DEMAND

Demand- Factors determining demand- Demand Function-Demand Schedule- Law of Demand- Individual Demand- Market Demand- Demand Curve-Change in Demand and Change in Quantity Demanded-Utility- Marginal Utility- Law of diminishing marginal utility- Law of demand- Explanation to the Law of demand- Income Effect- Substitution Effect- Exceptions to law of Demand- Inferior Goods-Giffen Goods- Consumer Surplus

What do you mean by demand?

In Economics mere desire for a comm. is not referred as demand. Here by demand we mean Effective Demand. Thus **demand is the desire for a comm. backed by the purchasing power of the consumer**. Demand for a comm. therefore refers to the amount of that commodity that will be purchased at a particular price during a particular time.

Thus, in economics demand implies:

- The desire for a comm.
- The consumer must possess necessary purchasing power.

In this respect we can also mention some features of demand-=-

1. Demand always refer to demand per unit of time; The time may be a day, a month ,a year;
2. Demand always relates to a comm. or service;
3. Demand always refers to a place. However this is applicable only for market demand;
4. Demand is different for different prices.

Types of Demand

1. **Individual demand** :- Individual demand for a comm. is the demand for that comm. by a single consumer i.e. if an individual demands 10 oranges at the rate of Rs. 5 per orange, then that will be his individual demand for orange,

Market demand: - But Market demand for a comm. is the aggregate of all individual demand for that comm. Suppose in Kolkata daily demand for orange is 5000pc. This is market demand for orange.

2. **Cross demand:** If the demand for a commodity depends on the price of a related commodity, it is called cross demand. For example, the demand for car is influenced by the price of petrol.
3. **Joint demand:** When the demands for different complementary goods are created at a time, it would be termed as complementary demand or joint demand. For example, the demands for Gun and Bullet are created jointly.
4. **Composite demand:** When any commodity or service is demanded for many alternative uses, it is called a composite demand. For example, the electricity services are demanded both for domestic and commercial uses.
5. **Competitive demand:** If any commodity or a service has some close substitutes in the market, then the demand for any of these substitutes would be termed as competitive demand. For example, in case of soap in Indian market we can see such competitive demand.
6. **Direct demand:** If any commodity is demanded for direct consumption, its demand will be considered as direct demand. For example, the demand for bread and butter.

Derived demand: When the demand for any commodity is derived from the demand for some other commodities, it is called derived demand or indirect demand. Generally, the demand for any factor of production (say, the demand for a machine) is called derived demand.

Describe the Determinants of demand?

By determinants of demand we actually mean those factors which influence the quantity demanded of any comm. Now determinants of demand may be of two types. Some are controlling Individual demand, known as determinants of demand of individual demand. Again some are controlling Market demand known as determinants of demand of Market demand. Let us describe them---

Determinants of Individual demand

1. Need for the comm. - It is the need for the comm. that primarily determines what should be demanded.
2. Price of the comm. --- The most important determinants of demand for a comm. is its price. Generally, greater the price of any comm. lower will be its demand and vice-versa.
3. Income of the consumer—Income of the consumer gives purchasing power and demand is desire backed by purchasing power. Thus as income increases, purchasing power of the consumer increases and thus his demand increases.
4. Taste & preference of the consumer—Taste & preference of a consumer also affects his demand. If a comm. suits the taste of consumer then his demand for that comm. will increase.

5. Prices of related goods—A goods may have two types of related comm. namely substitute and complimentary. Now if the prices of substitute comm. increase, then demand for the original comm. increases and vice-versa. Again if prices of complimentary comm. increase, then demand for original comm. will fall.
6. Expectation regarding future price—If there is an expectation that in future price of any comm. will rise, then present demand for that comm. will rise and vice-versa.
7. Demonstration Effect:-Sometimes purchase decision of an individual is influenced by the purchase decision of other. For ex. When an individual purchases TV, his neighbor may also purchase TV seeing his. This is known as Demonstration Effect.

Determinants of Market demand –

Since market demand is the aggregate of all individual demand. Thus determinants of individual demand are also determinants of market demand. But there are some additional determinants that control only market demand. Let us mention some of them.

1. Number of consumer-- If number of consumers of any comm. increases, then market demand for that comm. will also increases.
2. Population & its composition-- If population of any country increases, then market demand for all comm. in that country will increase. Again if the population composed mainly of children, then market demand for goods of children will increase.
3. Advertisement expenditure- Advt. creates brand loyalty. So, greater advt. means greater brand loyalty and greater brand loyalty means greater demand.
4. Availability of credit- Many durable goods are purchased on credit. So easy availability of credit on easy term implies greater market demand for that comm.
5. Introduction of new product- Introduction of new product temporarily reduces demand for old product.
6. Income distribution – since in an economy different classes have different MPC, therefore with the change in income distribution among different classes market demand for many commodity rises.

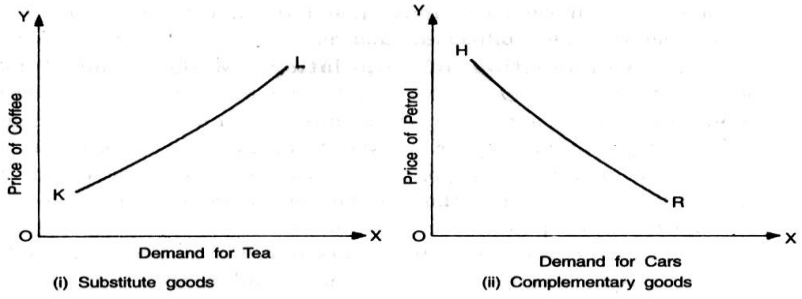
What do you mean by Inferior goods?

