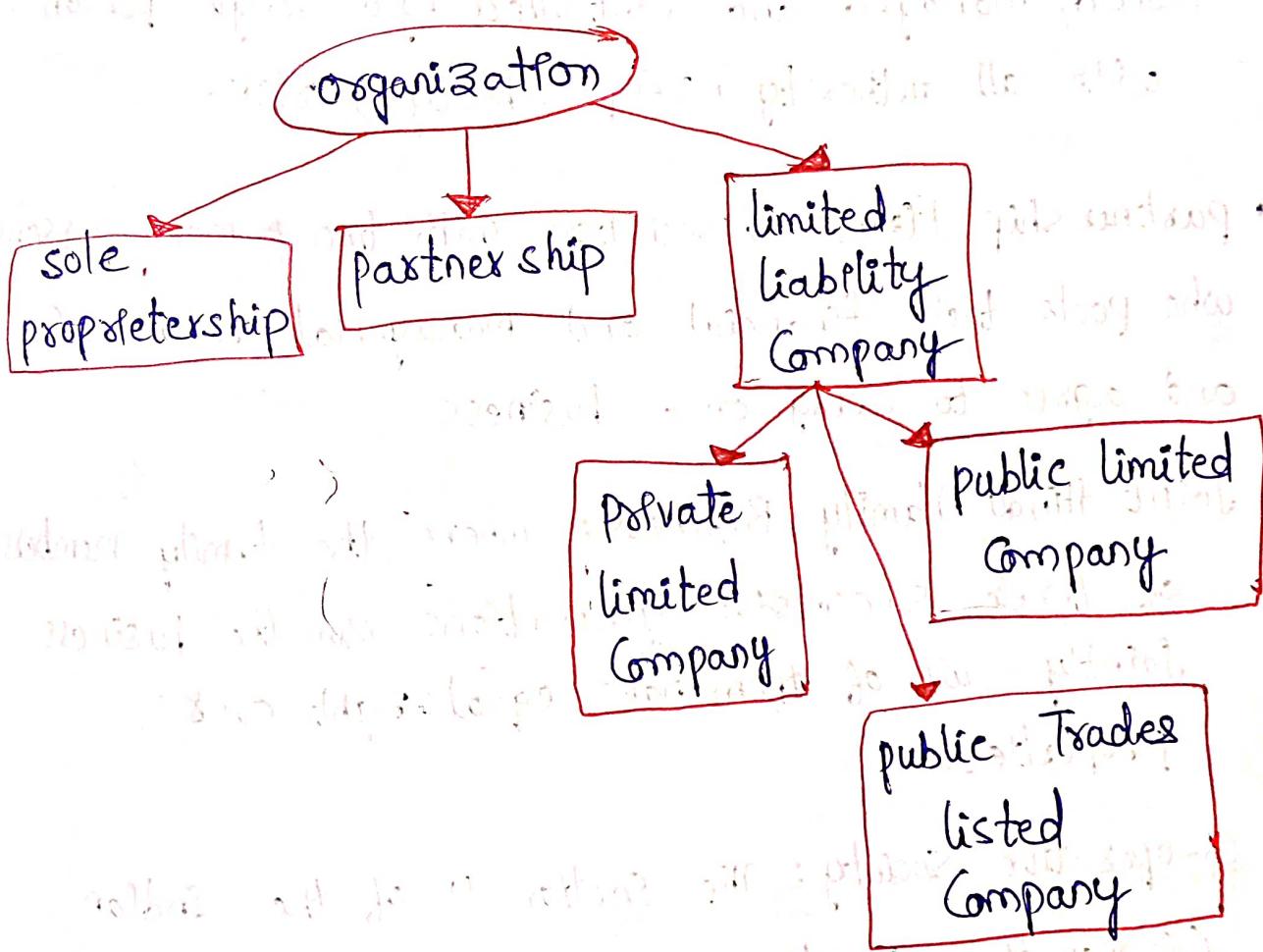


Unit-1 Introduction to Business Economics

Business firm:

A commercial organization that operates on a for-profit basis and participates in selling goods or services to customers.

Structure of Business firm



Theory of the firm:

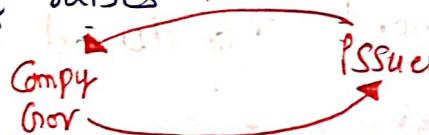
Consists of a no. of economic theories that explain and predict the nature of the firm, company, or corporation, including its existence, behaviour, structure and relationship to the market

- Types of theories:
- Transaction Cost theory
 - Managerial Theories
(Business decisions)
 - Behavioural theories.

