

Wealth
[Adam Smith]

Well Being
[A.C. Pigou]

Choice Making
[Lionel Robbins]

Growth & Dev.
[Paul A Samuels]

An inquiry into the nature and causes of the wealth of the nations

Study of mankind in the ordinary business of life

studies human behavior as a relationship between ends and scarce means which have alternative uses

of how men and society choose, with or without the use of money, to employ scarce productive resources which could have alternative uses

Micro

study the economic behavior of an individual, firm or industry in the national economy

Macro

of overall economic phenomena as a whole rather than its individual parts

Methods of Study

DEDUCTIVE
logic proceeds from **general to particular**

INDUCTIVE
logic in this case proceeds from the **particular to the general**

Why to Study?

QUESTIONS
When to produce?
What to produce?
For Whom to produce

Economic Systems

Capitalist

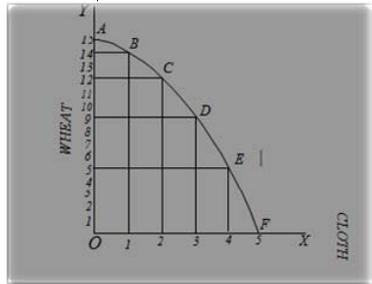
all the means of production are owned and controlled by private individuals for profit

Socialist

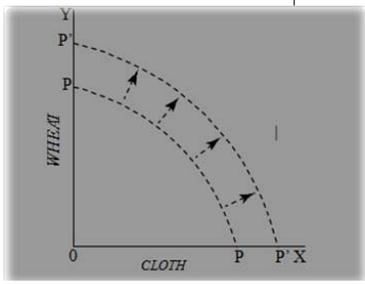
the material means of production i.e. factories, capital, mines etc. are owned by the whole community represented by the State

Mixed

aim is to develop a system which tries to include the best features of both the controlled economy and the market economy while excluding the demerits of both



Production Possibility Curve



Shift in PPC

PPC is a graph that shows the different rates of production of two goods that an individual or group can efficiently produce with limited productive resources

What is Demand?

demand' refers to the quantity of a good or service that consumers are willing and able to purchase at various prices during a period of time

Law of Demand

an inverse relationship between price and quantity demanded

Rationale of Demand

Diminishing Marginal utility
Substitution effect
Income effect
Different uses

Determinants of Demand

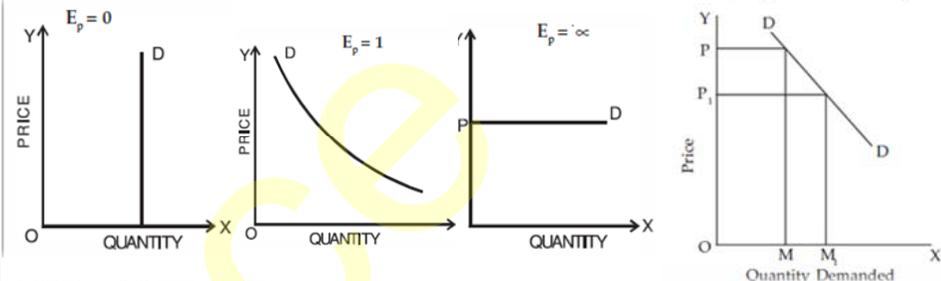
Price of the commodity
Level of income of the household
Tastes and preferences of consumers

Price of related commodities
(i) Complementary
(ii) Competing

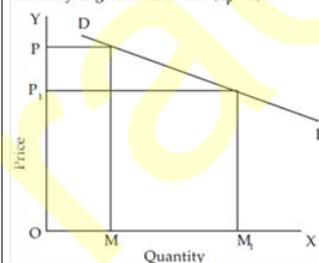
Exceptions

Conspicuous Goods
Giffen goods
Future expectations
Speculative goods

Price elasticity of demand expresses the response of quantity demanded of a good to a change in its price



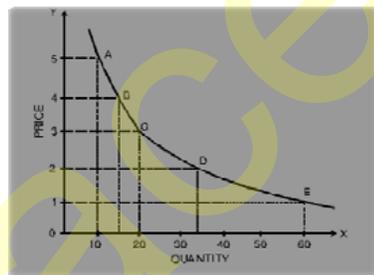
Elasticity is greater than one ($E_p > 1$)



