UNIT-1

Introduction to Managerial Economics

Economics:

Economics studies individual behaviour from the perspective of earning money and putting money into the expenditure.

Adamsmith is father of economics.

Adamsmith defined economics in 17^{th} century

Definations of economics:

Def 1 : Economics is study of wealth (Adamsmith)

Def 2 : Economics is study of welfare (Alfered Marshall)

Def 3 : Economics is science which studies human behaviour as a relationship between ends and scales resources which are having alternative uses (Robinson)

(Ends = wants, resources = money, scales = limited)

Def 4: Economics is production, consumption and distribution (J.B.say)

Economy: A country situation in financial way.

Defination of Managerial Economics:

Integration of economic tools with the bussiness for the purpose of forward planning and decision making in the bussiness is called as managerial economics. (spencer)

Nature of managerial economics:

1. Micro economic in nature

It studies about the individual persons behaviour.

2. Macro economic in nature
3. pragmetic in nature

(Pragmet means what ought to do or what should we do)

4. prescriptive in nature

prescritive means goal oriented

Scope of Managerial Economics:

1. Demand analysis
2. Production analysis
3. Pricing Desisions
4. Profit analysis
5. Market analysis

Demand analysis:

~~The~~ Identifying the needs of the customers

Identifying the demand of the product

Production analysis:

After identifying the demand of the product then they plan for the production.

It is all about minimising the cost and maximising the profit and production.

Pricing Decisions:

After the production analysis, the product should give a certain price

Profit analysis:

After the completion of all above three analysis, the organisation will ~~see~~ ~~get the~~ calculate the profit.

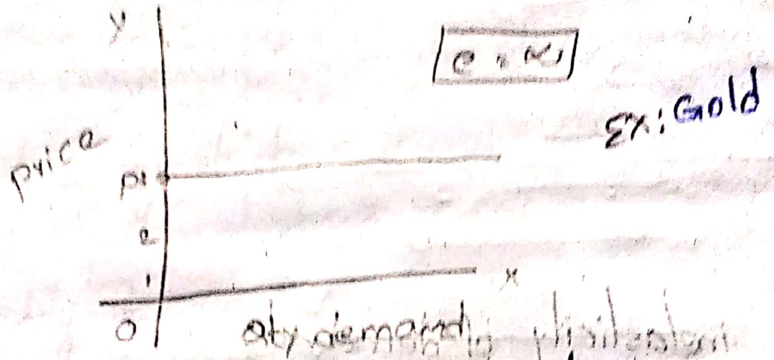
Market analysis:

Alfered master divided the ~~market into~~ two types

1. perfect compitition market
2. Imperfect Compitition market.

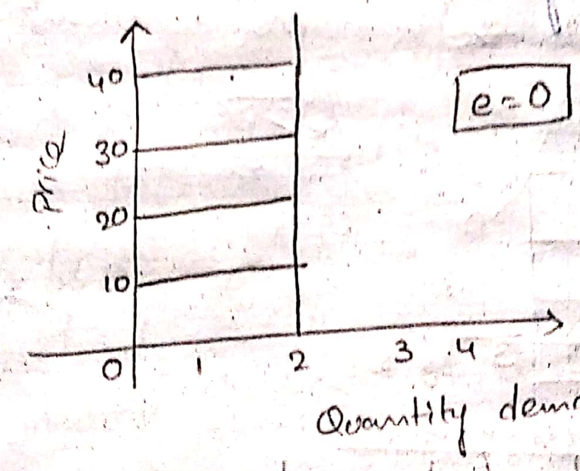
Perfectly Elasticity of demand:

Under perfectly elasticity of demand the rate of change in quantity demand is infinity or very small change with the small change in price of the product.