Inferior Goods are those for which we can see **negative Income Effect of demand**. This means in case of Inferior goods **as the income of the consumer increases, the demand for those commodities fall** and vice versa. Generally, Inferior goods are those commodities which consumer does not like, but consume them as he cannot afford what he actually likes. Hence, when income of the consumer rises, he will then switch his consumption from Inferior goods to those he actually like, known as Superior goods. Thus with the rise in the income level of the comsumer, demand for Inferior Goods falls. As for example, coarse cereal, bad quality cloth are Inferior goods.

Define Substitute and Complimentary Goods.

Substitute goods are those goods which satisfy the same type of demand and hence can be used in place of one another, such as tea and coffee.

There is a direct, relationship between the demand for a product (say tea), and the price of its substitute (say coffee). For example, if the price of coffee rises, many consumers will shift from the consumption of coffee to the consumption of tea because tea has now become relatively cheaper. The demand for tea will increase and that of coffee will decrease. Thus, demand varies directly with a change in the price of a substitute.



Complementary goods are those goods which are complementary to one another in the sense that they are used jointly or consumed together, like car and petrol, gas and gas stoves.

There is an inverse relationship between the demand for a good and the price of its complement. For instance, an increase (or decrease) in the price of petrol causes not only a decrease (or an increase) in the demand for petrol, but it also causes a decrease (or an increase) in the demand for cars. Thus, in case of complementary goods an increase in the price of one decreases the demand for the other.

What do you mean by Demand function?

As we know demand for a comm. is the desire backed by purchasing power. Now demand for a comm. depends on factors known as determinants of demand. Such as price of the comm., income of the consumer, price of the related comm., etc. Now **the mathematical representation of that cause & effect relationship between demand for a comm. and its determinants is known as Demand function**.

Now if Q_{Demand}= quantity demanded of a comm.;
P = price of the comm.
I = income of the consumer;
P_Y^X = prices of related comm.; etc.

Then Demand Function will be;

$Q_{Demand} = f(P, I, P_Y^X, \ldots\ldots\ldots\ldots etc.)$

State the law of demand.

Prof Marshall first established a relation between the price and quantity demanded of a commodity. This relation is stated as the Law of Demand. If we assume that as price of any comm. Changes-----

1. The money income of consumer remains unchanged;
2. The taste & preference of the consumer remains unchanged;
3. The price of substitute comm. & complimentary comm. Remain unchanged;
4. The time period remains unaltered;

Then the law of demand can be stated as: ***Assuming that other things remaining unchanged, i.e. Ceteris Paribas; there exists an inverse relationship between the quantity demanded of any comm. and its price.***

This means if price of any comm. increases, then quantity demanded of that comm. decreases and vice-versa.

What do mean by demand schedule?

Demand schedule is a schedule which lists various quantities of a comm. demanded at various prices, in tabular form. Basically **demand schedule is the tabular representation of the law of demand**.

Now demand schedule may be of two types, namely; Individual demand schedule & Market demand schedule.

Individual demand schedule represents various quantities of a comm. which an individual demanded at various prices in tabular form. Let us explain the concept with the following example-

Individual demand schedule:-

Price per unit(Rs-)	Quantity demanded (No. of Oranges)
1	10
2	12
3	8
4	5

On the other hand ***market demand schedule*** represents total amt. of any comm. demanded by all consumers of that commodity in the market at different prices. Now market demand schedule is obtained by the horizontal summation of individual demand schedules of all consumers. As for ex., suppose for a comm. there are only two consumers with following individual demand schedules.

Individual DD schedule of A

Prices	No. of Oranges
10	6
5	10
1	15

Individual DD schedule of B

Prices	No. of Oranges
10	10+6=16
5	15+10=25
1	20+15=35

Market DD Schedule

Prices	No. of Oranges
10	10
5	15
1	20

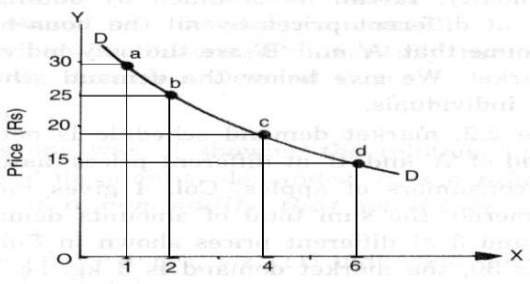
What do you mean by demand curve?

Demand curve is a graphic presentation of the law of demand. ***We can convert the demand schedule into a demand curve by plotting the various price-quantity combinations graphically. The picturization of the demand schedule is called the 'demand curve'. It is the curve showing different quantities demanded at various alternative prices during a given period.*** If the demand schedule is represented by a diagram plotting prices of the comm. on the vertical axis and quantity demanded on the horizontal axis then we will get demand curve. Basically demand curve is a diagrammatic representation of the law of demand.

Now like demand schedule demand curve is also of two types; namely, Individual demand curve & market demand curve.

Individual demand curve is obtained by plotting individual demand schedule in the price comm. space. Let us consider the following example.

