Chapter 3

DEMAND

3.1 Meanings of Demand

A desire which is accompanied by willingness and power to purchase is called demand. Purchasing power of certain goods means rupee. We have many desires but these desires can be changed into demand if we have money to buy them. Therefore, demand has two necessary conditions to fulfill:-

1. **Will to purchase** 2. **Power to purchase**

As demand is always at a specific price so a strong relationship develops between demand and price. If we go in the market, we will buy more at low price and buy less at high price. So, demand can be defined as follows:-

"Demand is the quantity of goods that buyers want to purchase at different prices".

3.2 Law of Demand

"Other things remaining the same, if price of certain goods rises, then quantity demanded falls and if price falls, then the quantity demanded increases". It shows that the quantity demanded is the function of price.

In terms of functional equation it will be written as follows:-

$Q_d = f(P)$ (Quantity demanded is the function of price)

In the law of demand, "Other things remaining constant", means that the certain factors are assumed to be constant. These are called assumptions of the law of demand.

3.3 Assumptions of The Law of Demand

(i) Consumer's income must not change

If there is an increase in income people may buy more even if price increases. If your pocket money increases you will buy more CDs even at higher price.

(ii) Prices of related goods do not change

Related goods can either be substituted or complement. Even if the price of chicken does not fall people buy it more because of increase in mutton price.

(iii) Taste and fashion remain the same

If there is a change in taste and fashion, people will keep on buying the same quantity of the commodity irrespective of any change in price. If taste of a consumer increases for a particular good, its demand will not decrease inspite of an increase in price.

(iv) Composition of population remains the same

The demand of goods will change at same price with an increase or decrease in the composition of population. If there is an increase in the population then demand will increase without a decrease in price.

(v) No change in future expectations

If people believe that prices of certain goods are going to change in near future, the law of demand will not hold true. If prices are falling, people will not increase their demand because they expect a further fall in price. Or if people expect the shortage of certain goods in future they will increase their demand at the same price.

(vi) No change in money supply

Demand is changed with an increase or decrease in the money supply.

3.4 Diagrammatic Presentation of Law of Demand

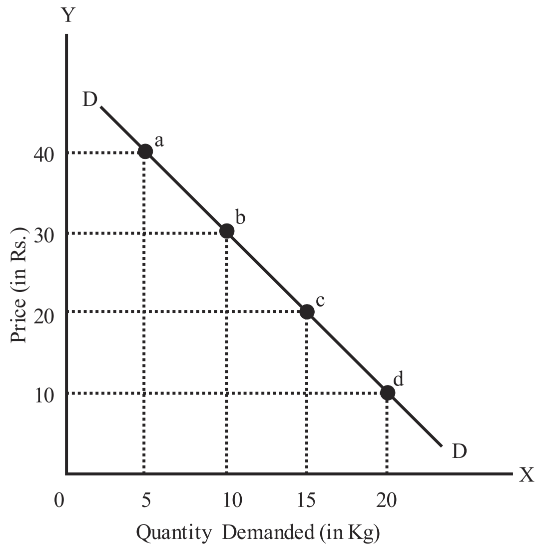
Let us explain the law of demand with the help of a demand schedule and a diagram.

Demand Schedule 3.1

Price of Sugar	**Demand for Sugar**
Rupees	Kilograms
40	5
30	10
20	15
10	20

The demand schedule is a table showing the quantities of a good at alternative prices in a given time period. At the price of Rupees 40 per kilogram, only 5 kilogram of sugar is demanded. If the price of the sugar falls to Rupees 30 per kilogram, then the demand of sugar increases to 10 kilogram. It means that when sugar becomes cheaper, more is demanded. In other words, a fall in the price of the sugar increases the demand for the sugar. This is law of demand, which develops an inverse relationship between price and demand.

Demand Curve 3.1



1. Demand curve, DD, slopes down to right. So, it has negative slope.
2. A fall in price increases the quantity demanded, so it shows inverse relationship between price and quantity demanded.

Demand curve (DD) is a graphic representation of the quantities of goods that a consumer is willing and able to buy at all possible prices. In the diagram 3.1, DD is the demand curve. At OX axis quantity demanded is taken in kilograms, whereas, price is taken at OY axis. OX axis is horizontal axis whereas OY is vertical axis. In economics price is always measured by the vertical axis and quantity is always measured by the horizontal axis.

If market price of any good is known then one quick look at the demand curve will tell us how much quantity a consumer will buy. Each point on the curve refers to a specific quantity that will be demanded at a given price. This curve falls from left to right downwards. This confirms that when price falls quantity demanded increases. At point ‘a’ price is Rupees 40 and the quantity demanded is 5 kilograms. At point ‘b’ the price falls to Rupees 30 and the quantity demanded increases to 10 kilograms. Similarly, at point ‘c’ price is Rupees 20 and quantity demanded is 15 kilograms and at point ‘d’ price is Rupees 10 and quantity demanded is 20 kilograms. By joining the points a, b, c and d, we get a demand curve.

Elasticity of Demand

The elasticity of demand represents the extent of change in demand in response to the change in price. There are three types of elasticity of demand:-

(i) **More elastic demand**: When a smaller change in price leads to a greater change in quantity demanded then demand is more elastic.

(ii) **Less elastic demand:** When a greater change in price leads to a smaller change in quantity demanded, then demand is less elastic.

