UNIT 2- BASICS OF DEMAND AND SUPPLY

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UNIT 2- BASICS OF DEMAND AND SUPPLY

- CONCEPT OF DEMAND AND DEMAND FUNCTION,
- DERIVATION OF INDIVIDUAL DEMAND CURVE AND MARKET DEMAND CURVE
- SHIFTING OF DEMAND CURVE
- THE SUPPLY FUNCTION AND THE SUPPLY CURVE
- DERIVATON OF INDIVIDUAL SUPPLY CURVE AND MARKET SUPPLY CURVE
- SHIFTING OF THE SUPPLY CURVE

MEANING OF DEMAND

In common use the term ,

- Desire
- Want and
- Demand

Are interchangeably use but

In economics, all these terms have distinct meaning.

Demand- Quantities of a particular good and service consumers are **willing** and **able** to buy at different possible prices.

Features of demand

- Main features of demand are :-

1. Demand depends upon utility of commodity.
2. Demand always means effective demand.
   - desire for commodity
   - means to fulfil the desire
   - readiness to buy the commodity.
3. Demand has its reference with price and time.

Demand definition

- "The demand , thus for a commodity is a schedule of the quantities that buyer would be willing to purchase at different prices at any one instant of time .

So far as the individual consumer is concerned , his demand for a commodity refers to various quantities of it which he would buy at different prices at a particular time".

-desire for a good

-sufficient resources to buy the goods

-Willingness to spend

-Given price

-Given time period

Demand function

- The quantity of each commodity that is demanded by an individual household is affected by five main variables.

- A **demand function** is expressed in following equation

  $$Dx = f(px, pr, Y, T)$$

Factors affecting demand

- **Utility of goods** :- Utility means power to satisfy human wants .

  commodities , having greater utility will be demanded more .

- **Income level** :-

When income goes up consumers buy more

When income goes down consumers buy less.

- **Distribution of wealth :-**

When national income is **equally distributed** , there will be more **demand for necessities**.

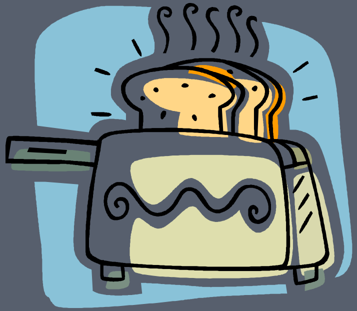
When distribution **of income is unequal** , there will be more **demand for luxury goods** like car , TV,AC.

- **<u>Price of related goods</u>** :-

Substitute Goods :- goods which may be used in place of each other. Eg

or

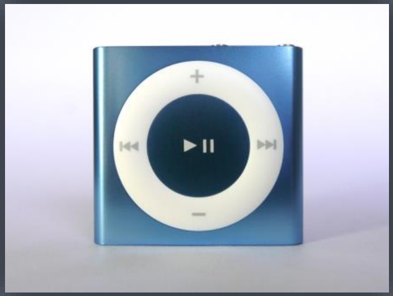
Complements :- goods which are jointly demanded to satisfy a particular want. Eg.



&

- **<u>Tastes and preferences</u>** :-

Then.... 

Now...... 

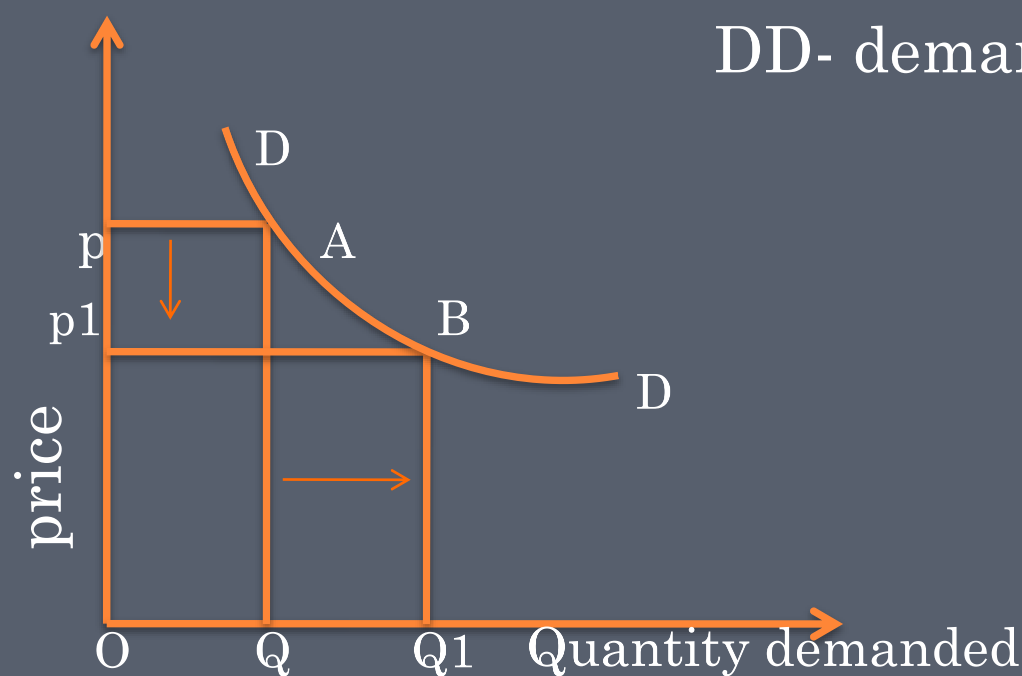
- **<u>Expected Future Change in Price</u>** :- other important factors influencing demand are government control, natural calamities, war & other unexpected factors .