Perfectly inelasticity of demand:

Under perfectly inelasticity of demand the rate of change in quantity demand remains constant at any level of price of the product



Ex: Salt

Relatively Elasticity of demand:

Under relatively elasticity of demand the rate of change in quantity demand is greater rate of change in price of the product than the rate of change

Ex: petrol, Diesel, Electricity Bill

Execeptions for law of demand:

1. Giffen goods (or) Giffen paradox

* Giffen goods are nothing but the basic goods.
* Giffen is a economist.
* Giffen goods does not follow law of demand
* Rice, bread, dal

2. weblen goods

* weblen goods are luxury goods
  Economist
* Ex: Diamond, branded things
* Demand of weblen goods increases with increase of price

3. Natural calamities, wars etc

Elasticity of demand:

Elasticity of demand means the rate of change in quantity demand with response to the rate of change in price of the product and other deteaminent factors of demand.

Measurements of elasticity of demand:

The elasticity of demand is measured in 5 ways

They are

1. perfectly elasticity of demand
2. Perfectly inelasticity of demand
3. Relatively elasticity of demand
4. Relatively inelasticity of demand
5. Unitary elasticity of demand

Perfectly Elasticity of demand:

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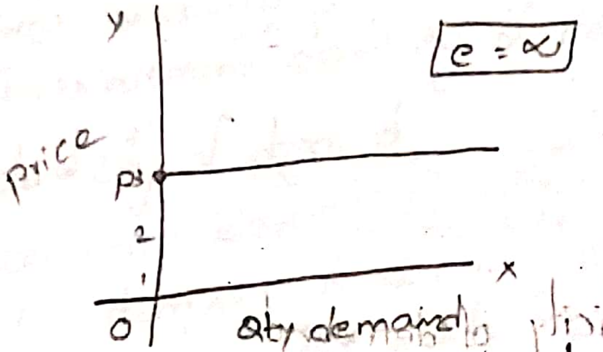
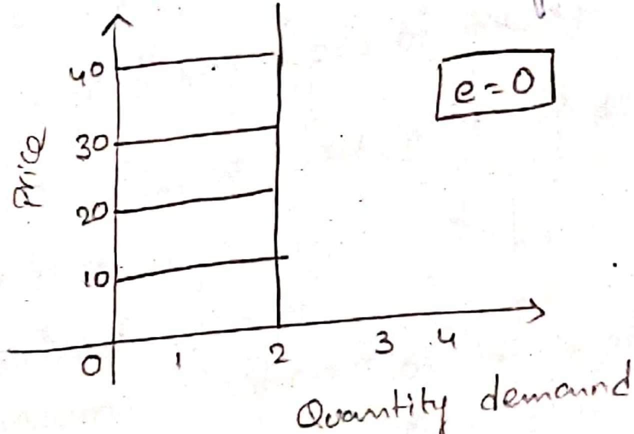


Ex: Gold

Perfectly inelasticity of demand:

Under perfectly inelasticity of demand the rate of change in quantity demand remains constant at any level of price of the product.

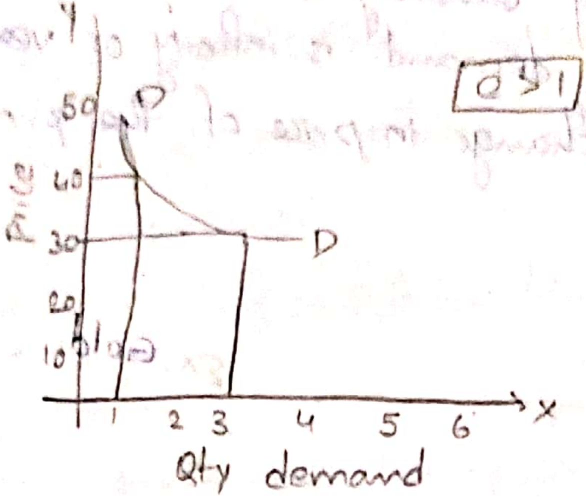


Ex: Salt

Relatively Elasticity of demand:

Under relatively elasticity of demand the rate of change in quantity demand is greater than the rate of change in price of the product.

