SASURIE COLLEGE OF ENGINEERING

DEPARTMENT OF MASTER OF BUSINESS ADMINISTRATION

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I YEAR – I SEMESTER

BA4103

MANAGERIAL ECONOMICS

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UNIT I INTRODUCTION The themes of economics – scarcity and efficiency – three fundamental economic problems – society's capability – Production possibility frontiers (PPF) – Productive efficiency Vs economic efficiency – economic growth & stability – Micro economies and Macro economies – the role of markets and government – Positive Vs negative externalities.

UNIT II CONSUMER AND PRODUCER BEHAVIOUR Market – Demand and Supply – Determinants – Market equilibrium – elasticity of demand and supply – consumer behaviour – consumer equilibrium – Approaches to consumer behaviour – Production – Short-run and long-run Production Function – Returns to scale – economies Vs diseconomies of scale – Analysis of cost – Short-run and long-run cost function – Relation between Production and cost function.

UNIT III PRODUCT AND FACTOR MARKET Product market – perfect and imperfect market – different market structures – Firm's equilibrium and supply – Market efficiency – Economic costs of imperfect competition – factor market – Land, Labour and capital – Demand and supply – determination of factor price – Interaction of product and factor market – General equilibrium and efficiency of competitive markets.

UNIT IV PERFORMANCE OF AN ECONOMY – MACRO ECONOMICS Macro-economic aggregates – circular flow of macroeconomic activity – National income determination – Aggregate demand and supply – Macroeconomic equilibrium – Components of aggregate demand and national income – multiplier effect – Demand side management – Fiscal policy in theory.

UNIT V AGGREGATE SUPPLY AND THE ROLE OF MONEY Short-run and Long-run supply curve – Unemployment and its impact – Okun's law – Inflation and the impact – reasons for inflation – Demand Vs Supply factors –Inflation Vs Unemployement tradeoff – Phillips curve –short- run and long-run –Supply side Policy and management- Money market- Demand and supply of money – money-market equilibrium and national income – the role of monetary policy.

CHAPTER 1

INTRODUCTION

Economics:

According to Alfred Marshall, Economics is an study of man's action in ordinary business of life. It enquires about an income &how it is used.

ManagerialEconomics:

AccordingtoSpencer&Siegelman

Managerial economics is the integration of economic theory with business practices for the purpose of facilitating decision making &forward planning by the management

NatureofManagerialeconomics

Appliedineconomictheory(micro&macro)

- Pragmatic
- Multi disciplinaryinnature
- Statistics
- Mathematics
- Management
- Psychology
- Accounts
- Operationalresearch
- Descriptive&prescriptive

.**Importanceofmanagerialeconomics**

- Assistsindecision making

- Optimization ofresources
- Createsgoodworking environment
- Relationship building
- Coordination building

Themesof economics

- Scarcity
- Efficiency

Scarcity

Itisarelationshipbetween howmuch thereisofsomethingandhow muchof itis wanted.

- Resourcesarescarce
- Iswaterscarce?
- Resourcesarelimited(factorsofproduction)Land ,labour,capital&entrepreneurship
- Humanwantsareunlimited
- Unwantedwantsare competingforlimited resources

Efficiency

It is a situation where all available scarce resources are being used in the most effectiveway possible to meet the greatest possible level of consumer wants.

Partsofeconomic efficiency

- Productiveefficiency(lowestcostvitproduction)
- Technicalefficiency(singlefop)
- Manufacturingefficiency(typeofmachine&methods)
- Networkefficiency(utilizationofnetwork resources)
- Marketefficiency(price)

Threefundamentaleconomicproblems

Theeconomicproblem,sometimescalledthebasic,centralorfundamental economicproblem,is one of the fundamentaleconomic theoriesin theoperation of anyeconomy.It asserts that thereisscarcity, or that the finite resources available are insufficient to satisfy all human wantsand needs. The problem then becomes how to determine what is to be produced and how thefactorsofproduction(suchascapitalandlabor)aretobeallocated.Economics revolvesaroundmethods and possibilities of solving the economic problem.

TheThreeEconomicproblems are:

1) Whattoproduce?
2) Howtoproduce?
3) Forwhomtoproduce?

What to produce:

Thisproblemiswhattheeconomyshould produceinordertosatisfyconsumerwants(as seen by demand curves) as best as possible using the limited resources available. If a country produces goodsinawaythatmaximizesconsumersatisfactionthentheeconomyisallocativelyefficient.

How to produce:

This problem is how to combine production inputs to produce the goods decided in problem 1 as most efficiently as possible. An economy achieves productive efficiency if it produces goods using the least resources possible. A productively efficient economy is represented by an economythatisabletoproduceacombinationofgoodsontheactualcurveofthePPF.

For whom to produce

Should the economyproduce goods targeted towards those who have high incomes or those who have low incomes. What sort of demographic group should the goods in the economy that are producedbetargetedtowards? If theeconomyis addressesthisproblemthenithasreachedpreto efficiency or pareto optimality.

Ifallthreeproblemsareaddressedatanyonetimethentheeconomyhasachievedstatic

efficiency. If the economy achieves static efficiency over a period of time then it is dynamically efficient.

The price mechanism is the only allocative mechanism solving the economic problem in a free market economy. However, most modern economies are **mixed economies**, comprising not only amarketsector,butalsoa **non-marketsector**,wherethe**government**(orstate)usesthe**planning mechanism**to provide public goods and services such as police, roads and merit goods such as education, libraries and health.

In a state run**command economy,**the price mechanism plays little or no active role in the allocation of resources. Instead government planning directs resources to where the state thinks there is greatest need. The reality is that state planning has more or less failed as a means of deciding what to produce, how much to produce, how to produce and for whom. Following the collapse of communism in the late 1980s and early 1990s, the market-based economy is now the dominant economic system – even though we are increasingly aware of **imperfections in the operation of the market** – i.e. the causes and consequences of market failure.

Pricesand incentives

- **Incentives**matter enormously in our study of microeconomics, markets and instances of market failure. For competitive markets to work efficiently all economic agents (i.e. consumers and producers) must respond to **appropriate price signals** in the market.
- **Market failure**occurs when the signaling and incentive function of the price mechanism fails to operate optimally leading to a loss of economic and social welfare. For example, the market may fail to take into account the **external costs and benefits** arising from production and consumption.Consumer preferences for goods and services may bebased on**imperfect information** on the costs and benefits of a particular decision to buy and consume a product. Our individual preferences may also be distorted and shaped by the effects of persuasive advertising and marketing to create artificial wants and needs.

Governmentinterventioninthemarket

Often the incentives that consumers and producers have can be changed by**government intervention** in markets. For example a change in relative prices brought about by the introduction of **government subsidies and taxation**.

Supposeforexamplethat thegovernmentdecides tointroduceanewtaxon aviationfuelinabid to reduce some of the negative externalities created by the air transport industry.

- Howwill airlines respond?

✓ Will theypass onthetaxtoconsumers?

✓ Cantheyabsorb thetaxandseek cost-savingselsewhereintheir operations?

➢ Ifthetax raisespriceforair travellers,will theychangetheirbehaviour inthe market?

➢ Is an aviation tax the most effective way of controlling pollution? Or could incentives for producers and behaviour by consumers wanting to travel by air be changed through other more effective and efficient means?

Agents may not always respond to incentives in the manner in which textbook economics suggests.The**"law of unintended consequences"** encapsulates the idea that government policy interventions can often be misguided of have unintended consequences! See the revision focus article on government failure.

Society'scapability

- Humanbeings(differneeds &wants)
- Goods &services(commodity)
- Means(resources)&wants
- Factorofproduction(land,labour,capital&entreprenurship)

ProductionPossibilitiesfrontier(PPF)

A curve depicting all maximum output possibilities for two or more goods given a set of inputs (resources, labor, etc.). The PPF assumes that all inputs are used efficiently.

A**production possibility frontier**(PPF) is a curve or a boundary which shows the combinations of two or more goods and services that can be produced whilst using all of the available factor resources efficiently.

A curve depicting all maximum output possibilities for two or more goods given a set of inputs (resources, labor, etc.). The PPF assumes that all inputs are used efficiently.

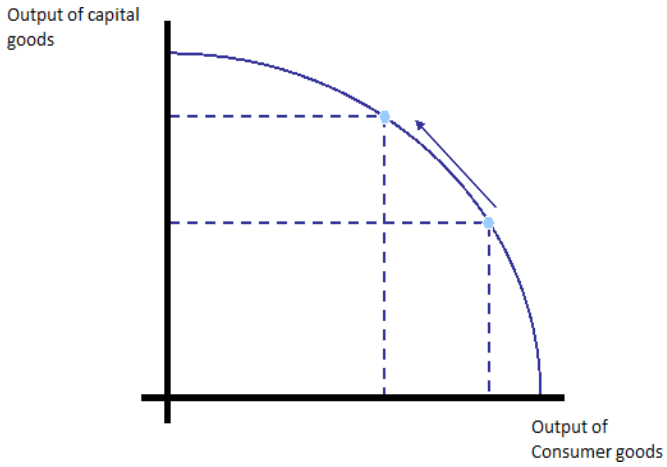
We normallydraw a PPF on a diagram as concave to the origin. This is because the extra output resulting from allocating more resources to one particular good may fall. I.e. as we move down the PPF, as more resources are allocated towards Good Y, the extra output gets smaller – and more of Good X has to be given up in order to produce the extra output of Good Y. This is known as the principle of**diminishing returns**. Diminishing returns occurs because not allfactor inputs are equally suited to producing different goods and services.

CombinationsofoutputofgoodsXandYlyinginsidethePPFoccurwhenthereare**unemployed resources** or when the economy uses resources**inefficiently**. In the diagram above, point X is an example of this. We could increase total output by moving towards the production possibility frontier and reaching any of points C, A or B.

Point D is unattainable at the moment because it lies beyond the PPF. A country would require an**increase in factor resources**, or an**increase in the efficiency (or productivity)** of factor resources or an**improvement in technology** to reach this combination of Good X and Good Y. If we achieve this then output combination D may become attainable.

Producing more of both goods would represent an improvement in our economic welfare providing that the products are giving consumers a positive satisfaction and therefore an improvement in what is called**allocative efficiency**

Reallocating scarce resourcesfrom one product to another involves an **opportunity cost**. If we go back to the previous PPF diagram, if we increase our output of Good X (i.e. a movement along the PPF from point A to point B) then fewer resources are available to produce goodY.BecauseoftheshapeofthePPFtheopportunitycostofswitchingresourcesincreases– i.e.wehaveto giveup moreof Good Ytoachievegains inthe output of good X.



The PPF does not always have to be drawn as a curve. If the opportunity cost for producing two products is constant, then we draw the PPF as a straight line. The gradient of that line is a way of measuring the opportunity cost between two goods.

ExplainingShiftsintheProductionPossibilityFrontier

Theproductionpossibilityfrontierwillshift when:

- ✓ There are**improvements in productivity and efficiency** perhaps because of the introduction of **new technology** or **advances in the techniques of production**)

- ✓ **More factor resources are exploited** perhaps due to an increase in the size of the workforce or a rise in the amount of capital equipment available for businesses

In the diagram below, there is an improvement in technology which shifts the PPF outwards. As a result of this, output possibilities have increased and we can conclude (providing the good provides positive satisfaction to consumers) that there is an improvement in economic welfare.

Importanceof PPF

Theproduction possibility frontier (PPF) represents the point at which an economy is most efficiently producing its goods and services and, therefore, allocating its resources in the best waypossible. If the economyis not producing the quantities indicated bythe PPF, resources are being managed inefficiently and the production of society will dwindle. The production possibility frontier shows there are limits to production, so an economy, to achieve efficiency, mustdecidewhatcombinationofgoodsandservicescanbeproduced.

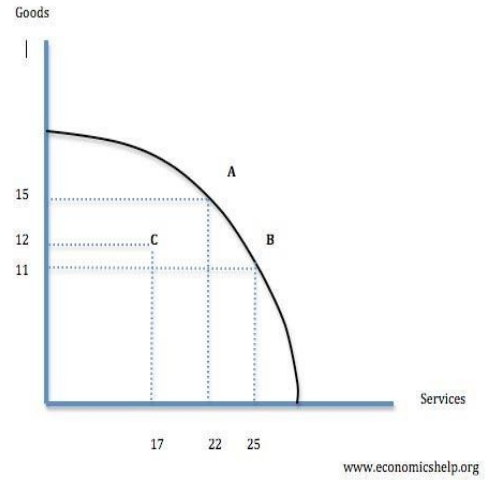
An economy can be producing on the PPF curve only in theory. In reality, economies constantly struggle to reach an optimal production capacity. And because scarcity forces an economy to forgo one choice for another, the slope of the PPF will always be negative; if production of product A increases then production of product B will have to decrease accordingly.

Productiveefficiencyvs.Economicefficiency

Productive efficiency

Definition: Productive efficiency can be defined as producing goods and services for the lowest cost. Productive efficiency is said to occur on the production possibility frontier. On the PPF curve, it is impossible to produce more of one good without producing less of another.

In the diagram below. If you are at point A you can't produce more services without foregoing goods.



Point C in graph is productively inefficient because you can produce more goods or services without an opportunity cost.

Economicefficiency

A state of economic efficiencyis essentiallyjust a theoretical one; a limit that can be approached but never reached. Instead, economists look at the amount of waste (or loss) between pure efficiencyandrealitytoseehowefficientlyaneconomyisfunctioning.

Measuring economic efficiencyis often subjective, relying on assumptions about the social good created and how well that serves consumers. Basic market forces like the level of prices, employment rates and interest rates can be analyzed to determine the relative improvements made toward economic efficiency from one point in time to another.

Economicgrowth&stability

Economicgrowth

- welfareofeconomy
- Howthegovernmentpolicyaffectsaneconomy's livingstandards

Factors

- Percapitaout put grows overtime
- Capitalworkerratiogrowsovertime
- Returnon capital

- Ratioofphysicalcapital output
- Labour& capital

Importanceoflongrun growth

- Improvethe quality&quantityof the factor of production
- out put determine growthofproductivity&capital&labour
- toincrease productivity
- Business cycle
- GDP(Themonetaryvalueofallthefinishedgoodsandservicesproducedwithinacountry's borders in a specific time period)
- ProductivityVs economicgrowth rate
- DiminishingreturnVsgrowthrate

Policies forstabilisationand growth

Economic stability enables other macro-economic objectives to be achieved, such as stableprices and stable and sustainable growth. It also creates the right environment for job creationand a balance of payments. This is largely because stability creates certainty and confidence and this encourages investment in technology and human capital.

Unfortunately, an unintended consequence of globalisation is the increased likelihood of economic shocks, including supply side shocks like oil and commodity price shocks, anddemand side shocks like the credit crunch.

Policiestopromotestability

Fiscal stabilisers

Built-in automatic fiscal stabilisers, which include progressive taxes and escalating welfare payments, provide a shock absorber to stabilise an economy following an economic shock. The combined effect of these is to create fiscal drag during periods of unusually strong growth, and fiscal boost during periods of very weak growth or negative growth. Negative or positivedemand side shocks can be stabilised more quickly when automatic stabilisers are built-in to the tax-benefit system.

Floatingexchangerates

Floating exchange rates are also seen as an automatic stabiliser. In the event of either a negative demand or supply side shock affecting an economy, the exchange rate will fall as currency traders sell the currency, leading to a fall in export prices and an automatic increase in competitiveness. Assuming foreign demand is price elastic, export revenue will rise, and, via an upward multiplier effect, aggregate demand will bounce back.

Flexible labourmarkets

The third automatic stabiliser is flexible labour markets. In the events of a demand side shock, like the credit crunch, aggregate demand will fall and firms will experience a fall in demand for their products. If the labour market is inflexible, full-time workers may be made redundant, and their spending will fall. Assuming a downward multiplier effect, national income will fallfurther, and the economy may plunge into a recession. However, with a more flexible labour market, a number of flexible responses can occur, which stabilise the economy. For example, instead of making workers redundant, pay can be reduced so that unemployment is avoided. In addition,full-timeworkerscangopart-time,againavoidingfull-blownunemployment.Finally,a more flexible and mobile workforce can move quickly from areas or industries with low demand to areas or industries with higher demand.

Monetarypolicy

In addition to these automatic stabilisers, short-term stability can be maintained by altering monetary conditions, such as raising or lowering interest rates, or by expanding or contractingthe money supply. Most national economies and monetary unions review monetary policy on an ongoing monthly basis.

Policiesto promotesustainable growth

Sustainable economic growth occurs because of increases in aggregate demand and supply. However, long-term sustainable growth ultimately depends on supply-side improvements because balance of payments and inflationary problems are less likely when the productivity of factors improves. Policies to promote growth include:

Technology policy

Technology policy refers to policies where government provides incentives for private firms to invest into new technology. These incentives could be in the form of grants, cheap loans, or tax relief.

Humancapital development

Investment in human capital by allocating more resources to education and training is widely regarded at critical to the success of developing and developed economies. Human capital development provides key skills and knowledge to enable increases in productivity and efficiency.

Reducingred-tapeandde-regulation

A key driver of growth for both developed and developing countries is FDI, and this can be encouragedbyreducingredtapeandunnecessaryregulation,andopeningupmarketstooverseas investors.

Providing incentives

National governments can provide incentives for individuals to start their own business and for small businesses to expand.

Tax reform

Redesigning the tax and benefit system to increase the labour activity rate and encourage work and discourage idleness is clearly an important option for countries wishing to improve their supply-side performance.

Increasingcompetitivenessand contestability

Another important stimulus to supply-side growth is to increase the degree of competitiveness in the micro-economy by promoting contestability, reducing barriers to entry, and by deregulating markets to encourage new entrants.

Newmarkets

Sustainability can also be achieved by encouraging the formation of new markets which exploit new technology or new trading methods. The newly emerging markets for waste and carbon credits, and the development of carbon offsetting schemes, are recent examples of how new markets can emerge, with or without government support.

Infrastructure

Long-term development of infrastructure projects is also central to the promotion of long terms growth and development in a globalised environment. Better infrastructure enables output to be transported at lower cost, as well as generating jobs and other positive externalities

Microeconomics&Macro economics

Theeconomyis madeupof **foursectors**sometimes called **economic agents**:

- ✓ Households
- ✓ Firms
- ✓ Government
- ✓ International

Households

Householdswhoreceive payments(income) fortheir services

(eglabourandland)andusethismoneytobuytheoutputoffirms(ieconsumptionorhousehold spending).

Firms

Firms who use land labour and capital to produce goods and services for which they pay wages rent etc (income) and receive payment (expenditure)

- ➢ Government&International
- ➢ Governmentwhichis alsoknown asthe publicorstatesector

International

consumersbuyingoverseasproductsandForeignersbuyinghomecountry's products

Microeconomics

Meaning

Thebranchofeconomics thatanalyzesthemarket behavior ofindividual consumersand firmsin an attempt to understand the decision-making process of firms and households.