Types of Demand

- Three kinds of demand may be distinguished:-

1. Price demand – **Demand varies inversely with price ,** if price falls demand will increase and vice versa , indicate negative slope of demand curve , ie downward from left to right

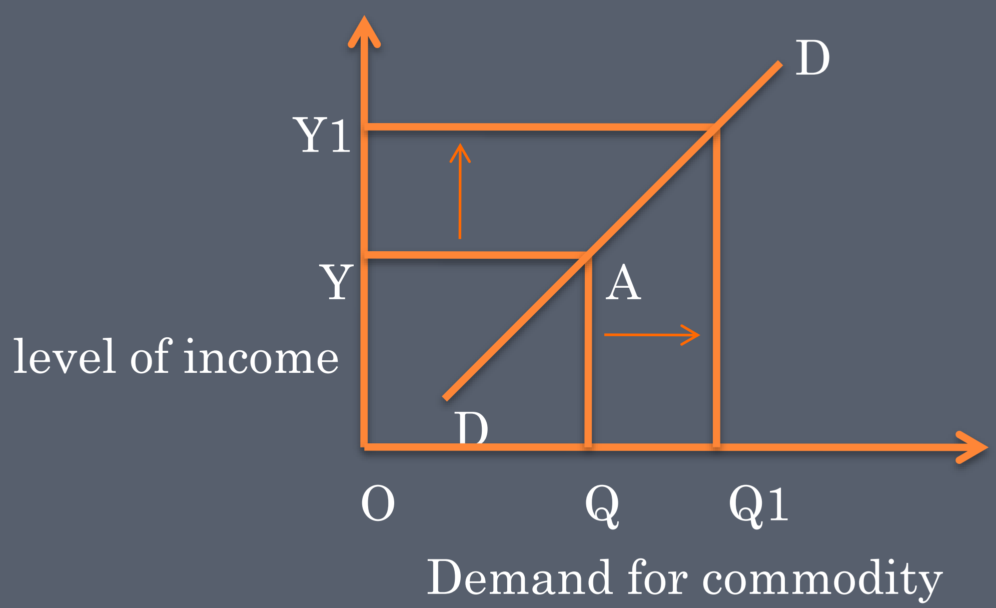
DD- demand curve



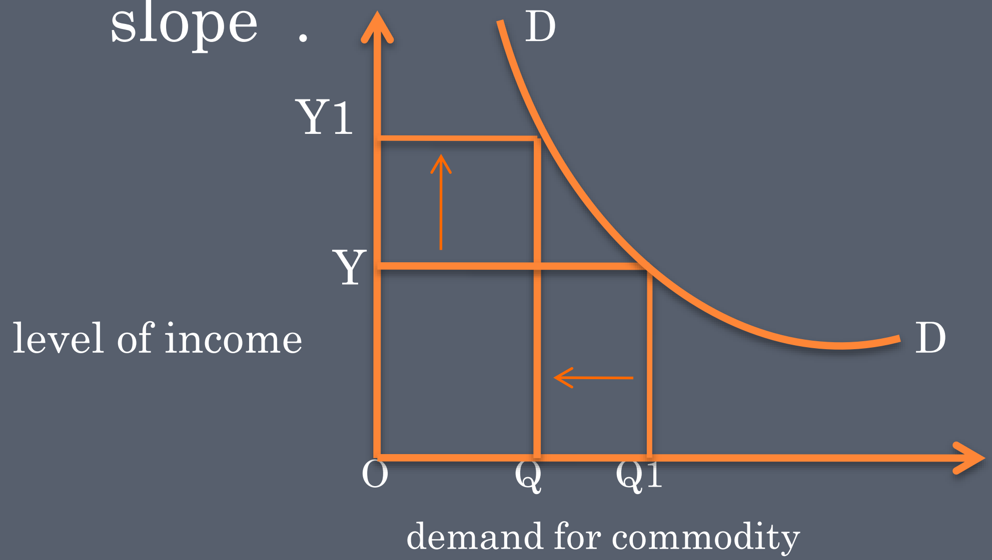
2. Income demand- It refers to the different quantities of commodity which consumer will buy at different level of income .

For the purpose of income demand analysis , goods and services may be grouped under two categories:-

- Superior goods – the income demand curve has positive slope. It slopes upwards to right , as consumer's income increases , they buy greater quantity of commodity.



- Inferior goods :- these goods are bought in large quantities when consumers are poor , So Income demand curve of inferior goods have a negative slope .



3. **<u>Cross demand</u>** :-It means the quantities of goods or services which will be purchased with reference to change in the price not of this good but of other inter related goods.

Law of Demand

- Law of demand indicates the qualitative relationship between the price of a commodity and its quantity demanded .
- It indicates only the direction in which the demand will change.
- According to Marshall " The amount demanded increases with a fall in price and diminishes with rise in price "
- Consumers buy more of a good when its price decreases and less when its price increases.