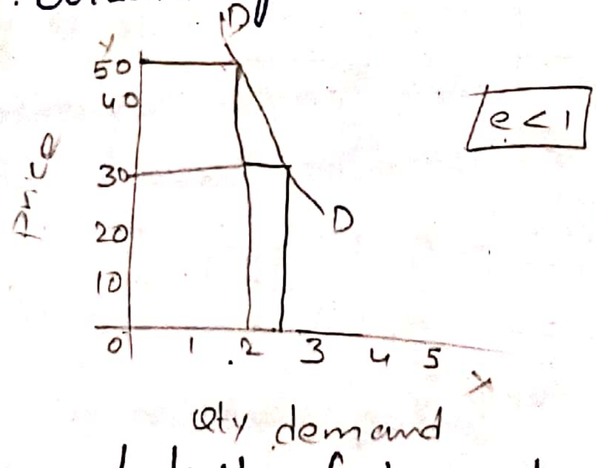
Ex: petrol, Diesel, Electricity Bill



Relatively inelasticity of demand:

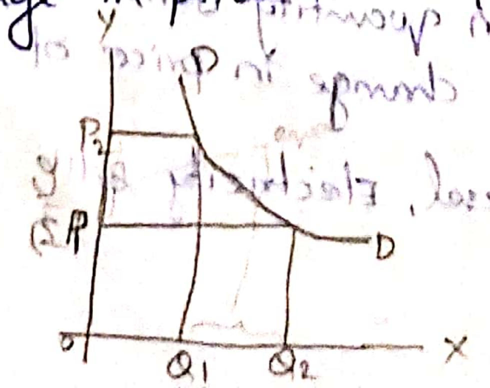
Under relatively inelasticity of demand the rate of change in quantity demand is less than the rate of change in price of the product

Ex: Outdated goods



unitary elasticity of demand:

Under unitary elasticity of demand the rate of change in Quantity demand is equal to the rate of change in price of the product.



Ex: Natural goods like fruits, vegitables and so on

Types of elasticity of demand:

There are four types of elasticity of demand. They are

1. price elasticity of demand
2. Income elasticity of demand
3. Cross elasticity of demand
4. Adveatlaisment elasticity of demand.

Price elasticity of demand

Under price elasticity of demand the rate of change in quantity demand is depend upon the rate of change in price of the product.

(Measurements of price elasticity)

Income elasticity of demand

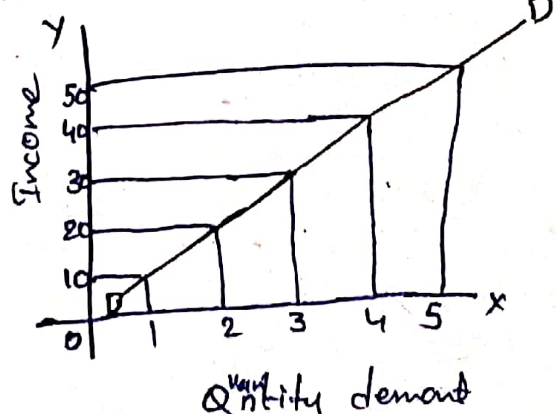
when the rate of change in quantity demand is depends upon the rate of change in come of individual. Such situation is called as income elasticity of demand.

There are three types of income elasticity of demand

1. positive income elasticity of demand
2. negative "
3. constant "

positive income elasticity of demand

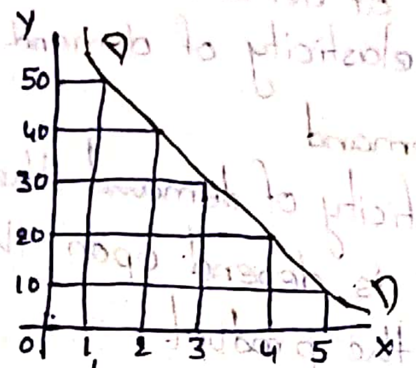
Under positive income elasticity of demand the quantity demand for the product increases with the increase of income of individuals.