- ➢ MicroeconomicConcerns
- ➢ Demand& Supply
- ➢ MarketCompetition
- ➢ ConsumerBehavior
- ➢ ProducerBehavior

- MarketEquilibrium
- MicroeconomicsExamples
- Recessionin thetourist industrydueto theglobal downturn
- Agovernment subsidyto steel producers
- Arecessioninthetextiles industry
- IncreasedspendingontheNationalHealthService
- **Macroecon**

omics Meaning

Thefield ofeconomics that studiesthebehavior oftheaggregateeconomy.

Macroeconomicsexamineseconomy-widephenomenasuchaschangesinunemployment, national income, rate of growth, gross domestic product, inflation and price levels.

- What is macroeconomics?
- Macroeconomicsconsiders theperformanceoftheeconomyas awhole.
- Wetryto understandchanges in

- Therateofeconomic growth
- Therate of inflation
- Unemployment

Ourtradeperformancewith other countries

- Macroeconomicsalsoincludesanevaluationoftherelativesuccessorfailureof government economic policies
- MacroeconomicConcerns

Inflation

- Output growth
- Unemployment
- Balanceofpayment

- Key Concepts

GrossDomesticProduct(GDP)

Themonetaryvalueofallgoodsandservicesproducedwithinthecountryinagiventime period

RealGDP

The volume of goods and services produced within the Country (i.e. GDP adjusted for changesin the price level)

EconomicGrowth

ThepercentagerateofincreaseofrealGDP

Inflation

Theannual percentagerate ofchangeof thegeneral pricelevel

- Macroeconomicexamples
- Strongeconomicgrowtharisingfromhighlevels ofconsumerspending
- AfallinexportsbecauseofarecessioninleadingEuropeanmarkets
- Higher interest rates to curb inflationarypressure
- GovernmentintheMacroeconomy
- Therearethreekindsofpolicythatthegovernmenthasusedtoinfluencethemacroeconomy:
    - ✓ Fiscal policy
    - ✓ Monetarypolicy
    - ✓ Growthorsupply-side policies
- GovernmentintheMacroeconomy
- **Fiscalpolicy**referstogovernmentpoliciesconcerningtaxesandspending.
- **Monetarypolicy**consistsoftoolsusedbytheCentralbanktocontrolthequantityof money in the economy.

- **Growthpolicies**aregovernmentpoliciesthatfocusonstimulatingaggregatesupply instead of aggregate demand.

Roleofmarkets&Government

Role of markets

- Provideplaceformarket(customersatisfaction)
- Incentiveto producers
- Generationof employment
- Indexofeconomicsituation(globalsituation)
- SupplyVs demandadjustment

Roleofgovt

- Encouragesaving& investment
- Encourageinvestmentfromabroad(FDI&FPI)
- Encourageeducation&training(Physical,humancapital)
- Promotehealth& nutrition
- Securepropertyrights
- Promotefreetrade
- Controlpopulation growth
- Promoteresearch&developmentreduce

Malthusian model

populationgrowthincrease-productivitydecrease

Affect the national income

Populationgrowthincreasewillleadsto increasein poverty

Positivevs NegativeExternalities

- itisusedtoanalysethe marketfailures

- Thirdpartyeffectsofanytransactionbetweenaconsumer&firm

Types

- Positive externalities
- Negativeexternalities

Positive externalities

Meaning

some economic transactions generate beneficial to the third parties Effects. Economistscall these

positiveexternalities.

ex:mid19thcenturylocalgovtofmanybritishcitiesinvestedintheprovisionofcleanpiped water.

benefit-less illness &diseases,access to safe water supplies ,better standards of health&greater productivity

Price machanism

Negativeexternalities:

someeconomictransactionsgeneratenon beneficialtothethirdpartiesEffects. Economistscallthesenegative externalities.

- Industrial&commercial activities
- Pollution(waterpollution)
- Forestareexploited fortheirtimbergivingrisetoerosion,floods etc
- Antisocialbehaviour byconsumers of Alcohol&tobaccocanaffect thewell beings

CHAPTER2

Market:

CONSUMER & PRODUCERS BEHAVIOUR

Itisaplacewheregoodsarepurchasedor sold.

Definition

According to prof.R.Chapman, the term market refers not necessarily to a place but always to a commodity and the buyers &sellers who are in direct competition with one another.

Featuresofmarket

- Area
- commodity
- Buyers&sellers
- Freecompetition
- price

TYPESOF MARKETS

Financialmarkets

- Financial markets facilitate the exchange of liquid assets. Most investors prefer investing in two markets, the stock markets and the bond markets.

Prediction markets

- Prediction markets are a type of speculative market in which the goods exchanged are futures on the occurrence of certain events. They apply the market dynamics to facilitate information aggregation.

Organizationofmarkets

- A market can be organized as an auction, as a private electronic market, as a commodity wholesale market, as a shopping center, as a complex institution such as a stock market, and as an informal discussion between two individuals.

Mechanismsof markets

Ineconomics,amarketthatrunsunder laissez-fairepoliciesisafreemarket.

Demand&Supply

Demand refers to the quantityof goods or services that consumers are willing and able to purchase at the various prices delaing a period of time

- ✓ Desiretoacquireit
- ✓ willingness to payforit
- ✓ Abilitytopayfor it

Definition

AccordingtoBenham,thedemandforanythingatagivenpriceisamountofitwhich will be boughtper unit of time at that price

Basis ofClassification

- Enduser of Goods
- Consumergoodsandproducer'sgood
- (Directdemand&deriveddemand)
- Durability
    - Perishable&durable/ NonPerishabledemand
- Sizeofbuyers
- Individual/Market(Total demand)
- Marketshare
- Company& Industrydemand
- Linkage
    - Autonomous&Induceddemand
- Time Period
- Shortrun&Longrundemand

Lawof demand

AccordingtoMarshall,theamountdemandedincreaseswithafallinpriceand diminishes with a rice in price, other remaining constant.

Demandschedule-Market demand

Price of Oranges	Quantity demanded		
	Consumer I	Consumer II	Market Demand
5	1	-	1
4	2	1	3
3	3	2	5
2	4	3	7
1	5	4	9

AssumptionsofLawof Demand

- ✓ Incomelevelshouldremainconstantofconsumers
- ✓ Tasteofthe buyersshould not change
- ✓ Pricesofothergoodsshouldremainconstant
- ✓ Nonew substitutes forthecommodity
- ✓ Pricerisein futureshould not be expected

Exceptionsoflawof demand

- ➢ Conspicuousgoods
- ➢ Giffengoods
- ➢ NecessitiesofLife
- ➢ Conspicuousnecessities
- ➢ FutureExpectationsabout Prices
- ➢ ImpulsivePurchases
- ➢ Ignoranceeffect
- ➢ OutdatedGoods

Conspicuousgoods

someconsumersmeasuretheutility ofacommodity by itspriceeg.,thecommodity is expensive , they think it has got more utilities.

Giffengoods

Generallythose goods which are considered inferior bythe consumer and which occupy a substantial place in the consumer's buget called " Giffengoods"

NecessitiesofLife

Lawofdemand doesnotapplyon necessities oflifesuch asfood,cloth etc.,

Conspicuous necessities

Demandforcertaingoodsisaffectedbythedemonstrationeffectoftheconsumption pattern of a social group to which an individual belongs.

FutureExpectationsaboutPrices

whenthepricearerising,householdsexpectingthatthepricesinthefuturewillbe higher tend to buy larger quantities of the commodity

ImpulsivePurchases

At timesconsumerstendtomakeimpulsivepurchaseswithoutanycoolcalculations about price and usefulness of the product.

Ignoranceeffect

Itisdemand thathouseholds haveperfect knowledgeabout priceand qualityof goods

OutdatedGoods

Goodsthat go out of usedueto advancements

intheunderlyingtechnologycalledoutdated goods

Eg.,Sale ofair coolers maygo down in winters even if theyaresold as reduced price

Variationin Demand

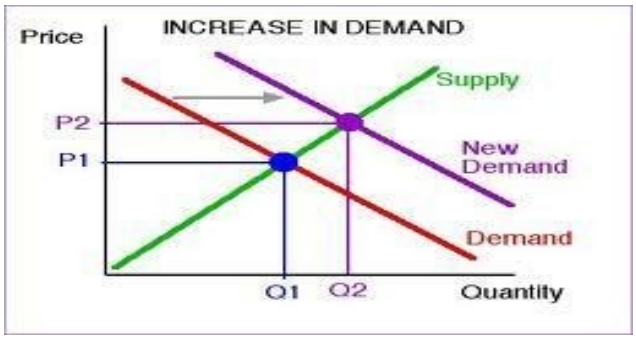
a. **Movementalongthedemandcurve**

Extension in demand

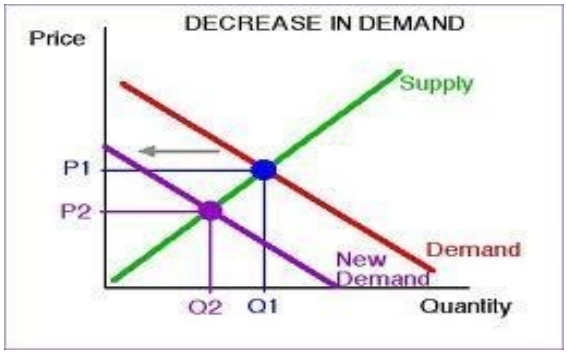
contractionindemand

b. Shiftindemandcurve

Increasein demand



Decreasein demand



a. **Movementalongthedemandcurve**

Extension in demand

Theprice falls, demandtendsto increase

Price	Quantity
5	1
4	2
3	3
2	4

1 5

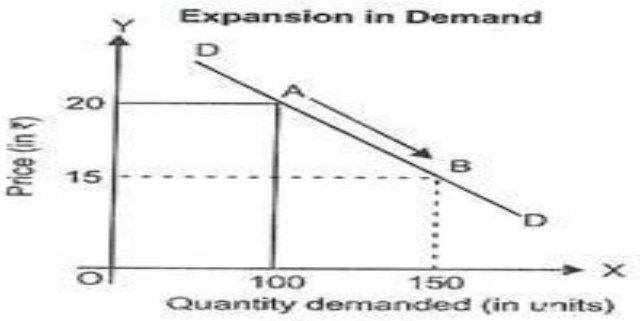


Fig. 3.5

contractionindemand

Increaseindemandleadstofallindemand

Price	Quantity
1	5
2	4
3	3
4	2
5	1

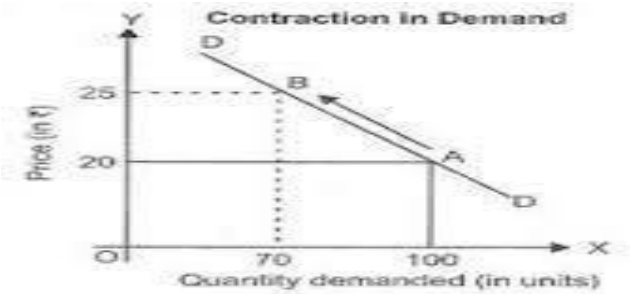


Fig. 3.6

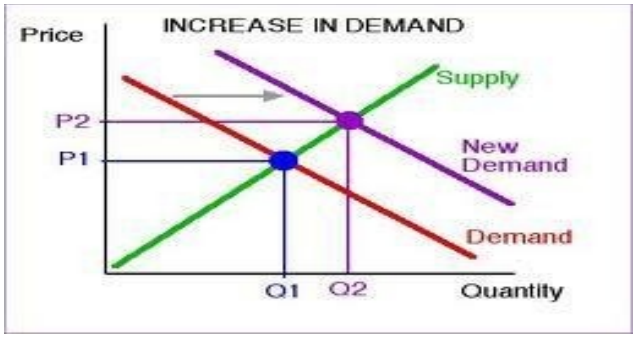
b. Shiftindemandcurve

Increase ordecreaseindemandreferstochangeindemand.Itcausedbychangein factors like tastes, preferences, fashion etc., instead of price.

Increasein demand

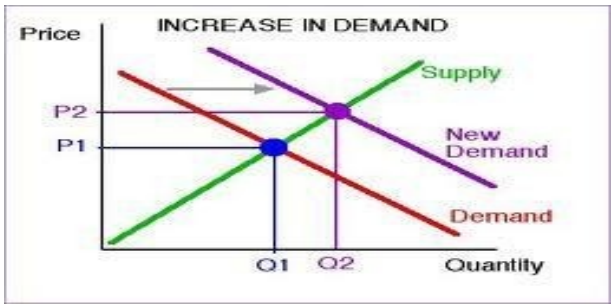
a)Samepricebut moremovement in demand

Price	Demand
5	1
5	2
5	3



b)Risein priceremains samein demand

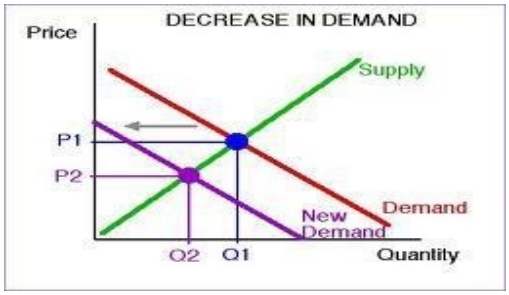
Price	Demand
1	5
2	5
3	5
4	5
5	5



Decreasein demand

Samepricelessdemand

Price	Demand
5	3
5	2
5	1



LessPriceSamedemand

Price	Demand
5	3
4	2
3	1

Demand Function

It is the comprehensive formulation which specifies the factors that influence the demand for the product.

Dx=f(Px, Py, P2, B, A, E, T, U)

Where,

Dx=Demandforitemx

Px= Price for item x

Py= Price of substitutes

P2=Priceofcompliments

B= Income of consumers

A=Advertisementeffects

E=PriceExpectations of theusers

T=Taste orPreferencesof users

U=Unknown variables

Supply

Thetotal amount of aproduct (goodorservice) available forpurchaseatanyspecified price

Price	Q(s)
7	43
6	40
5	38
4	35
5	30

Lawof supply

The**law of supply**isafundamentalprincipleof anincreaseinprice resultsinanincrease in quantity supplied.

Inotherwords,thereisadirectrelationshipbetweenpriceand quantity

Individualsupplyschedule

Price	quantity supplied in dozens
4	3
6	6
8	9
10	12

Marketsupplyschedule

Price in Rs.	Quantity Supplied in Units			Total (A+B+C)
	A	B	C	
5.00	500	600	700	1800
4.00	400	500	600	1500
3.00	300	400	500	1200
2.00	200	300	400	900
1.00	100	200	300	600

ExceptionsofLawofsupply

- ✓ Futureexpectationsaboutchangesinprices
- ✓ Increasesinagricultural product&Perishablegoods
- ✓ Disposalofoldstock

Determinants of supply

Price of the product

- ✓ Technologychanges
- ✓ Resourcesupplies
- ✓ Tax/Subsidiarypolicy

- ✓ Expectationsaboutfutureprice
- ✓ Priceofothergoodsproduced
- ✓ Objectiveofthe firm
- ✓ Weatherconditions

Supply function

In economics,**supply**referstotheamountofaproductthatproducersandfirmsarewilling to sell at a given price when all other factors being held constant.

Sx=f(Px,Py, C,T, O, F,W, N, T)

Where,

Px-Productprice

Py-Priceofrelatedproducts

C-Cost

T-Technology

O–Objectiveofthefirm

F-Future expectations

W-Weather conditions

N- Number of sellers

T-Taxation policy

Determinantsof Demand

When price changes, quantity demanded will change. That is a movement along the same demandcurve. When factors otherthan price changes, demand curve will shift. These are the determinants of the demand curve.

1. **Income:** A rise in a person's income will lead to an increase in demand (shift demand curve to the right), a fall will lead to a decrease in demand for normal goods. Goods whose demand varies inversely with income are called inferior goods (e.g. Hamburger Helper).

2. **ConsumerPreferences**: Favorable change leads to an increase in demand, unfavorablechange lead to a decrease.

3. **Number of Buyers**: the more buyers lead to an increase in demand; fewer buyers lead to decrease.

4. Priceof relatedgoods:

a. Substitutegoods(thosethatcanbeusedtoreplaceeachother):priceofsubstituteand demand for the other good are directly related.

Example:Ifthepriceof coffeerises, thedemand forteashould increase.

b. Complement goods (thosethat can beused together):priceofcomplement and demand for the other good are inversely related.

Example:if thepriceoficecreamrises, thedemand forice-cream toppingswill decrease.

5. Expectationoffuture:

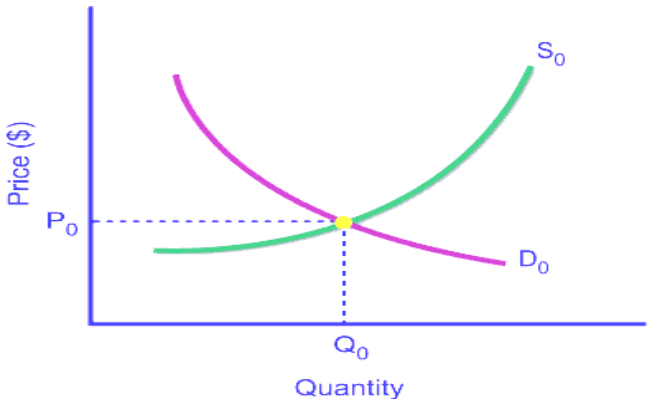
a. **Future price:**consumers'currentdemandwillincreaseiftheyexpecthigherfutureprices; their demand will decrease if they expect lower future prices.

b. **Futureincome:**consumers'currentdemandwillincreaseiftheyexpecthigherfuture income; their demand will decrease if they expect lower future income

Marketequilibrium

Market Equilibrium

- Theoperationofthe marketdependsontheinteractionbetweenbuyersandsellers.
- Equilibrium is the condition that exists when quantity supplied and quantity demandedare equal.
- Atequilibrium, thereis no tendencyfor themarket priceto change.



Marketequilibriumisthatstateinwhichthequantitythatfirmswanttosupplyequalsthe quantity that consumers want to buy.

- Thepricethatclearsthemarketiscalledtheequilibriumpriceandthequantity(soldand bought) is called the equilibrium quantity.
- Themarketissaidtobe"atrest"sincetheequilibriumpriceandequilibriumquantitywill stay at those levels until either demand or supply changes.

