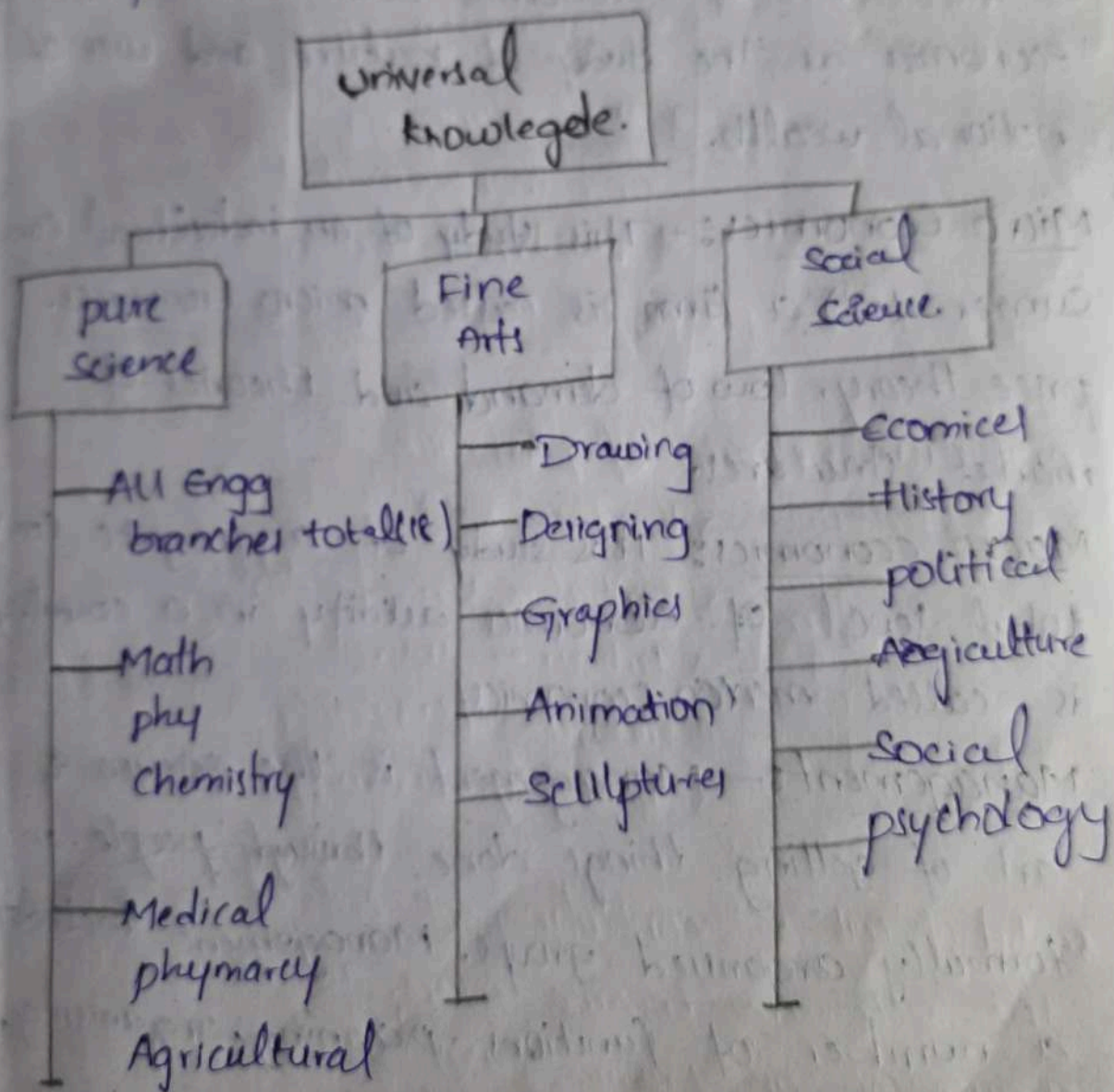


7/12/22

MAFA (Managerial economics and Financial Analysis).