Ex: Superior goods like carrot, Beetroot, kivi, meet etc

Negative Income elasticity of demand:

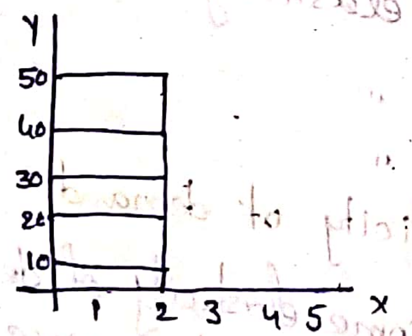
Under negative income elasticity of demand the quantity demand for the products decreases with the increase of income of individuals



Ex: inferior goods like potato

Constant income elasticity of demand (or) zero income elasticity of demand:

Under Constant income elasticity of demand the quantity demand ~~for~~ the remains constant when the income of individual increases.



Ex: Salt

cross elasticity of demand:

when the quantity demand for product 'x' is depend upon the price of the product 'y' such situation is called as cross elasticity of demand.

$$E_c = \frac{\text{Percentage change in quantity demand of product 'x'}}{\text{percentage change in price of the product 'y'}}$$

Adveartaisement Elasticity of demand:

Under adveartaisement elasticity of demand the quantity demand for the products is depend upon the adveartaisement cost upon the product.

$$E_{adv} = \frac{\text{Percentage change in Quantity demand of a product}}{\text{percentage change in adveartaisement cost}}$$

Demand forecasting:

Demand forecasting means prediction of future demand for the products.

Methods of demand forecasting:

1. Census method
   a) Sample method
   b) Survey method
2. Delphi method (experts opinion method)
3. statistical method
4. Sales force method (retailer plays important role)

Unit - 2

Production and cost Analysis.

Production:

production means conversion of raw material into finished goods in a systematic process.

Raw meterial → process → Finished goods

Input — output

Factors of production:-

There are five factors of production. They are.

1. land
2. Labour
3. Capital
4. Technology
5. organisation.

* The factors of production is classified into two types. They are (in short period of time)

1. variable factors
2. Fixed factors.

Variable factors:

The factors of production which will variable with the volume of production such factors is called as variable factors

Ex: labour

Fixed factors:

The factors of production which remains Constant irrespective of volume of production such factors is called as fixed factors of production

Ex: land, Technology, organisation.

For the analysis of production factors time period is a key element.

Time period is classified into two types. i.e.,

1. short period of time

2. Long period of time.

short period of time:

short period of time means the time period with in 365 days (or) 1 year. In short period of time there are two types of factors of production. They are

1. variable factors

2. Fixed factors of production.

Long period of time

Long period of time means the time period above 5 years. In long period of time there is only one type of factors of production. i.e., variable factors of production