Determinants

Availability of substitutes
Position of a commodity in consumer's budget
Nature of need that commodity satisfies
Number of uses to which a commodity can be put
Period
Consumer Habits

	Price (₹)	Quantity demanded (Units)
A	5	10
B	4	15
C	3	20
D	2	35
E	1	60



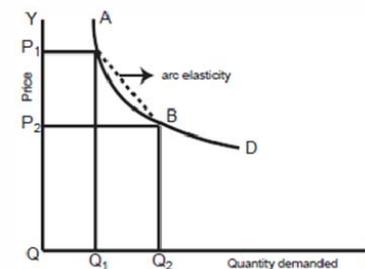
Demand Schedule is a series of quantities which consumer would like to buy at different prices at a given point of time

When we plot the prices and quantities demand on a graph it is termed as a demand curve

In **point elasticity**, we measure elasticity at a given point on a demand curve.



In **arc elasticity**, we measure elasticity between 2 points on a demand curve.

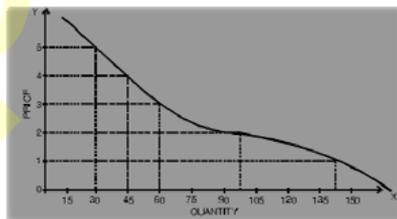


Income elasticity of demand is the degree of responsiveness of quantity demanded of goods to a small change in the income of consumers.

$$\text{Income Elasticity} = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in income}}$$

Cross demand refers to the quantities of a commodity or service which will be purchased with reference to changes, not of that particular commodity, but of other inter-related commodities, other things remaining the same.

Price (₹)	Quantity demanded by			Total market demand
	P	Q	R	
5	10	8	12	30
4	15	12	18	45
3	20	17	23	60
2	35	25	40	100
1	60	35	45	140



When we add up the various quantities demanded by the number of consumers in the market we can obtain the market demand schedule

If we plot market demand schedule on a graph we get market demand curve

Marginal Utility

It is the additional utility derived from additional unit of a commodity

Assumptions of Marginal Utility

- Cardinal measurability of utility
- Constancy of marginal utility of money
- Hypothesis of independent utility

Diminishing Marginal Utility

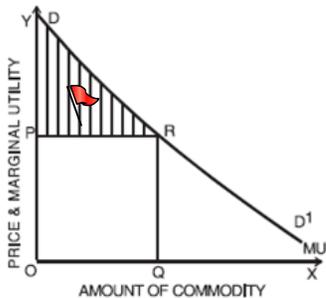
The additional benefit which a person derives from a given increase in stock of a thing diminishes with every increase in the stock that he already has

Limitation of Dim. Marg. Utility

- Homogeneous units
- Standard units of consumption
- Element Concept
- Law fails for prestigious goods
- Case of related goods

Consumer Surplus - Marshall

consumer's surplus = What a consumer is ready to pay - What he actually pays.



Limitations of Consumer Surplus

- Can not be measured precisely
- Affected by availability of substitutes
- Can not be measured in terms of money as marginal utility of money changes
- In case of necessities, marginal utilities of earlier units are infinitely large

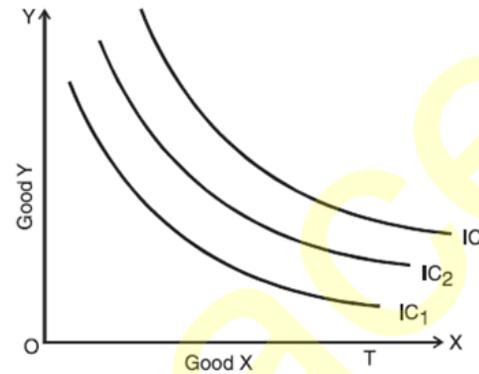
Assumptions of Indiff. Curve Analysis

- Consumer is rational
- Capable of ranking all combinations of goods
- If combination A has more commodities than B, then A should be preferred
- If consumer prefers combination A to B, B to C then he must prefer combination A to C