1. Geo-graph
2. History
3. Economics about humans
4. political science.



Economics (Decision making) — eco — Human activities.  
 — nomos — satisfy / sacrifice.



# 1. Introduction to Economics:-

\* Meaning of economics:- Economics is a study of human activity both at individual & national level. Economics is the science of wealth.

• Economics activities:- Earning and spending money are called economics activity.

⇒ The father of Economics Adam Smith defined economics as the study of nature and use of national wealth.

Micro Economics:- This study of an individual consumer (or) a firm is called micro economics. price theory, law of demand and theories of market structures.

Macro economics:- This study of aggregate (or) total level of economics activity in a country is called macro economics.

Management:- Management is the science & art of getting things done through people in formally organised groups. Management includes a number of functions: planning, organising, staffing, directing and control.

Meaning of Managerial Economics:-



Managerial Economics is a part of economics & it is concerned with decision making. It is a science which deals with the application of economic theories, techniques.

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\* Nature and scope of Managerial Economics:-

25/3/22

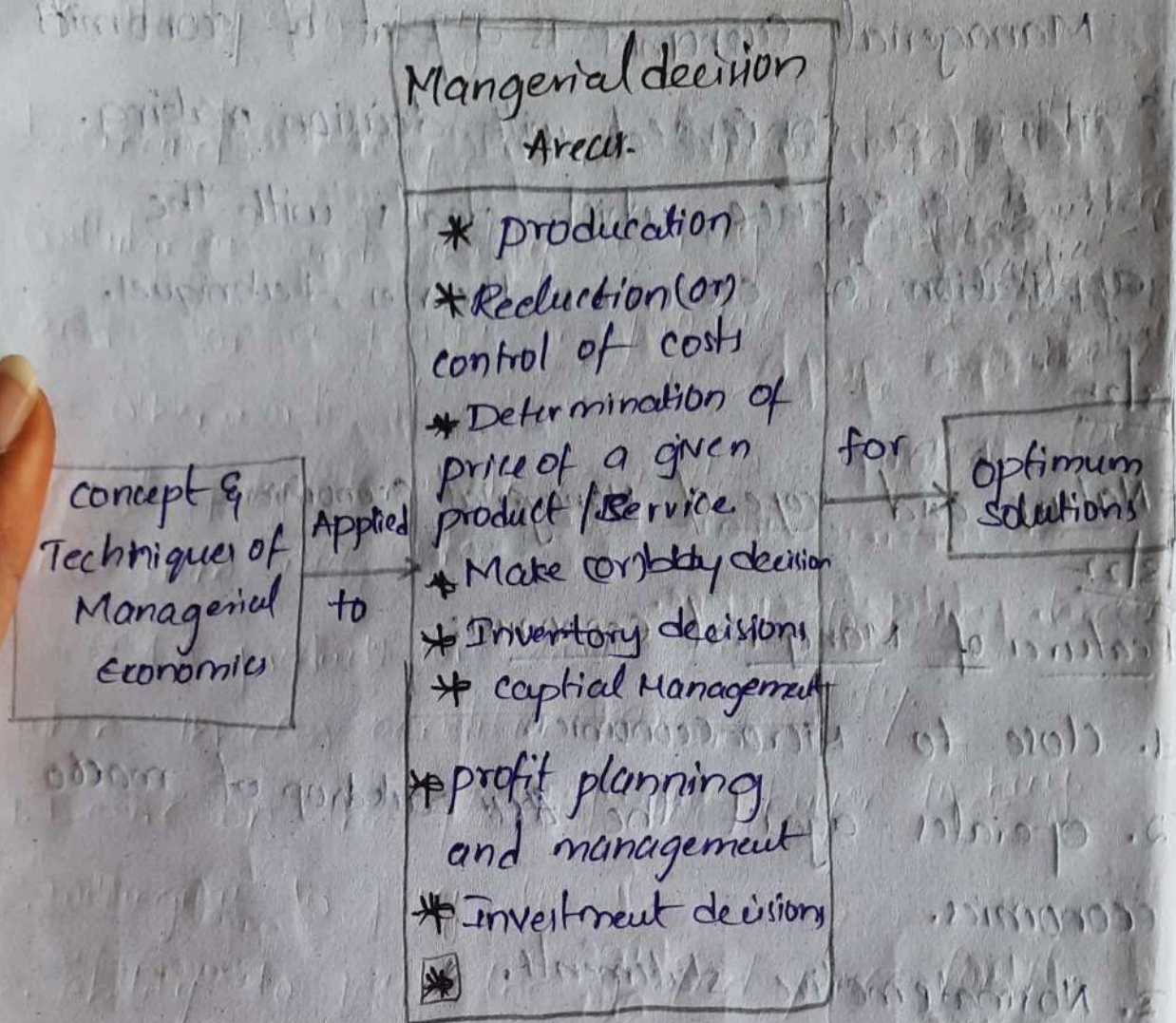
\* Features of Managerial Economics:-

1. close to Micro-Economics.
2. operates against the ~~the~~ backdrop of macro economics.
3. Normative statements.
4. prescriptive actions.
5. applied in nature.
6. offers scope to evaluate each alternative.
7. Interdisciplinary.
8. assumptions and limitations.

Scope of Managerial Economics:-

The main focus in the managerial Economics is to find an optimal solution to a given managerial problem. The problem may relate to managerial decision areas.





production :- Factor of production

fixed factor

→ Land - Rent

variable value factor

→ Capital - wage / salaries

→ Labour - Interest

→ Entrepreneur / Organizer - Profit / Loss