Ex: Land, labour, capital, technology and organisation

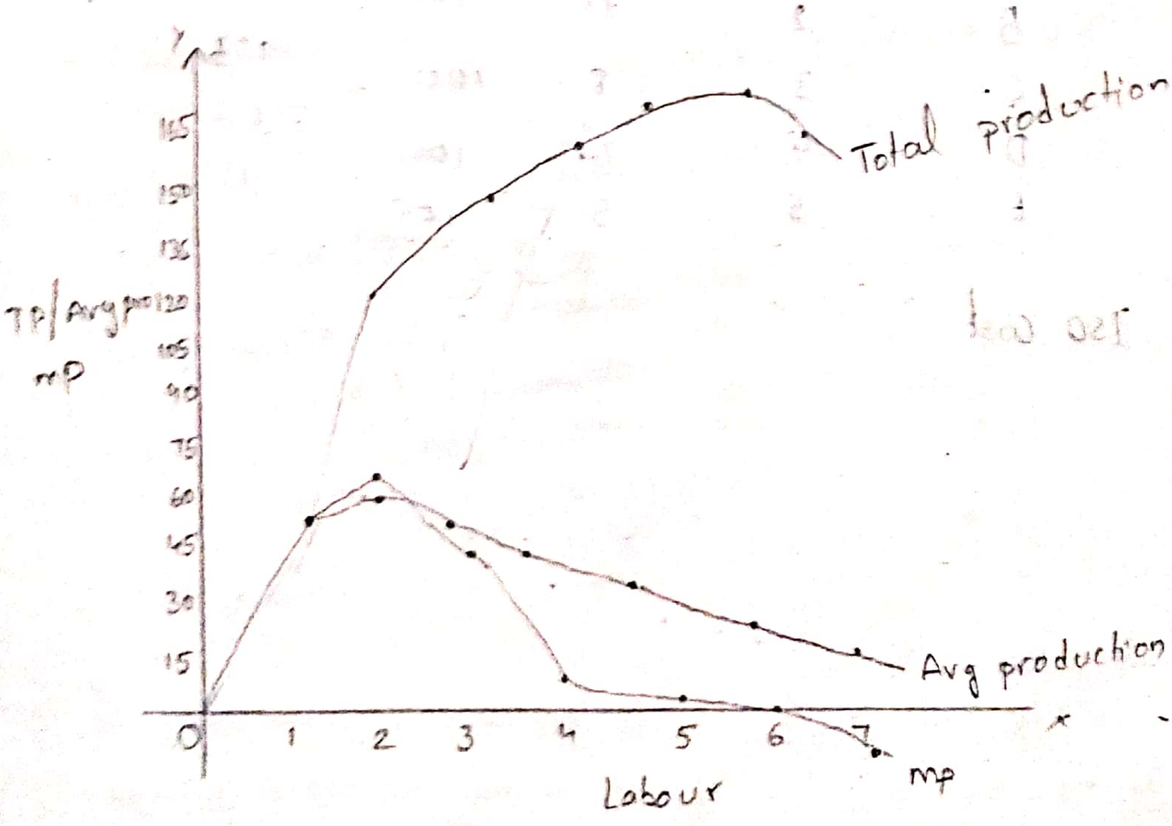
Function of production:

$$Q = f(L_1, L_2, C, T, O)$$

L_1 - land
L_2 - Labour
C - Capital
T - technology
O - organisation

Law of single variable proportion:

Factor Labour	Total production	Avg production	Marginal production
1	50	50	50
2	110	55	60
3	150	50	40
4	160	40	10
5	165	33	5
6	165	27.5	0
7	160	22.8	-5



Law of two variable proportions:

i, ISO QUANT:

ISO Quant means "equal quantity of output"

Here, output should remains "Constant".

By increasing/decreasing the values

By taking assumed values

Combinations	labour	capital	output
A	1	15	100
B	2	11	100
C	3	8	100
D	4	6	100
E	5	5	100

ii, MRTS (Marginal Rate of Technical substitution)

combinations	labour	capital	output	MRTS
A	1	15	100	—
				1:4
B	2	11	100	
				1:3
C	3	8	100	
				1:2
D	4	6	100	
				1:1
E	5	5	100	

/ISO Cost

Economies of scales:

Economics of scales concept is developed by Alfred Marshal which concentrates on maximisation of production and minimization of cost.

There are two types of economics of scales

1. Internal economics of scales
2. External economics of scales

Internal economics of scales: the internal

Internal economics of scales means the internal regions of a manufactoring unit in minimization of cost and maximization of production.

Internal Factors:

1. Technology:
2. Efficient managers
3. Efficient Labour
4. Financial ability
5. Developing the R and D department (Research and development department)

External Factors:

1. Economic of Concentration
2. Common R and D department.
3. Common welfare facilities

Cost concepts:

Explicit Cost:

The cost which will be measured with money and posted in the books of accounts such cost is called as explicit cost.

Examples : wages, salaries, raw material expenditures etc.