Indifference Schedule

Combination	Food	Clothing	MRS
A	1	12	
B	2	6	6
C	3	4	2
D	4	3	1

Indifference Map



Properties of Indifference curves

- Slope downward to right
- Always convex to origin
- Can never intersect each other
- Higher indifference curve represent higher satisfaction
- Indifference curve will never touch the axis

Set of Indifference Curves

Budget Line

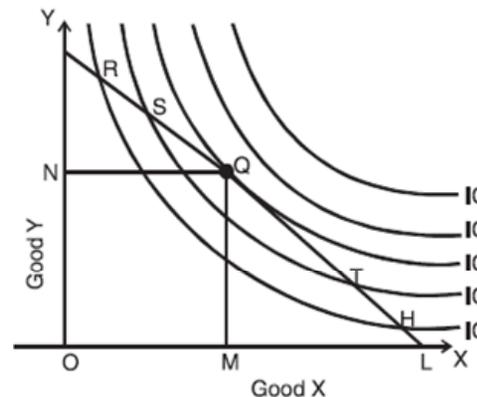


a budget line shows all those combinations of two goods which the consumer can buy spending his given money income on the two goods at their given prices. All those combinations which are within the reach of the consumer (assuming that he spends all his money income) will lie on the budget line.

Indifference Curve Analysis

Indifference curve gives same satisfaction to the consumer at every point. It is an ordinal concept

Consumer Equilibrium



At equilibrium point Q,

$$MRS_{xy} = \frac{MU_x}{MU_y} = \frac{P_x}{P_y}$$

Production

Production is the organized activity of transforming resources into finished products in the form of goods and services; and the objective of production is to satisfy the demand of such transformed resources

James Bates and J.R. Parkinson

Factors of Production

Land

Labour

Capital

Entrepreneur

- Nature Gift
- Fixed Supply
- Indestructible
- Passive
- Different uses

- Human Effort
- Perishable
- Mobile
- Inseparable from laborer
- All laborer not productive

- Stages of formation
- Savings
 - Mobilization
 - Investments

- Functions
- Initiating a business
 - Risk bearing
 - Innovations

Production Function

The term production function is applied to the physical relationship between a firm's input of resources and its output of goods or services per unit of time leaving prices aside

Richard H. Leftwich

Equation

$q = f(a, b, c, d, \dots, n)$
 where 'q' stands for the rate of output of given commodity a,b,c,d.....n, are different factors (inputs) and services used per unit of time.

Assumptions

- Related to particular unit of time
- Technical knowledge is constant
- Factors of production are divisible
- Best available technique is used

Economies & Diseconomies

Internal

External

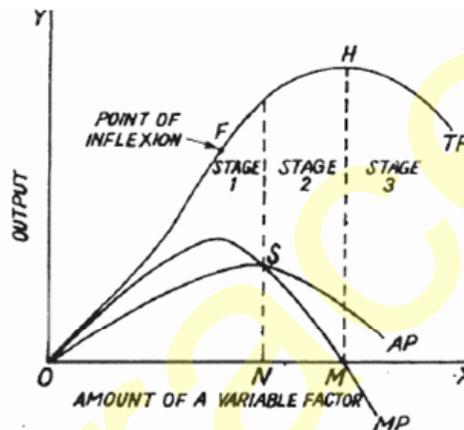
- Technical
- Managerial
- Commercial
- Financial
- Risk Bearing

- Cheaper raw material
- Technological
- Development of skilled labour
- Growth of ancillary industries
- Better transportation and marketing

$$Q = KL^a C^{(1-a)}$$

where 'Q' is output, 'L' the quantity of labour and 'C' the quantity of capital. 'K' and 'a' are positive constants

Law of Variable Proportions



Stages

- Law of increasing returns
- Law of diminishing returns
- Law of negative returns

A rational producer will always produce in stage 2 where both the marginal product and average product of the variable factors are diminishing.

