

**Practical Importance of Law of LEMU:**

1. Consumption: A wise consumer acts on this law while arranging his expenditure and obtains maximum satisfaction.
2. Production: To obtain maximum net profit, he must substitute one factor of producing to another so as to have most economical combination.
3. Exchange: Exchange implies substitution of one thing to another and hence this law is important.
4. Distribution: It is on the principle of the marginal productivity that the share of each factor of production is determined.
5. Public finance: The Government is also guided by this law in public expenditure by allocation of revenue (money) in such a way that it will secure maximum welfare of the people.

**Consumer's Surplus – Meaning, Assumptions, Explanation, Difficulties in measuring Consumer's Surplus, Importance.**

CONSUMER'S SURPLUS

Importance:

The concept of consumers surplus is based on the theory of demand. It was introduced by marshal in 1895 in his publication 'principles of economics.'

According to marshal consumer's surplus is "the excess of the price which he would be willing to pay rather than go without the thing, over that which he actually does pay, is the economic measure of this surplus satisfaction". In brief, consumers surplus is the difference between what the consumer is willing to pay and what he actually pays.

**Assumptions:**

1. Marginal utility of money for the consumer is assumed to be the same through out the process of exchange.
2. Commodity does not have substitutes
3. In the market at the given point of time, there are no differences of income, tastes, preferences and fashions among the consumers and
4. Each commodity is considered independent of others.

**Explanation:**

To illustrate let us suppose that a consumer is willing to buy jamun if its price were Rs.1/-, 2 jamun if the price were 75 paise, 3 jamun at 50 paise and 4 at 25 paise. Suppose the market price is 25 paise per jamun. At this price the consumer will buy 4 jamun and enjoy a surplus of Rs.1.50 (0.75 + 0.50 + 0.25). This is shown in table.

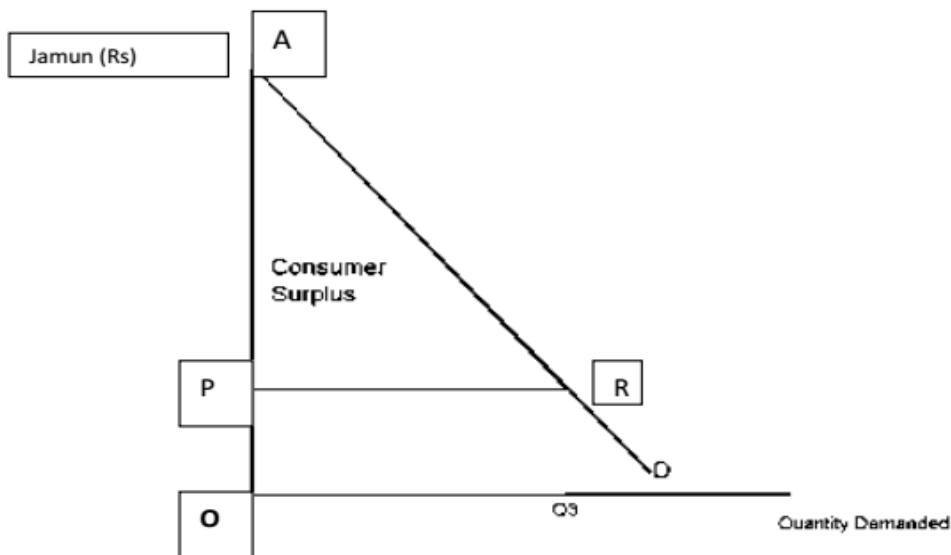
Units of Jamun	Marginal Utility (Price willing to pay)	Actual Price	Consumer Surplus
1	1.00	0.25	0.75
2.	0.75	0.25	0.50
3.	0.50	0.25	0.25
4.	0.25	0.25	--

Our hypothetical consumer is prepared to pay Rs.2.50/- (Rs.1.00 + 0.75 + 0.50 + 0.25) for four jamuns but actually pays Rs.1/- and therefore derives a surplus of Rs.1.50/- (Rs.2.50/- - Rs.1.00/-). It can also be expressed as

$$CS = \text{Total utility} - \text{Marginal Utility}$$

$$CS = TU - (\text{Price} \times \text{NO. Of units of the commodity})$$

Consumer's surplus is represented diagrammatically



Price per unit is OQ. At this price, the consumer will demand OQ quantity of commodity, he will get total satisfaction equal to the area OQRA, and thus gets a surplus satisfaction equal to PRA (OQRA - OQRP). Thus surplus satisfaction has been defined as consumer's surplus.