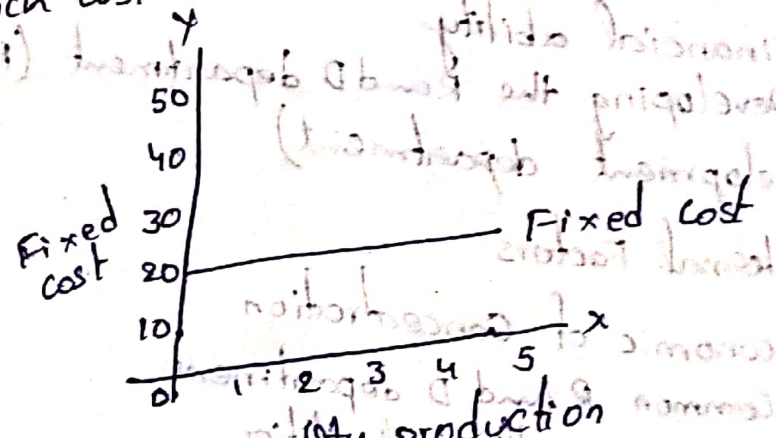
Implicit Cost:

The cost which can not be measured with money and can not be posted in the books of accounts such cost is called as implicit cost.

Fixed cost:

The cost which remains constant in short period of time such cost is called as fixed cost. (or)

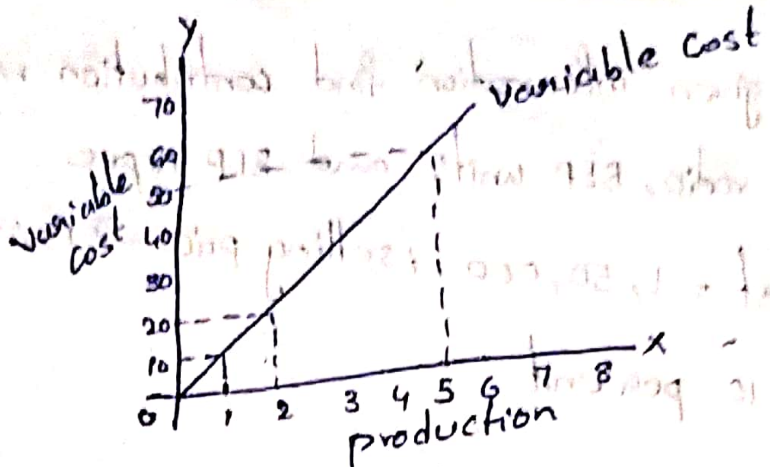
The cost which remains constant at any level of production such cost is called as fixed cost.



Example Machinery, land etc

Variable cost:

The cost which will be varied with the volume of production such cost is called as Variable cost



Examples: Raw material, labour

<u>Total cost:</u>

The combination of fixed and variable cost is called as total cost.

Total cost = variable cost + fixed cost

<u>Opportunity cost:</u>

It is a cost measured when the best alternatives had left by selecting the one alternative. (or) It is also called as foregone cost.

<u>Break Even Analysis:</u>

Contribution margin = Selling price - variable cost per unit

$$P/V \text{ ratio} = \frac{\text{Contribution margin}}{\text{selling price}}$$

$$\text{Breakeven point units} = \frac{\text{Fixed cost}}{\text{Contribution margin per unit}}$$

$$\text{BEP (Rupees)} = \frac{\text{Fixed cost}}{P/V \text{ ratio}}$$

From the given information find contribution margin per unit, p/v ratio, BEP units and BEP rupees