When price goes up...	demand goes Down.....	when price Goes down...	Demand goes Up

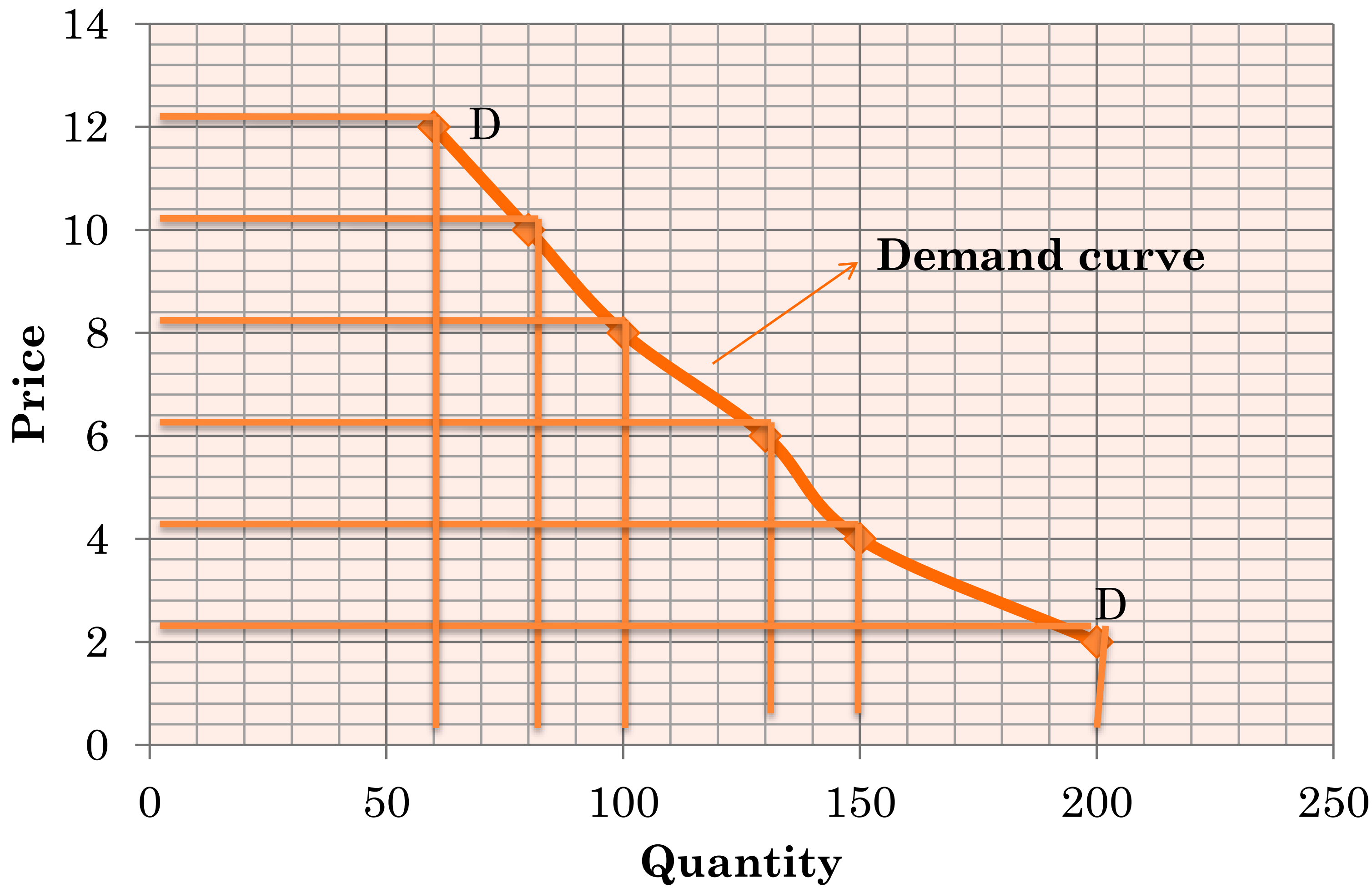
- It is clear from the above definition that , the price and quantity demanded of a commodity are inversely related . It can be expressed as –

$$p \alpha 1/Q$$

DEMAND SCHEDULE – Summarises the information on price and quantity demanded in tabular form.

Price of goods per Unit (in Rs.)	Units of commodity X
2	200
4	150
6	130
8	100
10	80
12	60

The demand curve



- Demand curve is a graphical representation of demand schedule. It is the locus of all the points showing various quantities of a commodity that a consumer is willing to buy at various levels of price, during a given period of time, assuming no change in other factors.
- demand curve is of two types:

(a) Individual Demand Curve

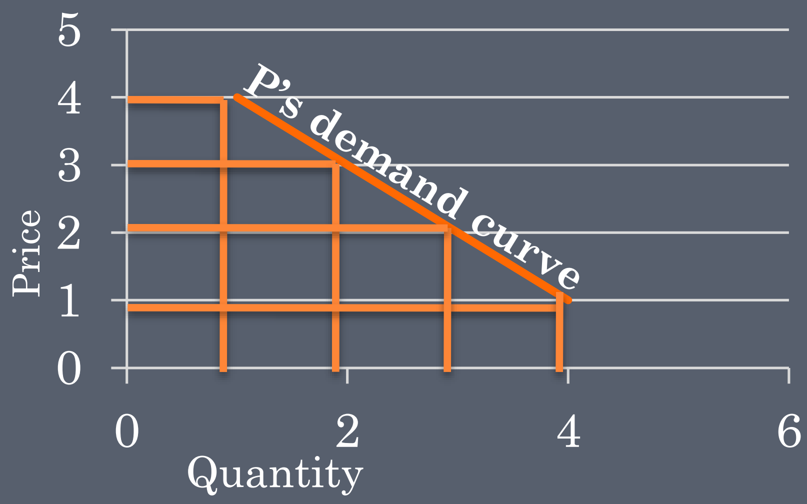
(b) Market Demand Curve

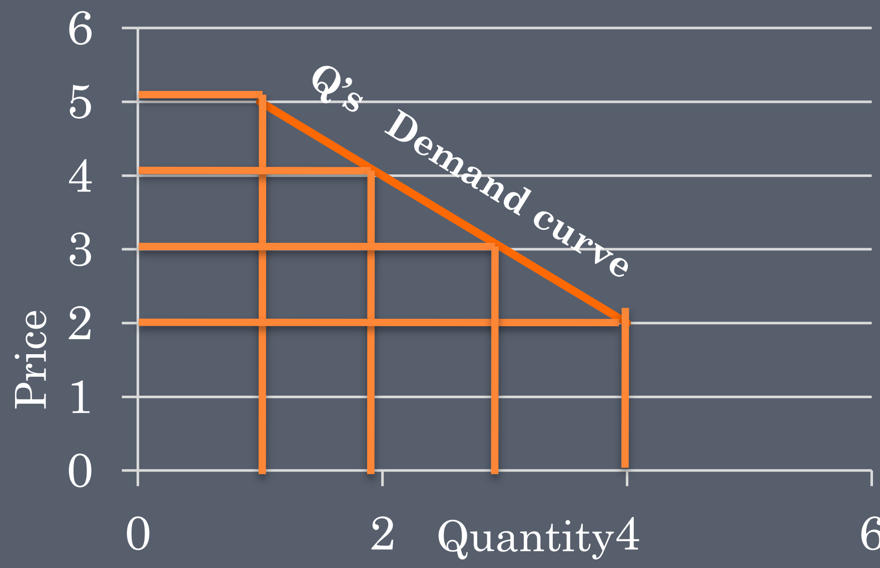
- **Individual Demand Curve**: Individual demand curve refers to a graphical representation of individual demand schedule. It is single consuming entity's demand .
- **Market Demand Curve**: Market demand curve refers to a graphical representation of market demand schedule. It is obtained by horizontal summation of individual demand curves.

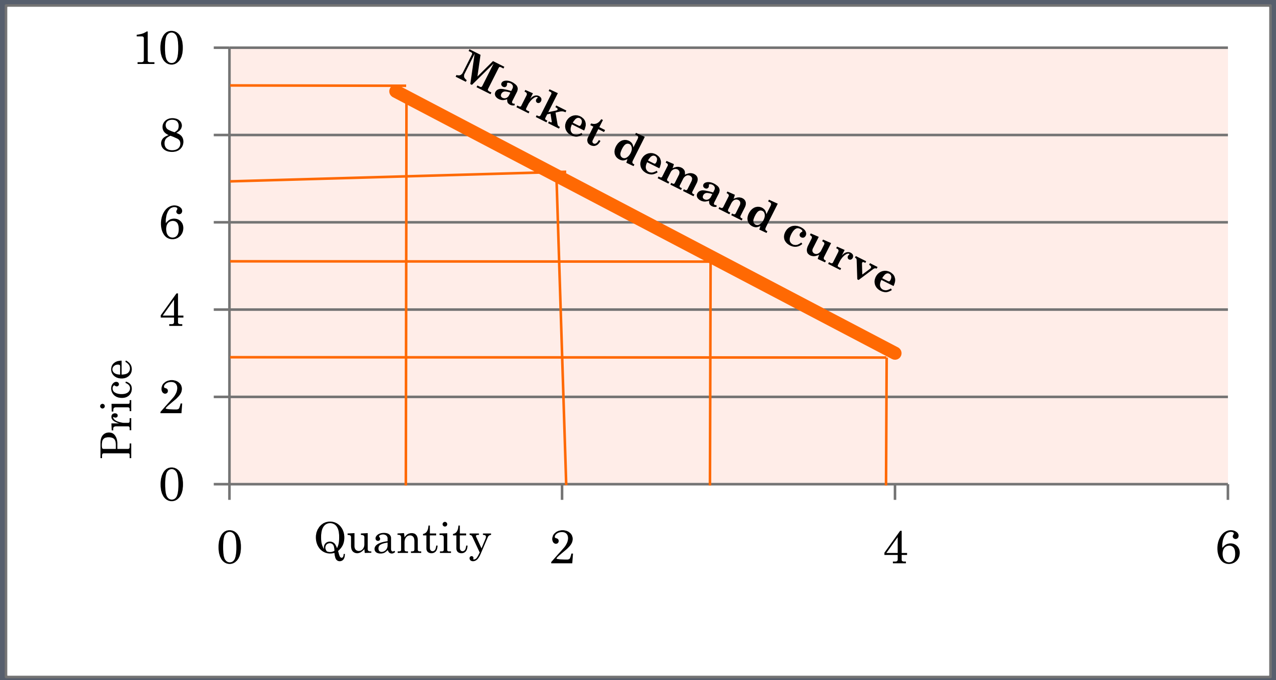
Market demand curve

- Market demand schedule :- it is table showing various quantities of a commodity which all the buyer's are ready to buy at different possible prices of a commodity at a point of time.