**Difficulties in measuring Consumer's Surplus:**

1. The cardinal measurement of utility is difficult because it is close to impossible for a consumer to say that the first unit of commodity gave him 10 units of satisfaction and the second unit of commodity gave him 5 units of satisfaction.
2. Marginal utility for the same commodity is different to different consumers. Marginal utility for a particular commodity varies from person to person depending upon their income, tastes and preferences.
3. Existences of substitutes: In the real world a number of substitutes for a commodity exist, thus making the work of measuring consumer's surplus a complicated task.
4. Marginal utility of money is not constant: Marshall based his concept of consumer's surplus on the simplifying assumption that the marginal utility of money is constant. As the consumer buys more and more units of a commodity x, the amount of money with him diminished, in this case, the marginal utility of money is bound to increase rather than remain constant.
5. Lack of awareness of different price: It is not possible for a consumer to be aware of the entire demand schedule.

**Importance of Consumers Surplus**

1. **Conjunctural Importance :** When the people enjoy larger consumer's surplus, it does not indicate that they are better off. Thus it serves as an index of economic betterment.
2. **Useful to the Monopolist :** The monopolist can freely raise the price of the goods if they bring in higher consumer's surplus, without any fear of foregoing the sales.
3. **Helps in Public Finance and Taxation :** More taxes can be imposed by the government to get more revenue, on those goods for which consumer's surplus is high

4. Helps to measure benefits from International Trade: International trade implies transaction of commodities across the frontiers. Generally, those commodities which happen to be cheaper in the foreign markets are imported thereby resulting in higher consumers surplus of satisfaction for the commodity.

**Demand – Meaning, Definition, Types of demand - income demand, price demand, cross demand- Demand Schedule, demand curve, Law of demand – contraction and extension, increase and decrease in demand**

## **DEMAND**

### Meaning of Demand

Demand in economics means a desire to possess a good supported by willingness and ability to pay for it. If you have a desire to buy a certain commodity, say, a tractor, but do not have the adequate means to pay for it, it will simply be a wish, a desire or a want and not demand. Demand is an effective desire, i.e., a desire which is backed by willingness and ability to pay for a commodity in order to obtain it. In the words, "Demand means the various quantities of a good that would be purchased per unit of time at different prices in a given market. There are thus three main characteristics of demand in economics.

- i. Willingness and ability to pay. Demand is the amount of a commodity for which a consumer has the willingness and also the ability to buy.
- ii. Demand is always at a price. If we talk of demand without reference to price, it will be meaningless. The consumer must know both the price and the commodity. He will then be able to tell the quantity demanded by him.
- iii. Demand is always per unit of time. The time may be a day, a week, a month, or a year.

Individual's Demand for a commodity:

The individual's demand for a commodity is the amount of a commodity which the consumer is willing to purchase at any given price over a specified period of time. The individual's demand for a commodity varies inversely with price *ceteris paribus*. As the price of a good rises, other things remaining the same, the quantity demanded decreases and as the price falls, the quantity demanded increases. Price ( $p$ ) is here an independent variable and quantity ( $q$ ) dependent variable.

The Market Demand for a Commodity:

The market demand for a commodity is obtained by adding up the total quantity demanded at various prices by all the individuals over a specified period of time in the market. It is described as the horizontal summation of the individuals' demand for a commodity at various possible prices in market.

In a market, there are a number of buyers for a commodity at each price. In order to avoid a lengthy addition process, we assume here that there are only four buyers for a commodity who purchase different amounts of the commodity at each price. The

horizontal summation of individuals' demand for a commodity will be the market demand for a commodity as is illustrated in the following schedule:

**Demand Schedule**

Demand schedule is a tabular representation of the quantity demanded of a commodity at various prices. For instance, there are four buyers of apples in the market, namely A, B, C and D.