Elasticity of Demand

Itdenotesameasureof therate at whichdemandchangesinresponse tothe changein prices

Typesof Elasticityof Demand

1. PriceElasticityofdemand
2. Income Elasticityofdemand
3. Cross elasticityof demand
4. Promotional elasticityofdemand

1. PriceElasticityof demand

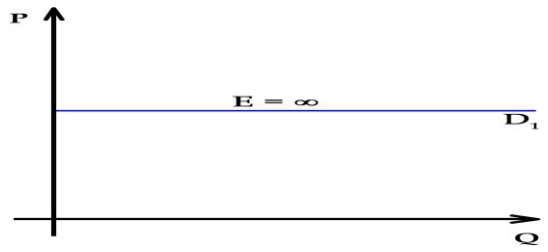
Itmaybedefinedastheratiooftthepercentagechangeindemandtothepercentage change in price

PriceElasticity=%changein quantitydemand / %Changein prices

TypesofPrice Elasticity

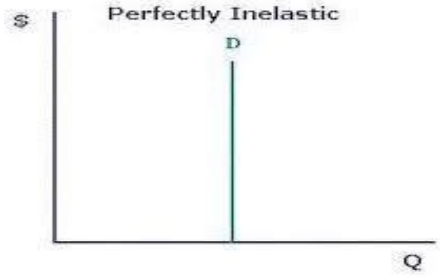
1. **Perfectly Elastic demand** (E=∞)

Demandchangebutpricedoesnotchange



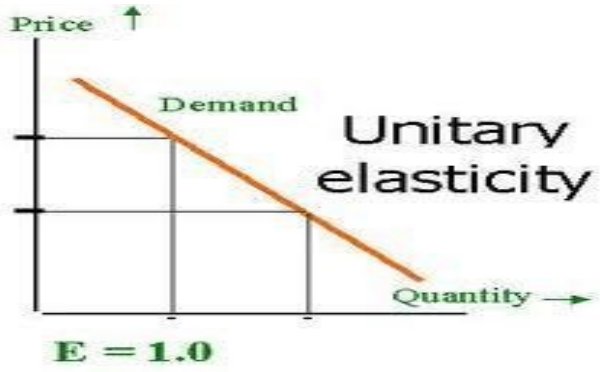
PerfectlyInelasticdemand(E=0)

Ifthedemandforacommoditydoesnotchangeinspiteofanincreaseordecreaseinits price



UnitaryElasticdemand(E=1)

Changein demand is exactlyproportionateto thechangein price



ElasticDemand (E>1)

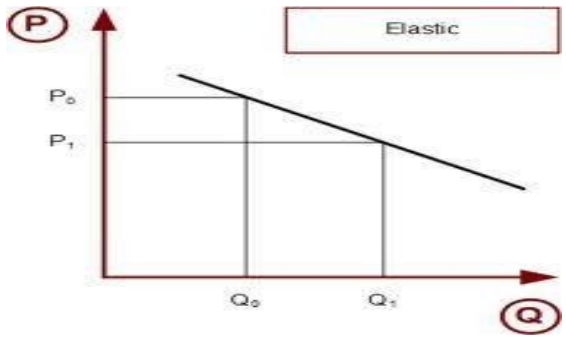
Ifthepercentagechangequantitydemandedisgreaterthanthepercentagechangein price.

Priceelasticityofdemandgreaterthan1. ie.,

Inversely related

Pricedecreasesdemand increases

Priceincreasesdemanddecreases



Inelasticdemand

Ifthepercentagechangeinquantitydemandedislessthanthepercentagechangein price. Price elasticity of demand lesser than 1.

ie., Directlyrelated

Price decreases demand

decreasesPriceincreasesdemandi

ncreases

MeasurementofPriceElasticityof Demand

1. **PercentageMethod**

Itmeasuresthepercentagechangeinthequantityofacommoditydemandedresultingfroma given percentage change in its price

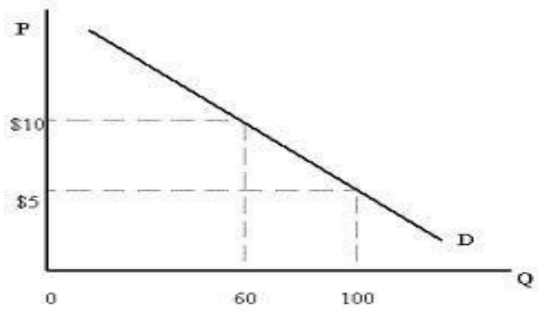
Ep=%changeinq

%changein p

2. PointMethodorGeometricMethod

Itmeasurestheelasticityofdemandondifferentpointsofademandcurve.Itisavariant proportionate method.

$$Ep = \frac{P.\Delta Q}{Q.\Delta P}$$



.Arc Method

segmentofademand curvebetweentwo pointsis called Arc.

$$Ep = \frac{\Delta Q}{Q1+Q2} \quad \frac{\Delta P}{P1+P2}$$

Where

ΔQ=change inquantity demanded

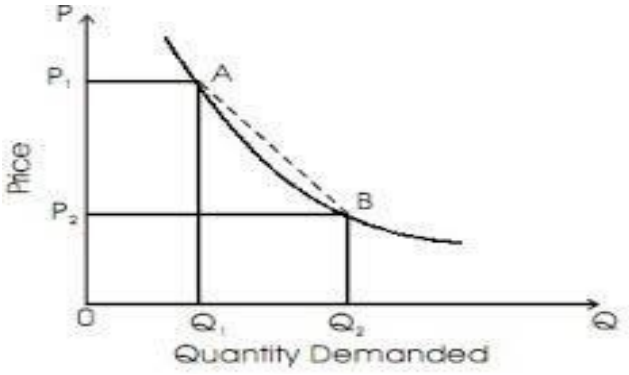
ΔP=Changeinpriceofthecommodity P1=

Original price

P2=New Price

Q1=Originalquantity

Q2=New quantity



Total outlay Method

It is measuredon the basis of change in total outlay or total expenditure in response tochange in the price of the commodity

Types:

UnitaryElasticity: Smallchangesinpriceunaffectedthetotaloutlay **Elastic**

demand: Small changes in price increases the total outlay **Inelastic**

demand: Small changes in price decreases the total outlay

.RevenueMethod

Itreferstothesaleproceedsofafirm. Ep=

$$\frac{A}{A-M}$$

Where,

Ep=Standsforelasticityofdemand

A=Stands for average revenue

M=Stands for Marginal revenue

2. IncomeElasticityof Demand

Itisdefinedasthepercentagechangeinthequantitydemandedofagooddividedbythe percentage change in the income of the consumer,

$$Ey = \frac{\Delta Q}{\Delta Y} \times \frac{Y}{Q}$$

Where,

Ey= stands for income elasticity

Q=standsforquantitydemanded

Y=stands for income

ΔQ=Giveschangein quantitydemanded

ΔY=Giveschangein income

.Crosselasticityofdemand

Achangeindemand foronegood inresponse to a changeinthepriceof anothergood .

$$Ec = \frac{\Delta Qx}{\Delta Py} * \frac{Py}{Qx}$$

Where,

Ec=standsforcrosselaticity

ΔQx=changesinquantitydemanded Py=original

price of good y

ΔPy=smallchangesinpriceofy

Qx=changes in quantity demanded

Advertisingandpromotionalelasticityof demand

Itisameasureoftheresponsivenessofdemandforacommoditytothechangeinoutlayon advertisements and other promotional efforts

Ea= ΔDx A

_____* _____

ΔA Dx

ElasticityofSupply

Itisameasureofdegreeofresponsivenessofsupplytothechangeinprice E(s) =

Proportional change in supply

_____

Proportionalchangeinprice

Typesof Elasticityof supply

Itisameasureofdegreeofresponsivenessofsupplytothechangeinprice E(s) =
Proportional change in supply

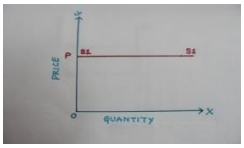
_____

Proportionalchangeinprice

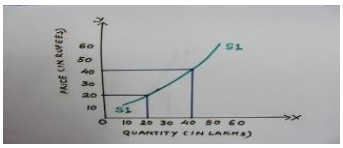
Typesof Elasticityof supply

1.Completely (Perfectly) Inelastic supply: In this case the quantitysupplied does not react to the changes in the price. The increase or decrease in the price does not change the quantity supplied.

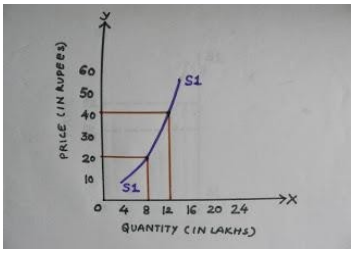
2.Completely(Perfectly)Elasticsupply: Whenaminusculechangeinpriceresultsin infinite change in the quantity supplied then it is a case of completely elastic supply. For instance when there is marginal rise in the price, then the quantity supplied rises infinitely.



Unitary Elastic supply:When the proportionate change in quantity supplied is equal to the proportionatechangein thepriceofthecommoditythenwecall it as unitaryorunit elasticity of supply.



4.Relatively Inelastic supply: When the percentage change in quantity supplied is less than the proportionate change in price than it is a case of relatively inelastic supply.



Importanceof E(S)

Pricedetermination&e(s)

Factor pricing

FactorsdeterminingE(S)

- Natureofinputs used
- Naturalconstraints
- Natureof thecommodity
- Lawsof production
- Time
- Techniqueofproduction

ConsumerBehaviour

Consumer Behaviour is the studyof individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfyneeds and the impacts that these processes have on the consumer and society.

Environmentalfactors		Buyer'sblack box		Buyer's response
Marketing Stimuli	**Environmental Stimuli**	**Buyer Characteristics**	**DecisionProcess**	
Product PricePlace Promotion	Economic Technological Political Cultural Demographic Natural	Attitudes Motivation Perceptions Personality Lifestyle Knowledge	Problemrecognition Informationsearch Alternative evaluation Purchase decision Post-purchase behaviour	Productchoice Brand choice Dealerchoice Purchase timing Purchase amount

- Providevalue andcustomer satisfaction.
- Effectivelytarget customers.
- Enhancethe value ofthecompany.
- Improveproductsandservices.
- Createacompetitiveadvantage
- Understandhow customersviewtheirproductsversustheircompetitors'products.
- Expandthe knowledgebaseinthefield of marketing,
- Apply marketing strategies toward a positive affect on society (encourage people to support charities, promote healthy habits, reduce drug use etc.)

Approachestoconsumerbehaviour

- MarginalUtilityapproach
  - cardinalmeasureof utility
  - problemofrelatedgoods
- Indifferenceapproach
  - ordinal utility
  - relatedgoods
  - observablebehavior

Law of equi - marginal utility

- Behaviour of the consumer when he spends his limited income on various commodities& services

Assumptions

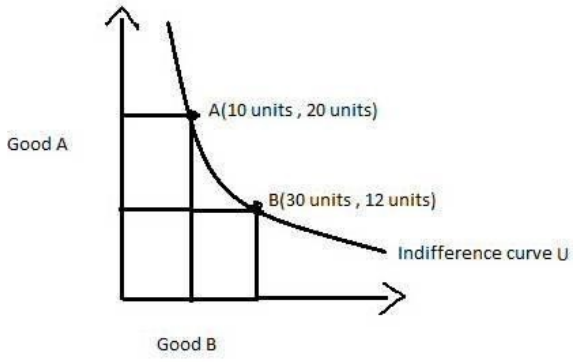
- Consumeris rational
- Easyto measurable
- Utilityofmoneyisconstant
- Thereis nochangeinincome, tasteand fashion
- Priceofgoodsis given
- Perfect competitionondemandsideofthe market

Ordinal UtilityAnalysis

Indifferencecurveanalysis

An indifference curve is a graph showing combination of two goods that give the consumerequal satisfaction and utility. Each point on an indifference curve indicates that a consumer is indifferentbetweenthetwoandallpointsgivehimthesameutility.

Description: Graphically, the indifference curve is drawn as a downward sloping convex to the origin. The graph shows a combination of two goods that the consumer consumes.



The above diagram shows the U indifference curve showing bundles of goods A and B. To the consumer, bundle A and B are the same as both of them give him the equal satisfaction. In other words, point A gives as much utility as point B to the individual. The consumer will be satisfied at any point along the curve assuming that other things are constant.

Asingleindifferencecurveshowsthedifferentcombinationof X&Y thatyieldequal satisfaction to the consumer

<u>Assumptions</u>

- Rationality

- Ordinal utility

unitsof variablefactor (L)	**Marginalproduct (MP_L)**	**Total product (TP_L)**	**Average product (AP_L)**	**Stages**

- Consistency
- Transitofchoice
- Rateof substitute
- Weakordering
- Maximizationofconsumerutility/consumerequilibrium
- Whenhehas no tendencyto makeanychangeinhis purchaseof goods
- 2 conditions
- Pricelinemustbetangenttoindifferencecurve
- Indifferencecurveconvextotheorigin

Production

<u>Decision</u>

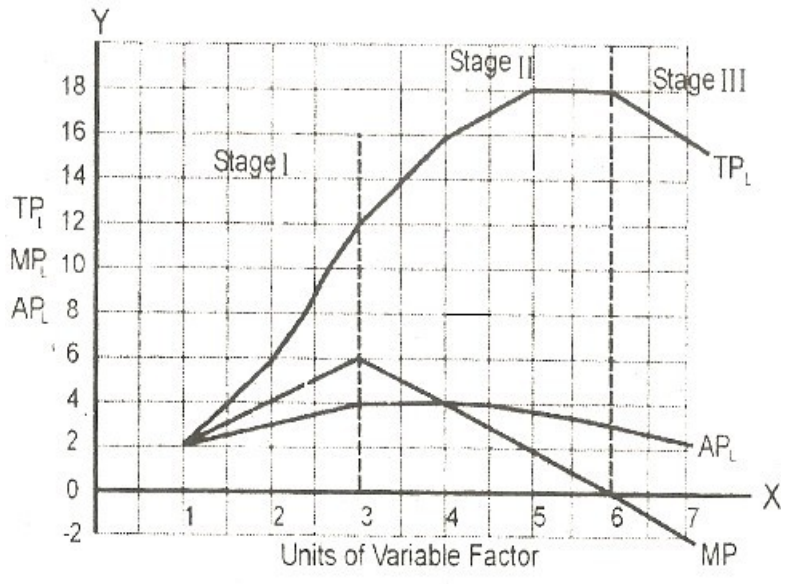
- Whatistheactual production?
- Howmuch to produce?
- What input combinationto use?
- Whattypeoftechnologytouse?

<u>Laws of production</u>

- Lawsofvariableproportions/productionfunctionwithonevariableinput
- Optimumcombinationsofinputs/isoquantsanalysis/productionfunctionwithtwovariable input
- Lawsofreturntoscale/productionfunctionwithallvariable input

1		2	2	2	
2		4	6	3	I
3		6	12	4	
4		4	16	4	II
5		2	18	3.6	
6		0	18	3	III

Schedule:



StageI☹lawofincreasingreturn

At this stage MP_Lincreases up to 3rd worker and its curve is higher than the average product, so that total product is increasing at increasing rate.

StageII:☹lawof decreasingordiminishingreturn

At this stage, MP_Ldecreases up to 6th unit of labor where MP_Lcurve intersects the X-axis. At 4the unit of labor MP_L= AP_Lafter this, MP_Lcurve is lower than the AP_L. TP_Lincreases at decreasing rate.

StageIII:☹lawof negativereturn

At the unit of labor the MP_Lbecomes negative, the AP_Lcontinues falling but remains positive. After the 6th unit, TP_Ldeclines with the employment of more units of variable factor (L).

Productionfunctionwith2variable input

Isoquantcurve:

itrepresentthedifferentcombinationofinputs producingaparticular quantityof output.

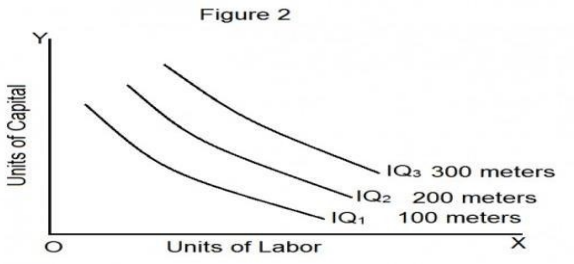
Assumption

- *Twofactor ofproductionvs capital&*labour
- Twofactor cansubstitute eachother uptoacertain limit
- ShapeofISO quantdepends upon theextent ofsubstitutabilityof2inputs
- Technologyis given overaperiod oftime

Isoproductcurve

isoquantmap

- Anisoquantmapisasetofisoquantsthatshowsthemaximumattainableoutputfrom any given combination inputs.



Typesofisoquants

Linear Isoquant:

- Thistypeassumesperfectsubstitutabilityoffactorsofproduction:agivencommodity maybeproduced byusing onlycapital, oronlylabour,orbyan infinitecombination ofK and L.

Input-OutputIsoquant:

This assumes strict complementarity[that is, zero substitutability] of the factors of production. The isoquant take the shape of a right angle. This type of isoquant is also called 'Leontief isoquant' after Leontief, who invented the input-output analysis.

KinkedIsoquant/'activityanalysis-isoquant'or'linear-programmingisoquant',

Thisassmeslimitedsubstitutability ofKandL.There are only a fewprocessesfor producing any one commodity. Substitutability of factors is possibleonly at the kinks.

Propertiesof Isoquants

Anisoquantlyingaboveandtotherightofanotherisoquantrepresentsa higher

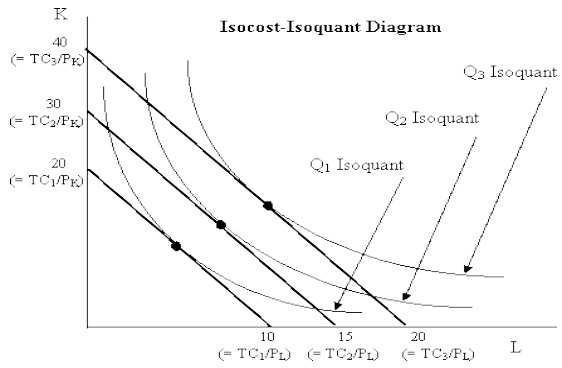
level of output

Isoquantsareconvextotheorigin Each

isoquant is oval-shaped **Expansion**

path

itisfocusof thepointoftangencytheequalproductcurve&Isoquantlines



ISOCOSTLINE

- An isocost line is also called outlay line or price line or factor cost line. An isocost line showsallthecombinationsoflabourand capitalthatareavailableforagiventotalcost to the producer. Just as there are infinite number of isoquants, there are infinite number of isocost lines, one for every possible level of a given total cost. The greater the total cost, the further from origin is the isocost line. The isocost line can be explained easily by taking a simple example.

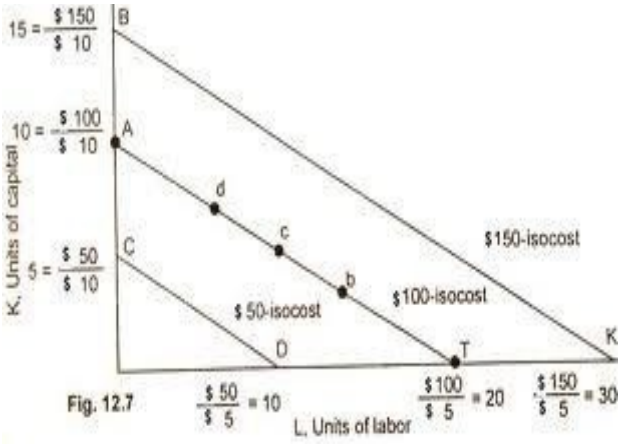


Fig. 12.7

Longrunproductionfunctionwithallvariableinput(Lawsofreturntoscale)

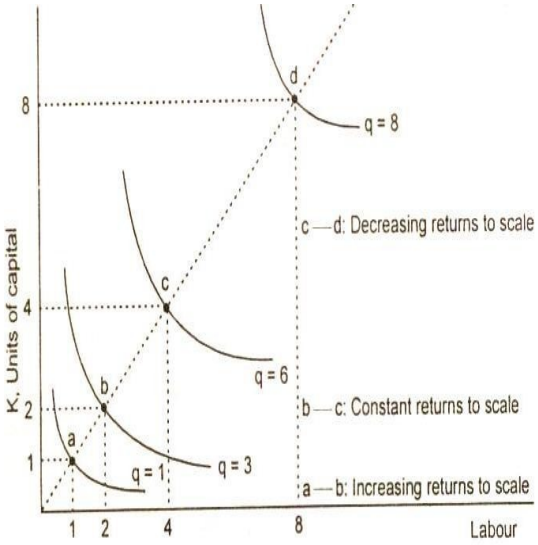
Returntoscalereferstotherelationshipbetweenchangesinoutputandproportionate changes in all factors of production

Assumptions

- Allfactorsare variable
- Workersworkwith giventoolsand implementation
- Technicalchangesare absent
- Thereisperfectcompetition

- Productismeasuredinquantities.

