STUDY MATERIAL

VIVEKANANDA COLLEGE

THAKURPUKUR

NAAC ACCREDITED GRADE—'A'

Subject: Economics

(For B.Com 1st Semester Students Under CBCS System)

Topic: DEMAND ANALYSIS

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Idea of Demand

Demand is a technical concept. Any commodity's demand implies-

- Desires to acquire it.
- Willingness to pay for it
- Ability to pay for it.

Demand Function

Let us consider a commodity be Q_1 . Its own price level is P_1. The demand of the commodity be q_1.Now its demand depends on the following factors.

i) Price of the commodity Q_1(denoted less P_1).
ii) Prices of other commodities . These may be substitutes or complements and their prices are p_2,p_3,p_4..... p_n
iii) Income level of the consumer (denoted by M).
iv) Taste and preference pattern of the consumer (say t)
v) Expected changes in commodity price in future (denoted by P^e)

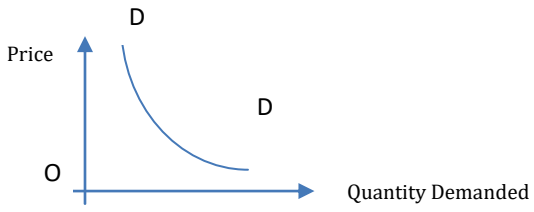
$$\mathbf{q_1 = f\ (P_1;P_2,P_3,P_4.....Pn;\ M;\ t;P^e).....(i)}$$

Equation (i) is called the demand function.Here$P_1,P_2,P_3,$.....P_n, M, t, P^e are treated as independent variable and q is a dependent variable .

Now we have to establish the relationship between quantity demanded of any commodity (q_1) and its own price level (P_1) consider the idea of ceteris paribus assumption i.e other things remaining constant (P_2,P_3,P_4..... P_n,M, t, P^e are all constant).

$q_1 = f\ (P_1)$ ..... (ii) , other things remaining constant

(ii) is called demand function for Q_1



'DD' is the demand curve of Q_1

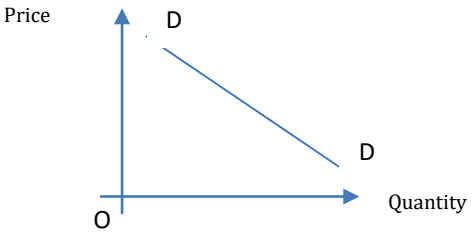
Derivation of Demand Curve

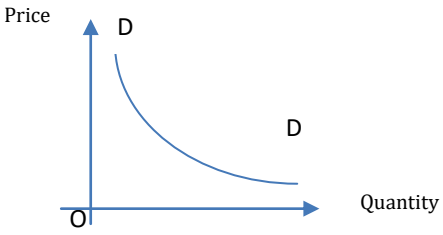
Price level of a commodity (Rs.)	quantity of the commodity (Units)
50	1
45	2
35	3
30	5

Say price of a commodity Rs.50, then consumer demand is 1 unit of the commodity . Now price falls to Rs.45, the consumer demands 2 units of the commodity. If price of the commodity falls to Rs. 35 then its quantity demand rises to 3 units. So we see that as price level falls then the quantity demanded rises continuously.

So there is a inverse relationship between price of the commodity and quantity level.

Demand curve may be linear or curved (shown in the following figures). Basic idea remains same in both the following figures i.e the demand curve is downward slopping.





This is also called individual demand curve.

Market Demand Curve

If we sum up all the individual demands we get market demand of the commodity. We can get market demand curve by lateral summation of individual demand curves.

Law of Demand

A fall in price of a commodity leads to a rise in the demand for the commodity and rise in price leads to a fall in the demand for the commodity , other things remaining constant . So there is inverse relationship between price and quantity demanded for a commodity.

Let us consider a linear demand curve,

$$q = a - bP \; ; \; a > 0, b > 0$$

$$\text{or , } bP = a - q$$

$$\text{or, } P = \frac{a}{b} - \left(\frac{1}{b}\right) q$$

slope of the demand curve = $\frac{dp}{dq} = -\frac{1}{b} < 0$

Why Demand Curve is Downward Slopping.

- Law of diminishing marginal utility.
- Income effect.
- Substitution effect.
- Change of number of buyers.
- Change of the use of commodity.

Main Factors Determining Demand

- Price level of the given commodity.
- Income level of the consumer .
- Price of substitute or complementary commodity.
- Taste and preference of the consumer .
- Demographic effect.

Distinction Between Movement Along the Demand Curve and Movement Away the Demand Curve.

A change in price of a commodity other things remaining constant will lead to a movement along the demand curve.

Any change in the quantity demanded for a commodity at each possible price resulting from the change in the value of any other parameter leads to movement away the demand curve .

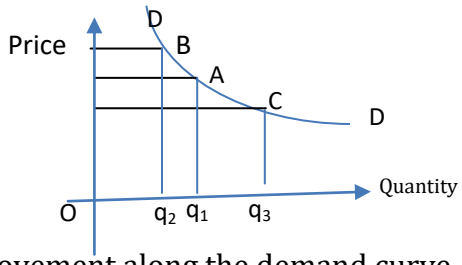


Fig: Movement along the demand curve.

Change in the price of substitute good or complementary good, change in income level, change in taste and preferences of the consumer leads to movement away the demand curve.

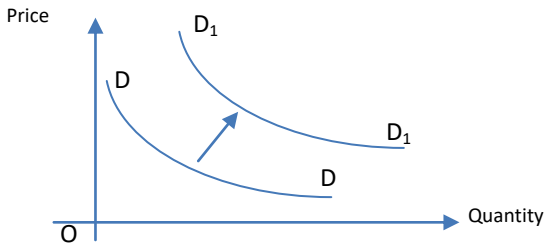


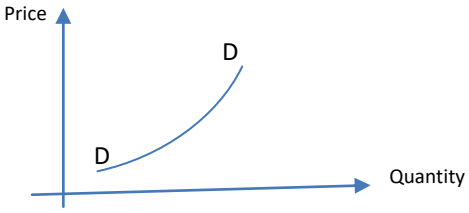
Fig: Movement away the demand curve.

Exceptions to the law of demand

The relation between price and quantity demanded is not inverse.

- Conspicuous Consumption
- Bandwagon Effect
- Snob Effect
- Speculation
- Giffen Effect

Above all cases there is a positive relationship between price and quantity demanded . Demand curve is upward rising.



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- **Case of salt** – the consumer does not change his consumption whatever the price of salt. In this case demand curve is vertical.