Price of commodity (X) in Rs.	Demand of (P)	Demand of (Q)	Market demand (Units)
1	4	5	4 + 5 = 9
2	3	4	3 + 4 = 7
3	2	3	2 + 3 = 5
4	1	2	1 + 2 = 3


P's demand curve
Price
Quantity
0
1
2
3
4
5
0
2
4
6


Q's Demand curve
Price
Quantity
0
1
2
3
4
5
6
0
2
4
6


Market demand curve
Price
Quantity
0
2
4
6
8
10
0
2
4
6

Change in Demand

There are two types of change in demand –

(A). **Extension or Contraction of demand or Movement along the same demand curve** :-

A movement along the demand curve occurs when quantity demanded changes because of **<u>change in price</u>** of the commodity alone .

It has 2 aspects –

- Extension of demand - It **occurs when quantity demanded increases in response to a fall in own price of the commodity**. This is shown as a downward movement (left to right) on the same demand curve .
- Contraction of demand - It occurs **when quantity demanded decreases in response to a rise in own price of the commodity**. This is shown as a upward movement (right to left) on the same demand curve.

Shift in demand curve

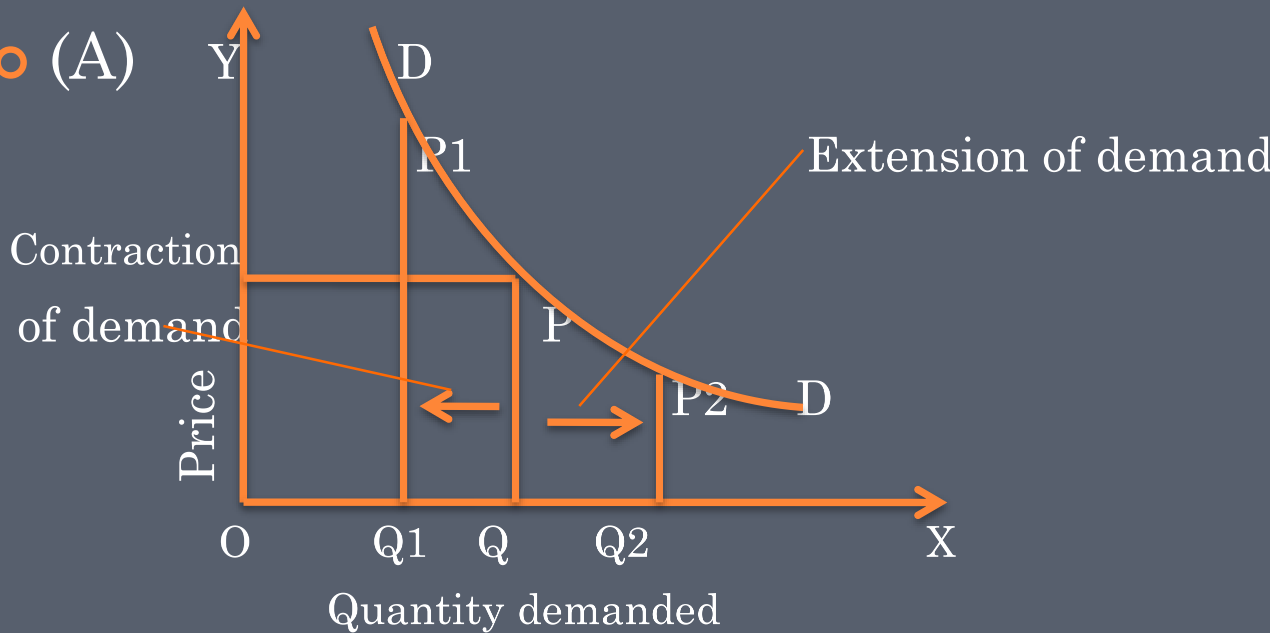
- (B) **Increase or Decrease in Demand Curve or Shifting of the Demand Curve** -

when the demand changes on account of the factors other than change in price , there will be change in demand . Demand curve may shift either rightwards or leftwards.