Types of Business Entities:

- Sole proprietorship: business enterprise exclusively owned, managed and controlled by a single person with all authority, responsibility, risk.
- Partnership Firm: association with two or more persons who pools their financial and managerial resources and agree to carry on a business
- Joint Hindu Family Business: where the family members of three successive generations own the business jointly - all of them have equal right over properties.
- Co-operative Society: The section 4 of the Indian Co-operative Societies Act 1912 defines Co-operative Society as "a society" which has its objective for the promotion of economic interests of its members in accordance with Co-operative principles.

Sources of Finance

- available
1. Long term finance: for a long period say five years and above (used to purchase fixed assets such as land and buildings, plants and so on,
 - (a) Own Capital: money invested by the owners, partners or promoters is permanent and will stay with the business throughout the life of business.
 - (b) Share Capital: Normally, the capital is raised by issue of shares
 - (c) Debentures: is essentially a long-term loan that a Corporate or Government raises from the public for Capital requirements
Ex: Gov. takes or raises funds to construct roads for public. Debenture holders are the creditors.
A red arrow points from the text "Company or Govt" to the word "Issues".
 - (d) Government grants and loans: Government may provide long term finance directly to the business houses or by indirectly subscribing to the shares of the companies.

Medium term finance

- a. Bank loans: are extended at a fixed rate of interest
Repayment of loan and interest are scheduled
They are secured loans
- b. Hire purchase: buy a fixed asset by paying the price over a long period, at fixed rate of interest in agreed no. of instalments
- c. Leasing or Renting: asset is not purchased, rented for fixed no. of years.

Short term finance

- a. Commercial paper: It is new money market instrument introduced in India in recent times
- b. Bank overdraft: Special arrangement with the banker where the customer can draw more than what he has in his Saving/Current account (U/s 19(1)(c) of the Banking Regulation Act)
- c. Trade credit: This is short term credit facility extended by the creditors to the debtors, it is common for the traders to buy the materials and other supplies from the suppliers on credit basis.

Business Economics :

Business economics, also called managerial economics is the application of economic theory and methodology to business.

Significance of Business economics:

① Concerned with aspects relevant for business decision making in real life.

② It also incorporates useful ideas

Example: ① What products and services should be produced?

② what input and production technique should be used?

③ How much output should be produced and at what prices it should be sold?

④ what are the best sizes and locations of new plants?

⑤ what should equipment be replaced?

⑥ It makes a manager more competent and appreciate the essential relationship characterising a given situation.

⑦ At the level of the firm, operations are conducted through known focus functional areas, such as finance, marketing, personnel and production, business economics.

⑧ Business economics → Interaction b/w firm & society achieving the its social and economic welfare goals

Micro and Macro Economics

2) Micro-economics: micro → means → small.

deals with the economic actions of individuals and groups of individuals and firms.

Macro-economics: macro → means → large.

is concerned with the economic behaviour of the whole nation (or economy) in terms of allocation of productive resources, consumption pattern, distribution of income etc.

National Income: National Income of a country means the sum total of incomes earned by the citizens of that country during a given period. It should be noted that national income is not the sum of all income earned by all citizens, only those incomes which due to participation in the production process.

Importance of National Income:

- Economic policy
- Economic planning
- Inflationary and Deflationary gaps
- Budgetary policies
- National Expenditure
- Standard of living comparison
- Defence and Development
- Public Sector