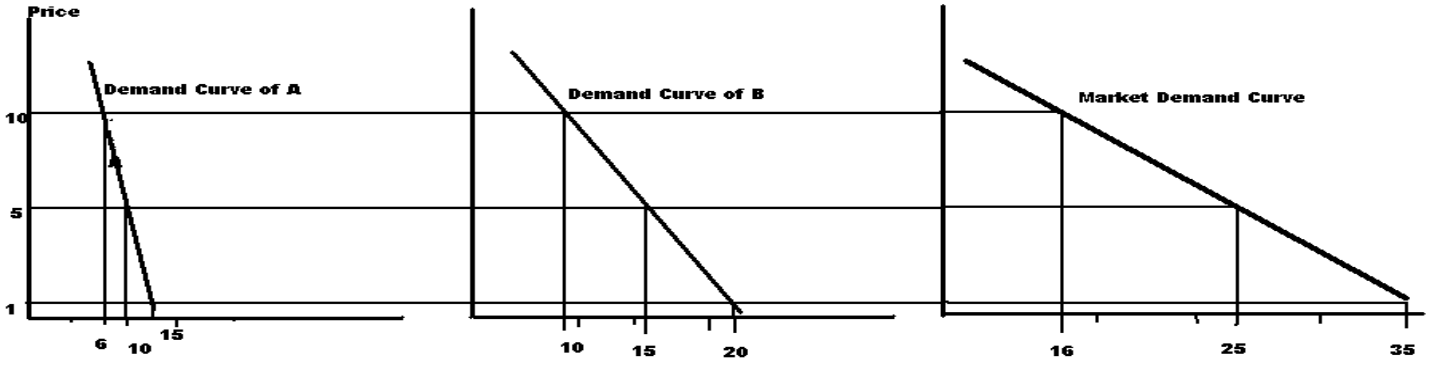
Price (Rs per kg)	Quantity Demanded (kg per week)
30	1
25	2
20	4
15	6



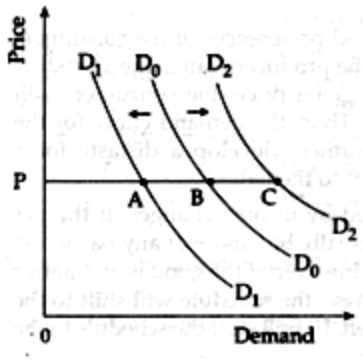
It is seen in the following demand schedule, that there are four price-commodity combinations; each of them is represented in the side-diagram. Now joining A,B,C,D by a straight line we obtain the demand curve. It is clear from the diagram that demand curve is a downward slopping straight line representing the inverse relationship between the price and quantity demanded.

Now market demand curve is similar representation of market demand schedule, or alternatively it can be obtained by the horizontal summation of individual demand curves of all consumers.

This can be seen from the example bellow where suppose there are two consumers A & B of a comm.X. Now their Individual demand curves are shown in the diagrams bellow; Now in order to obtain market demand curve we make a horizontal summation of both the individual demand curves.



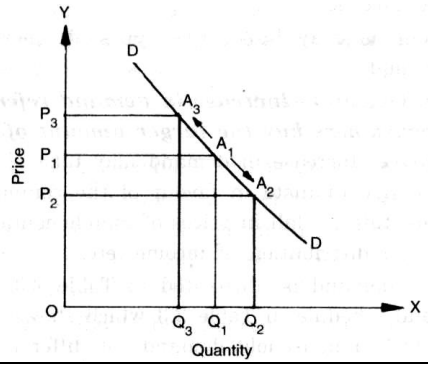
Distinguish between shift of the demand curve/change in demand and movement along the demand curve/change in quantity demanded?



We know that demand for any comm. depends on the price of that comm. and also on some other factors, like, income, taste, preference of the consumer, prices of the related comm. etc. These are known as the determinants of demand.

Now if one or more determinants of demand, other than the price of the comm. changes, then the entire demand schedule will change. As a result demand curve will shift from its original position. This phenomenon is also known as change in demand or shift of the demand curve. Now if the demand curve shifts right ward then it is known as increase in demand. On the other hand if the demand curve shifts leftward then it is known as decrease in demand.

As for example, D_oD_o was the initial demand curve. Now if the money income of the consumer increases, then his demand will increase, as a result his demand curve will shift to the right to the position D_2D_2. Again if the income of the consumer falls, then demand will decrease. As a result demand curve will shift leftward, as in the diagram it shifts from D_oD_o to D_1D_1.

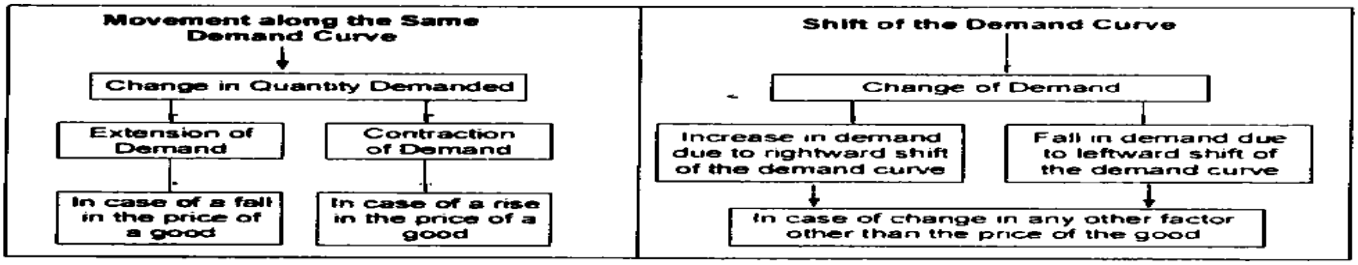


On the other hand ***if only price of the comm. changes, other determinants remaining same, then only amt. of quantity demanded will change keeping the original demand schedule same. In this case we will just move from one point on the demand curve to another point. This is known as change in quantity demanded or movement along the demand curve***. As the price increases, then the quantity demanded falls. This is known as contraction of demand (from A_1 to A_3). Again as the price decreases the quantity demanded increases. This is known as extension of demand (from A_1 to A_2).