The main cause of increase or decrease in demand are as fallows :-

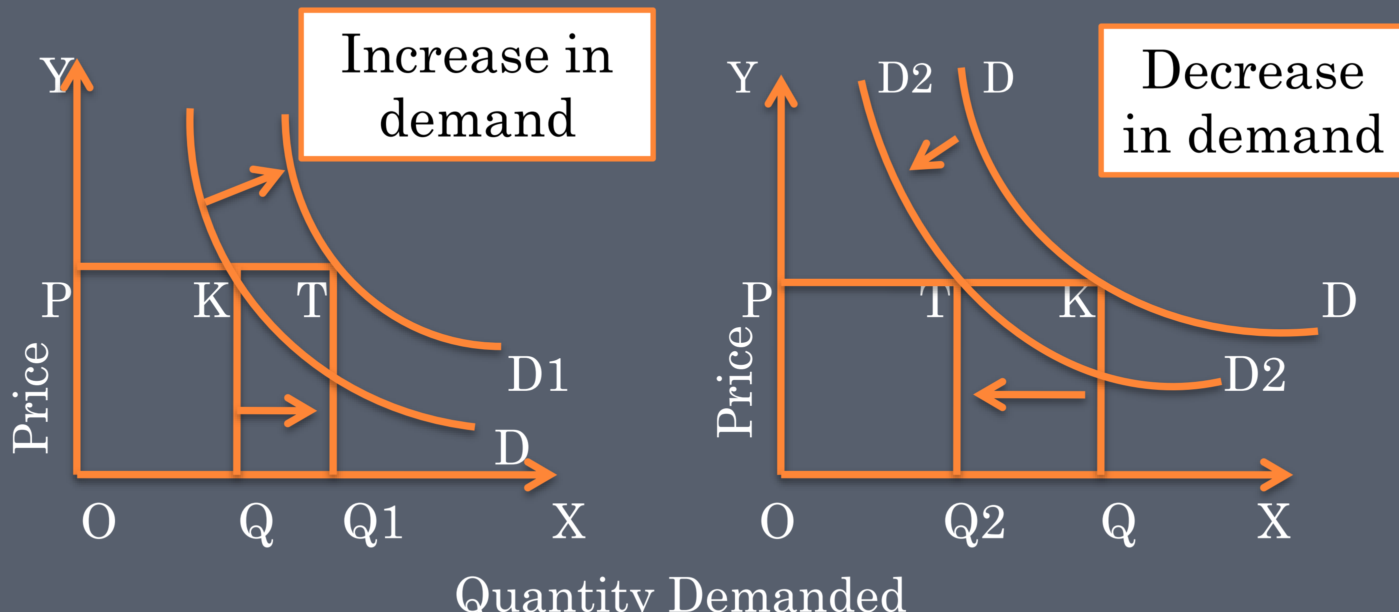
1. Change in income of consumer
2. Change in utility of commodity .
3. Change in the price of related commodities.
4. Change in taste , preference , fashion etc.
5. Expected change in future prices.

- (A)



Y
D
P1
Extension of demand
Contraction
of demand
P
P2
D
Price
O
Q1
Q
Q2
X
Quantity demanded

- (B)



Y
Increase in demand
P
K
T
D1
D
Price
O
Q
Q1
X
Y
D2
D
Decrease in demand
P
T
K
D
D2
Price
O
Q2
Q
X
Quantity Demanded

MEANING OF SUPPLY

- The term ' **quantity supplied of a commodity** ' refers to the quantity of a commodity offered for sale per period of time.

Like demand , supply is also related with price and time.

According to **Thomas** . " The supply of goods is the quantity offered for sale in a given market at a given time at various prices ."

Supply Schedule

- Supply schedule is a tabular representation of various quantities of a commodity that can be offered for sale at different prices during a given period of time .