Returnstoscale



Schedulewithdiagram

- Increasingreturntoscale
- Constantreturntoscale
- Decreasingto scale

Constantreturnstoscale(CRS)

Constantreturnstoscale(CRS)isapropertyofproductionfunctionthatholdswhena proportional increase in all inputs results in an increase in output by the same proportion.

Increasingreturnstoscale(IRS)

Increasingreturnstoscale(IRS)holdswhenaproportionalincreaseinallinputsresultsinan increase in output by more than the proportion.

Decreasingreturnstoscale(DRS)

Decreasing returns to scale (DRS) holds when a proportional increase in all inputs results in anincrease in output by less than the proportion.

Forexample,supposeinaproductionprocess, allinputsget doubled.

Asaresult, if theoutputgets doubled, theproduction function exhibits CRS.

Ifoutput isless than doubled,theDRS holds,and if itis morethandoubled, theIRSholds.

Economiesvsdiseconomiesofscale

Economies of scale

a situation in which an increase in the quantity produced decreases the long-run average cost of production.

TypesofEconomiesofScale

InternalEconomiesofScale&diseconomies

- Internaleconomiesareavailabletoaparticularfirmandgiveitan
- Advantageoverother firms engagedintheindustry
- Expansionof thesizeof aparticular firm
- Managerialdecisions
- Internaleconomiesarise duetoafirm‘sown expansion

Kindsofinternaleconomiesanddiseconomies

- Technicaleconomies&diseconomies
- Managerialeconomies&diseconomies
- Commercialeconomies&diseconomies
- Financialeconomies &diseconomies
- Riskbearingeconomies &diseconomies

ExternalEconomies&diseconomies

- Economiesavailabletoallfirmsinthe industry.
- Foreg.Constructionofroads,railwaysinan area reducescostsforallfirmsinthat area
- Discovery of a new technique, rise of industries using by-products, availability of skilled labour through the establishment of special technical schools

- industryisheavilyconcentrated ina particulararea.

Kindsofexternaleconomies&diseconomies

- Cheaperrawmaterialandcapitalequipment
- Technologicalexternaleconomies
- Developmentofskilledlabour
- Growth ofancillaryindustries
- Bettertransportationand marketing

Analysisofcost

Costanalysisreferstothestudyofbehaviour Types of

cost concepts- some criteria

- Traceability-directcost&indirect cost
- Separability-separate cost,commoncost,jointcost,byproductcosts
- Computation–historicalcost/pastcost,replacementcost
- Variability-variablecosts,semivariablecosts,fixedcost
- Controllability-controllablecost,uncontrollablecost
- Economic concept- opportunity cost/alternative cost,marginal costs,incremental costs,differential costs
- Escapability–escapablecosts,sumk cost
- Liquidity(cashposition)-outofpocket &bookcost

Typesof cost concepts

ActualcostsandOpportunity Costs

- Actualcostsarealsocalled asoutlaycosts, absolutecosts andacquisition costs.
- Theyarethosecoststhatinvolvefinancialexpendituresatsometimeandhenceare recorded in the books of accounts.

- They are the actual expenses incurred for producing or acquiring a commodity or service by a firm.
- For example, wages paid to workers, expenses on raw materials, power, fuel and other types of inputs. They can be exactly calculated and accounted without any difficulty.

Opportunity cost of a good or service is measured in terms of revenue which could have been earned by employing that good or service in some other alternative uses.

Directcostsandindirectcosts

- Direct costs are those costs which can be specifically attributed to a particular product, a department, or a process of production.
- For example, expenses on raw materials, fuel, wages to workers, salary to a divisional manager etc are direct costs.
- indirect costs are those costs, which are not traceable to any one unit of operation. They cannot be attributed to a product, a department or a process.

ImplicitorImputedCostsandExplicitCosts

- Explicit costs are those costs which are in the nature of contractual payments and are paid by an entrepreneur to the factors of production [excluding himself] in the form of rent, wages, interest and profits, utility expenses, and payments for raw materials etc.
- Implicitorimputedcostsareimpliedcost.Theydonottaketheformofcashoutlaysandas such do not appear in the books of accounts. They are the earnings of owner employed resources.

Money Cost and Real Cost

- When cost is expressed in terms of money, it is called as money cost. It relates to money outlays by a firm on various factor inputs to produce a commodity.
- When cost is expressed in terms of physical or mental efforts put in by a person in the making of a product, it is called as real cost.

Pastand future costs.

- Pastcostsarethosecostswhicharespentin theprevious periods.
- On the other hand, future costs are those which are to be spent in the future. Past helps in taking decisions for future.

MarginalandIncrementalcosts

- Marginal cost refers to the cost incurred on the production of another or one more unit. It implies additional cost incurred to produce an additional unit of output.
- Incremental cost on the other hand refers to the costs involved in the production of abatch or group of output. They are the added costs due to a change in the level or nature of business activity.

Fixedcostsandvariablecosts.

Fixed costs are those costs which do not vary with either expansion or contraction in output. They remain constant irrespective of the level of output. They are positive even if there is no production.They are also called as supplementary or over head costs.

Accountingcostsandeconomic costs.

Accounting costs are those costs which are already incurred on the production of a particular commodity.It includes only the acquisition costs.

Economic costs are those costs that are to be incurred by an entrepreneur on various alternative programs. It involves the application of opportunity costs in decision making.

ShutdownandAbandonmentCosts

Shutdown costs are required to be incurred when the production operations are suspended and will not be necessary, if the production operations continue. For example, if the production is suspended, the plant, machinery or equipment will have to be protected byputting up sheds, plastic sheets etc. Such costs are called shutdown costs.

AbandonmentCosts

When anyplant is to bepermanentlyclosed down, some costs are to be incurred for disposing of the fixed assets. These costs are called abandonment costs.

Privatecosts&socialcosts&economic costs

- Private costs are those which are actually incurred or provided for by an individual or a firm for its business activity.
- SocialTheoryofCost,ontheotherhand,isthetotalcosttothesocietyonaccountof production of a good.
- Thus,theeconomiccostsincludebothprivateandsocial costs.

Out-of-Pocket

Out-of-pocket costs are those that involve immediate payments to outsiders as opposed to book costs that do not require current cash expenditure.

IncrementalandSunkCosts

- Incremental costs are defined as the change in overall costs that result from particular decision being made. Incremental costs may include both fixed and variable costs.
- Sunkcostisonewhichis notaffectedoralteredbyachangeinthe levelornatureofbusiness activity. It will remain the same whatever the level of activity. The most importantexample of sunk cost is the amortization of past expenses, e.g. depreciation.

Costfunction

Itreferstothemathematicalrelationbetween costofaproduct&variousdeterminantsofcost. C=f(O,S,T,U,P…)

Where,

Cis cost

O-levelofoutput

S-sizeof the plant

T-timeunderconsideration

P-factors of production

Determinants of costs

- Lawofreturns operatings
- Sizeof theplant
- Period
- Capacityutilization
- Pricesoffactorsof production
- Technology
- Efficiencyin the useofinputs
- Lotsizeofthe product

- Outputisstable&constant

Types of cost functions

Linear cost function

Y=a+bX

Quadraticcostfunction

Y=a+bX+Cx2

Cubiccostfunction

Y=a+Bx-cX2+dX3

Shortruncostfunction&Longruncostfunction Short

run cost function

(Aperiodoftimeinwhichtheoutputcanbeincreasedordecreasedbychangingonlythe amount of variable factors such as labour, raw materials, chemicalsetc.)

Costoutputrelationshipinshort run

- Totalcost & output
- Averagecost&output
- Marginalcost&output

Longrun costfunction(Aperiodoftimein which thequantities ofall factorsmaybevaried.)

- Derivationoflong runcostcurvefrom short run cost curves
- Derivationof LRACcurvefromSRACcurve
- Derivationoflongrunmarginalcost curve(LRMC)

Relationbetweenproduction&costfunction

Production function

Itshowstheminimumquantitiesofvariousinputsthatarerequiredtoyieldagiven quantity of output.

cobbdouglasproductionfunction Q=f(I1,I2,I3….)

Q- output

I1,I2,I3-input

Costfunction

Itreferstothemathematicalrelationbetweencostofaproduct&variousdeterminantsof cost.

Qc=f(p1I1,p2I2,p3I3….)

Q- output

I1,I2,I3-input

p- price

CHAPTER 3

PRODUCT&FACTORMARKET

PRODUCTMARKET

Itis amechanism that allows people to easilybuy&sell products

Nature/featuresServices

- Nature&degreeof competition
- Twomarkets(factor&product market)
- Factor-services
- Product-goods

Determinantsofmarket structure

- Number &natureof sellers
- Number &natureof buyers
- Natureofproducts
- Entry&exitconditions
- Economiesofscale

Whyweneedformarketclassification?

- Behaviorpatternofthe competition
- Degreesofcompetition
- Roleofgovernmentregulations

Differentmarket structure

Differentmarketstructure

- Perfectcompetition

- Imperfectcompetition
- Monopoly
- Monopolistic competition
- Oligopoly
- duopoly

Perfectcompetition/market

Meaning&definition

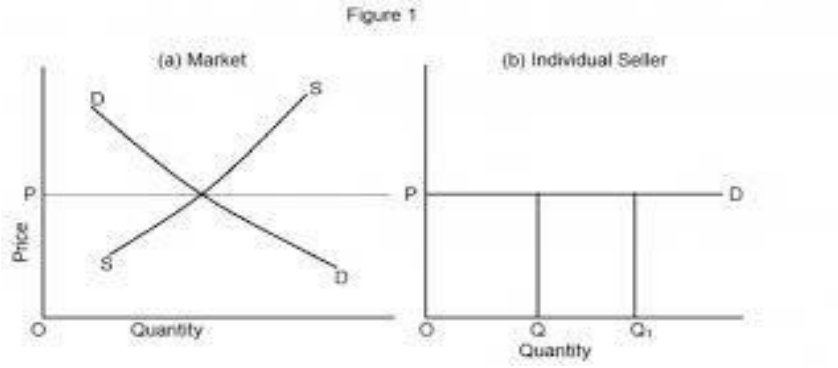
According to R.G.Lipsey, perfect competition in a market structure in which all firms in an industry are price takers and in which there is freedom of entry into &exit from industry.

Features/conditions(table)

Pricedetermination&equilibriumof afirm

Conditions of equilibrium

1. MC=MR
2. MCcurvecut MR curve from below.



Assumptions

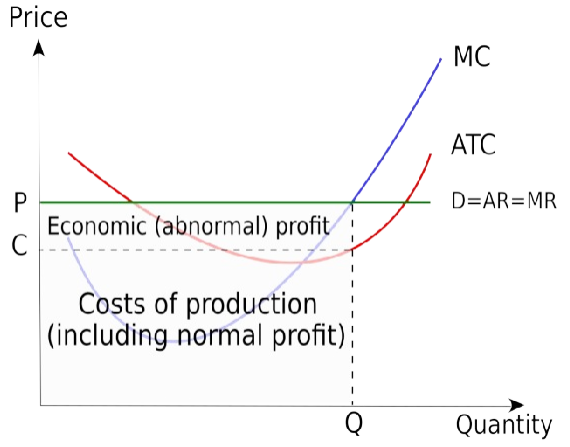
- Firmsarefreeto enterinto leavethe industry
- Allfirmsareof equal efficiency
- Allfactorsare homogeneous
- Costcurvesareuniform

- Technologyadoptation
- Perfectknowledgeabout price &output

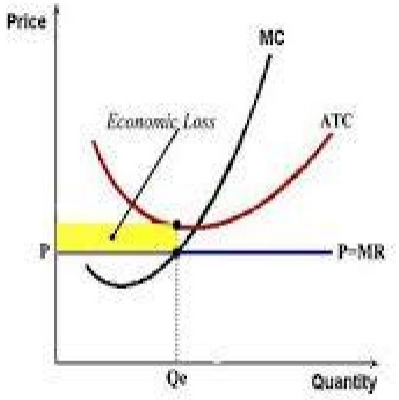
Pricedetemination &equilibriumof thefirmin short run

- Abnormalprofit/supernormal profit
- Losses
- Normal profit/break even

<u>Abnormalprofit/supernormalprofit</u>



<u>Losses</u>



ImperfectCompetition/Market

Itisthecompetitivesituationinanymarketwheretheconditionsnecessaryforperfect competition are not satisfied.

Importantfeaturesof imperfect competition:

- Existenceof largenumber of firms:
- Product differentiations
- Someinfluenceoverthe price
- Absenceoffirm'sinterdependence
- Non-pricecompetition
- Freedomofentryand exit

Typesofimperfectmarket/structure

- Monopoly(mono-single,poly-seller)
- Monopolisticcompetition(manysellers)
- Oligopoly(fewsellers,manybuyers)
- Duopoly(2sellersorsuppliers)

Monopoly

It isa market situation in which there is asingle seller, there are noclose substitute forcommodity to produce and there are barriers to entry

classificationofmonolpoly

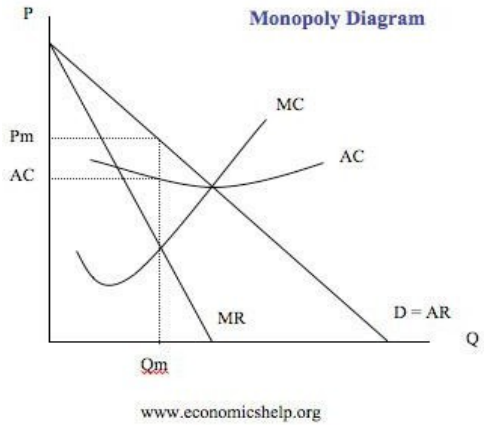
- Natural monopoly(ex; electricity) allow competition.It is a **monopoly** in an industry in which it is most efficient (involving the lowest long-run average cost) for production tobe concentrated in a single firm.
- Regulatedmonopoly(fairrateofreturn)
- Unregulatedmonopoly

Assumptionsofmonopoly

- Onlyoneseller

- Homogeneous product
- Noclosesubstitutes
- Itisapure competition
- toearn moreprofit withinminimum costs
- Priceisnot controlled

Pricedeterminationundermonopoly



Conditions

- MC=MR
- MCcurvemustcutMRcurvefrombelow.

Price determination under monopoly in short run

- Supernormalprofit
- Normal profit
- Minimum loss

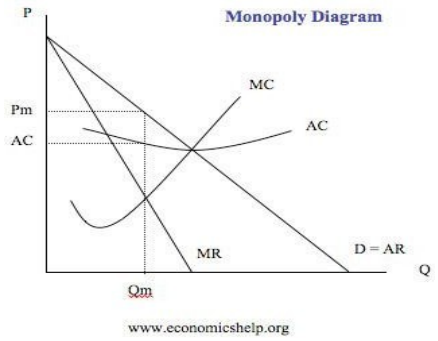
Supernormalprofit

Pricedetermination undermonopolyinlong run

Monopolistic competition

Itisamarketstructurewheretherearealargenumberofsmallsellers,selling differentiated but close substitute products

Pricedeterminationundermonopoly



Conditions

- MC=MR
- MCcurvemustcutMRcurvefrombelow.

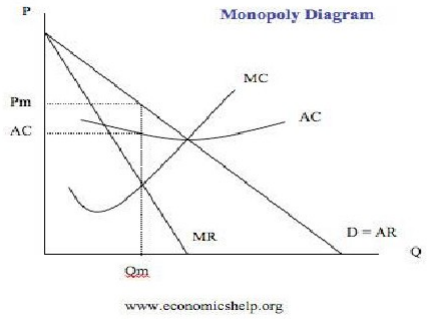
Assumptions

- Theno.ofsellers arelarge
- Productsare differentiated
- Firmhasdeterminatedemandcurvewhichis elastic
- Shortruncostcurvesof eachfirmdiffer fromeachother
- Nofirmsenter intotheindustry

Pricedeterminationundermonopolisticinshort run

- Supernormalprofit
- Normal profit
- Minimumloss

Super normal profit



Normal profit

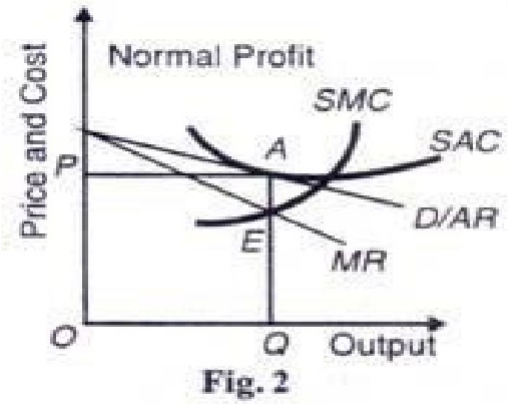
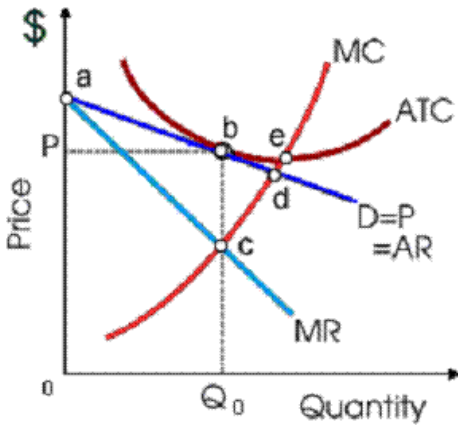


Fig. 2

Pricedeterminationunder monopolisticinlongrun



Oligopoly

Anoligopolyisamarketforminwhichamarketorindustryisdominatedby asmall number of sellers (oligopolists). Oligopolies can result from various forms of collusion which reduce competition and lead to higher prices for consumers

Pricedeterminationunderoligopoly(thereisnodefinitetheorytodeterminepriceandoutput determination under oligopoly)

Differentbehaviours

- Rivalsmaydecide to co-operative&achievetheirobjectives
- Fighttoincreasetheirmarketshare
- Agreement

Modelsofoligopoly

- Kinkeddemandcurve(noncollusivemodelof sweezy)
- Collusive model

Assumptions

- TherearеFew firmsinthis industry
- Close substitute of products
- Samequalitybutthereisno product differentiation

- Noadvertisingexpenditure
- Sellersattitudearedepend uponhis rivals
- Changesinmarginalcost do notaffectoutputare price

Collusion

is an agreement between two or more parties, sometimes illegal and therefore secretive,to limit opencompetitionby deceiving, misleading, or defrauding others of their legal rights, or to obtain an objective forbidden bylawtypically by defrauding or gaining an unfair market advantage. It is an agreement among firms or individuals to divide a market, set prices, limit production or limit opportunities. It can involve "wage fixing, kickbacks, or misrepresenting the independence of the relationship between the colluding parties".In legal terms, all acts effected by collusion are considered void.