fixed cost = 1,50,000 ; selling price = ₹15 ; variable Cost = ₹10 per unit

Contribution margin = selling price − Variable cost per unit

$$CM = S - V$$

$$= 15 - 10$$

$$= ₹5 \text{ per unit}$$

$$\text{p/v ratio} = \frac{\text{Contribution margin}}{\text{selling price}}$$

$$= \frac{5}{15}$$

$$= 0.33$$

$$\text{BEP units} = \frac{\text{Fixed cost}}{CM} = \frac{1,50000}{5}$$

$$= 30000 \text{ units}$$

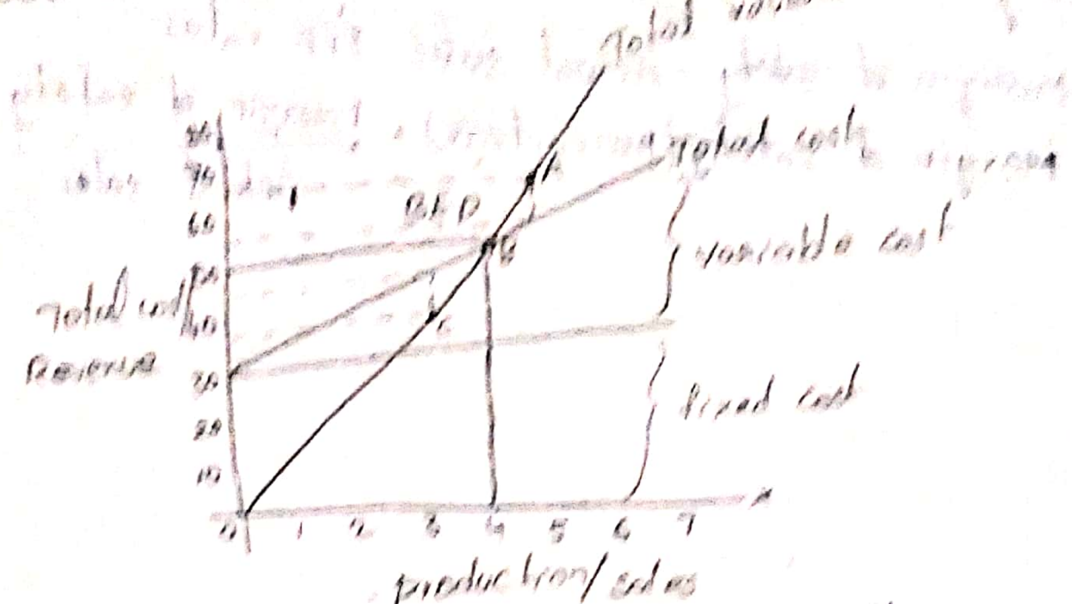
$$\text{BEP Rupees} = \frac{\text{Fixed cost}}{\text{p/v ratio}}$$

$$= \frac{150000}{0.33}$$

$$= \frac{150000}{1/3}$$

$$= ₹450000$$

Break even point:



At point 'A' Total revenue is around 65 and Total cost is around 55

then the profit is 65-55 = 10

At point BEP the TR = TC = 50. At this point the organization will get no profit or no loss.

At point C TR = 38 and TC = 48. The organisation faces loss. Because TR - TC = 38 - 48 = -10.

From the following information find contribution margin, pv ratio, BEP units and rupees

Fixed cost = Rs 5,00,000, SP = ₹ 50, V.C = ₹ 25 per unit

CM = S - V = 50 - 25 = 25/- per unit

pv ratio = $\frac{C}{S} = \frac{25}{50} = 0.5$

BEP units = $\frac{FC}{C} = \frac{500000}{25} = 20000$ units

BEP rupees = $\frac{F}{PV} = \frac{500000}{0.5} = 1000000$

UNIT-3

MARKETS

Market:

Market is a place where there will be large number of buyers and sellers exchange goods and services for money.

Alfred Marshall has imaginated markets based on the competition they are prefect competition market and imperfect competition market.

Imperfect competition market again divided into 3 types. They are

1. Monopoly market
2. Monopolistic competition market
3. oligopoly market.

Perfect competition market:

It is a situation where there will be large number of buyers and sellers exchange goods and services ~~for money~~ and information in between buyer and seller

Features of perfect competition market:

1. large number of buyers
2. large number of sellers
3. Homogeneous goods
4. Perfect information
5. Absence of transportation cost and factors of ~~distrib~~ Production
6. Firms are price takers and industries are price makers.

7. The price of the product is decided, based on demand and supply.

8. Free entry and exit

Monopoly Market:

Mono – single
poly – seller

Monopoly market is single seller market and it is inperfect competition market.

Monopoly means a single seller. Under this market the single seller will sell the products and services to the many buyers.

Features of Monopoly market

1. Single seller
2. No substitution for the product
3. Firm and industry are one and the same
4. price or supply will be controlled by monopolist
5. Restriction to entry and exit

Example:

Indian Railways,