CHAPTER2 THEORY OF DEMAND AND SUPPLY

MEANING OF DEMAND

The concept 'demand' refers to the quantity of a good or service that consumers are willing and able to purchase at various prices during a period of time. It is to be noted that demand in Economics is something more than desire to purchase though desire is one element of it. Thus effective demand for a thing depends on

(i) **desire**
(ii) **means to purchase** and
(iii) on **willingness to use those means for that purchase**.

Unless demand is backed by purchasing power or ability to pay, it does not constitute demand. Two things are to be noted about quantity demanded: The quantity demanded is always expressed at a given price. At different prices different quantities of a commodity are generally demanded. Second thing is that **quantity demanded is a flow**.

WHAT DETERMINES DEMAND?

There are a number of factors which influence household demand for a commodity:

(i) **Price of the commodity:** Ceteris paribus i.e. other things being equal, **the demand of a commodity is inversely related to its price**. It implies that a rise in price of a commodity brings about a fall in its purchase and vice-versa.

(ii) **Price of related commodities:** Related commodities are of two types: (a) complementary goods and (b) competing goods or substitutes.

Complementary goods are those goods which are consumed together or simultaneously. **For example, tea and sugar, automobiles and petrol, pen and ink are used together.** When commodities are complements, a fall in the price of one (other things being equal) will cause the demand of the other to rise. For example, a fall in the price of cars would lead to a rise in the demand for petrol. There is an **inverse relation** between change in price of one complement and demand of other complementary good.

Competing goods or substitutes are those goods which can be used with ease in place of one another. For example, **tea and coffee, ink pen and ball pen,** are **substitutes for each other** and can be used in place of one another easily. There is **positive relation** between **change in price of one substitute and demand of other substitute i.e.** a fall in price of one leads to a fall in the quantity demanded of its substitutes and vice-versa.

(iii) **Level of income of the household:** Other things being equal, the demand for a commodity depends upon the money income of the household. The larger the average money income of the household, the larger is the quantity demanded of a particular good. However, there are certain commodities for which quantities demanded decrease with an increase in money income like Inferior goods. for necessities the increase will be less than proportionate to the increase in income.

(iv) **Tastes and preference of consumers:** The demand for a commodity also depends upon tastes and preferences of consumers and changes in them over a period of time. Goods which are more in fashion command higher demand than goods which are out of fashion.

(v) **Other factors :** Apart from the above factors, the demand for a commodity depends upon the following factors :

(a) Size of population : Generally, larger the size of population of a country or a region, greater is the demand for commodities in general.

(b) Composition of population : If there are more old people in a region, the demand for spectacles, walking sticks, etc. will be high. Similarly, if the population consists of more of children, demand for toys, baby foods, toffees, will be more.

(c) Distribution of income : The wealth of a country may be so distributed that there are a few very rich people while the majority are very poor. Under such conditions the propensity to consume of the country will be relatively less, for the **propensity to consume of the rich people is less** than that of the poor people.

LAW OF DEMAND

The law of demand is one of the most important laws of economic theory. According to law of demand, **other things being equal, if the price of a commodity falls, the quantity demanded of it will rise and if the price of a commodity rises, its quantity demanded will decline**. Thus, **there is an inverse relationship between price and quantity demanded**, other things being same. The other things which are assumed to be equal or constant are the prices of related commodities, income of consumers, tastes and preferences of consumers, and such other factors which influence demand.

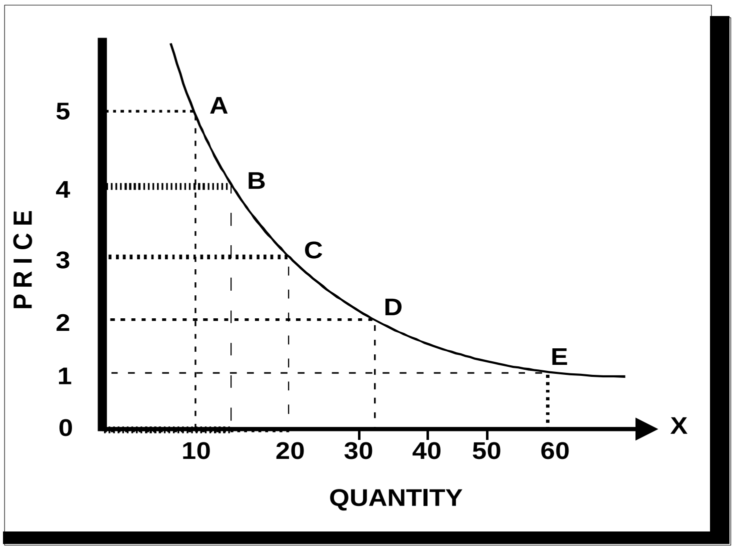
Demand Schedule: is a schedule which explains the relationship between price and quantity demanded.