→ Technology - Value / Price

control of cost :- controlling of costs of an products, the sells are became more. To Reduce it, that analysis of an product waitage Removing.

Determination: Estimation of product price.



Make (or) buy:- To taking decision about making  
or buy the same product at market.

Inventory:- stock decision making.

$$\text{Economic order quantity (E.O.Q)} = \sqrt{\frac{2AB}{C}}$$

capital management:- Getting good returns/profit  
on investments on something.

profit planning & management:- Maintaining the returned  
good profits.

Linkages with other objects (or) ~~disciplines~~:- The interlinker  
objects of an Managerial economics.

- 1) Economics — Marco, Micro (decision making)
- 2) Mathematics — calculation
- 3) Operation Research — Transportation problem, etc.
- 4) Statistics — Also Mathematical part (1956)
- 5) Accountancy — To know the financial positions. (Assets, liabilities...)
- 6) psychology —
- 7) OB (Organization Behaviour).

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\* It is interdisciplinary of the other subjects, is  
called as Managerial economics.

\* Demand analysis:- [chapter-1]

1. What is Demand?

\* Desire to buy a product.

\* Willingness to pay



\* ability to pay

Demand:- Everyone want supported by the willingness and ability to buy constitutes demand for a particular product (or) service. In other words, if I want a car and I can't pay for it there is no demand for the car from my side.

A product (or) service said to have demand when three (3) conditions are satisfied.

1. Desire on the part of the buyer to buy
2. willingness to pay for it.
3. ability to pay the specified price for it.

\* unless, all these conditions are fulfilled this product is said to have any demand.  
(Law of demand:-)

\* Factors Determining Demand:- Determining the factors of a product.

1. product price
2. customer income
3. customer taste
4. customer future income

A demand for a particular product depends on several factors. The following factors determine the demand for a given



product.