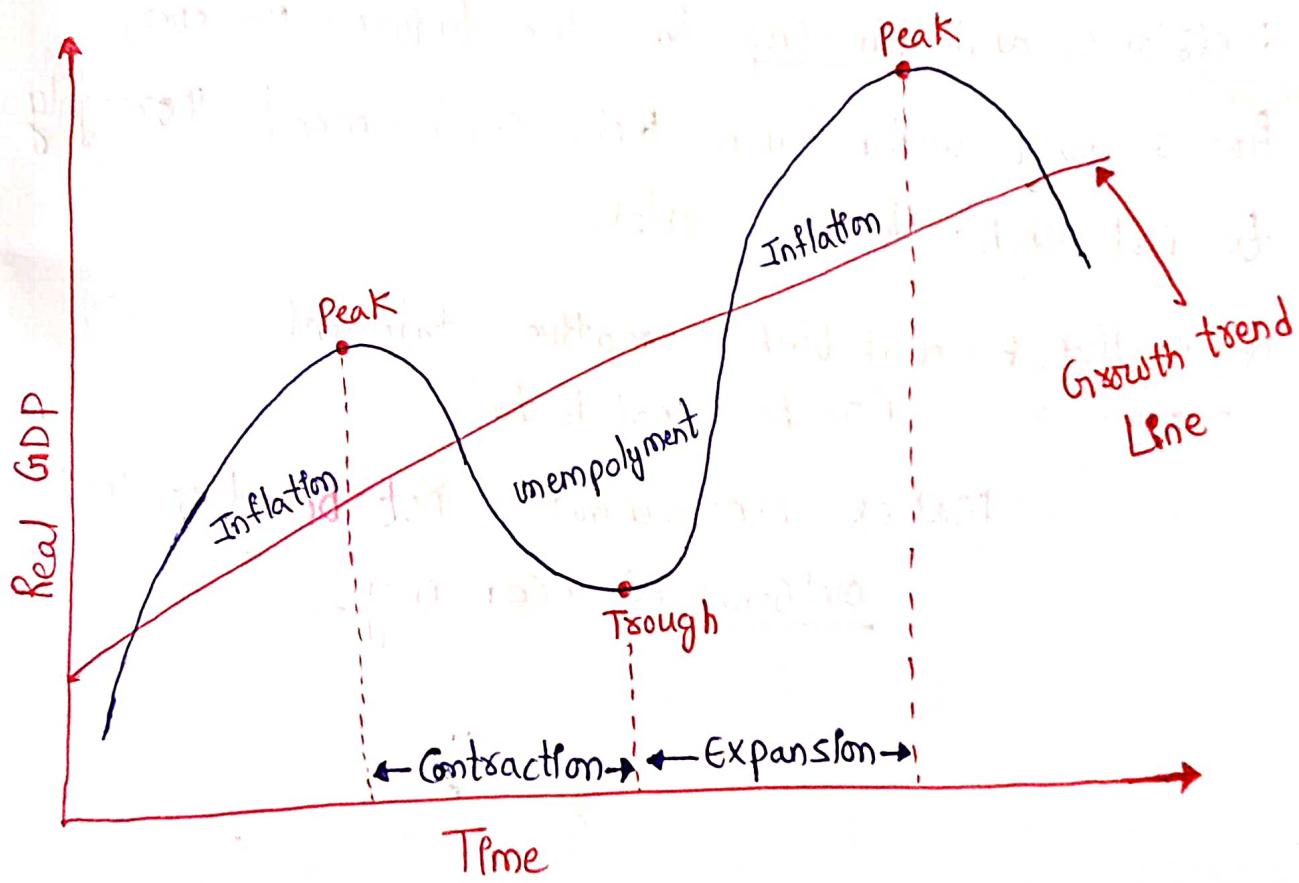
Inflation: refers to general rise in price measured against a standard level of purchasing power.

Money Supply and Inflation:

- If the money supply increases faster than real output, then prices will increase causing inflation.

This is known as the quantity theory of money ($MV=PT$)

Business Cycle:



The alternating periods of expansion and contraction in economic activity is called business cycle.

Features of Business Cycles:

- Business cycle occurs periodically
- Business cycles are synchronous
- It tells about, employment, investment, consumption, price level, rate of interest
- tells about fluctuation cycle

Nature of Business economics: is normative in nature. It offers suggestions for the application of economic principles while forming policies, making decisions, and planning for the future. However, firms must understand their environment thoroughly to establish decision rules.

Normative + deal with normative statement-economics (To be or not to be)

Makes recommendation not based on test-outcomes of economy

Scope of Business Economics:

1. Demand Analysis and forecasting
2. Cost and production Analysis
3. Pricing Decision, policies and practices
4. profit management
5. Capital management

Role and Responsibilities of Business economics

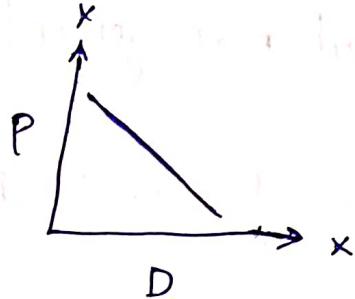
- Business economics Should study the environment
- Business economics should make decisions regarding business operations

Unit - II

Demand and Supply Analysis

Elasticity of Demand :

- * "Marshall" introduced the concept
- * It shows extent of "change in quantity of demand" to "change in price"
- * Price ↑ Demand ↓



* It is 2 types:

① Elastic Demand

② In elastic Demand

* Types of Elasticity of Demand

Elastic Demand :- small change in price leads to big change in demand.

Ex:- tomato, onion, soap

In-elastic Demand :- Big change in price lead to small change in demand

Ex:- Petrol, Diamond.

Types of elasticity of Demand:

① Price elasticity of Demand :=

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

Q_1 = quantity of demand before price change

Q_2 =

P_1 = Price

② Income elasticity of Demand :=

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

Q_1 = Q_2 =

I_1 = I_2 = Income

③ 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.