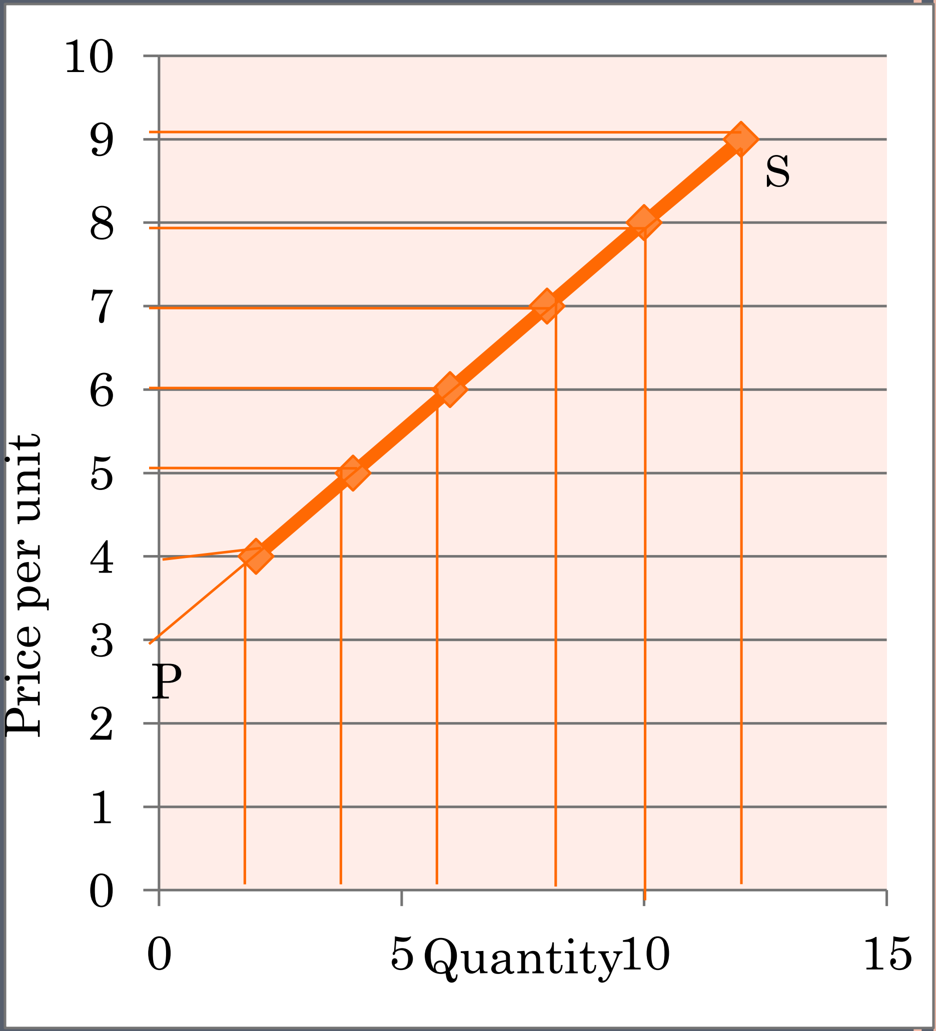
- It is of two types :-

I. Individual supply schedule
II. Market supply schedule

Individual supply schedule and supply curve

Price per unit (in Rs.)	Quantity supplied by Producer 'A'
4	2
5	4
6	6
7	8
8	10
9	12

It shows the different quantities of a commodity that a producer is prepared to sell at various points .
The **supply curve has positive slope** it represent positive relationship between price and quantity supplied .OP is the price where the supply is nil , this price is regarded as "**reserve price**" or **minimum supply** price .



Market supply schedule and supply curve

- Market supply schedule is the sum total of all individual supply schedule.

Price per unit of commodity (in Rs.)	Producer A	Producer B	Producer C	Market supply A+B+C
4	2	2	1	5
5	4	3	4	11
6	6	5	5	16
7	8	8	7	23
8	10	11	9	30
9	12	13	11	36

It represents the total market supply of commodities offered for sale by different producers at a given price at a given period of time . It clearly shows that **market supply increases as the price of commodity rises**.

SUPPLY FUNCTION

- Functional Relationship between the price of commodity and its determinants is known as supply function.
- It can be represented in following equation-

$$Sx = f\,(\,Px\,,\,Pr\,,\,Pf\,,\,T\,,\,N\,,\,G\,,\,Ex\,,\,Gp\,)$$

Where, Sx = Supply of Commodity X

Px = Price of Commodity X

Pr = Price of related goods

Pf = Price of factors of production

T = Technique

N = Number of firms

G = Goal of firm

Ex = Expected future price

Gp = Government policy

Law of Supply

- Law of supply states the relationship between price of a commodity and its supply.
- According to this law , “other things being equal” the quantity supplied of a commodity varies **directly** with its price , in other words when price of commodity rises , supply increases & vice versa.

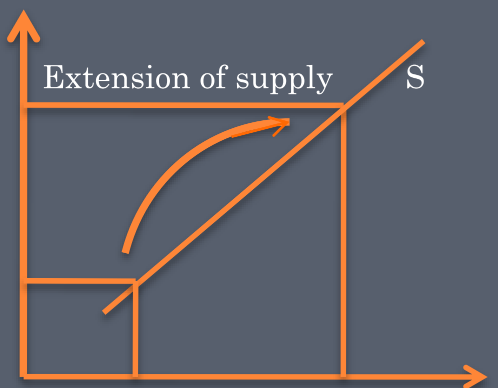
When price goes up… Supply goes up…

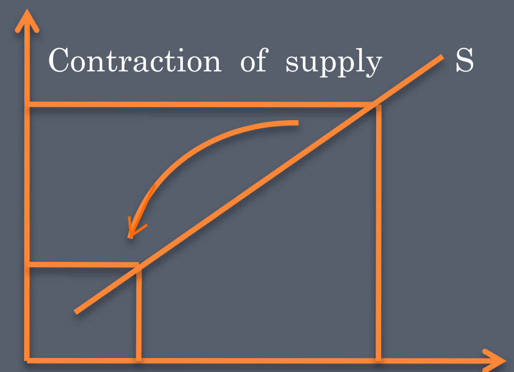
When price goes down.. Supply goes down..

Shifting of the supply curve

- A) Extension and Contraction of Supply – When quantity of supply changes due to change in price of commodity . It is called extension and contraction of supply.