- a) price of the product (P)
- b) customer income level (I)
- c) Tastes & preferences of the customers (T)
- d) prices of related goods, which may be substitutes (PR)
- e) Expectations about the prices in future. (EP)
- f) Expectations about the incomes in future. (EI)
- g) size of population (SP)
- h) Distribution of customers over different regions. (DC)
- i) Advertising efforts (A)
- j) Any other factors capable of effecting the demand. (O)

### \* Demand function:-

Demand function is a function, which describes a relationship between one variable and its determinates.

Mathematically the demand function for a product (A) can be expressed as follows

$$Q_d = f(P, I, T, PR, EP, EI, SP, DC, A, O).$$

where  $Q_d$  refers to quantity of demand and it is a function of the following variables



P - price of the product

I - Income level of the customer

T - Refers to taste and preferences of the customer.

PR - Refers to price of related goods.

EP - Refers to expectation about the prices in future.

EA - It refers to expectations about the future incomes

SP - Refers to size of population.

DC - Distribution of customer over different regions

A - Advertising efforts.

O - Refer to any other factors of effecting the demands.



4/4/22

## Law of Demand:-

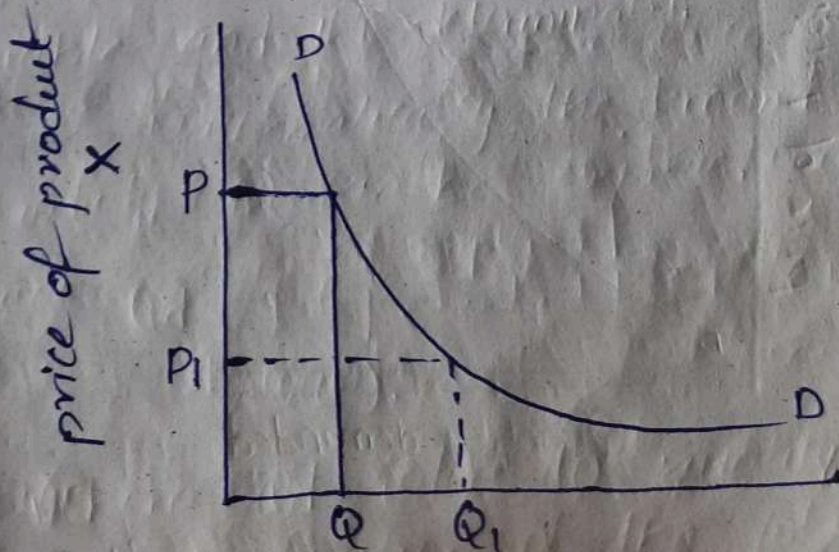
1) What is law of Demand? ~~Q16~~  
The law of demand states: other things remaining the same, the amount of quantity demanded rises with every fall in the price and vice versa.

The law of demand states the relationship between price and demand of a particular product or service. It makes an assumption that all other demands remain the same or do not change.

### Assumptions of the Law of Demand:-

The phrase 'other things remaining same' is price (income, taste, future, size of population, advertising efforts, and any other factor).