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

④ Advertising elasticity of Demand :

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

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

Demand: (desire for an object)

Demand in economics means "enough money to pay for the goods demanded"

Ex: I want a car and I can't pay for it, there is no demand for the car from my side.
Tesla car

A product or services is said to have demand when three conditions are satisfied:-

- Desire on the part of the buyer to buy
- willingness to pay for it.
- Ability to pay the specified price for it.

Demand Determinants :-

① Price of the product :- Price of product ↑ demand ↓

② Income of customer :- Income ↑ demand ↑

③ Price of Substitutes or Complementary :-

Ex: Bike (product) → Demand ↓

Petrol (Substitute product) → Price ↑

④ Tastes and preferences :- Most of the companies keep changing their product according to customer tastes and preferences change.

Demand function:

$$QD = F(P, I, P_{Sc}, T, A)$$

QD = quantity demand

F = functional relational between input

P = Price of the product

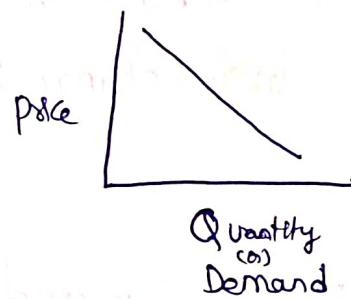
I = Income of the Consumer

P_{Sc} = Price of substitute or Complementary

T = taste and preference

A = advertisement

Law of Demand:



Exceptions of the law of demand:

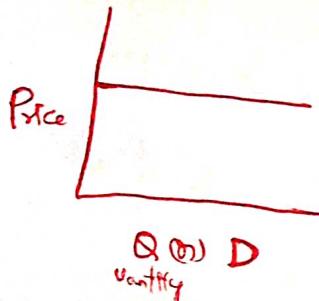
1. where there is a shortage of necessities feared.
2. where the product is such that it confers distinction
3. Giffen Paradox
Ex: low purchase (broken slice, bread) \rightarrow Price $\uparrow \rightarrow$ then instead of buying this \uparrow , people buy meat so, demand fall to thin \uparrow
4. In case of ignorance of price changes &
Ex: apple iPhone

Measurement and significance of elasticity of demand:

Demand:

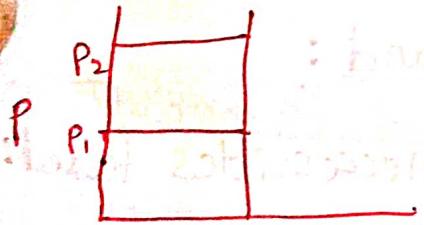
1. Perfectly elasticity of demand
2. Perfectly Inelasticity of demand
3. Relatively elasticity of demand
4. Relatively Inelasticity of demand.
5. Unity elasticity of demand

① Perfectly elasticity of demand:

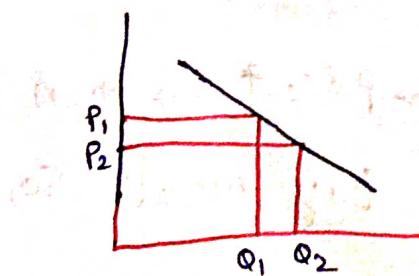


Small increase in price lead to large change in demand.

② Perfectly Inelasticity of demand:

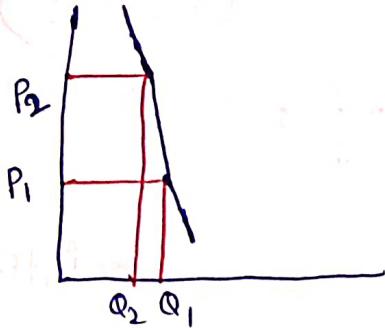


③ Relatively elasticity of demand:



→ change in demand ↑ then change in price

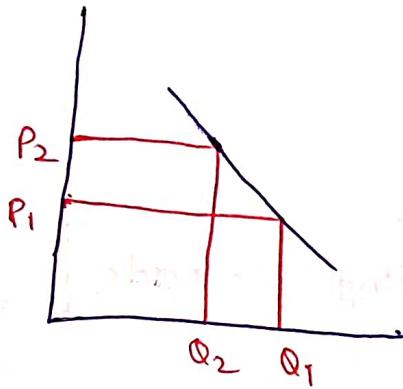
④ Relatively Inelasticity of demand :



→ change in demand less ↓
then change in price

⑤ Unity elasticity :

$$\text{change in demand} = \text{change in price}$$



Significance of elasticity of Demand:

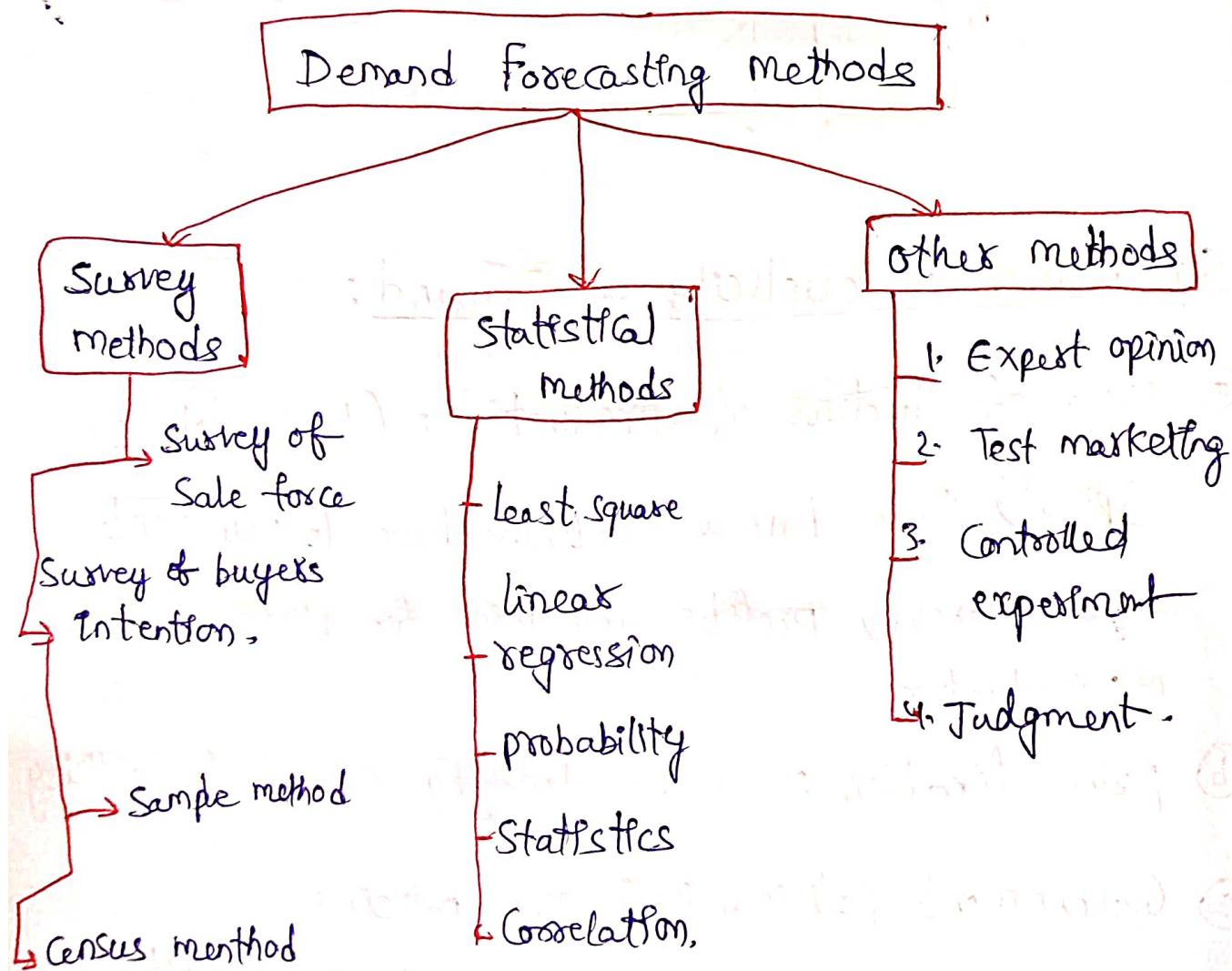
- a) price of factors of production : (Land, labour, Capital) These have a cost, we have to pay rent, wages, interest, profits and price for these factors of production.
- b) Price fixation : can be done by Concept of elasticity
- c) Government policies →
 - ① Tax policies
 - ② Raising bank deposit
 - ③ public utilities
 - ④ forecasting demand.

② plan

Demand Forecasting (predict future business)

Methods of Demand forecasting :

- ① Survey methods
- ② Statistical methods (Linear regression, Correlation)
- ③ Expert opinion methods
- ④ Test marketing
- ⑤ Controlled experiments
- ⑥ Judgmental approach



Unit-III Production, Cost, Market Structures 2

price

Production Function:

- * Samuelson defines as technical relationship which reveals the maximum amount of output produced in being produced by each and every inputs
- * Michael defines $(P_F)_k$ as Max amount of output that can be produced with a given input

Mathematically production function can be written as

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

Q = quantity

C = Capital

F = function explain

O = Organization

L_1 = land

T = Technology

L_2 = labour

• A manufacturer has to make a choice of production function by considering technical knowledge and should work on different permutations and combination.