Collusion

Whencompetingfirmsmakesomekindofagreementaboutpricing&outputiscalled collude

Types

- Perfectcollusion
- Imperfectcollusion(priceleadership)

Duopoly

A true **duopoly** (from Greekduo (two) + polein (to sell)) is a specific type of oligopolywhere only two producers exist in one market.

Types

EconomicCostsofImperfectCompetitionandOligopoly

- Thecostofinflatedpricesandinsufficient output:
- Measuringthewastefromimperfectcompetition:

Thecostofinflatedpricesandinsufficientoutput:

Themonopolist, bykeeping theoutput alittlescarce, raises its price above marginal cost. Hence, the society does not get as much of the monopolist's output as it wants in terms of product's marginal cost and marginal value. The same is true for oligopoly and monopolistic competition

I**nterventionStrategies:**

- **Anti-trust Policy:** Anti-trust policies are laws that prohibit certain kinds of behaviour (such as firm's joining together to fix prices) or curb certain market structures (such as pure monopolies and highly concentrated oligopolies).
- **Encouraging Competition:** Most generally, anticompetitive abuses can be avoided by encouraging competition whenever possible. There are many government policies that can promote vigorous rivalry even among large firms. In particular, it is crucial to keep the barriers to entry low.
- **Economic Regulations:** Economic regulation allows specialised regulatory agencies to oversee the prices, outputs, entry, and exit of firms in regulated industries such as public utilities and transportation. Unlike antitrust policies, which tell businesseswhat not to do, regulation tells businesses what to do and how to do.
- **Government Ownership of Monopolies:** Government ownership of monopolies has been an approach widely used. In recent years, many governments have privatised industries that were in former times public enterprises, and encouraged other firms to enter for competition.
- **Price Control:**Pricecontrolonmostgoodsandserviceshasbeenusedinwartime,partly as a way of containing inflation, partly as a way of keeping down prices in concentrated industries.
- **Taxes:** Taxes have sometimes been used to alleviate the income-distribution effects. By taxing monopolies, a government can reduce monopoly profits, thereby softening someof the socially unacceptable effects of monopoly.

Differentmarket structure

Type of market structure	Basis of Distinction			
	Number of independent sellers	Seller concentration	Product differentiation	Condition of entry
Perfect or Pure competition	Large	Non-existent	Homogeneous product	Free or easy
Monopolistic competition	Large	Non-existent or low	Products are close substitutes	Free or easy
Oligopoly	Few	Medium or high	Products may be homogeneous or close substitutes	Difficult
Duopoly	Two	High	Products may be homogeneous or close substitutes	Very difficult or impossible
Monopoly	One	Very high	Remote substitutes	Barred or impossible

Firm'sequilibriumand supply

Meaning:

A firm is in equilibrium when it has no tendency to change its level of output. It needs neither expansionnorcontraction.ItwantstoearnmaximumprofitsInthewordsofA.W.Stonierand D.C.Hague,"Afirm willbeinequilibrium whenitisearningmaximummoneyprofits."

Equilibrium of the firm can be analysed in both short-run and long-run periods. A firm can earn the maximum profits in the short run or may incur the minimum loss. But in the long run, it can earn only normal profit.

Short-runEquilibriumoftheFirm:

The short run is a period of time in which the firm can vary its output by changing the variable factors of production in order to earn maximum profits or to incur minimum losses. The number of firms in the industry is fixed because neither the existing firms can leave nor new firms can enter it.

It'sConditions:

The firm is in equilibrium when it is earning maximum profits as the difference between its total revenue and total cost.

Forthis, itessential thatitmustsatisfy two conditions:

(1) MC = MR, and (2) the MC curve must cut the MR curve from below at the point of equality and then rise upwards.

The price at which each firm sells its output is set by the market forces of demand and supply. Each firm will be able to sell as much as it chooses at that price. But due to competition, it will not be able to sell at all at a higher price than the market price. Thus the firm's demand curvewill be horizontal at that price so that P = AR = MR for the firm.

1. MarginalRevenueandMarginalCost Approach:

The short-run equilibrium of the firm can be explained with the help of the marginal analysis as well as with total cost-total revenue analysis. We first take the marginal analysis under identical cost conditions.

Thisanalysisisbasedonthefollowingassumptions:

1. Allfirms in an industryusehomogeneous factors of production.

2. Theircostsareequal. Therefore,allcostcurves areuniform.

3. Theyusehomogeneous plants so that theirSAC curves are equal.

4. Allfirmsareof equalefficiency.

5. Allfirmsselltheirproductsatthesamepricedeterminedbydemandandsupplyofthe industry so that the price of each firm is equal to AR = MR.

DeterminationofEquilibrium:

Given these assumptions, suppose that price OP in the competitive market for the product of all the firms in the industryis determined bythe equalityof demand curve D and the supplycurve S at point E in Figure 1(A) so that their average revenue curve (AR) coincides with the marginal revenue curve (MR).

At this price, each firm is in equilibrium at point L in Panel (B) of the figure where (i) SMC equals MR and AR, and (ii) the SMC curve cuts the MR curve from below. Each firm would be producing OQ output and earning normal profits at the maximum average total costs QL. A firm earns normal profits when the MR curve is tangent to the SAC curve at its minimum point.

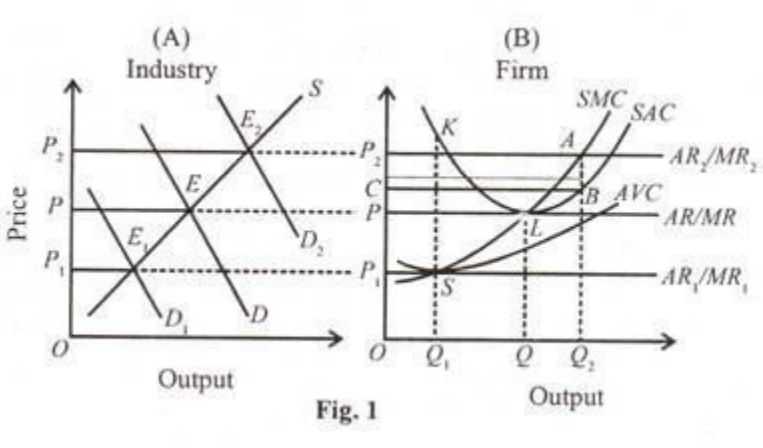


Fig. 1

If the price is higher than these minimum average total costs, each firm will be earning supernormal profits. Suppose the price rises to $0P_r$where the SMC curve cuts the new marginal revenue curve $MR_2(=AR_2)$ from below at point A which now becomes the equilibrium point. In this situation, each firm produces OQ_2output and earns supernormal profits equal to the area of the rectangle P_2ABC.

If the price falls below $OP_1$the firm would make a loss because the SAC would be higher thanthe price. In the short-run, it would continue to produce and sell OQ_1output at OP_1price so long as it covers its AVC. S is thus the shut-down point at which the firm is incurring the maximum loss equal to SK per unit of output. If the price falls below $OP_1$the firm will close down because it would fail to cover even the minimum average variable cost. $OP_1$is thus the shut-down price.

Marketefficiency

Whatis anefficient market?

- Efficient market is one where the market price is an **unbiased estimate** of the true value of the investment.
- Implicitinthisderivation areseveralkeyconcepts-

(a) Market efficiency does not require that the market price be equal to true value at every point in time. All it requires is that errors in the market price be unbiased, i.e., that prices can begreater than or less than true value, as long as these deviations are random.

(b) Thefact that thedeviations from truevalue arerandom implies, in arough sense, that thereis an equal chance that stocks are under or over valued at any point in time, and that these deviationsareuncorrelatedwithanyobservablevariable.Forinstance,inanefficientmarket,

stocks with lower PE ratios should be no more or less likely to under valued than stocks with high PE ratios.

(c) If the deviations of market price from true value are random, it follows that no group of investors should be able to consistently find under or over valued stocks using any investment strategy.

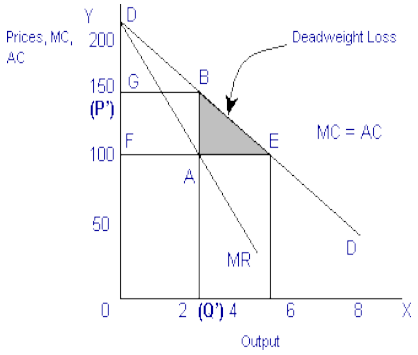
Economiccostsofimperfect competition

- **Thecostofinflatedpricesandinsufficientoutput:**
- **Measuringthewastefromimperfectcompetition:**

The cost of inflated prices and insufficient output:

The monopolist, by keeping the output alittle scarce, raises its price above marginal cost. Hence, the society does not get as much of themonopolist'soutputasitwantsintermsofproduct'smarginalcost andmarginalvalue. The same is true for oligopoly and monopolistic competition

Measuringthewastefromimperfect competition:



In the above diagram, DD curve represents the consumers' marginal utility at each level of output, while the MC curve represents the opportunity cost of the devoting production to this good rather than to other industries.

Factor Market

Factor market refers to markets where the factors of production are bought and sold such as labour markets,the capital market,the market of raw materials and the market for management or entrepreneurial resources

Fourfactorsofproduction

- Land
- Labor
- capital
- Entrepreneurship

Land,LabourAndCapital

Land means the material and the forces which nature gives freely for man's aid, in land and water, in air light & heat

Characteristicsof land

- Itisfreegiftofnature
- Itis strictlylimited in quantity
- Landhasnocostof production
- Itissubject tolawofdiminishing return
- Landcannotbeshiftedfromoneplaceto another

Labour

- It can be defined as anyexertion of mind or body undergonepartlyor whollywith a view to earning some good other than the pleasure derived directly from the work.In short labour in economic means that any type of work performed by a labourer with an intention to earn income.

Characteristics

- Labourisinseparablefromthelabourer
- Labourersellshisservicesnothimself
- Labouris moreperishablethan other commodity
- Man,not a machine

- Lessmobile
- SupplyIndependent of its demand
- Labourerdiffersinefficiency

Factorsdeterminingefficiencyoflabour

- Racialquality
- Climatic factors
- Education
- Personalqualities
- Industrialorganisationandequipment
- Factoryenvironment
- Workinghours
- Fairandpromptpayment
- Social&political factors

AdvantagesofDivisionofLabour

- Higherproductivity
- Lowercosts
- Simplified training
- Inventions
- Greatercooperation
- Better goodwill

Disadvantagesof Divisionof Labour

- Monotony
- Lackofresponsibility
- Lackofjobpride

- Toomuch interdependence
- Limitedmarket

Mobility of labour

Meaning:

Mobilityof labour means the capacityand ability of labour to movefrom one place to another or from one occupation to another or from one job to another or from one industry to another.

Typesof Mobilityof Labour:

1. GeographicalMobility
2. OccupationalMobility
    (a) Horizontal Mobility
    (b) Vertical Mobility
3. MobilitybetweenIndustries

FactorsDeterminingMobilityofLabour:

- EducationandOutlookor Urge
- SocialSet-up
- MeansofTransport
- AgriculturalDevelopments
- Industrialisation
- Trade
- Advertisement
- PeaceandSecurity

.**Capital**

In economics, capital goods, real capital, or capital assets are already-produced durable goods or any non-financial asset that is used in production of goods or services.

Role&FunctionsofCapital

Capitalis necessaryforthefollowing functions in anyindustry:

- Firstly, capitalisthesourceofwagestolaborers.
- Secondly, capital acts as an incentive and helps to improve the productivity of land andlabor.
- Thirdly, without capital, purchase of raw materials and capital formation (infrastructureand machines) are not possible.
- Fourthly,alliedamenitiessuchastransportationandcommunicationarenotpossible without adequate capital.
- Fifthly,capitalhelpstoimprovesalesbyfacilitatingeffective marketing

Processof CapitalFormation:

Theprocessof capitalformation involvesthreesteps:

(1) Increaseinthevolumeofrealsavings;

- Power and Will to Save, Perpetuation of Income Inequalities, Increasing Profits, Government Measures:

(2) Mobilisationofsavingsthroughfinancialandcreditinstitutions;and

(3) Investmentofsavings.

Entrepreneur

- Entrepreneurship is the process of starting a business or other organization. The entrepreneur develops a business model, acquires the human and other required resources, and is fully responsible for its success or failure.
- Someone who exercisesinitiative by organizing a venture to take benefit of an opportunity and, as the decisionmaker, decides what, how, and how much of a good or service will be produced.

Demandand supply

Demandreferstothequantityofgoodsorservicesthatconsumersarewillingandableto purchase at the various prices delaing a period of time

- ✓ Desiretoacquireit
- ✓ willingness to payforit

- ✓ Abilitytopayfor it

Demand'Aneconomicprinciplethatdescribesaconsumer'sdesireandwillingnesstopayaprice for a specific good or service. Holding all other factors constant, the price of a good or service increases as its demand increases and vice versa.

Supply

Thetotal amount of aproduct (goodorservice) available forpurchaseatanyspecified price.

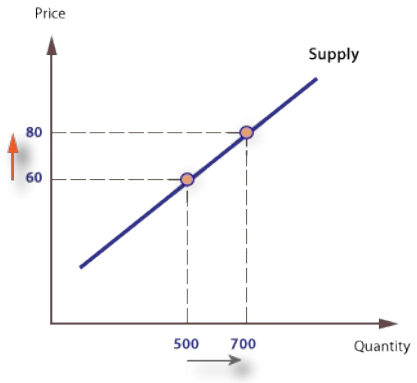
Supplyis determined by

(1) Price: producers will try toobtain the highest possible price whereas thebuyers will try topay the lowest possible price both settling at the equilibrium price where supply equalsdemand.

(2) Costofinputs:thelowertheinputpricethehighertheprofitat apricelevelandmoreproduct will be

offered at that price.

(3) Price of other goods: lower prices of competing goods will reduce the price and the supplier may switch to switch to more profitableproducts thus reducing the supply.



Determinantsoffactorprice

- Intrinsicdifferences(intellience,efficiency)
- Acquireddifferences(acquiringaprofessionalqualification,specialization,trainingetc)
- Nonmonetarybenefits(security&safetymeasures)

Marketefficiency

- Efficiency is the property of resource allocation of maximizing the total surplus received byall members of society.
- hallmarkofcompetitive market.
- Efficientlyallocation ofresources

Pareto efficiency

asituationwhereitisimpossibletomakeonepersonbetteroffwithouthurtinganother person

ConditionsforParetoEfficiency

- marginalbenefitequals marginalcost(for lastitemproduced)
- marginalcostof eachgood shouldbethesame forall producers
- marginalbenefitof eachgoodshould bethesameforall consumers

Benevolentsocialplanner

- Evaluatemarket outcomes

- Benevolentsocialplannerisanallknowing,allpowerful,wellintentioneddictator.

Consumer **surplus** is defined as the difference between the consumers' willingness to pay for acommodity and the actual price paid by them, or the equilibrium price.

Producersurplusis**defined**asthedifferencebetweentheamounttheproduceriswillingto supply goods for and the actual amount received by him when he makes the trade

Totalsurplus=consumersurplus+producersurplus Market

failure

Ineconomics,**marketfailure**iswhentheallocationofgoodsandservicesbyafree market is not efficient .

- Demand&supplypricesdo not fullyreflect thevalue ofproduction
- Demand&supplyis notequal

Market failure Occurs when resources are misallocated, or allocated inefficiently. The result is waste or lost value.

Reasonsformarketfailure

- Publicgoods
- Marketcontrol
- Externalities
- Imperfect information

Marketefficiency&marketfailure

Competitivemarket(Marketefficiency)

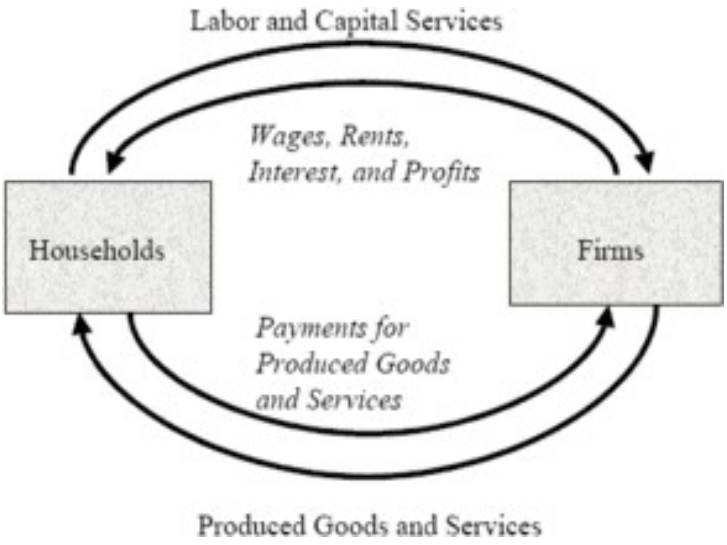
- Resourceallocation
- Demandprice=supply price
- Quantitydemanded =quantitysupplied
- Agreement(buyers&sellers)

Marketfailure

- Participantsloseundernew arrangements
- Improved bysocietial point ofview
- Noncompetitivemarket
- Outcomeis imperfect

Interactionof productandfactormarket

- Productandfactor marketand withinfirm growth
- Factorandproductmarketsandresource allocation



Generalequilibrium&efficiencyofcompetitivemarket

Consumer eqilibrium

Thepointatwhichaconsumerreachesoptimumutilityorsatisfactionfromthegoodsand services purchased given the constraints of income &prices.

