SYJC FEB' 19
ECONOMIC
SOLUTION

Date: 31st May, 2018

A1)

a) **Form utility: -** Form utility is created by changing the form or shape of goods. The process of manufacturing or processing creates form utility.

E.g.:

(i) When wood is changed to furniture, its utility increases.

(ii) When tea leaves are processed to tea powder, its utility increases.

b) **Service utility: -** Service utility is created when any serviced is provided by any person to other person or group of people.

E.g.:

(i) Professor taking lectures in a coaching class.

(ii) An advocate giving legal advice to his clients.

c) **Knowledge utility: -** The utility of a product increases when the user or buyer gains knowledge about such product. This utility is called as knowledge utility. Advertisements, user manuals, demonstrations, etc. help the user or buyer to acquire knowledge about the product.

E.g.:

(i) The utility of a washing machine will increase when the user known about its operations.

(ii) The utility of a computer game will increase when the player known all its control keys.

d) **Time utility: -** When utility of a commodity increases by storing it and making it available during the time of need, it is called time utility. Warehousing helps to create time utility.

E.g.:

(i) The utility of textbook will increase if they are launched exactly college reopens as there is need for Book.

(ii) The utility of crackers will increase if they are distributed during the period of Diwali.

A2)

a) **Features of utility**

The want satisfying power of a commodity is called "utility". "utility" is the capacity of a commodity to satisfy particular human want.

The Following are the features of utility:

(1) **Forms the basis for demand:** A person will demand a commodity only if it has utility for him. Thus, utility is the basis for demand.

For e.g.:

(i) An uneducated person will not demand a book as it has no utility for him. A student will demand a book as it has utility for him

(ii) A student pursing arts will not demand a calculator as it has no utility for him. A student Pursuing commerce will demand it.

(2) **Ethically or Moral Significance not considered:** The concept of utility does not consider whether the commodity satisfies a good want or a bad want. A commodity can have utility even if it satisfies a bad or unethical want. Utility does not consider any moral or ethical factors. In short, it is ethically neutral.

For e.g.: A gun has utility for a solider as well as a terrorist.

(3) Also Different from Usefulness : Usefulness is the benefit that is derived by consuming a commodity; whereas, utility is the want satisfy power of a commodity. A commodity having utility need not be useful.

For e.g.:

(i) Alcohol has utility to drunkard but it is not useful as it harms his health.

(ii) Hookah have utility for customers of a hookah bar but it is not useful as it harms their health.

(4) The Measurement of utility is not possible : Utility is a psychological concept. Therefore, measurement of utility is not possible in numbers.

For e.g.: It cannot be said that "Good Day" Biscuit has 5 utility and "Dark Fantasy" Biscuits has 10 utility. However, utility can be measured in relatives terms :

For e.g.: The utility of food is 'Higher' for a person who is hungry and 'lower' for a person who is not hungry.

(5) Utility is a Subjective Concept : Subjectivity means changing from one person to another. A product may give utility to one person but the same product may not give as much utility to another. Therefore, utility is a subjective concept as the utility of a commodity differs from person to person on account of differences in tastes, preference, age, habits, surroundings, occupation, etc.

(6) Relative Concept : Utility of a commodity changes from time to time and place to place.

For e.g.:

(i) Aquaguard (water purifier) has more utility in the rainy season compared to other seasons because the risk of water-borne diseases in high.

(ii) A room freshener has more utility in the bathroom as compared to the drawing room.

(7) Even Different from pleasure : A commodity may have utility but it is not necessary that is consumption will give pleasure to the consumer.

For e.g.: A textbook has utility for a student but he may not derive pleasure from reading it.

(8) Satisfaction and utility are Different : Utility is the satisfaction power of a commodity i.e. utility is considered before consumption satisfaction is the end result of consumption. Satisfaction is the happiness derived by the consumer after consuming a commodity.

(9) Utility Depends on Intensity of the Want : The utility if a commodity depends on the intensity of the want. If the want is intense And the commodity satisfies the want, then the utility of the commodity is higher.

For e.g.:

(i) The utility of notes is higher when exams are closer as the want for notes is intense.

(ii) The utility of the fan is high when the weather is warm outside as the want for the fan breeze is high.

A3)

a) Law of DMU has exceptions.

b) There is no relationship between TU and MU.

The relationship between total utility and marginal utility can be explained with the help of a Schedule and diagram.