*What causes an upward movement along a demand curve of a commodity?

Now these two phenomena have the following points of distinction;

- In case of change in demand any determinants other than price will change; but in case of change in quantity demanded only price of the comm. changes.
- In case of change in demand entire demand schedule is changed; but in case of change in quantity demanded the original demand schedule does not change.
- In case of change in demand curve shifts to a new position, but in case of change in quantity demanded only we move from one point to another along the original demand curve.
- Change in Demand shows either an increase or a decrease in the quantity demanded for any commodity, given the price of that commodity. But change in quantity demanded shows negative or inverse relationship between price and quantity demanded.



Reasons for Rightward Shift of the demand Curve.

Causes of an Increase in Demand

The demand for a good increases for any of the following reasons:
(i) an increase in the income o f the consumer,
(ii) an increase in the price o f a substitute (for example, if the price o f coffee increases the demand for tea will increase),
(iii) a fall in the price o f a complement (for example, if the price of sugar falls, the demand for tea
(iv) increase since each cup o f tea will now cost less).
(v) the consumer's expectation about price rise (if the consumer expects price to rise in future, he will buy more now).
(vi) the consumer's expectation about rise in his income (if he expects his income to rise soon, he will buy more now).

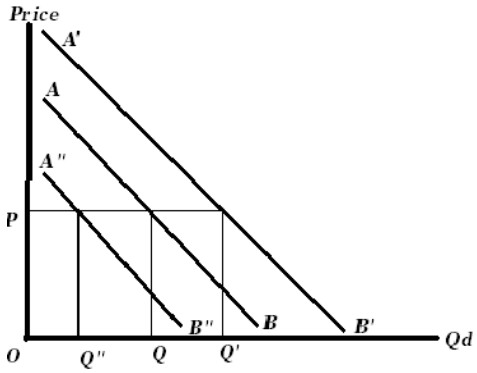
Reasons for Leftward shift of the demand curve

Causes of a decrease in demand

To be specific the demand for a good decreases-for any o f the following reasons:
(i) a fall in the income o f a consumer,
(ii) a fall in the price o f a substitute (for example, if the price o f coffee falls, the consumer will buy more coffee and less tea),
(iii) a rise in the price o f a complement (for example, if the price o f sugar increases, the demand for tea will fall since each cup o f tea will now cost more),
(iv) A change in the tastes o f the consumer against a good (for example, if a medical report indicates that consumption o f tea is injurious to health, a consumer will buy less tea),
(v) The consumer's expectation about price fall (if the consumer expects price to fall, he will buy less o f a good now),
(vi) The consumer's expectation about fall in his income (if the consumer expects his income to fall soon, he will buy less o f a good now).

Describe what happens to demand curve as income changes?

As income of the consumer rises, his purchasing power will increase, as a result his demand will expands, and so, demand curve will shift upward or rightward. Therefore at each price consumer will demand more now. As seen in the side diagram, as income rises, demand curve shifts from AB to A'B'. And at price P demand increases from Q to Q'. Again as income falls, purchasing power falls, so, demand will reduce and demand curve shifts from AB to A"B". Thus at each price less commodity will be demanded. So, demand will fall from Q to Q".

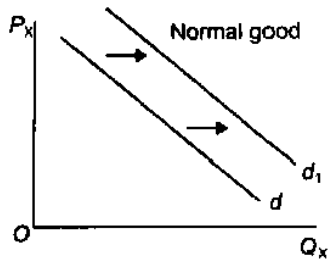


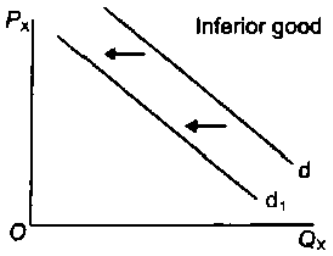
How a change in the income will affect the demand for a good depends upon the type o f the good:

(a) If **x is a normal good** then with an increase in income, consumer buys more of the good. **Goods whose demand rises when income rises are called normal goods.**

Example: clothes, books, etc.

(b) If **x is an inferior good** then an increase in income causes its demand to decrease. This is because as income rises, purchasing power rises and consumers substitute more superior goods for inferior goods. **Goods whose demand falls when income rises are called inferior goods.** *Example:* Coarse cereals.





Graphically, the relationship between quantity demanded of good *x* and income of the consumer is shown as in Fig

The figure shows that in case of normal goods as income rises, demand increases and in case of inferior goods as income rises, demand decreases.

Describe what happens to demand curve as price of the substitute goods rises?

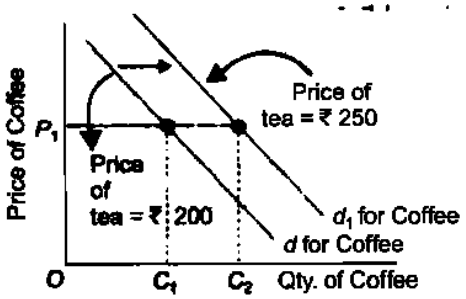
As the price of substitutes rises demand for the original comm. rises. So, demand curve will shift upward from its original position AB to A'B'. Therefore at each price consumer will demand more now. And at price P demand increases from Q to Q'.

Describe what happens to demand curve as price of the substitute goods falls?

As the price of substitutes falls demand for the original comm. falls. So, demand curve will shift downward from its original position AB to A"B". Therefore at each price consumer will demand less now. And at price P demand decreases from Q to Q".

***When X and Z are Substitutes**

Substitute goods are those which are an alternative to one another in consumption.