### Operation of the Law of Demand:-



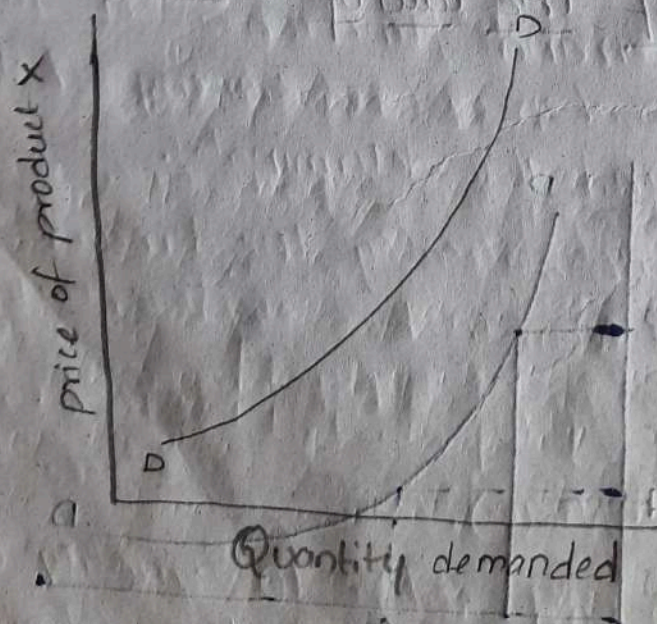
\* Quantity Demanded



From the above, it can be seen that in the normal course, at OP price, the quantity demanded is OQ. If the price falls from P to P<sub>1</sub>, then the higher quantity OQ<sub>1</sub> is bought. OP is the demand curve. This shows that there is an inverse relationship b/w the demand and the price. It can be seen that the demand curve is sloping downwards from left to right.

There are certain exceptions to this law. In other words, the law does not hold good in the following cases:-

1. Necessities feared
2. confers distinction (product such as jewels, diamonds, and so on).
3. Giffen's paradox.
4. Ignorance of price changes.





## Elasticity of Demand:-

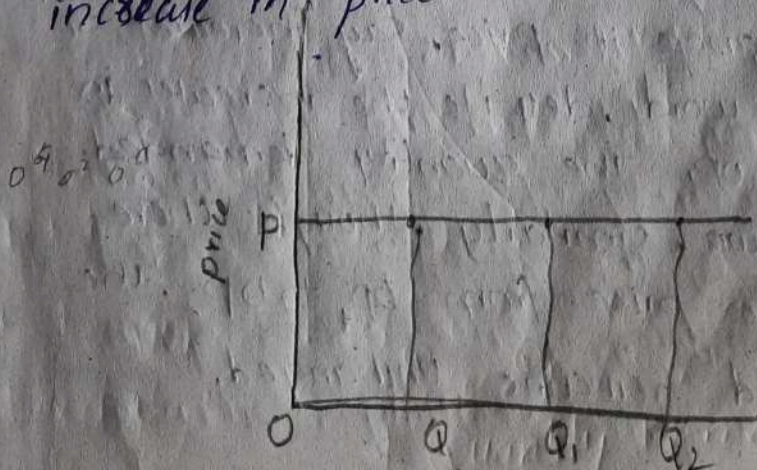
The term 'elasticity' is defined as the rate of responsiveness in the demand of a commodity for a given change in price or any other determinants of demand.

In other words, it explains the extent of change in quantity demanded because of a given change in the other determining factors, may be price or any other factors.

### Measurement of elasticity:-

- 1) perfectly elastic demand
- 2) perfectly inelastic demand
- 3) Relatively elastic demand
- 4) Relatively inelastic demand
- 5) unitary elasticity.

1) perfectly elastic demand:- when any quantity can be sold at a given price, and when there is no need to reduce price, the demand is said to be perfectly elastic. In such cases, even a small increase in price will lead to fall demand.



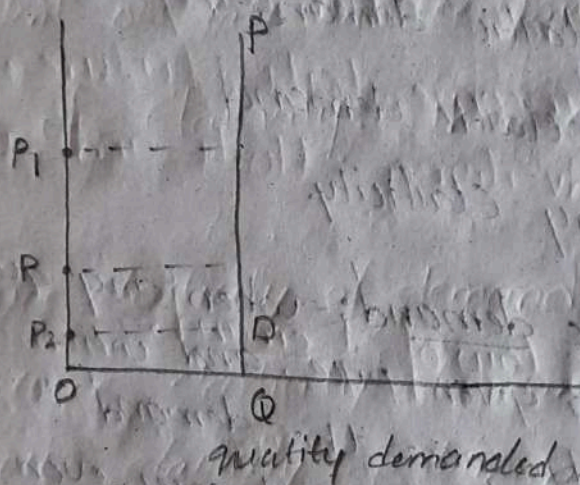


\* price is fixed, but product demand is increased.

