the blank with appropriate alternatives given below:

When MU is _____ TU decreases.

Options

- positive
- negative
- zero
- high

Solution

When MU is **negative**, TU decreases.

Explanation: Total Utility TU depends upon the Marginal Utility MU . Marginal utility depicts the addition to total utility when an additional unit of the commodity is consumed. A negative marginal utility suggests that additional to total utility is negative. Thus, total utility is falling.

Question: 5

Match the columns:

Column "A"	Column "B"
1. Marginal utility	a. Maximum TU
2. Point of satiety	b. Assumption of law of DMU
3. Form utility	c. Utility from last unit
4. Cardinal measurement	d. Exemption of law of DMU
5. Service utility	e. Furniture from wood
	f. Knowledge by teacher
	g. Minimum TU

Solution

The above columns can be correctly matched as:

Column "A"	Column "B"
1. Marginal utility	c. Utility from last unit
2. Point of satiety	a. Maximum TU
3. Form utility	e. Furniture from wood
4. Cardinal measurement	b. Assumption of law of DMU
5. Service utility	f. Knowledge by teacher

Explanations:

1. Marginal utility is the addition to the total utility, due to the consumption of an additional unit of a commodity. In other words, it can be defined as the utility derived from the last unit of the commodity

consumed.

Algebraically,

$$MU_n = TU_n - TU_{n-1}$$

2. The maximum point of the total utility curve is also known as the point of satiety. Beyond this point, total utility starts declining with consumption of every successive unit of consumption. It is only at this point of satiety that the consumer gets the maximum amount of satisfaction from the consumption of a commodity.

3. Form utility is the utility derived by changing the physical characteristics of a product. Since furniture is made by changing the original form of wood, the creation of furniture from wood is an example of form utility. This type of utility increases with the change in the structure or shape of the good.

4. One of the basic assumptions of the law of Diminishing Marginal Utility is that the utility is measurable in numbers. Without such an assumption it would have been difficult to explain and represent the exact behaviour of the marginal utility.

5. Service utility is the utility created by providing services to the people. Since a teacher, by teaching in a class, renders service to students, knowledge imparted by a teacher to the students is a form of service utility.

Question: 6

State the following statement is True or False:

Utility depends upon intensity of want.

Options

- True
- False

Solution

Utility depends upon intensity of want. - **True**

Explanation: The above statement is true. Utility is the satisfaction that a consumer expects to derive from the consumption of a particular unit of a good. It depends on the intensity of want of the particular unit of the good. The greater the intensity of want, the greater would be satisfaction that the consumer would derive from the consumption of that unit of the

commodity. That is, there is a strong and positive relationship between utility and the intensity of want.

Question: 7

State the following statement is True or False:

Utility is the basis of demand.

Options

- True
- False

Solution

Utility is the basis of demand. -**True**

Explanation: The above statement is true. Demand for a commodity is based on the utility derived from it. A person will demand a commodity only if it gives him/her some satisfaction or utility, otherwise, it will not be demanded. Therefore, we can say that utility forms the basis of demand for a commodity.

Question: 8

State the following statement is True or False:

MU and TU are equal at the initial stage.

Options

- True
- False

Solution

MU and TU are equal at the initial stage. -**True**

Explanation: Total utility TU refers to the aggregate utility, or the summation of utility, derived from the consumption of all the units of a commodity. Algebraically, $TU_n = MU_1 + MU_2 + MU_3 + \dots + MU_n = \sum MU$ At the initial stage i.e. at the first unit of consumption, Marginal Utility MU and Total Utility TU are equal. That is, $MU = TU$.

Number of Units Consumed of Commodity (X)	Total Utility (TU) (utils)	Marginal Utility (MU)

		$MU_n = TU_n - TU_{n-1}$ (utils)
1	50*	$50 - 0 = 50^*$
2	100	$100 - 50 = 50$
3	130	$130 - 100 = 30$

* TU and MU are equal at the initial phase.

Question: 9

State the following statement is True or False:

The law of diminishing marginal utility explains economic behaviour of a rational consumer.

Options

- True
- False

Solution

The law of diminishing marginal utility explains economic behaviour of a rational consumer. -**True**

Explanation: 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." Such a behaviour is a rational behaviour. As the consumer has more of a commodity, the intensity of want for additional units goes on decreasing, i.e. utility decreases. No rational consumer would want additional units of the commodity when the intensity of want is decreasing.

Question: 10

State the following statement is True or False:

Negative MU denotes more satisfaction.