(iii) **Inelastic demand:** When price changes but the quantity demanded remains the same then demand is inelastic.

3.5 Limitations of The Law of Demand

(i) Inferior goods

In case of inferior goods, people do not buy more even if its price decreases. So the law of demand will not apply in such cases.

(ii) Scarce goods

If a shortage of supply of certain goods is expected, people will increase their demand even if its price increases. This is against the definition of the law so the law will not hold.

(iii) Giffen goods

Professor Giffen gave the concept of 'Giffen goods'. These are special kinds of inferior goods. When price increases more is demanded and less of it is demanded if price is lower. It goes against the law of demand. For example, barley is inferior to wheat. However, if price of barley falls, people will buy some quantity of wheat more, instead of barley and its demand will not increase.

(iv) Precious goods.

If possession of any good is thought to be a matter of prestige or distinction, people will buy that commodity even at higher price. It means that rising prices will not lower the demand of such precious goods. Example of such goods is diamonds and antiques etc.

3.6 Factors Affecting Demand, other than Price

There are numerous other factors than the price of a commodity which affect its demand.

1. Liking or disliking

If you like chocolate, your friend may like ice cream. Preferences or tastes are important in determining our willingness to buy different types of goods. The demand for many goods, such as clothing and hairstyle, changes frequently as fashion changes. People plan to buy more at same price, if these are in fashion.

2. Income

An increase in income will also cause an increase in our demand for most of the goods. For example, an increase in income will increase the demand for clothing. If higher income causes an increase in the demand for a good, the product is a normal good. But in some cases, the opposite will happen. If an increase in income causes a decrease in the demand for a particular good, it is because it does not come at the standard of the income group and can be called an inferior good.

3. Population

Since people are potential buyers, therefore, the demand for most goods will increase with the rise in population. For example, migration of people from rural to urban areas increases the demand for housing, restaurants and transport in urban areas.

4. Prices of other goods

In this regard we will classify products in three major categories.

i. Substitute goods

In case of substitute goods, products are related with each other in such a way that a rise in the price of one will increase the demand for the other. Similarly, decrease in the price of one will decrease the demand for the other. For example, sharp increase in the price of mutton will increase the demand for its substitute (chicken)

ii. Complementary goods

In case of complementary goods, products are related with each other in such a manner that an increase in the price of one will decrease the demand for the other or a decrease in the price of one will increase the demand for the other. For example, an increase in the price of tennis ball will decrease the demand for tennis racket.

iii. Independent goods

If price of one good changes it will not have any effect on the demand for the other (independent) good. For example, an increase in the price of computer does not affect the demand for a car.

5. Expectations

If the price of a particular good is expected to increase in the future, consumers will rush to markets and demand will increase. For example, if people expect that the price of mutton will increase sharply they will purchase more mutton and store it for future consumption.

6. Quantity of money

An increase in the money supply will increase the demand and a decrease in the money supply will decrease the demand

7. Climate conditions

During the summer season, the demand for ice will increase while it will decrease in winter. Similarly, the demand for air conditions increases in summer but decreases in winter.

8. Standard of a goods

An improvement in quality of a good increases its demand. For example, if ice is added to any soft drink during summer, its quality improves and its demand will rise.

The change in quality of 'Coca-Cola' will change its demand without a change in its price.

9. Innovation and Inventions

Sometimes demand for a good is changed without any change in price level. For example, demand for computers will go up for publishing books if it is quicker and easier to compose books on computer rather than manually.

Exercise

Q. 1 Each statement has four possible answers. Tick (✓) the best option:

1. If the price of a good decreases the quantity demanded
   (a) increases. (b) decreases.
   (c) remains constant. (d) a, b ,and c.
2. The demand curve slopes
   (a) downward to the right. (b) upward to the right.
   (c) vertical. (d) horizontal.
3. The law of demand does not hold if goods are
   (a) inferior. (b) precious.
   (c) scarce. (d) all of the above.
4. With an increase in the price of a good, its substitutes will have
   (a) a fall in its price. (b) an increase in its price.
   (c) an increase in its demand. (d) a decrease in its demand.

Q. 2 Complete the following statements by filling in missing words or phrases:

1. When price of a good __________ its quantity demanded decreases.
2. With a decrease in the price of inferior goods __________ decreases.
3. With an increase in the price of a prestigious goods its demand ___________.
4. A change in quantity demanded due to a change in price is called _________.

Q 3 Match the statement in column A with column B, Choose the correct answer from column B and write in column C.

A	B	C
Complementary goods	is a good whose quantity demanded decreases with a decrease in price.	
Inferior goods	An increase in the price of one good decreases the demand for another good.	
Normal goods	is a good whose quantity demanded increases with an increase in price.	
Scarce goods	An increase in the price of a particular good increases the demand of another good.	
Substitute goods	A decrease in the price of certain goods increases the quantity demanded.	

Q. 4 Answer the following questions in three sentences.

1. Define demand.
2. Write the functional equation of demand.
3. What does elasticity of demand mean?
4. What is the slope of a demand curve?
5. What does 'other things remain constant' mean in the law of demand?

Q. 5 Answer the following questions in detail:

1. Law of demand and its assumptions.
2. Law of demand with the help of schedule and diagram.
3. What does the law of demand mean? Give its limitations also.
4. What factors other than price bring changes in the quantity demanded?