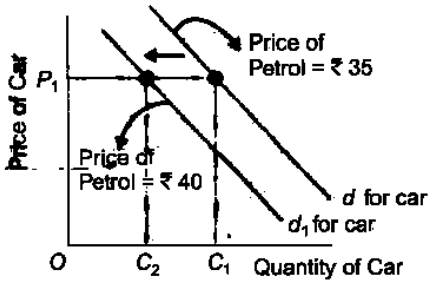


They satisfy same human want w ith equal ease. *Examples* are: tea or coffee; wheat or rice; ink pen or ball pen; a Maruti car or a Zen car, Pepsi or Coca Cola, Lux Supreme or Lifebuoy Gold. This substitute relationship arises because the goods have a similar technology or have a similar price.
Example. If the price of tea rises from Rs 200 to Rs 250 per kg it would cause an increase in demand for coffee from *C1* units to *C2* units at price *OP1* . Fig. illustrates a rightward shift in the demand curve to coffee from *d* to *d1* when the goods tea and coffee are substitutes. An increase in the price of a substitute good increases the quantity demanded of the other good. If there is an increase in the price of a substitute good, the demand curve shifts rightward. Thus, **the demand for a good usually moves in the direction o f the price of its substitutes.**

Describe what happens to demand curve as price of the complimentary goods falls?

As the price of complimentary falls demand for the original comm. rises. So, demand curve will shift upward from its originalposition AB to A'B'. Therefore at each price consumer will demand more now. And at price P demand increases from Q to Q'.

***When X and** Z **are Complements**



Complementary goods are those which are jointly used or consumed together to satisfy a want.

Examples are: tea and sugar; car and petrol; pen and ink; bread and butter; cigarettes and cigarette lighter; compact disc player and compact discs.
Example. If price of petrol rises from Rs 35 to Rs 40 a litre, then quantity demanded of car will reduce from C1 to *C2* units at price of rate *OP1*, other things remaining the same. This is graphically shown in Fig. There is a leftward shift of the demand curve of car from *d* to *d1* when the two goods are complementary. That is, if there is increase in the price of complementary good, the demand curve shifts leftward.

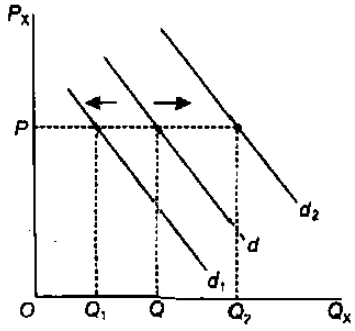
Thus, the demand for a good moves in the opposite direction o f the price of its complementary good.

Describe what happens to demand curve as price of the complimentary goods rises?

As the price of complimentary goods rises demand for the original comm. falls. So, demand curve will shift downward from its original position AB to A"B". Therefore at each price consumer will demand less now. And at price P demand decreases from Q to Q".

Consumer's Tastes and Preferences

Any change in consumer's tastes causes demand to change. If there is a change in tastes in favour of a good, then it will lead to increase in demand and any unfavourable change will lead to decrease in demand.
The relationship is shown graphically by shifts of demand curve in Fig. Increased preference for a good is shown by increase in demand, *i.e.,* rightward shift of demand curve from *d* to *d2.* It shows that more is demanded at each price. At price *OP,* the consumer will now . Due to demand a larger quantity *OQ2* compared to *OQ (OQ* change in tastes and preferences. is the amount demanded before the change in taste). Decreased preference for a good is shown by decrease in demand, *i.e.,* leftward shift of demand curve from *d* to *d 1* It shows that less is demanded at each price. At price *OP,* the consumer will now demand a smaller quantity *OQ1* compared to *OQ.*



1) What do you mean by utility?

William Stanley Jevons was the first economist to conceive the idea of utility. By utility in economics we mean the satisfaction derived from the consumption of a commodity which is needed. Thus goods and services which are wanted by some individual are said to posses' utility for that individual.

In this regard we may mention some characteristics of utility:

1. It is a subjective phenomenon. It has no physical or material existence;
2. Utility is *not measurable.* Since utility is subjective;
3. Utility is *variable.* It is relative to a person's need. Utility of a commodity to a person depends on his intensity of desire for the commodity; the greater the need, the greater is the utility. Therefore, utility varies from person to person, place to place and time to time.
4. Utility has no ethical, moral or legal connotations.
5. It is not inherent in the commodity. How much utility a commodity has depends upon the intensity of wants it satisfies.
6. Utility and usefulness are different. Liquor may possess utility to a drunkard but it is not useful for him.

2) What do you mean by Total Utility?

Total utility means the total satisfaction received by the consumer by the consumption of specific units of a commodity taken together at a time. According to **Prof. Leftwitch, "Total utility refers to the entire amount of satisfaction obtained from consuming various quantities of a commodity."**

In mathematical terms, total utility is a direct function of the number of units of a commodity consumed. It can be written as,

$TUx = \mathbf{f}(Q_X)$ where TU_X = Total Utility from the consumption of X, Q_X = number of unit of X consumed.

This can be seen from the following example,

Level of Utility derived from the consumption of Apple	
No. of Apples	Total Utility
1	10
2	17
3	22
4	25

Now Marshall measured utility in terms of money. Therefore if we consider the following example we will find that after consuming three units of apple consumer gets total utility equivalent of Rs.22/-.

3) What do you mean by marginal utility?