Options

- True
- False

Solution

Negative MU denotes more satisfaction. - **False**

Explanation: The above statement is false. In fact, negative marginal utility denotes dissatisfaction. Negative marginal utility implies that the additional unit decreases the total utility derived from the consumption of the commodity.

Question: 11

Define or explain the following concept:
Possession utility

Solution

Possession utility refers to the utility derived from the possession or ownership of a good. In other words, it refers to the utility obtained by the consumers by purchasing a good from the seller.

Question: 12

Define or explain the following concept:
Knowledge utility

Solution

Knowledge utility is the utility derived from acquiring knowledge about a particular product. For instance, the utility derived from a mobile increases, if the consumer has complete knowledge about its functions.

Question: 13

Define or explain the following concept:
Total utility

Solution

Total utility refers to the aggregate utility, or the summation of utility, derived from the consumption of all the units of a commodity i.e. total utility is the sum of marginal utility. Algebraically,

$$TU_n = MU_1 + MU_2 + MU_3 + \dots + MU_n = \sum MU$$

Question: 14

Define or explain the following concept:
Marginal utility

Solution

Marginal utility refers to the addition to the total utility, due to the consumption of an additional unit of a commodity. MU is derived from TU as:

$$MU_n = TU_n - TU_{n-1}$$

Question: 15

Give reason or explain:

Utility is a subjective concept.

Solution

Utility is the satisfaction that a consumer expects to derive from the consumption of a particular good. It is a subjective concept as it varies from person to person and from time to time. That is, a consumer defines a utility for himself. For example, a commodity, say apples, provides different levels of satisfaction to different persons. Also, the same person can derive different levels of satisfaction from the consumption of apples, at different points of time for example, at the time of illness, the apples may provide a higher level of satisfaction to the consumer.

Question: 16

Give reason or explain:

Utility and happiness are different.

Solution

Utility and happiness are two different concepts. On one hand, utility is the want satisfying capacity of a commodity. On the other hand, happiness is a state of mind. It is an expression of the feeling of satisfaction. Moreover, utility is the anticipated level of satisfaction while happiness is actually realised by the consumer.

Question: 17

Give reason or explain:

Utility is ethically neutral.

Solution

Utility does not discriminate between commodities on the basis of their characteristics such as good or bad, moral or immoral, etc. It simply implies that a commodity that possesses utility may or may not be ethically good. It just satisfies the consumer even if it is not socially desirable. For instance, commodities such as cigarettes, drugs and alcohol may fulfill satisfaction of a particular consumer despite the fact that they are socially undesirable.

Question: 18

Give reason or explain:

Utility is a psychological term.

Solution

Utility is a psychological term as it is difficult to measure utility in terms of numbers. That is, it cannot be measured cardinally, though for simplicity, we assume it to be measured in terms of numbers. Also, it cannot be seen or touched, but can only be experienced. Utility can only be measured ordinaly. For instance, a hungry person, after having food, derives a utility.

Question: 19

Distinguish between:

Utility and usefulness

Solution

Utility	Usefulness
It is the want satisfying power of a commodity.	It is the benefit obtained from a commodity.
It signifies the level of satisfaction.	It indicates value in use of a commodity.
A commodity that possesses utility may not always be useful.	A commodity that is useful will always possess some utility.

Question: 20

Distinguish between:

Utility and satisfaction

Solution

tility	Satisfaction
It is the want satisfying power of a commodity.	It is the feeling of happiness derived by the consumer.
Utility is derived or obtained by a person.	Satisfaction is experienced by the person.
It is the anticipated level of satisfaction.	It is actually realised by the consumer.
It is the starting point of consumption.	It is the end result of consumption.

Question: 20

Distinguish between:
Total utility and Marginal Utility

Solution

Total Utility	Marginal Utility
It is the aggregate utility derived from the consumption of all the units of a commodity.	It is the addition to the total utility due to the consumption of an additional unit of a commodity.
$TU_n = MU_1 + MU_2 + MU_3 + \dots + MU_n = \Sigma MU$	$MU_n = TU_n - TU_{n-1}$
It is the utility derived from all the units consumed.	It is the utility derived from the last unit consumed.

Question: 21

Distinguish between:
Place utility and Time utility

Solution

Place utility	Time utility
It is the utility derived from the change in the place of utilisation.	It is the utility derived from the change in the time of utilisation.
It increases with the change in the place of utilisation.	It increases with the change in the time of utilisation.
It is created when a good is transferred from the place of production to the place of consumption.	It is created by storing goods so that they can be used when the demand arises.