Demand Schedule of an Individual Consumer

	Price (Rs.)	**Quantity demanded (Units)**
A	5	10
B	4	15
C	3	20
D	2	35
E	1	60

When price of commodity X is Rs.5 per unit, a consumer purchases 10 units of the commodity. When the price falls to Rs.4, he purchases 15 units of the commodity. Similarly, when the price further falls, quantity demanded by him goes on rising until at price Re.1, the quantity demanded by him rises to 60 units. The above table depicts an inverse relationship between price and quantity demanded.

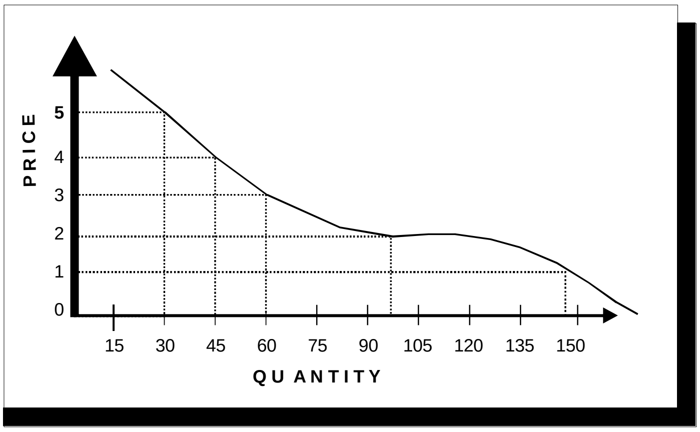
Demand Curve: is a graphical representation of the Demand Schedule



Market Demand Schedule: When we add up the various quantities demanded by the number of consumers in the market we can obtain the market demand schedule.

Market Demand Schedule

	Quantity demanded by			
Price (Rs.)	P	Q	R	Total Market Demand
5	10	8	12	30
4	15	12	18	45
3	20	17	23	60
2	35	25	40	100
1	60	35	45	140



Market Demand Curve

Market Demand Curve: If we plot market demand schedule on a graph we get market demand curve. In other words, market demand curve is the horizontal summation of individual demand curves.

Rationale for the Law of Demand: (why does demand curve slopes downward to right)

1. **Substitution Effect:** When the price of a commodity falls, it becomes relatively cheaper than other commodities. It induces consumers to substitute the commodity whose price has fallen for other commodities which have now become relatively expensive. The result is that total demand for the commodity whose price has fallen increases. This is called **substitution effect.**

2. **Income Effect:** When the price of a commodity falls, the consumer can buy the same quantity of the commodity with lesser money or he can buy more of the same commodity with the same money. In other words, as a result of fall in the price of the commodity **consumer's real income or purchasing power** increases. This increase in the real income induces him to buy more of that commodity. Thus, demand for that commodity (whose price has fallen) increases. This is called **income effect.**

3. **Law of Diminishing Marginal Utility:** This law states that as a consumer consumes more and more units of a commodity, the additional utility derived from each additional unit goes on diminishing. It means, the consumer will be willing to purchase an additional unit if it is available at lower price than last unit. It is because a consumer always pays the price equal to the MU of the commodity.

4. **Number of Consumers:** When the price of a commodity changes, the number of consumers consuming the commodity in the market also changes. As a result the demand behaves inversely to the change in price of the commodity. For example: if the price of the commodity falls, the number of consumers in the market will increase. Hence the demand will increase & vice versa.

5. **Several Uses of Commodity:** The commodity which has alternative uses such as electricity, milk etc. are also one of the main causes of law of demand. For example: if the price of electricity falls, its unnecessary uses will increase resulting the increase in its demand & vice versa.

EXCEPTIONS OF LAW OF DEMAND

The following are the important exceptions to the law of demand:

(i) **Conspicuous goods:** Some consumers measure the utility of a commodity by its price i.e., if the commodity is expensive they think that it has got more utility. Diamonds are often given as example of this case. Higher the price of diamonds, higher is the prestige value attached to them and hence higher is the demand for them.

(ii) **Giffen goods:** Such goods which exhibit **direct price-demand relationship** are called 'Giffen goods'. Generally those goods which are considered **inferior by the consumers** and which occupy a substantial place in consumer's budget are called 'Giffen goods'. Examples of such goods are coarse grains like bajra, low quality of rice and wheat etc.

(iii) **Conspicuous necessities:** The demand for certain goods is affected by the **demonstration effect** of the consumption pattern of a social group to which an individual belongs. These goods, due to their constant usage, have become necessities of life. For example, in spite of the fact that the prices of television sets, refrigerators, coolers, cooking gas, etc. have been continuously rising, their demand does not show any tendency to fall.