Marginal Utility is the extra utility derived from the consumption of one extra unit of a commodity. Thus, Marginal Utility is the change in total utility due to change in the quantity consumed of a commodity. So, Prof. Chapman says, **"Marginal utility is addition made to total utility by consuming one more unit of a commodity."**

Thus, Marginal Utility or MU = $\frac{\Delta TU}{\Delta Q}$.

If we measure utility in terms of money, then the following example will clarify the concept of MU.

Level of Utility derived from the consumption of Apple		
No. of Apples	Total Utility	Marginal Utility
1	10	10
2	17	7
3	22	5
4	25	3
5	25	0
6	23	-2

Algebraically, the marginal utility can be expressed as $\mathbf{MU_n = TU_n - TU_{n-1}}$,

Where, MU_n = Marginal utility of nth unit, TU_n = Total utility of *n* units and TU_{n-1}= Total utility of n-1 units.

4) Explain the Law of diminishing Marginal Utility.

The Law of diminishing Marginal Utility was first discussed by the Cardinal Economist Marshall in order to analyze the consumer behavior.

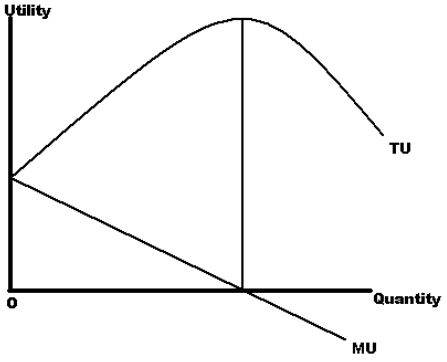
The Law of diminishing Marginal Utility states that as the consumption of a particular commodity increases the marginal utility derived from the successive units of that commodity decreases.

This law is based on the following assumptions,

a) It is assumed that the utility can be measured cardinally and it is measured in terms of money;
b) Utility of any commodity depends on the consumption of that commodity alone;
c) The consumer is rational;
d) Commodity is divisible;
e) The utility derived depends on the consumption of the individual alone.
f) The taste preference and money income of the consumer remain unchanged.

If the above mentioned assumptions hold then the law operates in the way as shown in the following table.

Level of Utility derived from the consumption of Apple		
No. of Apples	Total Utility	Marginal Utility
1	10	10
2	17	7
3	22	5
4	25	3
5	25	0
6	23	-2



Here MU goes on decreasing as consumption of apple increases and after consuming 5th unit it becomes zero, i.e. consumer is not getting any utility from the apple. As consumer consumes 6th unit, MU is negative means it causes disutility to the consumer. This is shown in the side diagram.

Cardinal economists provides following bases for the law.

a) If an individual gets a commodity in more and more units, his desire for that commodity gradually decreases.

b) It is often happen that the first unit of a commodity is used for the most essential purpose. Thus it provides highest utility. But after satisfying that want later units are used for fulfilling comparatively less useful purposes and naturally less utility is derived.

Though the theory explains the phenomenon of increasing disutility with successive consumption, but modern economists has chalked out several limitations of the theory. Let us describe them.

a) It is often seen that MU initially increases then decreases;
b) If time period changes then the law of diminishing MU will not apply.
c) Utility of any commodity depends on other quantity also, thus utility of any commodity may not diminish due to the influence of some other commodity.
d) In case of habitual necessities, this law may not operate.
e) This law is not applicable for indivisible commodity.

Describe why demand curve is downward slopping? Or state the reasons behind the law of demand.

We know that when price falls the quantity demanded of a commodity rises and vice versa, other things remaining the same. It is due to this law of demand that demand curve slopes downward to the right. Now, the important question is why the demand curve slopes downward, or in other words, why the law of demand describing inverse price-demand relationship is valid. We can **explain this with marginal utility analysis and also with the help of Hicks – Allen's Income effect and substitution effect.**

Explanation given by Marshall:- Prof. Marshall considered the law of diminishing MU to be the acting force behind the inverse relationship. As we know for equilibrium with single comm. consumer has to maximize his net utility. Now for maximizing net utility he has to equate his MU with price i.e. MU=Price. Now if the Price of the comm. falls, then in order to maintain equilibrium consumer has to increase consumption of that comm., so that, his MU starts to fall as long as it becomes equal to price. Thus as price of any comm. falls demand for that comm. will increase. Again the opposite will happen as price of the comm. rises. Thus there exists an inverse relationship between price & quantity of a comm.

But Marshall's explanation is highly criticized due to its unrealistic assumption of cardinal utility. So, Hicks-Pareto offers an alternative explanation in terms of Ordinal Preferences of the consumer. Let us explain it,

Hicks – Allen's Income effect and substitution effect: When the price of a commodity falls, the consumer can buy more quantity of the commodity with his given income. Or, if he chooses to buy the will be left with him because he has to spend less on the commodity due to its lower price. In other words, as a result of the fall in the price of the commodity, consumer's real income or purchasing power increases. This increase in real income induces the consumer to buy more of that commodity. This is called income effect of the change in price of the commodity.

The other important reason why the quantity demanded of a commodity rises as its price falls is the substitution effect. When the price of a commodity falls, it becomes relatively cheaper than other commodities. This induces the consumer to substitute the commodity whose price has fallen for other commodities which have now become relatively dearer. As a result of this substitution effect, the quantity demanded of the commodity, whose price has fallen, rises.

This substitution effect is more important than the income effect. Marshall explained the downward-sloping demand curve with the aid of this substitution effect alone, since he ignored the income effect of the price change. But in some cases even the income effect is very significant and cannot be ignored. Hicks and Allen who put forward indifference curve analysis of consumer's behavior explain this downward-sloping demand curve with the both income and substitution effects.