• with change in industry and the requirements the production function also need to be modified to suit to the situation.

Production Function with one Variable Input:

- The law of return when at least one factor of production is fixed, Total and all other factors are variable.
- Total output initially in initial stage will increase in increasing rate.
 - After certain of output it will decrease in rate.

According to F. Benham

" As the proportion of one factor in a combination of factors is increased, after a point, first the marginal and then avg product of that factor will diminished

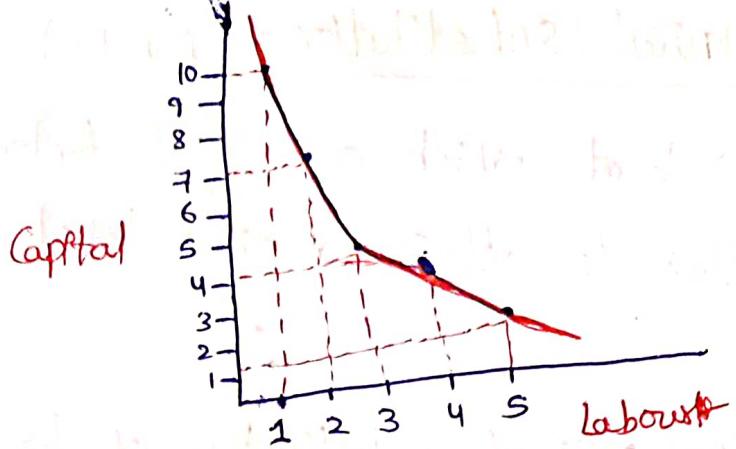
Iso-Quants: ISO - means equal

quants - means quantity.

→ They are called Isoquant curves

→ It shows various combination of two input factors

Combinations	Labour (Units)	Capital (Units)	Output
A	1	10	50
B	2	7	50
C	3	4	50
D	4	4	50
E	5	1	50



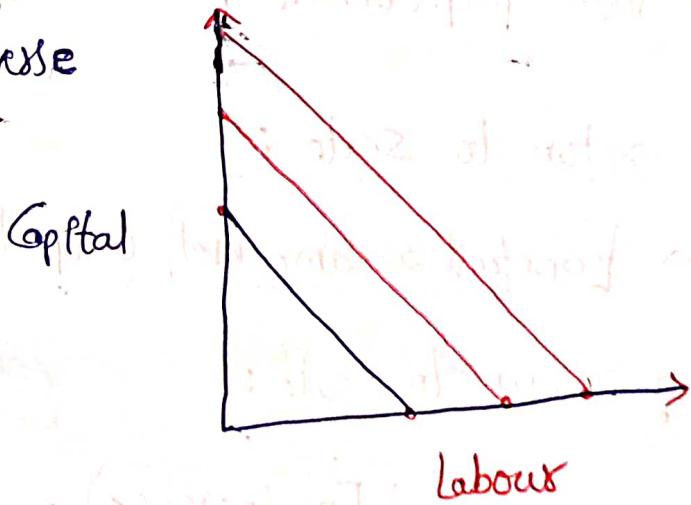
Factors of ISO-quant:

1. Downward sloping
2. Convex to origin
3. Do not intersect
4. Donot axes

Iso Cost: Iso - means equal
Cost - means cost

→ It denotes a particular level of total cost for a given level of production.

→ If the level of production changes, the total cost changes and thus the iso-cost curve moves upwards vice versa

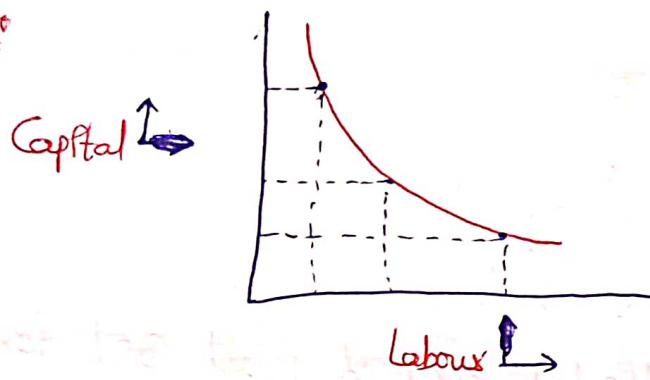


Marginal Rate of Technical Substitution: (MRTS)

MRTS refers to the rate at which one input factor is substituted with others to attain a given level of output.

For example, the marginal rate of substitution of labour for capital gives the amount of Capital than can be replaced by one unit of labour while keeping output unchanged.