In above diagrams reveals that the quantity demanded increases from  $OQ$  to  $OQ_1$ , from  $OQ_1$  to  $OQ_2$  even though there is no change in price.

2) perfectly Inelastic demand:- when a significant degree of change in price leads to little or no change in the quantity demanded, then the elasticity is said to be the perfectly Inelastic.

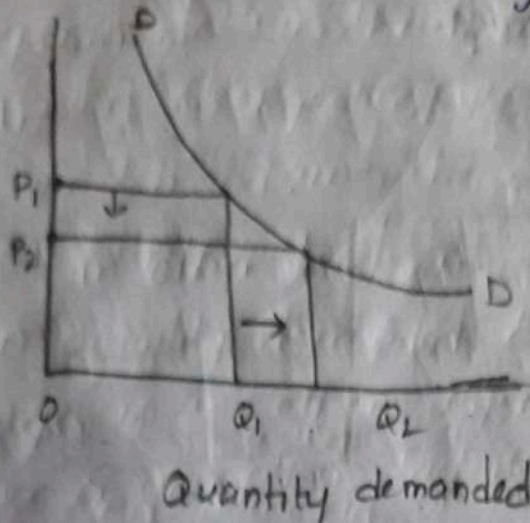
\* product price increase (or) decrease but the quantity demand still continued.



In the above diagram, it reveals that there is no change in the quantity demanded though there is change in price, say increase or decrease. In other words, despite the increase in price from  $OP$  to  $OP_1$ , the quantity demanded has not fallen down. Similarly, though there is a fall in the price from  $OP_1$  to  $OP_2$ , the quantity demanded remains unchanged.

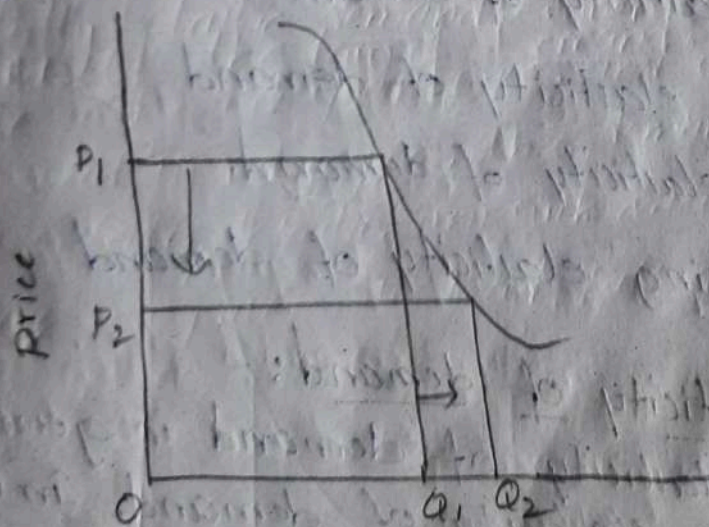


3) Relatively Elastic Demand: The demand said to be relatively elastic when the change in demand is more than the change in the price.



In the above diagram, it reveals that the quantity demanded increase from  $OQ_1$  to  $OQ_2$  because of a decrease in price from  $OP_1$  to  $OP_2$ . The extent of increase in the quantity demanded is greater than the extent of fall in the price.

4) Relatively Inelastic Demands: The demand said to be relatively inelastic when the change in demand is less than the change in the price.

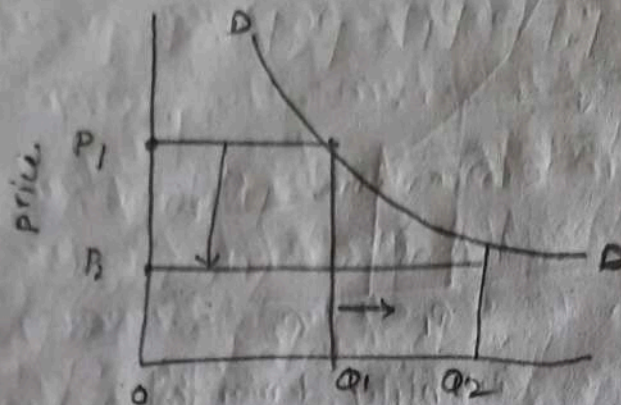


\* Quantity demanded.