Now market demand curve is downward slopping mainly because individual demand curves are downward slopping. But besides that there are also some other factors responsible for the negative slope of market demand curve. Let us describe them.

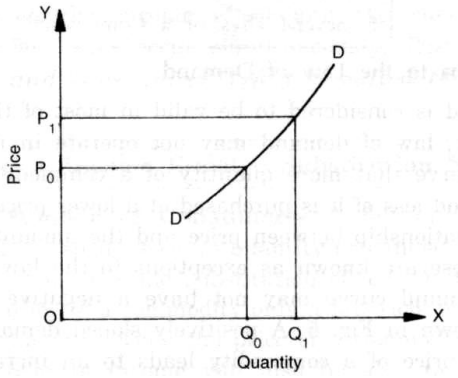
a) As price of any comm. falls, new consumers who previously cannot afford to buy that comm. will now enter the market. As a result demand increases.
b) As the price of any comm. falls, its multiple uses will start which in turn increases its demand.

State the exceptions of the law of demand.

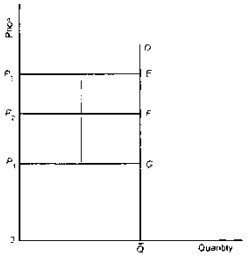
A downward slopping demand curve represents inverse relationship between price of a comm. and its quantity demanded. But there may be some situation where opposite of that is seen to happen. Those situations are referred as exception to the law of demand. Let us describe some of these exceptional situations where a positively slopped demand curve can be seen.

A.

1. ***Giffen Goods***:- One exception to the normal demand curve is associated with Giffen Goods. **Giffen goods** (named after the nineteenth century economist Sir Robert Giffen) **are those inferior goods on which the consumer spends a large part of his income and the demand for which falls with a fall in their price. (**Sir Robert Giffen who had observed that a rise in prices in Potato, which is a staple food item for workers in England in the 19th century, forced the workers to spend more money on Potato and thus less money for meat. To make up for their reduced intake of meat, they had to buy more of potato even at higher prices. So here, higher the price of Potato larger was the demand for it.) Thus the demand curve of Giffen goods is upward rising. This happens always for all starch food items like, Rice, Wheat, etc. which are the staple diet for low income groups. These goods are known as Giffen Goods. Basically for these goods negative income effect is stronger than substitution effect.



2. **Conspicuous Consumption**:-Precious comm. like **diamond, jewelry, rare paintings, etc**. are wanted by the rich people to flaunt their wealth before others. Actually higher the prices of these goods, the more prestige are attached to these goods and thus higher demand for them and vice-versa.
3. **Bandwagon effect**: A somewhat similar situation arises with the so-called 'Bandwagon effect'**,** that is, if others start to use a product in a big way, it becomes **fashionable and so you go for it too** without looking at its merit. In other words, you 'follow the crowd'.
4. **Snob effect**: The opposite also may happen. A consumer may try to show that he no longer belongs to a particular social class. This shows the snobbish nature of a consumer. **Snob effect**, referres to a situation where you want to be different from others for the sake of being different, that is, you 'go against the crowd'. If more people buy something, your demand for it falls. This is the opposite of the bandwagon effect. Consider a commodity which is consumed typically by poor people. When the price of this commodity falls, the consumer may decrease his purchase of this commodity in order to show that he no longer belongs to the class of the poor.
5. Occupying insignificant portion of the consumer's budget: If a commodity occupies an insignificant position in the total budget of the consumer, variations in its price may leave the demand for the commodity unaffected. In that case, the demand curve will be vertical. Salt is an example of this type of commodity.
6. Price expectation:- During inflationary and deflationary situation, expectation regarding future price plays an important role in deciding demand. When the price of any comm. rises consumer expects that it will rise further in future. Following such anticipation they demand more now to avoid higher future prices. Similarly when price starts to fall, their demands do not increase in anticipation that in future price will be much lower.
7. Speculation:- In share market as price of any share starts to rise, for future gain people rush to buy more of that share. Therefore its demand increases. Again as the price of any share starts to fall, people tries to get rid of that share to avoid future loss. Thus its demand falls.
8. Veblen effect:-Sometimes, consumer judge the quality of any comm. by its price. Thus as the price of the comm. rises people thinks that a qualitative improvements has taken place. So , some people, in order to impress others (and possibly themselves), tend to buy more of a good when it becomes more expensive. This is called a **Veblen effect** and the good in question is called a **Veblen good**. Veblen goods are 'conspicuous goods', which others may look upon with some envy—like a branded car or a fancy jacket. American economist Thorstein Veblen first pointed out such effect. Thus it is known as Veblen Effect.
9. Demonstration Effect:-Sometimes purchase decision of an individual is influenced by the purchase decision of other. For ex. When an individual purchases TV, his neighbor may also purchase TV seeing his. This is known as Demonstration Effect. Now due to Demonstration Effect often people purchase such comm. whose price is rising.
10. Habitual Necessity:- In case of comm. of habitual necessity, such as cigarettes, liquor, etc. rise in price do not affect its demand.
11. Still another effect can be in the form of a **network externality**, defined as a change in the benefit to a person when the number of other individuals using it increases. For instance, if your friends, relatives and colleagues do not use e-mail, your demand for e-mail will be small. But if they all start to use e-mail, your demand for e-mail will increase irrespective of the expenditure incurred.
12. **Highly essential items of consumption.** In case o f highly essential items o f consumption, such as life-saving drugs, a certain fixed amount is demanded by consumer— whether price is high or low. So the demand curve is a vertical straight line.