Question: 22

Write short note on:
Equi-marginal utility

Solution

Equi-marginal utility implies that a consumer allocates his expenditure on various commodities in such a manner that the utility derived from each additional unit of the rupee spent on each of the commodities is equal. Algebraically, this is represented by the following equation:

$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y} = \dots \frac{MU_n}{P_n} = MU_m$$

Where MU_x , MU_y , MU_n are the marginal utilities derived from the goods X, Y and N, respectively; P_x , P_y , P_n are the prices of the goods X, Y and N, respectively; and MU_m is the marginal utility of money.

Question: 23

Write short note on:
Paradox of value

Solution

Paradox of value refers to the difference between the value in use of a commodity and the value in exchange. This paradox states that a commodity that has a high use value may have a low exchange value in terms of price. For instance, water, which has a high use value, commands a low price in the market, i.e. it has a low exchange value. On the other hand, diamonds that have a low use value have a very high exchange value. Thus, there is a disparity between the use value and exchange value.

Question: 24

Write short note on:
Form utility

Solution

Form utility is the utility that is derived by changing the physical properties of a product. As a good changes shape or structure, form utility increases. For instance, when a log of wood is changed into furniture, the utility derived from it increases. Similarly, when clay is changed into pottery, the utility increases.

Question: 25

Answer the following question:
Explain the relationship between TU and MU.

Solution

The following points highlight the relationship between TU (Total Utility) and MU (Marginal Utility).

i. As more and more units of the commodity are consumed, the marginal utility derived from the consumption of each additional unit of the commodity tends to fall. With the consumption of the successive units, the marginal utility becomes zero and, consequently, becomes negative.

ii. As long as MU, derived from the consumption of additional units of the commodity, is positive, TU continues to rise.

iii. When TU reaches the maximum point, MU becomes zero.

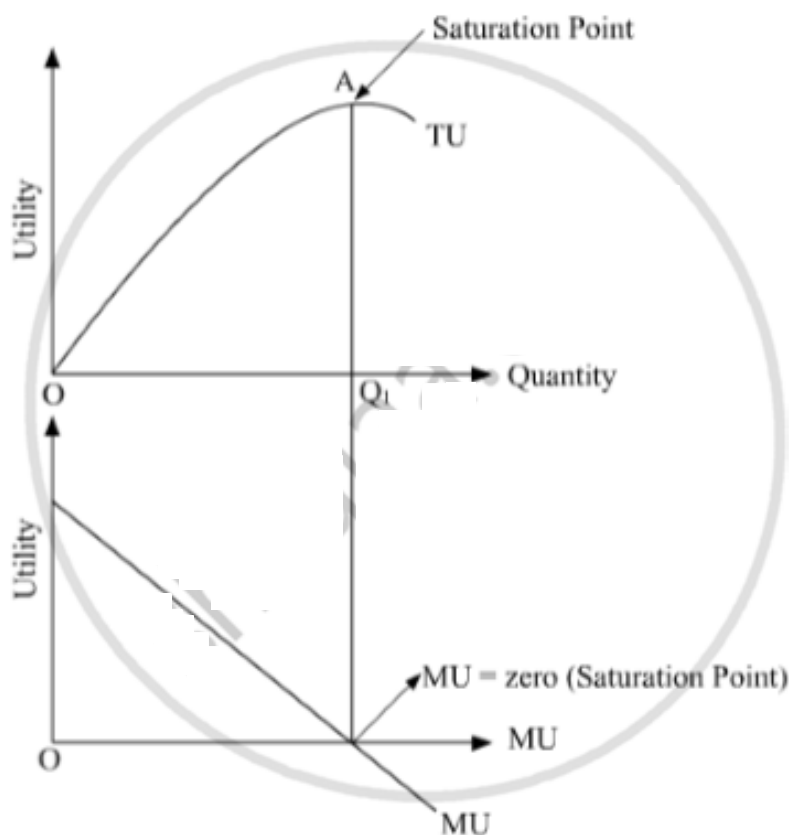
iv. When TU starts falling, MU becomes negative.

v. MU is derived from TU as: $MU_n = TU_n - TU_{n-1}$

vi. TU is defined as the summation of all the marginal utility values, given as:

$$TU_n = MU_1 + MU_2 + MU_3 + \dots + MU_n = \sum MU.$$

Diagrammatically, the relationship between the TU and MU can be expressed as follows.



Question: 26

Answer the following question:
What are the characteristics of utility?