The above diagram, reveals that the quantity demanded increase from  $OQ_1$  to  $OQ_2$  because of a decrease in price from  $OP_1$  to  $OP_2$ .



5) unity Elasticity :- It is also called as unitary elastic demand. The elasticity in demand is said to be unity when the change in demand is equal to change in price.



The above diagram reveals that the quantity demanded increase from  $OQ_1$  to  $OQ_2$  because of a decrease in price from  $OP_1$  to  $OP_2$ . The extent of increase in the quantity demanded is equal to the extent of fall in the price.

\* Types of Elasticity :- There are four types. Such

a.

- price elasticity of demand
- Income elasticity of demand
- cross elasticity of demand
- Advertising elasticity of demand

a) price elasticity of demand :-

elasticity of demand in general refer to price elasticity of demand. In other words, it refers to the quantity demanded of a commodity in response to a given change in price. price elasticity is always



negative which indicates that the customer tends to buy more with every fall in the price. The relationship between the price and the demand is inverse.

$$Ed_p = \frac{(Q_2 - Q_1) / Q_1}{(P_2 - P_1) / P_1}$$

where  $Q_1$  is the quantity demanded before price change,  $Q_2$  is quantity demanded after price change,  $P_1$  is price before change and  $P_2$  is the price after change.

b) Income elasticity of Demand:— Income elasticity of demand refers to the quantity demanded of a commodity in response to a given change in income of the consumer.

$$Ed_i = \frac{(Q_2 - Q_1) / Q_1}{(I_2 - I_1) / I_1}$$

where  $Q_1$  is the quantity demanded before change,

$Q_2 \Rightarrow$  the quantity demanded after change,

$I_1 \Rightarrow$  income before change,

$I_2 \Rightarrow$  It is the income after change.

c) Cross elasticity of Demand:— cross elasticity of demand refers to the quantity demanded of a commodity in response to a change in



the price of a related good, which may be substitute or complement.

$$E_{dc} = \frac{(Q_2 - Q_1)/Q_1}{(P_2 - P_1)/P_1}$$

where

$Q_1$   $\Rightarrow$  Quantity demanded before change.

$Q_2$   $\Rightarrow$  quantity demanded after change.

$P_1$   $\Rightarrow$  price before change and

gluher  $P_2$   $\Rightarrow$  price after change.

(d) Advertising Elasticity :— It refers to increase in the sales revenue because of change in the advertising expenditure. In other words, there is a direct relationship b/w the amount of money spent on advertising and its impact on sales. Advertising Elasticity is always positive.

$$E_{da} = \frac{(Q_2 - Q_1)/Q_1}{(A_2 - A_1)/A_1}$$

where  $Q_1$   $\Rightarrow$  quantity demanded before change

$Q_2$   $\Rightarrow$  quantity demanded after change.

$A_1$   $\Rightarrow$  amount spent on advertising before change.

$A_2$   $\Rightarrow$  amount spent on advertisement after change.



# \* Demand Forecasting

## \* Method of Demand forecasting:-

### 1) Survey methods.

#### a) Survey of buyer intentions

(i) census method

(ii) sample method

#### b) Sales force opinion method

### 2) Statistical methods

#### a) Trend projection methods

(i) Trend line by observation

(ii) least square method

(iii) Time series Analysis

(iv) moving average methods

(v) exponential smoothing

#### b) Barometric techniques

#### c) Simultaneous equations methods

#### d) correlation and regression methods

### 3) Other methods

#### a) expert opinion method

#### b) Test marketing

#### c) controlled experiments

#### d) Judgemental approach