INFERIOR GOODS AND GIFFEN GOODS

Inferior goods are those goods for which income effect is negative. The demand for such goods decreases when income of the consumer rises and vice versa. Generally, these goods are of inferior quality. When the income of the consumer rises, he decreases the consumption of these inferior goods and instead buys goods of superior quality. This is why the demand for inferior goods decreases when income rises.

Suppose X is an inferior good and price of X decreases. So the real income of the consumer rises. Since X is an inferior good, the demand for X falls due to the income effect. On the other hand, as the price of X falls, the relative price of X decreases. So there is also a substitution effect. Due to this substitution effect, the consumer wants to buy more of X. So the two effects of price change will work in the opposite directions. Whether the demand for X ultimately rises or falls depends on the relative strengths of these two effects. When the substitution effect is stronger than the income etfect, it can offset the negative income effect.

In that case, as the price of X falls, demand for X rises and *vice versa.* But if the income effect is stronger than the substitution effect, the demand for X falls when its price falls. In that case, X is said to be a Giffen good. So may be defined as a strongly inferior good for wh ich negative income effect is stronger than the substitution effect. As a result, price and quantity demanded vary in the same direction—demand falls with the fall in price and demand rises with the rise in price. In other words, price effect is always positive for Giffen goods.

The difference between an inferior good and a Giffen good may be noted. Whether a good is inferior or not depends on the relationship between the change in income and the change in the demand for the commodity. If the demand for the commodity varies inversely with income, it is called an inferior good. In other words, income effect is negative for an inferior good. But the price effect may be positive, negative or even zero. But for a Giffen good, income effect is stronger than the substitution effect. As a result, as price falls, demand for a Giffen good also falls. In other words, price effect is positive for a Giffen good. So, Giffen good is a special kind of inferior good for which negative income effect is strong enough to outweigh the substitution effect. It is therefore said that all Giffen goods are inferior goods but all inferior goods are not Giffen goods.

According to Prof. Hicks, the following three conditions must be satisfied for a Giffen good.

1 Income effect must be negative i.e., the good must be an inferior good.

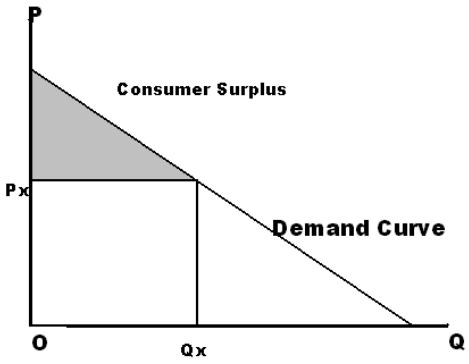
2, Income effect must be stronger than the substitution effect.

3; The proportion of total income spent on this good must be quite large.

Describe the concept of Consumer surplus?

Prof. Marshall had introduced the concept of consumer surplus with the help of his marginal utility theory. According to him consumer surplus is the total amt. of utility that a consumer gain from the consumption of a comm. Let us explain the concept,

AS we know, a consumer is willing to pay a maximum amt. for each unit of a comm. This is called demand price. However in practice, the consumer may not have to pay this maximum price. The prices at which consumer purchases the commodity is known as actual price. Now the difference between demand price and actual price is known as consumer surplus. As for example suppose the consumer is ready to pay Rs.10 for an orange, but he gets it at Rs.5 in the market. Therefore for him consumer surplus is Demand price – Actual price = Rs.10 – Rs5= Rs 5.



Now in the side diagram consumer surplus is shown graphically. If P_X is the market price of orange, then the triangle ΔAQP_X represents the consumer surplus of the consumer. Now if the MU curve remain same, but price of the comm. falls, then consumer surplus will increase.

Importance of the Concept of Consumer's Surplus

1. When the consumer purchases a commodity, the consumer's surplus becomes equal to maximum net utility. Hence, as the consumer's surplus increases the net utility of the consumer also increases and *vice versa.* The maximum net utility can therefore be measured through consumer's surplus.

2. The concept of consumer's surplus can be used as the index or measuring rod of welfare. The welfare of the consumer increases as the consumer's surplus increases and *vice versa.*

3. With the help of the concept of consumer's surplus, difference can be shown between value-in-use and value-in-exchange. The maximum price that a consumer is willing to pay for a commodity may be regarded as the value-in-use of that commodity. On the other hand, the actual price that a consumer is paying may be regarded as the value-in-exchange.

4. To measure the gains from international trade, this concept of consumer's surplus can also be used. If, due to international trade, the consumers of a country get a commodity at a lower price than before, then consumer's surplus increases and as a result the welfare of the consumers increases.

5. Sometimes there is only one seller in the market. This market is called a monopoly market. In this market, the monopolist can sell the same product to different buyers at different prices. This is called price discrimination. In the case of price discrimination, the monopolist uses the concept of consumer's surplus. The commodity can be

sold at higher price to an individual who has a higher consumer's surplus and *vice versa.* Thus, using the concept of consumer's surplus, the monopolist seller can fix different prices for different types of buyers.

Limitations of the Concept

1. Though the concept of consumer's surplus has some theoretical and practical importance, this concept has some limitations. These can be mentioned here.
2. To measure consumer's surplus, we assume that utility is cardinally measurable and can be measured in terms of money. For this it is assumed that marginal utility of money remains constant. These assumptions are not realistic. Many economists think that utility is a subjective concept. This cannot be measured in terms of money. Thus consumer's surplus is not measurable.
3. The individual demand price for necessary goods in life becomes very high. This means that for those goods the consumer is willing to pay any price. In this case, consumer's surplus will be infinitely large and it cannot be measured.