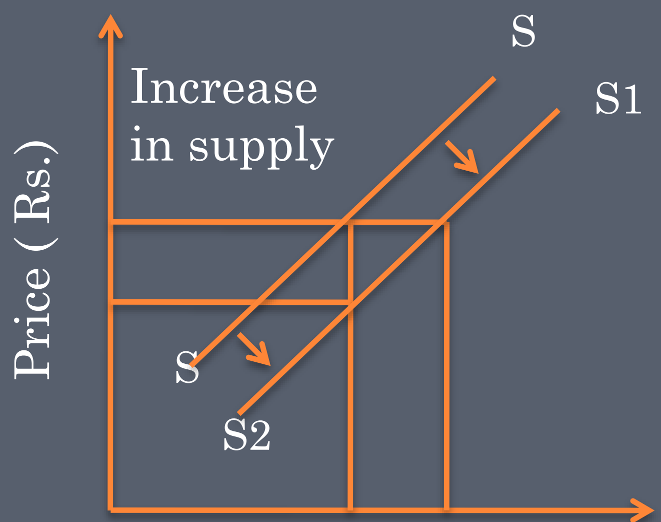
1. Extension of Supply – When supply of commodity increases due to rise in its price.
2. Contraction of supply – When supply of commodity falls as a result of fall in price .

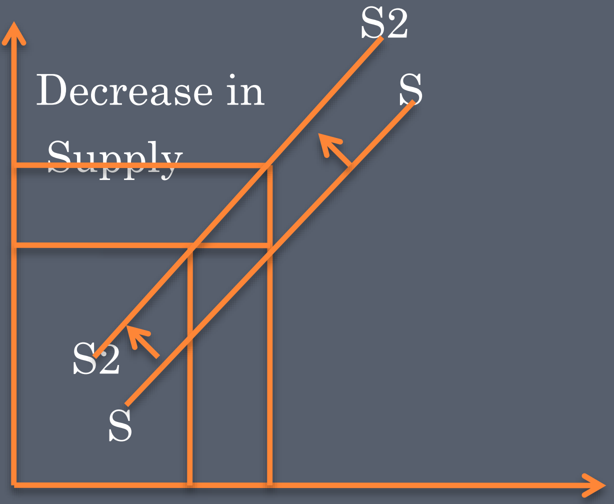




- (B) Increase and Decrease in Supply – When the supply of commodity changes due to **the factors other than price of the commodity** , it is called increase or decrease in supply.

1. <u>Increase in Supply- </u>increase in supply occurs when- the producers are **willing to supply more at same price** or ; they are prepared to supply original quantity at lower price
2. <u>Decrease in Supply- </u>it reflects the situations in which – the **producer supplies less quantity at the same price** ; same quantity at higher price.



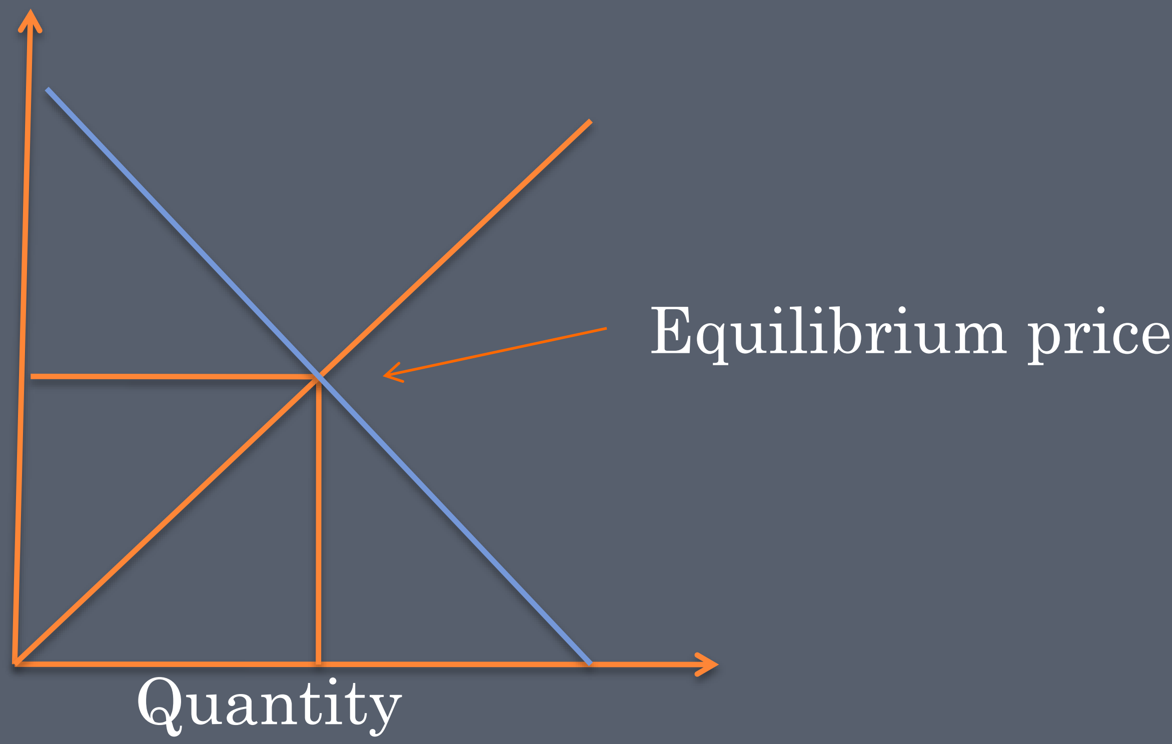


So.....

- The law of Demand describes how price affects **CONSUMERS**..
- The law of Supply describes how price affects **PRODUCERS**..

The best price …

- The **equilibrium price** is where the demand and supply intersect.



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