MU1 = P1

MU2 P2

Producersequilibrium

- Supply&demand(determine theprice)
- Producerswould liketochargehighest price.
- Profit

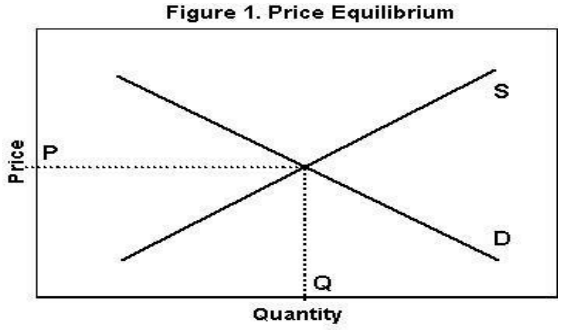
MU1 = P1

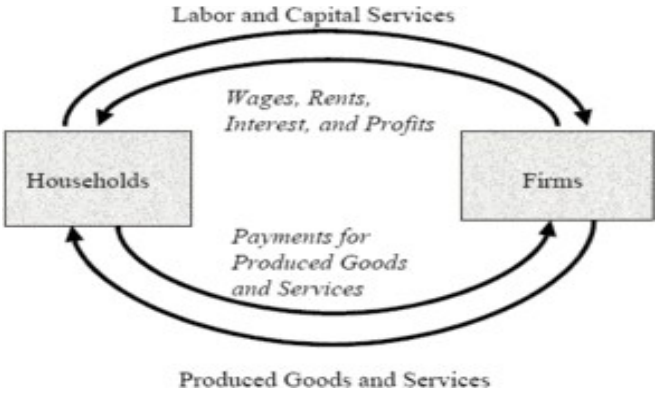
MU2 P2

Competitivegeneralequilibriumwithutilitymaximizingconsumers&profitmaximizing firms

- Ratioof MUof goodsofconsumers=priceof goods
- Ratioof marginal costofgoods produced byfirms=priceof goods
- Marginalrevenueproducts ofallinputs=priceofgoods

Efficiencyofcompetitivemarket





Competitivegeneralequilibriumwithutilitymaximizingconsumers&profitmaximizing firms

- Ratioof MUof goodsofconsumers=priceof goods
- Ratioof marginal cost ofgoodsproduced byfirms=priceof goods
- Marginalrevenueproducts ofallinputs=priceofgoods

CHAPTER 4

PERFORMANCE OFAN ECONOMY-MACRO ECONOMICS

Macro economic aggregates

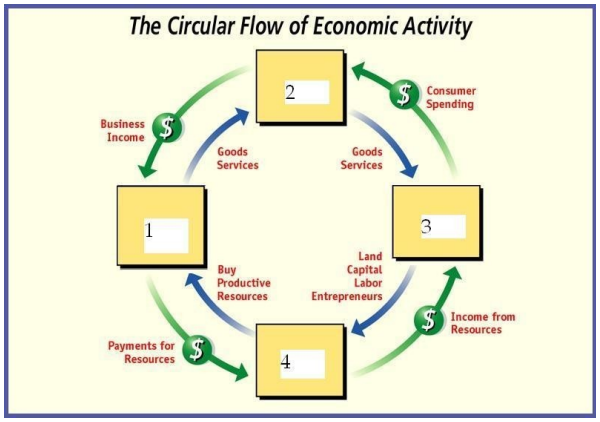
Set of policies, and programs that are formulated and implemented by the national govtwith the central monetary authorityas part of management of the economy.

Features/significant macro economic aggregates

- Realsector policies(domestic,foreign,FDI)
- Fiscal policies
- Agriculturepolicy(CIP-Centralissueprice,APL(abovepovertyline,TPDS(Targeted distribution system)
- Policyonmanufacturing,infrastructureand service
- Tradepolicies(EXIM,AEZ,KVIC,FOB,EPCG)
- Export&importpolicies(EXIM)

CircularFlow OfMacroEconomic Activity

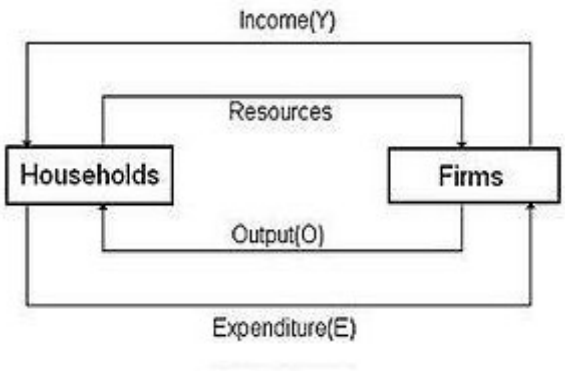
- Land
- Labor
- Capital
- Entrepreneur



Circularflow ofmacroeconomicactivity

Thecircular flow of income orcircular flowis a modelof theeconomyin which the major exchanges are represented as flows ofmoney, goodsandservices, etc. between economicagents

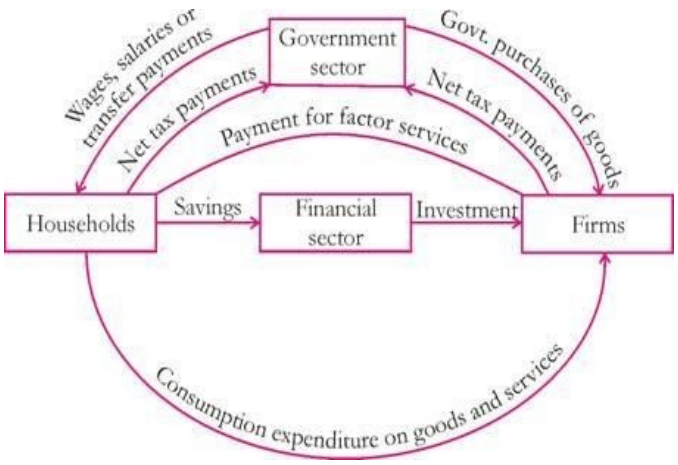
Circularflowof macro economicactivityintwo sectoreconomy



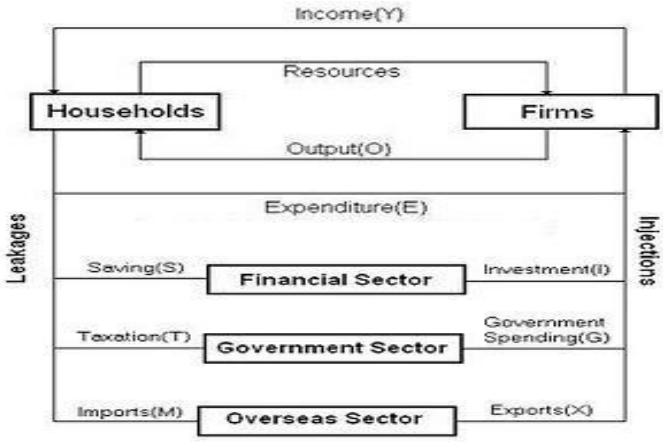
Circular flow of macro economic activity in threesectoreconomy **(**Household sector,Firms or Producing sector,Financial sector)

- Transactionmotive
- Precautionarymotive
- Speculative motive

Circularflowof macro economicactivityinfoursector economy



Circularflowof macroeconomicactivityin fivesectoreconomy



Nationalincomedetermination

National income is that part of the objective income of a community, which can be measurement in term of money, it also include income corned from abroad.
Followingarethemain factorson which thesizeifnational income depends.

Availabilityof natural resources

Availability of natural resource and its maximum exploitation increase the size of national income. A country having a large reserve of natural resources, in the form of coal, oil, gas etccan easily increases the size of national income and vice versa.

Stockoffactorofproduction

Itisoneofthemost importantfactorswhichinfluencethesizeofnationalincome.Thefactorsof production are land, labour, capital and organization. If these factors are available in larger quantity, then the size of national income increases.

Stateof technology

If advance technology and latest equipment used in the process of production, then more goods can lie produced, which increase the volume or size of national income.

Meansof transportandcommunication:

The well developed means of transport and communication, facilitate the exchange of goods and services, and so increase the mobility of the factors of production. It also strengthens trade activities in the country, while rise the volume of national income

Political stability:

If there is political stability in the country, the production can be sustained. At the highest level and is the size of national income will be large. In case of political condition is not good the production will be adversely affected and so the size of national income will be small.

Supplyofrawmaterial:

If the raw materials are available in large quantity then the size of national income increases and vice versa.

Technicalknow-how:

The technical know-how also influences the size of national income. If the people of a country are well-experienced, trained, and export, then the size of national income increase, otherwise decrease.

Aggregatedemand&aggregatesupply

Aggregate demand

Totaldemandforfinal goods&servicesof aneconomy(Y)atagiventime &price level

Y=C+I+G+(X-M)

where,

C-Consumption

I-investment

G-governmentspending

NX=X-M is net export

X-total exports

M-total imports.

ComponentsofAggregatedemand

- Consumption

  Durablegoods(8%gdp)

  Nondurablegoods(20%GDP)

  services(more than 40%)

- Investment

  1. non residential
  2. structures
  3. Producersdurables
  4. residential

- Government spending

Central(defense&nondefense)

state & local

- Netexports

  NX=X-Misnetexport

  X-total exports

M-total imports

THEAGGREGATE-DEMAND CURVE

- *It is sloping downwardsbecause at lower price levels a greater quantity is demanded.but aggregate level is in correct .*

TheAggregate-DemandCurve

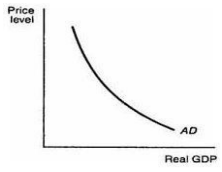


Figure 1 An aggregate demand curve

TheAggregate-SupplyCurve

- Measures the volume of goods and services produced within economy at a given overall price level.
- In the longrun, theaggregate-supplycurveisvertical.
- Intheshortrun,theaggregate-supplycurveisupwardsloping. Why

The Aggregate-Supply Curve Is Vertical In The Long Run?

- TheLong-RunAggregate-SupplyCurve
  - In the long run, an economy's production of goods and services depends on its supplies of labor, capital, and natural resources and on the available technology used to turn these factors of production into goods and services.
  - Thepriceleveldoes notaffectthesevariables inthelong run.
- TheLong-RunAggregate-SupplyCurve
  - Thelong-run aggregate-supplycurveisvertical atthe naturalrate of output.
  - This level of production is also referred to as potential output or full-employment output.

- TheLong-RunAggregate-SupplyCurve

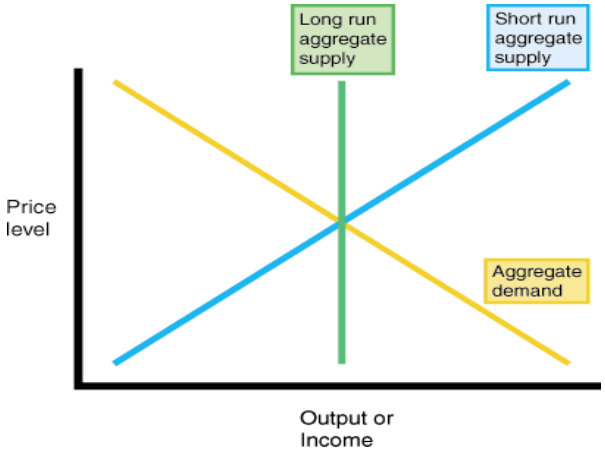
WhytheLong-Run Aggregate-SupplyCurveMightShift

- Anychangeintheeconomythatalters the **naturalrateofoutput** shiftsthelong-run aggregate-supply curve.
- The shifts maybe categorized according to the various factors in the classical model that affect output.
- Shifts arising
  - **Labor**
  - **Capital**
  - **NaturalResources**
  - **TechnologicalKnowledge**

WhytheShort-Run Aggregate-SupplyCurveMightShift?

- Anincreaseintheexpectedpricelevelreducesthequantityofgoodsandservicessupplied and shifts the short-run aggregate supply curve to the left.
- A decrease in the expected price level raises the quantity of goods and services supplied and shifts the short-run aggregate supply curve to the right.
- Shifts arising
  - Labor
  - Capital
  - NaturalResources.
  - Technology.
  - ExpectedPrice Level.

Macroeconomicequilibrium–(modelofaggregatedemand&aggregatesupply)AS/AD AD curve



AS curve

- MACROeconomicequilibrium(AggregateDemandandAggregateSupply...)
- ShiftsinAggregateDemand
  - In the short run, shifts in aggregate demand cause fluctuations in the economy'soutput of goods and services.
  - Inthelongrun,shiftsinaggregatedemandaffecttheoverallpricelevelbutdonot affect output.
- AnAdverseShiftinAggregate Supply
  - A decrease in one of the determinants of aggregate supply shifts the curve to the left:
    - Outputfallsbelowthenaturalrateofemployment.
    - Unemploymentrises.
    - Thepricelevelrises.

TheEffects of a Shift in Aggregate Supply

- Stagflation
  - Adverse shifts in aggregate supply cause *stagflation*—a period of recession andinflation.
    - Outputfallsandpricesrise.

- Policymakers who can influence aggregate demand cannot offset both of these adverse effects simultaneously.

- PolicyResponses to Recession
  - Policymakersmayrespond toarecessionin oneofthefollowing ways:
    - Donothingandwaitfor pricesandwagesto adjust.
    - Take actiontoincreaseaggregate demand by usingmonetary andfiscal policy.
    - AnAdverseShiftinAggregate Supply

Componentsofaggregatedemandandnationalincome

Nationalincome

National incomeis themoneyvalueofall thefinal goods and services produced bya country during a period of the year.

National income consist of a collection of different types of goods and services of different types.

National income may be defined as the aggregate factor, income(i.e., earning of labor and property), which arises from the current production of goods and services by the nations economy.

Natureof NationalIncome

- Itisamoneyvalueoffinalgoods,servicesproducedannuallyintheeconomyand intermediary goods.
- Itindicates thegrowthoftheeconomyin termsofincomeand output.
- Itcontains thefigureofconsumption, savingand investmentin the economy
- Itestimatetherevealsthe overallproductionoftheeconomy.
- Nationalincome is valuable guideto economypolicy.
- NationalIncomeprovideasanindexofeconomicactivityandaninstrumentofan economic planning.
- Nationalincomemeasuresthelevelofproduction Inayear.

- Nationalincomestatisticsthrowlightonthedistributionofnationalincome.

ConceptsofNationalincome

Gross and net concepts

- GDPdoesnotmeasuretotaltransactionsinthe economy.
- Itcountsfinaloutputbutnotintermediategoods.
- Theexpenditureapproach isshown on thebottomhalf ofthe circular flow.
- Specifically,GDPis equaltothe sumofthefourcategoriesof expenditures.

GDP=C+ I+G + (X-IM)

Net domestic product (***NDP***)is the sum of consumption expenditures, government expenditures, net foreign expenditures, and investment less depreciation.

- NetdomesticproductisGDPadjustedfordepreciation:

GDP=C+ I+G + (X-IM)

NDP=C +I + G + (X -IM)-Depreciation

GDP and NDP

- Since it is so hard to measure depreciation in the real world, economists use capital consumption allowance rather than depreciation.

Nationalanddomestic concepts

- The term national denotes that aggregate under consideration represents the total income which accrues to the normal residence of a country due to the participation in world production during the current year.

Marketpricesandfactor costs

Thevaluationof thenationalproduct atmarketprices indicatesthetotal

Grossdomesticproduct.(GDP)

- Grossdomesticproductisthemoneyvalueofallfinalgoodsandservicesproducedinthe domestic territory of a country during an accounting year.
- Theconcept of domestic territoryhas aspecial meaning innational income accounting.

Netdomestic product(NDP).

- While calculating GDP no provision is made for depreciation allowances (also called capital consumption allowance). In such a situation gross domestic product will notreveal complete flow of goods and services through various sectors.

NDP=GDP-Depreciation

Gross national product(GNP).

- Gross National product is defined as the sum of the gross domestic product and Netfactor Incomes from Abroad(NFIA).

GNP=GDP+NFIA

Netnationalproduct(NNP).

- It can be derived by subtracting depreciation allowance from GNP. It can also be found out by adding the net factor income from abroad to the net domestic product.

NNP=NDP+NFIA

NNPatfactorcost(or)national income.

- NetNationalproductatfactorcostisthenetoutputevaluatedatfactorprices.
- It indicates income earned by factors of production through participation in the production process such as wages and salaries ,rents,profits,etc. It is also called National income.

NNPatMarketPrices=GNPatmarketPrices-Dep

GDP atfactor cost.

- GDPat factor costis thesum ofnet valueadded byallprocedures withinthe country.
- Since the net value added gets distributed as income to the owners of factors of production,GDPisthesumofdomesticfactorincomesandfixedcapitalconsumption(or depreciation).

GDPatfactor cost=Netvalue added+Depreciation

- **GNPatmarketprices.**

GNPatmarketprices=GDPatMarketprices+NFIA

- **Domesticincome**

- Domestic income includes: wages and salaries, rents including imputed house rents, interest, dividends, undistributed corporate profits including surpluses of public undertakings, mixed incomes consisting of profits of unincorporated firms, self-0employed persons, partnerships, etc., and direct taxes.

Domesticincome=Nationalincome-Netincomeearned from abroad

- **Privateincome**

Private income = nationalincome(orNNPat factorcost)+Transfer payments+ Intereston public debt-social security-profitsandsurplusesof publicundertakings.

- **Percapitaincome**

- The average income of the people of a country in a particular year is called per capita income for that year. this concept also refers to the measurement o0f income at current prices and at constant prices.

- Example Nationalincomefor2001

  Per capita income for 2001=

  population in 2001

- **Personalincome**

- Personal income is the sum of all incomes actually received by all individuals or households during a given year.

Personalincome=NNPatfactorcost-undistributedprofits+transfer payments

- **Disposable income**

- After a good part of personal income is paid to government in the form of personal taxes like incomes tax, personal property taxes, etc., what remains of personal income is called disposable income.

Componentsofnationalincome

- Compensationof employees
- Properitors income
- Corporateprofits

- Rentalincomeof persons
- Net interest
- National income=Compensation of employees+Properitors income+Corporate profits+Rental income of persons+Net interest

Multiplierеffect

Themultiplier isthe ratioof changein incometo thechangein investment.

$$K = \frac{Y}{I}$$

Where,

K= Multiplier

Y=Changes in income

I=changeininvestment

Example

investment 5 crore=income 6c

Investment10crore=income11c

- **TheMultiplier**
- **TheMultiplier**
- **The Multiplier**

Assumptionsofmultiplier

- Changesintheautonomousinvestment&thatinducedinvestmentis absent
- Consumptionisafunctionofcurrentincome
- Increaseinvestmentleadsto amultiple increasein income
- Thereisa netincreaseinincome
- Otherresourcesof productionarealsoeasilyavailablewithintheeconomy
- Thereisno changesin prices

- Thereislessthanfullemploymentlevelintheeconomy
- New level of investment is maintained steadily for the completion of the multiplier process.

Leakages of Multiplier(potentialdiversionsfrom the income streamwhich tend toweaken the multiplier effect of new investment)

- Idlesaving
- Purchaseofgovt
- Payingofolddebts
- Import
- Excessstockof consumptiongoods
- HighliquidityPreference
- PriceInflation
- Taxationsystem
- Undistributedprofitsof companies

Types of Multiplier

EmploymentMultiplier

Thisconceptisrelatedtoincreasein employment.

- According tΔo R.F khan increase in investment will cause in increase in employment not only in those very industries where in such investment has been made but in other industries also.
- Employment Multiplier can be expressed by an equation as follows.

$$K1=N2/N1$$

- (Herek1=employmentmultiplier; N2=Totalemployment; N1=Primaryemployment.)

ForeignTrade Multiplier

- When foreigners import goods from our country , domestic export industries earn revenue. Income of those people who work in export industries will increase. They will increase their consumption expenditure.
- Itcanbeexpressedbyanequationasfollows. Kf= ΔY/ ΔE .