## Demand schedule for apples

PRICE (Rs. per dozen)	Buyer A (demand in dozen)	Buyer B (demand in dozen)	Buyer C (demand in dozen)	Buyer D (demand in dozen)	Market Demand (dozens)
10	1	0	3	0	4
9	3	1	6	4	14
8	7	2	9	7	25
7	11	4	12	10	37
6	13	6	14	12	45

The demand by buyers A, B, C and D are individual demands. Total demand by the four buyers is market demand. Therefore, the total market demand is derived by summing up the quantity demanded of a commodity by all buyers at each price.

**Demand Curve**

Demand curve is a diagrammatic representation of demand schedule. It is a graphical representation of price- quantity relationship. Individual demand curve shows the highest price which an individual is willing to pay for different quantities of the commodity. While, each point on the market demand curve depicts the maximum quantity of the commodity which all consumers taken together would be willing to buy at each level of price, under given demand conditions.

**1) Derived demand.**

Derived demand refers to demand for goods which are needed for further production. It is the demand for producer's goods like industrial raw material, machine tools and equipments.

**2) Autonomous demand**

Autonomous demand is independent of the other product or main product. It's not linked or tie-up with the other goods or commodity.eg: food articles,clothes.

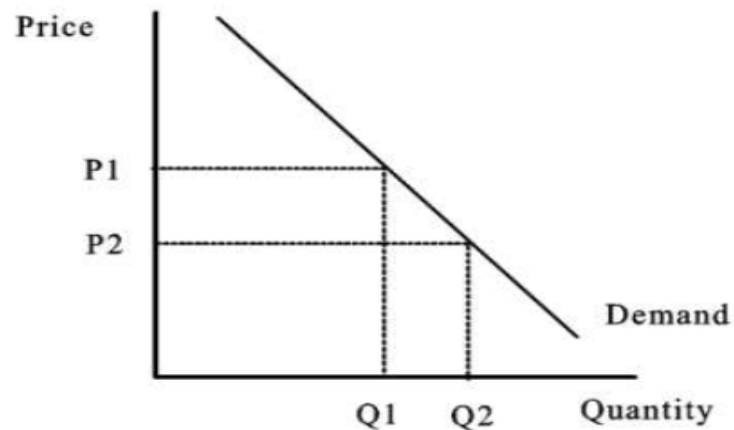
**Price Demand:** It refers to various quantities of a good or service that a consumer would be willing to purchase at all possible prices in a given market at a given point in time, *ceteris paribus*.

**Income Demand:** It refers to various quantities of a good or service that a consumer would be willing to purchase at different levels of income, *ceteris paribus*.

**Cross Demand :** It refers to various quantities of a good or service that a consumer would be willing to purchase not due to changes in the price of the commodity under consideration but due to changes in the price of related commodity. For example: Demand for tea is more not because price of tea has fallen but because price of coffee has risen. Thus demand for substitutes take the form of cross demand.

### **Law of Demand**

1. The law of demand states that as price increases (decreases) consumers will purchase less (more) of the specific commodity. Demand varies inversely with price.



As price falls from  $P_1$  to  $P_2$  the quantity demanded increases from  $Q_1$  to  $Q_2$ . This is a negative relation between price and quantity, hence the negative slope of the demand schedule; as predicted by the law of demand.

Demand curve has a negative slope, i.e, it slopes downwards from left to right depicting that with increase in price, quantity demanded falls and vice versa. The reasons for a downward sloping demand curve can be explained as follows-

1. **Income effect-** With the fall in price of a commodity, the purchasing power of consumer increases. Thus, he can buy same quantity of commodity with less money or he can purchase greater quantities of same commodity with same money. Similarly, if the price of a commodity rises, it is equivalent to decrease in income of the consumer as now he has to spend more for buying the same quantity as before. This change in purchasing power due to price change is known as income effect.

2. Substitution effect- When price of a commodity falls, it becomes relatively cheaper compared to other commodities whose prices have not changed. Thus, the consumer tend to consume more of the commodity whose price has fallen ,i.e, they tend to substitute that commodity for other commodities which have now become relatively dear.