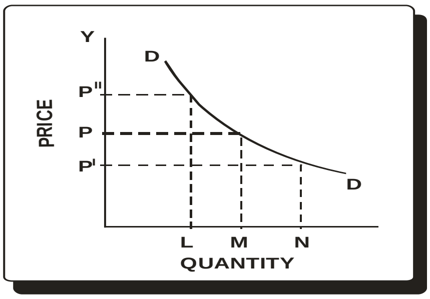
(iv) Future expectation about prices : It has been observed that when the prices are rising, households expecting that the prices in the future will be still higher, tend to buy larger quantities of the commodities. For example, when there is wide-spread drought, people expect that prices of food-grains would rise in future.

(v) Rationality: The law has been derived assuming consumers to be rational and knowledgeable about market-conditions. However, at times consumers tend to be irrational and make **impulsive purchases** without any cool calculations about price and usefulness of the product.

(vi) Ignorance effect: In practice, a household may demand larger quantity of a commodity even at a higher price because it may be ignorant of the ruling price of the commodity.

CHANGE IN QUANTITY DEMANDED
OR
EXPANSION AND CONTRACTION IN DEMAND

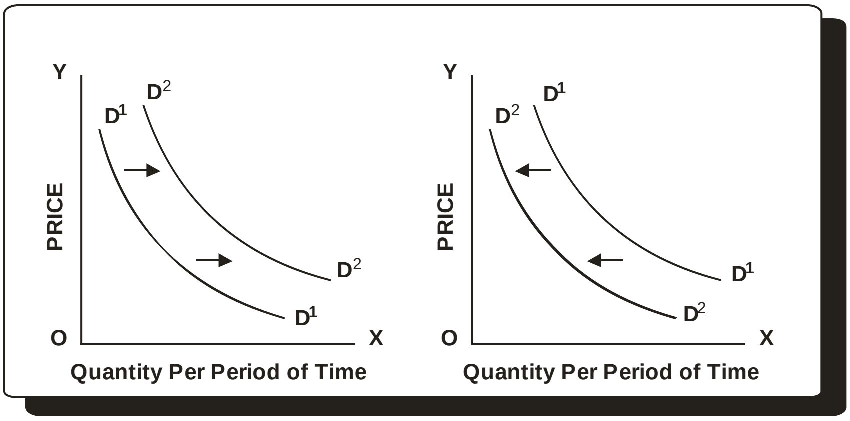
The demand schedule, demand curve and the law of demand all show that when the price of a commodity falls its quantity demanded increases, other things being equal. When as a result of decrease in price, the **quantity** demanded increases, in Economics, we say that there is an expansion of demand and when as a result of increase in price, **quantity** demanded decreases we say that there is contraction of demand. For example, suppose the price of apples at any time is Rs.10 per kilogram and a consumer buys one kilogram at that price. Now, if other things such as income, prices of other goods and tastes of the consumers remain same but the price of apples falls to Rs.8 per kilogram and the consumer now buys two kilograms of apples, we say that there is a change in **quantity** demanded or there is an expansion of demand. On the contrary, if the price of apples raised to Rs.15 per kilogram and consumer buys only half a kilogram, we say that there is a contraction of demand.



Expansion and Contraction in Demand

CHANGE IN DEMAND
OR
INCREASE AND DECREASE IN DEMAND

It should be noted that expansion and contraction in demand take place as a result of changes in the price while all other determinants of price viz. income, tastes, propensity to consume and price of related goods remain constant.



Rightward shift in the demand Curve **Leftward shift in the demand curve**

(i) A rightward shift in the demand curve : (when **more** is demanded at **same price)** can be caused by a rise in income, a rise in the price of a substitute, a fall in the price of a complement, a change in tastes in favor of this commodity, an increase in population, and a redistribution of income to group who favor this commodity.

(ii) A leftward shift in the demand curve : (when **less** is demanded at **same price**) can be caused by a fall in income, a fall in the price of a substitute, a rise in the price of a complement, a change in tastes against this commodity, a decrease in population, and a redistribution of income away from groups who favor this commodity.

MOVEMENTS ALONG DEMAND CURVE Vs. SHIFT OF CURVE

A **movement along the demand curve** indicates **changes in the quantity demanded** because of price changes, other factors remaining constant. A shift of the demand curve indicates that there is a change in demand at each possible price because one or more other factors, such as incomes, tastes or the price of some other goods, have changed.

Thus, when an economist speaks of an increase or a decrease in demand, he refers to a shift of the whole curve because one or more of the factors which were assumed to remain constant earlier have changed. When the economist speaks of **change in quantity demanded** he means movement along the same curve (i.e. expansion or contraction of demand) which has happened due to fall or rise in price of the commodity.

In short, **'change in demand' represents shift of the demand curve to right or left** resulting from changes in factors such as income, tastes, prices of other goods etc. and 'change in quantity demanded' represents movement upwards or downwards on the same demand curve resulting from a change in price of the commodity.