The law of diminishing return is the marginal product of each unit of input will decline as the amount of that output increases, holding all other inputs constant

Samuelson

Returns to Scale

Constant

with the increase in the scale in some proportion, output increases in the same proportion

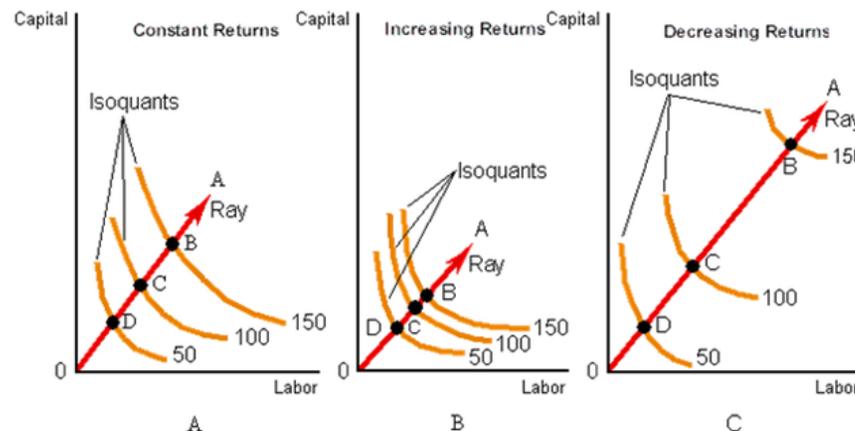
Increasing

increasing returns to scale means that output increases in a greater proportion than the increase in inputs.

Decreasing

When output increases in a smaller proportion with an increase in all inputs, decreasing returns to scale are said to prevail.

Cobb-Douglas Production Function



Economic Costs

economic costs include :
 (1) the normal return on money capital invested by the entrepreneur himself in his own business;
 (2) the wages or salary not paid to the entrepreneur but could have been earned

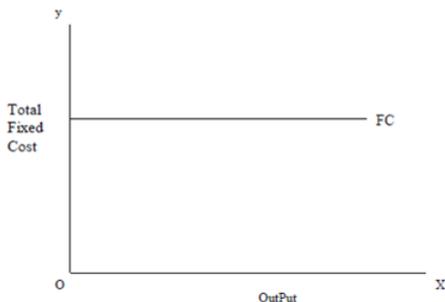
Direct or Traceable Costs

Direct costs are costs that are readily identified and are traceable to a particular product, operation or plant.

Cost Function

The cost function refers to the mathematical relation between cost of a product and the various determinants of costs.

Completely Fixed Cost



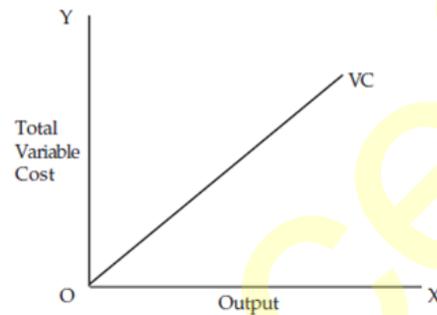
Outlay & Opp. Costs

Outlay costs involve actual expenditure of funds on, say, wages, material, rent, interest, etc.
Opportunity cost, on the other hand, is concerned with the cost of foregone opportunity

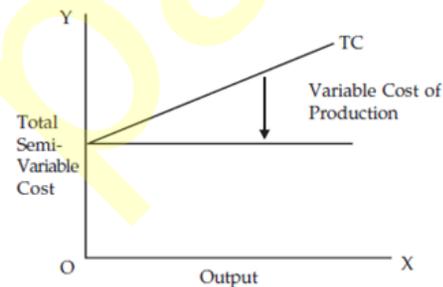
Indirect or non-traceable costs

Indirect costs are not readily identified nor visibly traceable to specific goods, services, operations, etc.

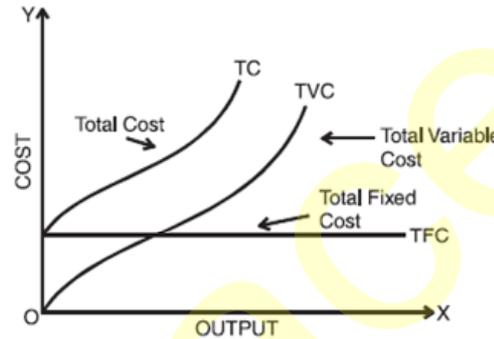
Completely Variable Cost



Semi - Variable Cost



Short Run Total Cost Curves



Total cost of a business is the sum of total variable cost and total fixed cost or symbolically
 $TC = TFC + TVC$

Average Fixed Cost

AFC is the total fixed cost divided by the number of units of output produced.