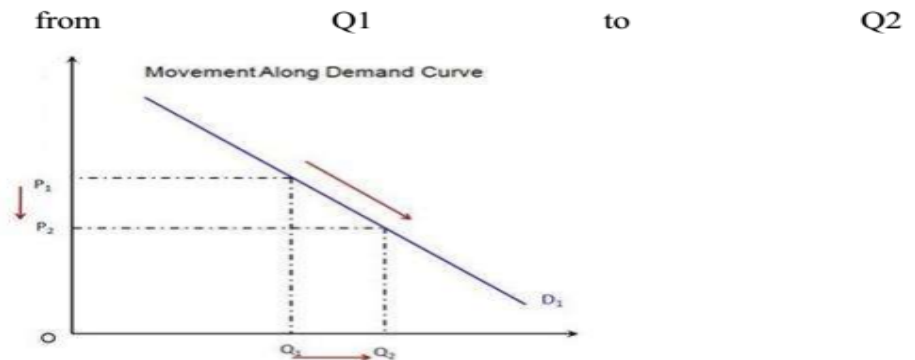
3. Law of diminishing marginal utility– It is the basic cause of the law of demand. The law of diminishing marginal utility states that as an individual consumes more and more units of a commodity, the utility derived from it goes on decreasing. So as to get maximum satisfaction, an individual purchases in such a manner that the marginal utility of the commodity is equal to the price of the commodity. When the price of commodity falls, a rational consumer purchases more so as to equate the marginal utility and the price level. Thus, if a consumer wants to purchase larger quantities, then the price must be lowered. This is what the law of demand also states.

Changes in demand for a commodity can be shown through the demand curve in two ways: (1) Movement along the demand curve(Extension and contraction ) and (2) Shifts of the demand curve( Increase and decrease).

**(1) Movement along the Demand Curve:**

Demand is a multivariable function. If income and other determinants of demand such as tastes of the consumers, changes in prices of related goods, income distribution etc remain constant and there is a change only in price of the commodity, then we move along the same demand curve, In this case, the demand curve remains unchanged. When, as a result of change in price, the quantity demanded increases or decreases, it is technically called extension and contraction in demand.

A movement along a demand curve is defined as a change in the quantity demanded due to changes in the price of a good will result in a movement along the demand curve. For instance, a fall in the price of apples from P1 to P2 causes an increase in the quantity demanded



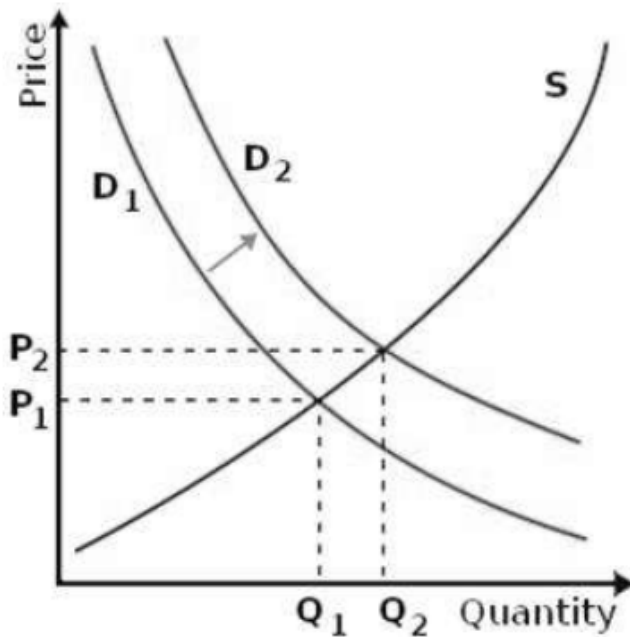
**Shifts in the demand curve**

A shift of the demand curve is referred to as a change in demand due any factor other than price. A demand curve will shift if any of these occurs:

1. Change in the price of other goods (complements and substitutes); leading to increase / decrease of real income

2. Change in the income level
3. Change in consumers' tastes and preferences

Each of these factors tends the demand curve to shift downwards to the left or upwards to the right. While downward shift signifies decrease in demand, an upward shift of the demand curve shows an increase in the demand. As shown in the figure the demand curve will shift to  $D_2$  from  $D_1$  and accordingly the price and quantity demanded will change.



Movements along a demand curve is the result of increase or decrease of the price of the good, while the demand curve shifts when any demand determinant other than price changes