Ex:



Law of Returns to Scale: (3 laws)

1. Law of Increasing return to scale:

Input ↑ → more proportionate ↑ in output

2. Law of Constant return to scale:

Input ↑ → [Constant or same level] output ↑

3. Law of decreasing return to scale:

at a level of Input ↑ → output [no increase].
Increase in

Internal and External economics of scale:

Internal economics: It occurs as a result of increase in the scale of production

It refers to introduction costs which accrue to the firm alone when it expands its output.

- ① Managerial economics → needs qualified managerial personnel to handle marketing, finance, production, resources
 - It helps in lower the cost, minimum wastage of production cost
- ② Commercial economics → transaction, buying, selling raw material and other spares, firm grow ↑, transaction ↑
- ③ Economics of large dimension
 - advantage in expansion of firm, profit ↑, ^{production} cost ↓
- ④ Financial economics → It can borrow from bank, public and other finance at cheaper rates. and able to secure ≡
The large firm reaps (ώο&ωώ) economics
- ⑤ Technical economics → machine, Technology ↑ profit cost ↓
- ⑥ Marketing economics → transport, buying, selling easy saving ↑ profit ↓ cost
- ⑦ Risk Bearing economics → able to absorb any shock or loss
- ⑧ Economics of research and development → development base can cope competition globally

• External economics: It help as the firm expands.

→ It refers to all firm in the industry

① Economics of Concentration → when the industry is concentrated in a particular area, all the member firms reap some common economics like Skilled labour, improved means of transport and Communications, banking financial services tends to ↓ cost of production

② Economic research and development → They share the benefits of research.

③ Economic of welfare → Common facilities such as Canteen, Industrial housing, Community halls, Schools and Colleges, employment bureau, Hospitals ... so-on

Cost analysis:

Institute of cost and management accountants (ICMA) define cost as the amount of expenditure, the amount of resources sacrificed to achieve a specific objective.

→ Cost incurred in connection with raw material, labour, other heads constitute the overall cost of production.

Cost concepts:

Clear understanding of different cost concept

Opportunity Cost: In simple terms, it is earning from the second best alternative. It represents the maximum possible alternative income that was have been earned if the resources were put to alternative use.

Fixed Cost & Variable Cost

fixed cost: remain constant for certain level of output.
It is not effected by volume of production.

Example: Salaries, rent, administrative expenses.

Variable cost: ↑ total variable cost lead → ↑ output
↓ total variable cost lead → ↓ output

Ex: Raw material, labour, direct expenses.

Explicit and Implicit Costs:

Explicit cost → those expenses that involve cash payment
appear in book of accounts, include payment
of wage and Salaries (Rents, transport, money)

Implicit Cost → any cost has already occurred not necessarily shown or reported as a separate expense (They no need to pay rent, they own firm)

Example: (The cost of resources already owned by firm owner) → will have been put to some other use.
entrepreneur use labour to earn income at job

Short run & long run Costs

Short run → Cost ↑ ↓ based on Variable Cost as

well as rate of production

Period during which some inputs are fixed and unchangeable while other are variable

Example: Imagine a Company, Best Bats, make wooden

bats, In short run → Best Bats has fixed as well as Variable Inputs. (rents, interest, salaries)

long run cost → The long run is the period during which all inputs are variables (run is long time period so that production inputs are variable (labour, capital))

In a very long run there is not fixed input.