Limitationsof multiplier

- Availabilityof consumergoods
- Multiplier period
- Lessthan fullemploymentlevel
- Steadyflow ofinvestment
- Netincreaseinexpenditure
- Netincreaseininvestment
- Autonomous investment
- Closed Economy
- Constantmarginal propensitytoconsume
- Industrializedeconomy
- Surpluscapacityin consumergoodsindustries
- Availabilityofotherresourcesof production
- Nochangein thedistribution ofincome
- Nochangeinprices
- Accelerationeffectignored

Demandside management

It is an economic theory which suggests that economic stimulation comes best from increasingthe demand for goods & services

<u>Keynesianmodel/techniques</u>

- Consumption function

- Multiplier
- Marginal efficiencyof capital
- Liquidpreference

Effectivedemand

ADortotalspending(consumptionexpenditure&investmentexpenditure)which matches with AS(national income at factor cost)

Effectivedemand=nationalincome(y)=nationaloutput(o)

Importanceof effectivedemand

- Determinantofemployment
- Say'slawfalsified
- Role of investment
- Capitalisticeconomy

Assumptionofdemandsidemanagementorkeynesian theory

- Labouris the onlyvariablefactorof production
- Changesinpriceproportionateto changes
- Moneyillusion&supplyoflabour
- Rigidor inflexible prices
- Effectivedemand
- Savings &investment determinants

Features of demand side management

Level of employment =output=income

Levelofeffectivedemand=totalexpenditure

ADF=ASF(aggregate demand&supplyfunction)

Consumption

- Moneyincome

- Propensityincome
- Investment
- MEC(marginalefficiencyofcapital)
- A)Prospective yields(expectations(shortrun&longrun)
- b)Supplyprice

Rateof interest

- Supplyofmoney
- Demandformoney(transactionmotive,precautionarymotive,speculative motive)

Significanceof demandside management

- Keynesianrevolution
- Completeideaoffullemployment
- Moneywith the theoryofvalue & output
- Introducedynamiceconomic theory
- Applicabletoalltypesof economic systems
- Instrumentofcontrollingcyclical fluctuations
- Promoting offull employment

Criticisms

- Itisnotmuchdynamic
- Ignoremicro analysis
- Nothelpful in the solution ofthe problems
- Hehas not given anyplaceto theaccelerator principle
- Itpaysexcessiveattentiontomoneyineconomicanalysis

Fiscalpolicy

Meaning

Fiscalpolicymaybedefinedasthatpartofgovernmentaleconomicpolicywhichdealswith taxation, expenditure, borrowing and the management of public debt in an economy.

Natureof fiscal policy

- Rationalizationofproductclassificationcodes
- Commonaccountingyearforincometax
- Longtermfiscalpolicy
- Impactonruralemployment
- Black money
- Relianceonindirecttaxes
- Inadequatepublicsector contribution
- Introductionof MODVAT
- Inflationarypotential

Objectivesof fiscalpolicy

- Fiscal policyfor full employment
- Fiscalpolicyandeconomicstabilization
- Fiscalpolicyandeconomicgrowth
- Fiscalpolicyand social justice

Theoriesoffiscalpolicy

- Supplysidetheory
- Keynesiantheory

Componentsusedinfiscalpolicy

1. Budgetarypolicy
2. Taxationpolicy
3. Publicdebt
4. Publicexpenditure

Roleoffiscalpolicy

- Capital formation
- Resourcemobilization
- Incentivetoprivate sector
- Encouragessavings
- Povertyalleviationandemploymentgeneration
- Reductionininequalityofincomeand wealth
- Exportpromotion

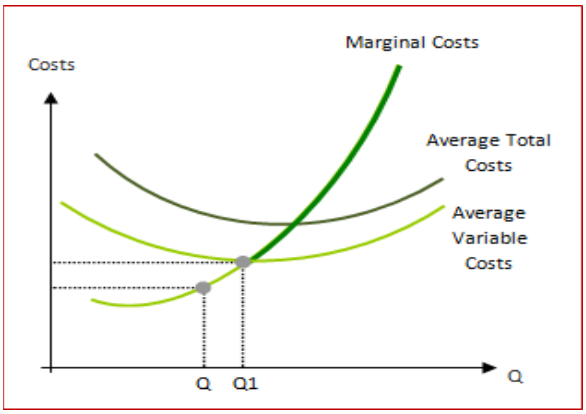
Limitations

- Dependenceonthesizeofmeasuresandtheirtimings
- Dependenceon the redistribution ofincome
- Flexibilityofthegovernmentrevenues
- Effectsonprivateinvestment
- Changesin thebalanceof payments
- Dependenceon the supplyof human efforts
- Lackof coordinationandintegration
- Limitationsofbudgetarypolicy

CHAPTER 5
AGGREGATE SUPPLYANDTHE ROLE OF MONEY

Shortrun and long run supply curve

The supply curve usually slopes upward, since higher prices give producers an incentive to supply more in the hope of making greater revenue. In the short run the price-supply tradeoff is greater than in the long run. In the short run, an increase in price will usually cause an increase in supply, but the leading producers can only manage a limitedincrease.However,inthelongerterm,newproducers enterthemarketattractedbyhigher prices, and the supply at each price increases more significantly. In theory, in the most extreme cases, supply can be totally unreactive to price (special cases of very uncompetitive markets), or supply can be infinite at a particular price (e.g. a highlycompetitive market).



Longruncost curve

In the long-run, firms can vary all of their input factors. The ability to vary the amount of input factors in the long-run allows for the possibility that new firms will enter the market and that some existing firms will exit the market. Recall that in a perfectly competitive market, there are no barriers to the entry and exit of firms. New firms will be tempted to enter the market if some of theexistingfirmsinthemarketareearning**positiveeconomicprofits.**Alternatively,existing

firms maychoose to leave the market if theyare earning losses. For these reasons, the number of firms in a perfectly competitive market is unlikely to remain unchanged in the long-run.

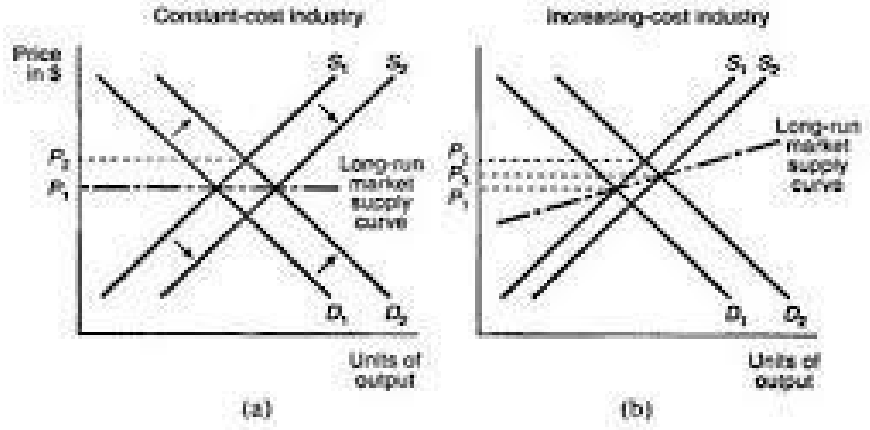


Figure 2
Long-run market supply curves

Unemployment

Unemploymentoccurswhenapersonwhoisactivelysearchingfor employmentisunabletofind work. Unemployment is often used as a measure of the health of the economy. The most frequently cited measure of unemployment is the unemployment rate. This is the number of unemployed persons divided by the number of people in the labor force.

ImpactofUnemployment

On the government:

- Fewer tax revenues – Because fewer people are working, there will be fewer people earning enough income to pay tax. As a result, the government will receive less tax revenue and this will have a large impact on the government's finances.
- Lower economic growth (GDP) – As fewer people have jobs, firms won't be able to produce as many goods and services. As a result, the output of goods and services in the economy, GDP, will be lower. This also has an impact on government taxation and spending and will negatively affect their finances.
- Higher welfare costs – Unemployment in an economy means that fewer people will be workingandmorepeoplewillbeclaimingbenefits.Morepeopleclaimingbenefits

creates a drain on the government's finances and means they have to spend more on benefitpayments and less on otherareas of theeconomy–so thereis an opportunitycost.

- Higher supply-side costs – With unemployment in an economy, more people won't be working. These people need to be taught skills in order for them to be employable by firms. The government will have to spend more money on training the unemployed sothat they have the right skills to be employed in a modern economy. This is also a drain on government finances and this money could also be spent elsewhere.

Onfirms:

- Lower wage costs – Unemployment in an economy increases the supply of labour available for firms to employ. This creates a downward pressure on wages as labour is less scarce and more people are willing to get a job at a slightly lower wage. This will have a positive effect on firms as their variable costs will fall.
- Larger pool of labour – Unemployment creates a large pool of labour which gives firms more choice of who to employ. This allows them to employ workers with higher skills and more experience.
- Less demand for goods and services – Unemployment in an economy means that a lot more people will have less disposable income. Therefore spending on most goods and services will fall. As a result, firms will experience lower sales revenue and will likelysee a fall in profits.
- Increase in demand for inferior goods – There are some goods in an economythat people buy more off when their incomes are lower – these are known as inferior goods. When unemployment increases in an economy more people start buying inferior goods because they have lower incomes. As a result, sellers of inferior goods will see an increase insales revenue and potentially an increase in profits.
- Higher training costs – As we have seen, many firms will benefit from lower wage costs as a result of unemployment. However, many firms may also have to spend more resources on training new employees because they have been out of work for so long. Training new employees uses up a firm's time and resources and as a result most firms will see an increase in employment costs.

Onpeople:

- Lower standard of living – The people who are unemployed will suffer a loss of income and will either have to survive on private savings or on benefits. As a result, they will be able to buy fewer goods and services and will see a fall in their standard of living.
- Loss of skills – When someone becomes unemployed they will stop working and will startlosingtheirskillsandabilitytowork.Thelongersomeonestaysunemployed,the

less employable they will be to firms because firms will need to spend money on retraining them.

- Loss of confidence/depression – People who are unemployed will also suffer a loss of confidence in their ability. Many people who become unemployed will also suffer stress related illnesses and depression.

Governmentpoliciesfor removingUnemploymentinIndia

- SwarajayantiGramSwarozgarYojana(SGSY)
- warajayantiGramSwarozgarYojana(SGSY)
- SampoornaGrameenRozgarYogana (SGRY)
- SwaranaSwarajayantiGramSwarozgarYojana(SGSY)
- SampoornaGrameenRozgarYogana (SGRY)
- SwaranaJayantiShahariRozgarYogana (SJSRY)
- PrimeMinister'sRozgarYogana (PMRY)
- NationalRuralEmploymentProgramme(NREP)
- RuralLandlessEmploymentGuaranteeProgramme (RLEGP)
- JayantiShahariRozgarYogana (SJSRY)
- PrimeMinister'sRozgarYogana (PMRY)
- NationalRuralEmploymentProgramme(NREP)
- RuralLandlessEmploymentGuaranteeProgramme(RLEGP)
- IntegratedRuralDevelopmentProgramme(IRDP)
- SchemeofTraining Rural YouthforSelf– Employment(TRYSEM)
- JawaharRozgarYogana (JRY)
- EmploymentAssuranceScheme(EAS)

Okun'sLaw

Okun's Law(named afteraneconomistonKennedy'sCouncilofEconomicAdvisors)statesthat there is a negative linear relationship between growth in output and changes in theunemployment rate.

If economicgrowth is low, unemployment will rise.

Ifeconomicgrowthishigh,unemploymentwillfall.

DerivationofOkun'sLaw

- OurbestestimateofOkun'sLawisthat: u_t–

  u_{t-1}= -0.5 (g_{Yt}– 3.4%)
- Soifg_{yt}>3.4%,thenunemploymentrises,andifg_{yt}<3.4%,thenunemploymentfalls.

  Ingeneral:

  u_t–u_{t-1}=-β (g_{Yt}– g*$_Y$)
- **Intuition**:The labour market is growing (in numbers and productivity) every year. Output must grow at least this fast, or the economy will not absorb all of the labour.

Inflationandtheimpact

Inflation

Inflationisdefined asasustainedincreaseinthegenerallevelofpricesfor goodsandservices. It is measured as an annual percentage increase. As inflation rises, every dollar you own buys a smaller percentage of a good or service.

The value of a dollar does not stay constant when there is inflation. The value of a dollar is observed in terms of purchasing power, which is the real, tangible goods that money can buy. When inflation goes up, there is a decline in the purchasing power of money. For example, if the inflation rate is 2% annually, then theoretically a $1 pack of gum will cost $1.02 in a year. After inflation,yourdollarcan'tbuythesamegoodsitcouldbeforehand

Impactonproduction

- Misallocationof resources
- Changesinthesystemof transactions
- Reductioninproduction

- Fallin quality
- Hoarding&black marketing
- Reductioninsavings
- Hindersforeigncapitalencouragesspeculation

Distribution impact

- Debtors&creditors
- Business community
- Fixedincome group
- Investors
- Farmers

Other impacts

- Government
- Balanceofpayments
- Exchange rate
- Collapseof themonetary system
- Social& political

Demandversussupplyfactors

Factorscausingincreaseindemand

- Increaseinpublicexpenditure
- Increaseinprivate expenditure
- Increasein exports
- Increasein taxation
- Repaymentofpastinternaldebt
- Rapidgrowth in population

Factorscausingdecreaseindemand

- Shortageofsuppliersof factorofproduction
- Hoardings bythetraders
- Hoardingsbyconsumers

Reasonsforinflation

Factorscausingincreaseindemand

- Increaseinpublicexpenditure
- Increaseinprivate expenditure
- Increasein exports
- Increasein taxation
- Repaymentofpastinternaldebt
- Rapid growth in population

Factorscausingdecreaseindemand

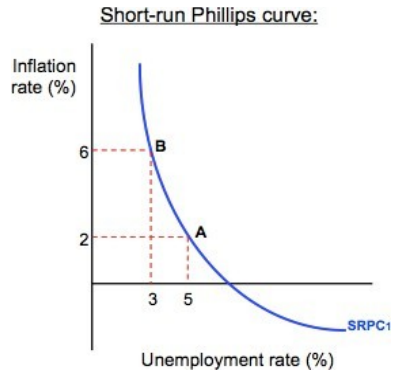
- Shortageofsuppliersof factorofproduction
- Hoardings bythetraders
- Hoardingsbyconsumers

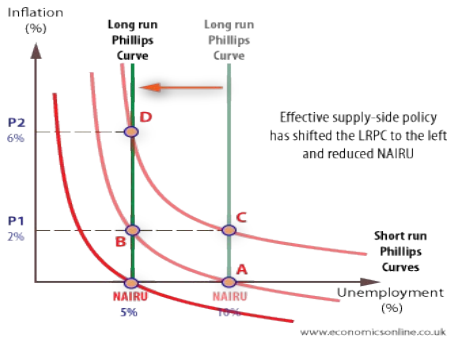
InflationVsUnemploymenttradeoff

- Phillips curve

  - In economics, the **Phillips curve** is a historical inverse relationship between rates of unemployment and corresponding rates of inflation that result in an economy. Stated simply, decreased unemployment, (i.e., increased levels of employment) in an economy will correlate with higher rates of inflation.

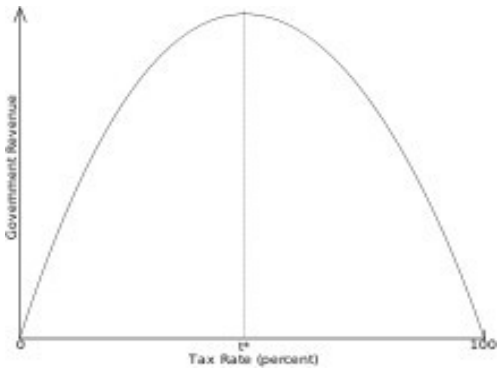
  - "The relationship between unemployment and the rate of change of money wages in the United Kingdom, 1861–1957"





5.9Supplysidepolicyandmanagement

Supply-sideeconomics isaschoolofmacroeconomicsthatarguesthateconomicgrowthcan bemost effectivelycreatedbyloweringbarriers forpeopleto produce(supply)goods and services as well as invest in capital. According to supply-side economics, consumers will then benefit from a greater supply of goods and services at lower prices; furthermore, the investment and expansion of businesses will increase the demand for employees.



Laffercurve:t*representstherateoftaxationatwhichmaximalrevenueis generated.Thisisthe curve as drawn byArthurLaffer,[10] however, the curve need not be single peaked nor symmetrical at 50%.

Basicpropositionof supplyside economics

- Taxationandlaboursupply
- Incentivestosaveandinvest
- Costpush effect ofthetax wedge
- Undergroundeconomy
- Taxrevenue&lafftercurve

Importanceof supplyside policy

- Reducetax&reduceincome
- Growth &lengthyeconomic expansion
- Changesintaxrate&smalleffectoflabour supplied

6.0.Money market

Network of banks,discount houses, institutional investors, and moneydealers who borrow and lend among themselves for the short-term (typically 90 days). Money markets also trade inhighlyliquidfinancial instruments with maturitiesless than90 days to one year(such as bankers'acceptance,certificates of deposit, and commercial paper), and government securities with maturities less than three years (such as treasury bills), foreign exchange, and bullion. Unlike organized markets (such as stock exchanges) money markets are largely unregulated and informalwheremosttransactionsareconductedoverphone,fax,oronline.Long-termborrowing and lending markets are calledcapital markets

Demandofmoney

The**demand for money** is the desired holding of financial assets in the form of money: that is, cash or bank deposits.

Whatarevariousmotivesforwhichmoneyisdemanded? The

Transaction Motive:

People like to keep their money in liquid form (cash) to meet their day-to-day expensesduring the period between the receipt and spending of their money.

ThePrecautionary Motive:

Besides day-to-day transactions, there are many unforeseen contingencies in the life of individuals for which they hold money. The desire of the people for holding money under the precautionary motive is devoted to fulfill the function of a store of value. It may be compared with a water tank. As there must be some water in the tank always for one does not know when and for what purpose it may be needed.

TheSpeculative Motive:

The third and the last motive for liquidity preference is the desire to earn profits. Many people may think that the rate of interest in the future will be higher and in order to take advantage of this future increase in the rate of interest, they may like to keep money in the liquid form to be invested in securities when the rates of interest actually rise. In the opposite case when thefeeling is that interest rates would decline, they will invest in the present thus reducing the liquidity of money with them. Keynes has called this as 'Speculative Motive'.