No. of Chocolates	TU	MU
1	10	10
2	18	8(18-10)
3	22	4(22-18)
4	24	2(24-22)
5	24	0(24-24)
6	22	-2(22-24)

Observation :

From the above schedule, it can be observed that :

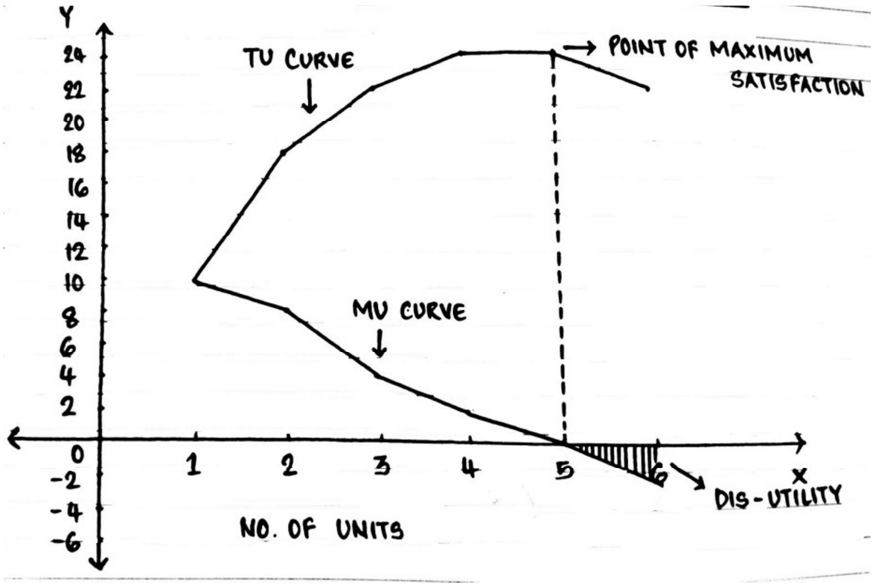
(1) After the first chocolate is consumed, the TU and MU are the same.

(2) As the consumer consumes more chocolates, the TU goes on increasing from 10 to 18 to 22 to 24 while the MU goes on decreasing from 10 to 8 to 4 to 2 TU increases at a diminishing rate.

(3) After consumption of the 5th chocolate, the consumer does not derive any marginal utility and the total utility also is the same as the previous unit. This is the point of maximum satisfaction or the point of satiety. When the TU is maximum, MU is zero.

(4) On consumption of the 6th unit, the total utility also reduces from 24 to 22 and the marginal utility is negative i.e. -2(disutility). Therefore, when total utility reduces, the marginal utility is negative. This is the stage where consumer would prefer not to consume the chocolate.

Relationship between TU and MU



Observations :

From the above diagram, it can be observed that:

(1) TU and MU curve begin at the same point.

(2) The TU curve slopes upwards from left to right.

(3) The MU curve slopes downwards from left to right.

(4) When TU curve moves upwards, the MU curve slopes downwards.

(5) When TU curve is at the maximum, point, the MU is zero (i.e. It touches the X-axis). This is the Point of satiety or point of maximum satisfaction.

(6) When TU curve moves downward, the MU curve goes below zero. This indicates dis-satisfaction Or disutility.

A4) Explain law of DMU with assumption.

Introduction :

The Law of DMU is based on two fundamental principles.

(i) The more we have the less we want of it.

(ii) Only a single want is satiable at a time.

The Law of DMU analyses consumer behavior with relation to consumption of a commodity. Mr. H.Gosses, a German Economist, was the first (in 1854) to explain this law and hence it is Also called as Gossen's First Law of Consumption. Prof.Alfred Marshall later on restated and propounded the law in this book 'Principles of Economics' in the year 1890.

Statement of the Law :

The Law of DMU states that, "Other things being equal, the additional benefit which a person Derives from the increases in the stock of a thing diminishes with every increase in the stock That he already has."

In simple words, as the consumers acquires or consumes more and more units of a commodity, the marginal utility derived fron every successive unit goes on declining.

Schedule:

The Law of DMU can be explained with the following utility schedule:

No. of Chocolates	MU
1st	10
2nd	8
3rd	4
4th	2
5th	0
6th	-2

Explanation to the Schedule :

(1) When the consumer consumes the first unit, the marginal utility (MU) is 10

(2) As consumption increases.MU keeps decreasing from 10 to 8 to 4 to 12. This proves that as the stock of the commodity increases, the MU goes on declining

(3) Further, when the 5th unit of the commodity, is consumed, the MU becomes zero. This is Is a point of maximum satisfaction on the point of satiety.

(4) When the consumer consumes the 6th unit, the MU becomes negative i.e. 2. This indicates negative utility or disutility.

Diagram :

The law of DMU can also be explain with the help of the following diagram:

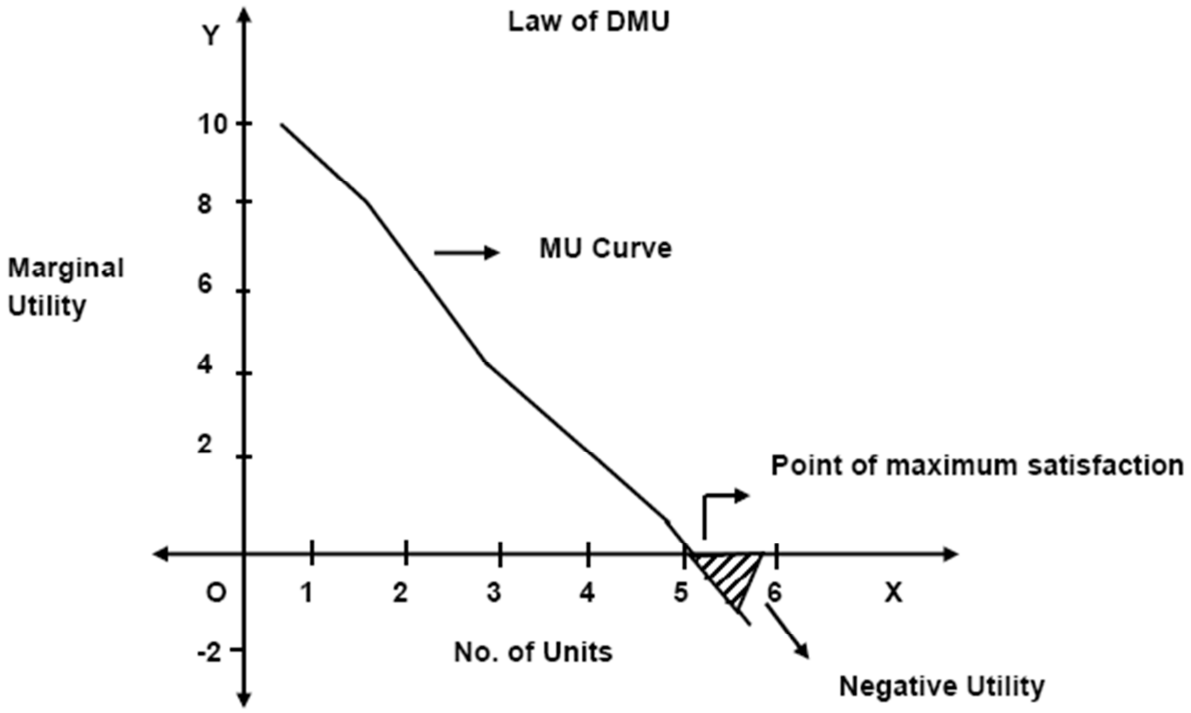
Explanation :

(1) In the diagram, X-axis represents no. of units consumed and Y-axis represents marginal utility.

(2) The MU curve is a downward sloping curve from left to right. It indicates that increase in Consumption of a commodity leads to decrease in the utility of that commodity.

(3) The point at which the MU curve intersects the x-axis is called the 'point of maximum satisfaction 'or the 'point of satiety'. At this point, MU = 0

(4) After further consumption, the MU curve slopes downward below the x-axis indicating negative Utility or dis-utility.



Assumptions:

The following are the assumptions to the Law:

(1) All Other factors are constant:

The law begins with the words "other things are being equal" i.e. the law assumes that factors affecting utility of the commodity to be constant.

E.g.: No change in price, income of consumer, habits, preference, etc.

(2) Size of the Commodity is Reasonable:

It is assumed that all the units of the commodity consumed are neither very small not very big. The size of the commodity is reasonable

E.g.: A thirsty person wills consumer a glass of water and not a jar of water. Similarly, he will not consume water in a teaspoon.

(3) Successive Consumption (Continuity):

The Law of DMU assumed that there is no time gap between consumption of units i.e. there is continuity in consumption.

E.g.: After one unit of the commodity is consumed, the consumer cannot consume the next unit of the commodity after 2-3 hours or the next day. The consumption should be back to back.

(4) Units consumed are Homogenous:

The Law of DMU assumed that all the units of the commodity being consumed are uniform. They are same or identical in terms of shape, size, colour, smell, etc.

E.g.: If the commodity being consumed is a Cadbury Dairy Milk, then all the other units consumed also should be Cadbury Dairy Milk only. The consumer cannot change to Dairy Milk Silk.

(5) Measurement of Utility is Possible Cardinally:

Utility is a psychological concept and therefore, it is not measureable cardinally. However, for explaining the Law of DMU, Prof, Alfred Marshall assumed that utility can be measured cardinally i.e.it can be expressed in numbers.

(6) Product or Commodity is divisible:

The Law of DMU assumed that the commodity consumed by the consumer can be divided into smaller parts so that it can be acquired (purchased) in small quantities and consumed quickly.

(7) The Marginal Utility of Money of Income Remains Constant:

It is assumed that the marginal utility of money remains constant throughout the period of consumption. If the MU of money changes due to increase or decrease in income, then it cannot yield correct measurement of the MU of the commodity. In short, the law will not hold good.

(8) Only Single Use:

It is assumed that the commodity is used to satisfy only a single want. If the commodity satisfies many wants, the law of DMU might not apply as the marginal utility will keep increasing. The consumer will keep using that commodity to satisfy his various wants

(9) Normal or Rational Behaviour:

In order for the Law of DMU to apply, it is assumed that the consumer it rational and behaves normally. The aim of the consumer should be to maximize his satisfaction.