out of pocket and Books Costs



Same as

explicit cost



Involve in

Current Cash

Payment

not direct cash payment



taken into account

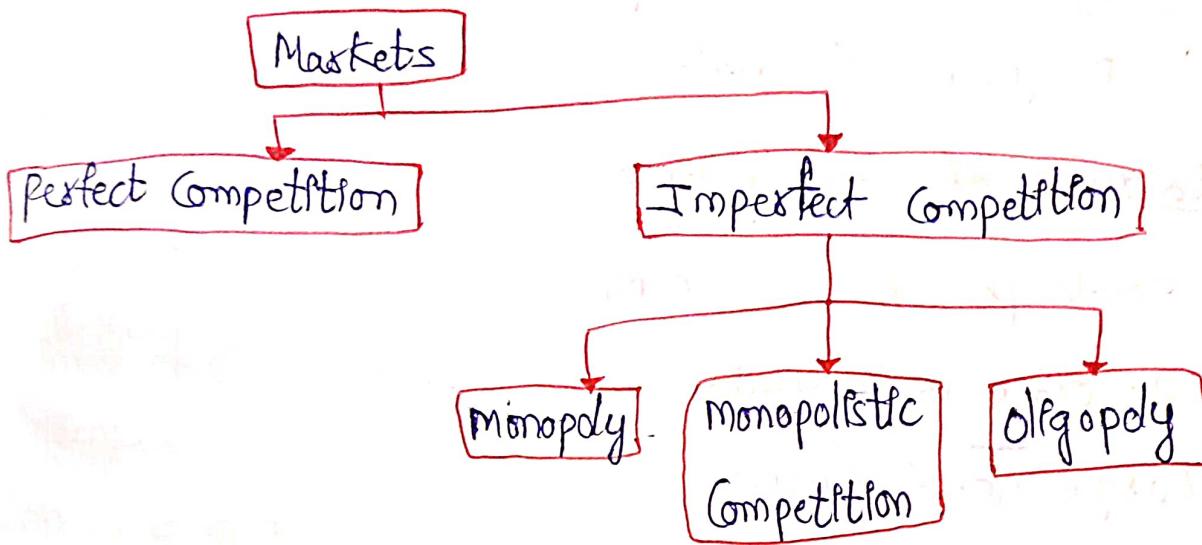


determining the level dividend

payable during a period

Marketing Structure

Market structure describes the competitive environment in the market for any good or service



Perfect Competition: where competition among the sellers and buyers

- Total demand and total supply in the market
- all firms in an industry are price takers.
- In which freedom to entry and exit from industry

features of perfect competition: each firm is price taker

- Large no. of buyers and sellers (small (s) 1 can't influence market)
- Homogenous products or services (product of sellers is homog.)
- Perfect information available to the buyers and sellers
(Information, about pricing, quantity, Supply, demand, nature of prod)
- Perfect mobility of factors of production
(no restriction on utilization of factors of production land, labour, capital -)

Monopoly: Mono → means → single
Poly → means → selling

→ Single firm sell the product for there is no good substitute

Features of monopoly:

- ① Single person or a firm
- ② No close substitute
- ③ Large no. of Buyers
- ④ Price makes
- ⑤ Supply and price: ($\text{Price} \uparrow - \text{Supply} \downarrow$, $\text{Price} \downarrow - \text{Supply} \uparrow$)
- ⑥ Downward sloping Demand curve:

Monopolistic Competition:

Monopolistic competition is said to exist when there are many firms and each one produces such goods and services that are close substitutes to each other. They are similar but not identical.

→ products can be differentiated by unique facilities, advertising, brand loyalty, packaging, pricing, term of credit.

Features of Monopolistic Competition:

- Existence of many firms
- product differentiation: (by facilities) features
- large no. of buyers
- free entry and exit of firm
- Selling cost
- Imperfect knowledge (If buyers have knowledge, they furt.)
- The Groups (all producing a homogeneous product, they are close substitutes)

Pricing methods:

→ Cost Based pricing methods:

- Cost plus pricing (profit based)
- marginal cost pricing (to recover their expenses)

→ Competition-Oriented pricing:

- sealed bid pricing (person who quotes lowest price)

- Going rate pricing: here the price charged by the firm is in tune with the price charged in the whole industry as a whole.

prevailing market price at a given point of time is the guiding factor.

Demand-oriented pricing

- The higher ↑ Demand — Price ↑
- ④ price discrimination: The practice of charging different price to customers for the same good.
- ⑤ perceived value pricing: The price is fixed on the basis of the perception of the buyer and value of the product by beliefs.

Strategy-Based pricing

- ⑥ market skimming: When product is newly introduced. The company fixes very high prices to grab maximum profit.
- ⑦ Market penetration: Price of the product is fixed low to increase their market. The company follows strategy

Break-even Analysis

Cost-volume-profit analysis

A business is said to be Break-even when its total ~~sales~~ sales are equal to total costs
→ It is a point No profit No Loss

Assumption:

- ① All costs are divided into 2 types. :
 - ① fixed
 - ② Variable
- ① fixed costs remain constant at all level of output
- ② variable costs vary with varying of level of output
- ③ There is no change in general pricing level.
- ④ volume of the production is the only factor effecting the cost.
- ⑤ volume of sales = Volume of production, hence. there's no unsold stock.
- ⑥ All goods produced are sold.

Significance of BEA (Break even analysis)

To calculate sales required, desired level of profit

To Compare product line, method of Sales, efficiency, existence of product.

To decide to make or buy

To know fixed cost or variable cost.

प्रिय व्यापारी

Limitation of BEA:

→ Dhani disadvantages rai sia bao - ~~use~~ DA o
sidhu fellow will explain.

duplex cheppura waste ga, venata unnaive points
use chesukoni disadvantages. rai

Determinants of BEP (Break even point)

- ① fixed cost
- ② Variable Cost
- ③ Contribution $\Rightarrow \text{Contribution} = \frac{\text{Sale} - \text{Variable Cost}}{\text{fixed cost} + \text{profit}}$
- ④ Margin of Safety = Present Sales - Break even sales
- ⑤ Angle of Incidence (large % of incidence tell ↑ profit)
- ⑥ profit volume ratio