Solution

The following are the characteristics of utility:

- i. **Relative concept** - Utility is a relative concept as it differs from time to time and from place to place. For instance, woollen clothes have more utility in winters and less in summers. Similarly, woollen clothes have more utility in Kashmir than in Jaipur.
- ii. **Subjective concept** - Utility refers to the satisfaction that a consumer expects to derive from the consumption of a particular good. It is a subjective concept as it varies from person to person and from time to time. A consumer himself defines the utility derived from the consumption of a good.
- iii. **Ethically neutral** - Utility is said to be ethically neutral as it does not discriminate between commodities on the basis of characteristics such as good, bad, moral, immoral etc. This implies that a commodity may provide utility even when it is socially undesirable.
- iv. **Utility and usefulness are different**- Utility and usefulness are two different concepts. Utility means the satisfaction derived from the consumption of a good. On the other hand, usefulness is the benefit obtained from the commodity.
- v. **Utility is not the same as pleasure**- Utility does not imply pleasure. That is, it is not necessary that a commodity that has utility will always provide pleasure or happiness to the consumer.
- vi. **Utility is different from satisfaction**- While utility refers to the want satisfying capacity of a commodity, satisfaction is an expression of the feeling of happiness. Moreover, utility is the anticipated level of satisfaction, while satisfaction is actually realised by the consumer.
- vii. **Utility is not easily measurable** - Utility is difficult to measure in terms of numbers cardinal measurement . It is a psychological concept, as it cannot be seen or touched, but can only be experienced.
- viii. **Depends upon the intensity of want** - This means that the utility derived from the consumption of a commodity depends upon the intensity of want for that commodity. The greater the intensity of want, the greater is the utility derived from the consumption of the commodity.
- ix. **It is the basis of demand**- Demand for a commodity is based on the utility derived from it. A person will demand a commodity only if it gives him/her some satisfaction or utility, otherwise, it will not be demanded.

Question: 27

State with reason whether you agree or disagree:
There are no real exceptions to the law of Diminishing Marginal Utility.

Solution

There are no real exceptions to the law of Diminishing Marginal Utility.
- **Disagree**

Explanation: The above statement is false. There are exceptions to the law of diminishing marginal utility. This law fails to operate in case of earning money, acquiring knowledge, consumption of liquor and cigarettes, hobbies such as jewellery collection by women, stamp collection, old coins, antiques, listening to good music and reading good poems again and again etc. In such cases, greater the consumption, greater is the utility derived.

Question: 28

State with reason whether you agree or disagree:
When MU is zero, TU diminishes.

Solution

When MU is zero, TU diminishes. - **Disagree**

Explanation: The above statement is incorrect as, when Marginal Utility MU is zero, Total Utility TU attains its maximum point i.e. the saturation point. On the other hand, when MU becomes negative, TU diminishes.

Question: 29

State with reason whether you agree or disagree:
Law of Diminishing Marginal utility is important in practice.

Solution

Law of Diminishing Marginal utility is important in practice. - **Agree**

Explanation: Yes, the law of diminishing marginal utility is important in practice. The following are some of the points that highlight the importance of the law. i. This law helps the consumers in budget planning. ii. It helps the producers in determining various policies such as the price and sales policies. iii. Keeping in consideration this law, a monopolist can easily follow the price discrimination policy. iv. Formulate and implement appropriate policy decisions.

Question: 30

Answer in detail :

State and explain the law of Diminishing Marginal Utility. Explain its assumptions.

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 is based on the following assumptions.

i. Reasonable size of units - A consumer consumes only standard units of the commodity such that the size of the commodity is neither too big nor too small. For example, consuming the whole of an apple, and not half of it.

ii. Continuous consumption - Consumption of the successive units of the commodity takes place continuously i.e. without any time lag.

iii. Homogeneous units - The law also assumes that the quality of the commodity remains the same throughout the process of consumption.

iv. Rational consumer - The law is applicable only if the consumer is a rational human being. That is, he should make rational consumption decisions.

v. Constancy - There is no change in the tastes, preferences, income or habits of the consumers.

vi. Cardinal measurement - The law only holds if the consumer is able to express its utility in terms of utils. That is, utility can be measured cardinally or numerically.

vii. Single use - The law of diminishing marginal utility assumes that a commodity is consumed to satisfy a single want and not multiple wants at the same time.

viii. Divisibility - This assumption implies that the commodities meant for consumption can be divided into small quantities. This division into small quantities makes its consumption faster.

ix. Constant marginal utility of money - Utility of income left after consumption is the same as the utility of total income before consumption.

Question: 31

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.