Average Variable Cost

Average variable cost is the total variable cost divided by the number of units of output produced

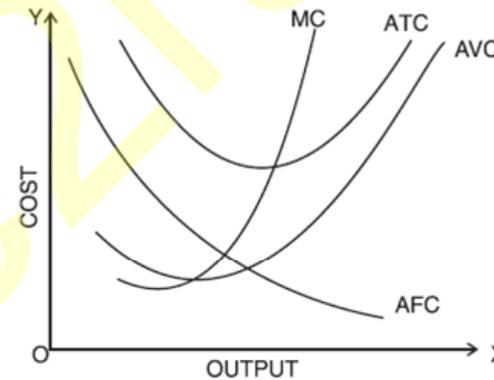
Average Total Cost

Average total cost is a sum of average variable cost and average fixed cost. i.e.,
 $ATC = AFC + AVC$.

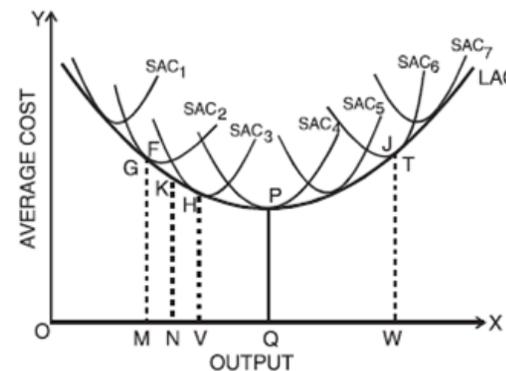
Relationship bet. AC & MC

$MC < AC$ ---- Average Cost Falls
 $MC > AC$ ---- Average Cost Rises
 $MC = AC$ ---- Average Cost is Min.

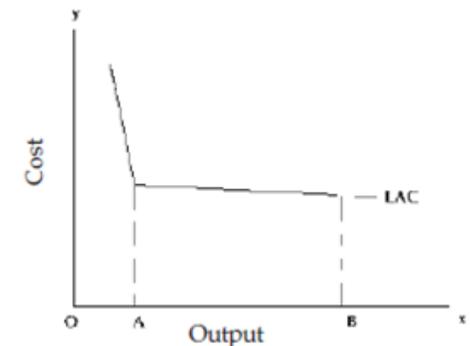
Short Run Marginal and Average Cost Curves



Long Run Average cost Curve



Constant Technology

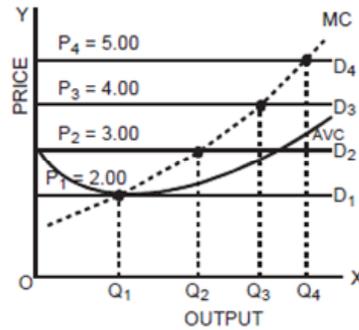
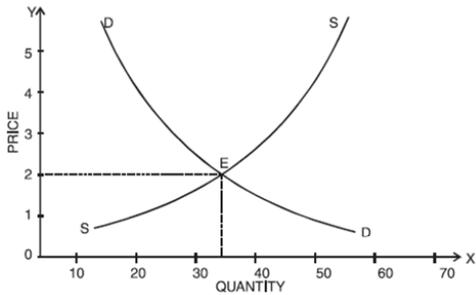


Changing Technology

Assumption	Market Types			
	Pure Competition	Monopolistic Competition	Oligopoly	Monopoly
Number of sellers	many	many	a few	one
Product differentiation	none	slight	none to substantial	extreme
Price elasticity of demand of a firm	infinite	large	small	small
Degree of control over price	none	some	some	very considerable

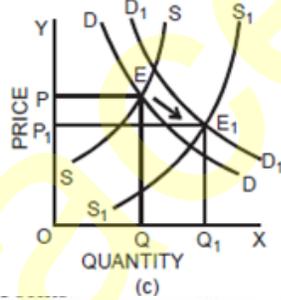
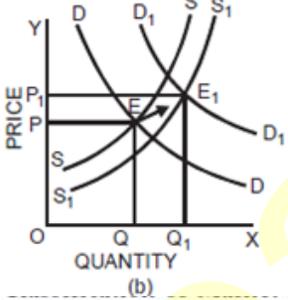
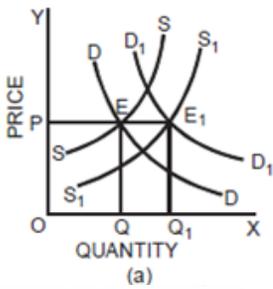
Equilibrium Price

MC Curve = Supply Curve



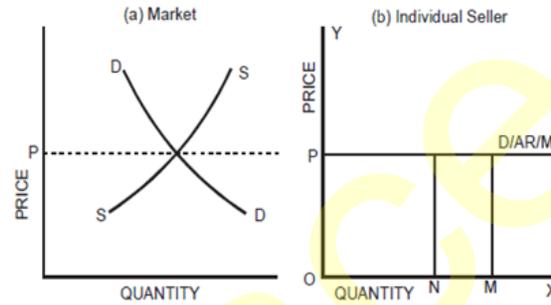
Where demand meets supply

Shifts in Demand & Supply

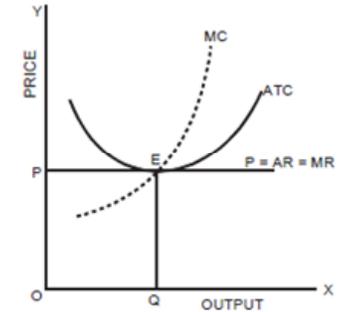


Form of Market Structure	Number of Firms	Nature of product	Price Elasticity of Demand of a firm	Degree of Control over price
(a) Perfect competition	A large number of firms	Homogeneous	Infinite	None
(b) Monopoly	One	Unique product without close substitute	Small	Very Considerable
(c) Imperfect Competition				
i) Monopolistic Competition	A large number of firms	Differentiated products	Large	Some
ii) Oligopoly	Few Firms	Homogeneous or differentiated product	Small	Some

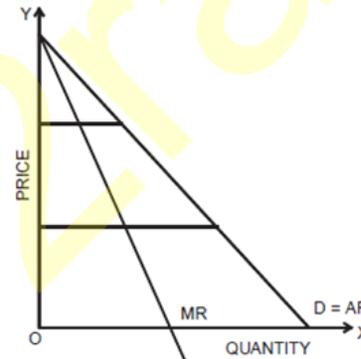
Demand Curve under Perfect Compt.



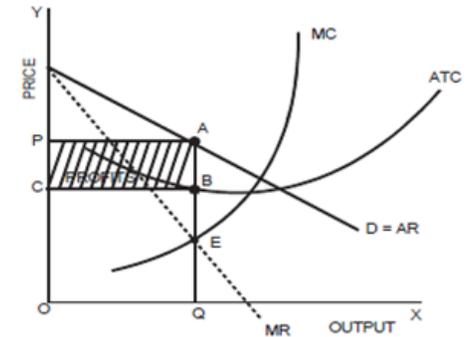
Equilibrium



Monopoly

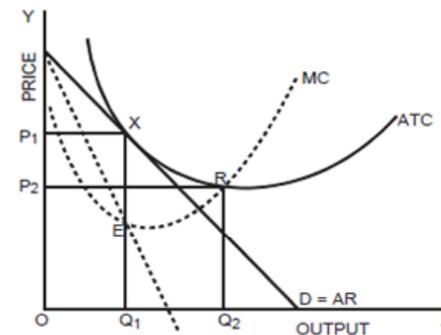


Demand curve



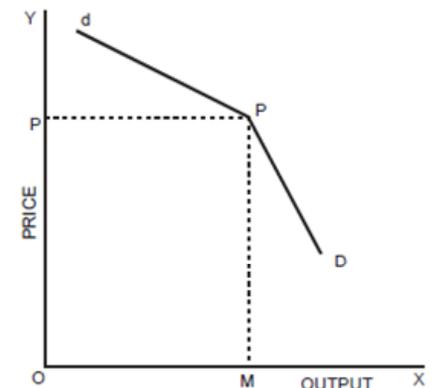
Long run equilibrium

Monopolistic



Long Run Equilibrium

Oligopoly



Kinked Demand Curve