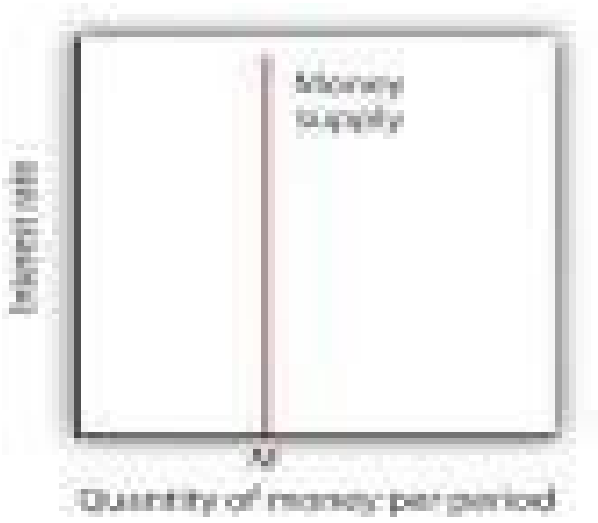
DeterminantsofDemandforMoney

- TotalWealth:ultimatewealthowner&consumerdemand
- HumanandNon-HumanWealth:
- Money
- Bond:perpetualsecurity
- Equity:(a)itscouponyield,(b)anyexpectedcapitalgainsorlossesduetochangesin interest rates, and (c) any expected changes in the general price level.
- Commodities:Physicalgoods
- HumanCapital:rateofreturn
- Expectations
- Preferences
- RealGDP

6.2Supplyofmoney

In economics, the money supply or money stock, is the total amount of monetary assetsavailable in an economy at a specific time

Supplycurve ofmoney



Factorsaffectingmoneysupplyinindia/sourcesofmoney supply

- Netbankcredittothegovt
- Bankcredittothecommercialsector
- Foreignexchange assets
- Govt currencyliabilities to thepublic
- Nonmonetaryliabilitiesof thebanking sector

Measurementofmoneysupplyinindia(monetaryaggregates) Old

monetary aggregates

M1-Currency with public

M2-M1+PostOfficeSavings

M3-M1+timedepositsofbanks(broadmoney)

M4-M3+saving andtimedepositswith thepost office

Newmonetaryaggregates

M0 –currencyin circulation +bankers deposits with RBI+otherdeposits withRBI

M1(NMI)-Currencywiththepublic+demanddepositswiththebankingsystem+otherdeposits with RBI

M2(NM2)-M1+ time liabilities portion ofsaving deposits with the banking system+certificate of deposits issued by banks+term deposits

M3(NM3)- M2+term deposits+call /term borrowings from non depository financial corporations by the banking system

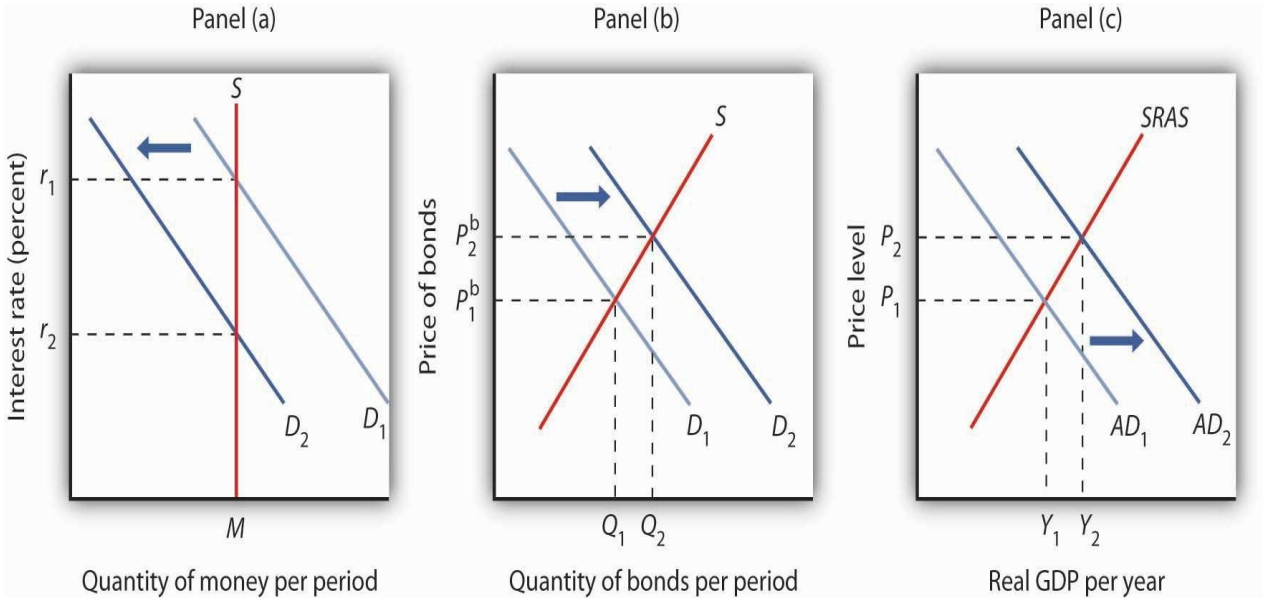
Liquiditymeasures

L1=NM3+postal deposits

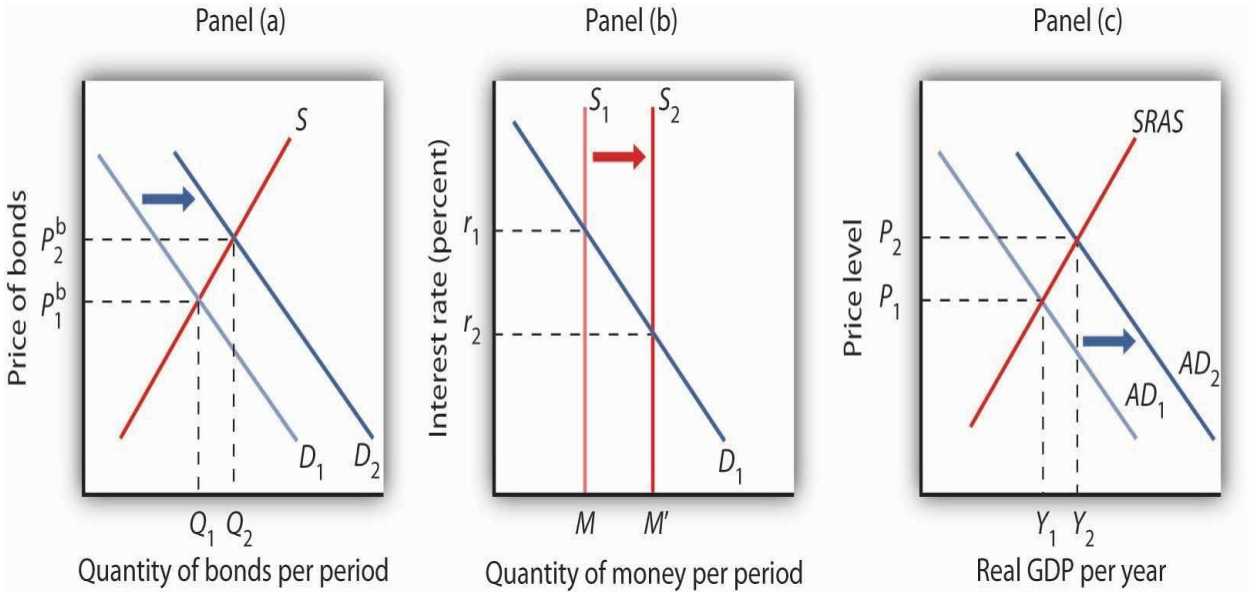
L2=L1+liabilitiesoffinancial institutions

L3=L2+publicdepositswithnonbankingfinancial companies

1)changesinmoney demand



2. ChangesIn Money Supply



6.2National income

National income is an uncertain term which is used interchangeably with national dividend, national output and national expenditure. On this basis, national income has been defined in a number of ways. In common parlance, national income means the total value of goods and services produced annually in a country.

In other words, the total amount of income accruing to a country from economicactivities in a year's time is known as national income. It includes payments made to all resources in the form of wages, interest, rent and profits.

ConceptsofNationalincome

Gross and net concepts

- GDPdoesnotmeasuretotaltransactionsinthe economy.
- Itcountsfinaloutputbutnotintermediategoods.
- Theexpenditureapproach isshown on thebottomhalf ofthe circular flow.
- Specifically,GDPis equaltothe sumofthefourcategoriesof expenditures.

GDP=C+ I+G + (X-IM)

Net domestic product (***NDP***)is the sum of consumption expenditures, government expenditures, net foreign expenditures, and investment less depreciation.

- NetdomesticproductisGDPadjustedfordepreciation:

GDP=C+ I+G + (X-IM)

NDP=C +I + G + (X -IM)-Depreciation

GDP and NDP

- Since it is so hard to measure depreciation in the real world, economists use capital consumption allowance rather than depreciation.

Nationalanddomestic concepts

- The term national denotes that aggregate under consideration represents the total income which accrues to the normal residence of a country due to the participation in world production during the current year.

Marketpricesandfactor costs

Thevaluation ofthenationalproduct atmarket pricesindicates thetotal

Grossdomesticproduct.(GDP)

- Grossdomesticproductisthemoneyvalueofallfinalgoodsandservicesproducedinthe domestic territory of a country during an accounting year.
- Theconcept of domestic territoryhas aspecial meaning innational income accounting.

Netdomestic product(NDP).

- While calculating GDP no provision is made for depreciation allowances (also called capital consumption allowance). In such a situation gross domestic product will notreveal complete flow of goods and services through various sectors.

NDP=GDP-Depreciation

Gross national product(GNP).

- Gross National product is defined as the sum of the gross domestic product and Netfactor Incomes from Abroad(NFIA).

GNP=GDP+NFIA

Netnationalproduct(NNP).

- It can be derived by subtracting depreciation allowance from GNP. It can also be found out by adding the net factor income from abroad to the net domestic product.

NNP=NDP+NFIA

NNPatfactorcost(or)national income.

- NetNationalproductatfactorcostisthenetoutputevaluatedatfactorprices.
- It indicates income earned by factors of production through participation in the production process such as wages and salaries ,rents,profits,etc. It is also called National income.

NNPatMarketPrices=GNPatmarketPrices-Dep

GDP atfactor cost.

- GDPat factor costis thesum ofnet valueadded byallprocedures withinthe country.
- Since the net value added gets distributed as income to the owners of factors of production,GDPisthesumofdomesticfactorincomesandfixedcapitalconsumption(or depreciation).

GDPatfactor cost=Netvalue added+Depreciation

GNPatmarket prices.

GNPatmarketprices=GDPatMarketprices+NFIA

Domesticincome

- Domestic income includes: wages and salaries, rents including imputed house rents, interest, dividends, undistributed corporate profits including surpluses of public undertakings, mixed incomes consisting of profits of unincorporated firms, self-0employed persons, partnerships, etc., and direct taxes.

Domesticincome=Nationalincome-Netincomeearned from abroad

Privateincome

Private income = national income(or NNP at factorcost)+Transfer payments + Interest on public debt-social security-profitsandsurplusesof publicundertakings.

Percapitaincome

- The average income of the people of a country in a particular year is called per capita income for that year. this concept also refers to the measurement o0f income at current prices and at constant prices.
- Example Nationalincomefor2001

  Per capita income for 2001=

  population in 2001

Personalincome

Personal income is the sum of all incomes actually received by all individuals or households during a given year.

Personalincome=NNPatfactorcost-undistributedprofits+transfer payments

Disposable income

After a good part of personal income is paid to government in the form of personal taxes like incomes tax, personal propertytaxes, etc., what remains of personal income is called disposable income.

6.3Roleof monetarypolicy

- Stability
- Rapideconomic development
- Promotional roleof monetaryauthorities
- Improvemoneyandcapital market
- Suitableinterestratestructure
- Publicdebt management

BA7103EconomicAnalysisforBusiness

Questionbank

UNIT-I INTRODUCTION

PartA(2MARKS)

1. DefineEconomics.
2. Statethe meaningof efficiency.
3. Briefonexternalities.
4. Whatdoyou meanbyscarcity?
5. DifferentiateMicroandMacroEconomy.
6. Statethefundamentals economic problems.
7. Listoutthethreefundamentaleconomic problems.
8. Whatdoyou meanbypositiveexternalities?
9. WhatdoyouunderstandbyProductiveefficiency?
10. Statethemeaning of micro economics.
11. What is“macroeconomics”?
12. Whatis“foreignexchange rate”?
13. Whatiseconomicefficiency?
14. Howis resourcebasedof an economysignificant?
15. Whatdo youmeanbyPPF?
16. Whatdoyoumeanbyeconomicdevelopment?
17. Whatis mixed economy?
18. Whatdo youunderstandproductionpossibilitycurve?
19. Whatdoyoumeanbyeconomicgrowth?
20. Whatarethe themes of economics?

PartB(16MARKS)

1. Enumerateandexplainthefundamentaleconomicproblems.
2. Examinethefactorthatdeterminestheeconomicgrowth.
3. Explainproduction possibilityfrontier. Statetheimportanceof PPF.
4. Howdomarketssolve thethreeeconomicproblems?Explainwithsuitableexamples.
5. (i)Explainthethemesof economics.
   (ii)CompareproductiveefficiencyVseconomicefficiency.
6. Asaneconomist howwillyou planforproductive efficiencyeconomicefficiency
7. Explainthepositivesandnegativesofeconomicexternalities
8. Howcaneconomicgrowthand stabilitybebalanced

9. Discuss the three fundamental economic problems and suggest suitable measures to overcome these problems.
10. Enumerate the economic role of Government and Markets. Examine their role in the present economy scenario

UNIT-IICONSUMER&PRODUCERBEHAVIOUR
Part A (2 MARKS)
1. DefineMarket.
2. Howdoes market equilibriumoccurs?
3. Whatdoyoumeanbyconsumer surplus?
4. Statethemeaningof marketeconomy.
5. Whatismarginal rate of substitution?
6. Whatdoyoumeanbyconsumer equilibrium?
7. What is theelasticityofdemand?
8. Whatisautonomousdemandandnegative demand?
9. Statetheimportanceofeconomicsof scale.
10. Statethe law of demand.
11. WhatdoyoumeanbyIncomeeffect?
12. Whatarediseconomiesof scale?
13. Whatarereturnstoscale?
14. Whichiscalledautonomous demand?
15. Defineeconomic cycle.
16. Definethe law ofdiminishing marginal utility?
17. Whatarethefactorsinfluencingthemarket demand?
18. Whatisopportunitycost?
19. WhatdoyoumeanbyProductionfunction?
20. Whatdoyoumeanbyconsumer behavior?

PartB(16MARKS)
1. Explainreturnstoscaleanditstypes. Whataretheuses ofreturnsto scale?
2. Describetherelation betweenproduction andcost function?
3. (i)Explainthedeterminantsofdemandandsupply

(ii)Elucidate thefactorsdeterminethe demand for acommoditywith suitable examples.
4. (i)Explain market equilibrium

(ii)Explaintheeconomiesofscale

5. WhatisProductionfunction? Discussitsmanagerial uses.

6. (i)Explainelasticityofdemandandsupply.Criticallyevaluatemarketequilibriumand consumer equilibrium

(ii)Explainhowelasticityofdemand isusefulformarkingbusiness decisions.

7. Discussaboutanalysisofshort-runandlong-runproductionfunction.Whatisthereaction between production and cost functions?

8. Howdoes thecost relatedto consumer behavior?

9. Whatismarketequilibrium?Howdoesmarketequilibriumchange Explain?

10. Whatis cost-outputrelationship?Explain thetheoryof costin short-run.

UNIT-IIIPRODUCT&FACTORMARKET

Part A (2 MARKS)

1. What is market?
2. Writeanote on „Factor Market".
3. Whatisproduct market?
4. Giveabrief account on competitive equilibrium.
5. Bringoutthemeaningofmarket efficiency.
6. Whenimperfectmarketsoccur?
7. Listdownthedeterminantsoffactorprice.
8. Mentionthefactorsof production.
9. Whatdo youmeanbyfactorprice?
10. Whatdoyoumeanbypriceleadership?
11. Whatis competitivemarket?
12. Differentiatecharacteristicsofperfectandimperfectmarket?
13. Mentiontheindicatorsofmarketefficiency?
14. Whatarethefeatures ofperfectcompetition?
15. Whatarethetypesofpricediscrimination?
16. What is acartel?
17. Whatis pricediscrimination?
18. Whatdoyoumean bykinkeddemand curve?
19. Whatdo youmeanbynaturalmonopoly?
20. Whatarethe factorsinfluencingpricediscrimination?

PartB(16MARKS)

1. Elucidatethedifferent typesofmarketstructure
2. "Afirm"sshutdownpointcomeswherepriceislessthanminimumaveragecost"_Explain

3. Demandforlabourreflectsmarginalproductivity"-Examine
4. Discussaboutthefactors influencingtheprice and market.
5. Discussabout the methodsof improving theefficiencyof competitivemarket.
6. Explainthecharacteristicsofperfectandimperfectmarket&differentiate.
7. Enumeratetheproducerfordeterminationofpricingfactors.Whatistheinteractionofproduct and market factor?
8. Explainthemethodsofmaintainingthemarketandfirmsequilibrium.
9. Howthemarket andproductfactor issynchronizedtomaintain theeconomicefficiency?
10. Howispricedeterminedunderperfectcompetition?Describe…

UNITIVPERFORMANCEOFANECONOMYMACROECONOMICS Part

A (2 MARKS)

1. WhatisGrossNationalIncome?
2. Whatdoyou meanbycircularflowof income?
3. DifferentiatebetweenGNPandGDP.
4. Whatis GDP deflator?
5. Whatisfiscal policy?
6. Define„Multiplier".
7. Whatdoyou meanbyaccelerator?
8. Whatarethevarious componentsof AggregateDemand?
9. DefineNetNationalProduct.
10. WhatisNetdomesticproduct?
11. Definenational income?
12. What is disposableincome?
13. WhatdoesFiscalpolicyeffectivenessmeasured?
14. StatethevariousobjectivesofFiscal policy.
15. Whatis meant bymultiplier effect?
16. Whatisaggregatedemand?
17. Whatisaggregatesupply?
18. Whatis equilibrium in macroeconomics?
19. Whatarethevarious approachestoNationalIncome?
20. Pointoutthevariousdifficultiesin computingNationalIncome.

PartB(16MARKS)

1. Whatisnationalincome?Howisnationalincomemeasuredbyincomemethod?Discuss about its methods & factors influencing it.

2. Howareaggregatepriceandoutputdeterminedbytheinteractionofaggregatesupplyand demand? Explain with suitable illustration
3. "Declineinaggregatedemandleadstoaneconomicdownturn"?Explain
4. (i)Explaintheprocessofdeterminationof NationalIncome(ii)Explainthemethods,scopeand limitations of computing national income.
5. Explainthetheories ofFiscal Policy
6. Howdodifferentforcesinteracttodetermineover allmacroeconomicsactivity?Illustrate.
7. GiveanaccountofFiscal Policy.Examineitsimpactonbusiness
8. Whatarethecomponentsofnationalincome?Explainanytwocomponentsin brief.
9. Criticallyexaminemacro-economicaggregate andtheperformanceof economy.
10. Whatisexpendituremultiper?WhatistheroleofbudgetinNationalIncome?

UNIT-VAGGREGATESUPPLYANDTHEROLEOFMONEY Part A

(2 MARKS)

1. What isInflation?
2. What is unemployment?
3. WhatdoesOkun"slawstate?
4. Bringout themeaning of inflation rate.
5. Whatdoes Phillips curvestate?
6. Differentiateinflationanddeflation.
7. Whatis demand pull inflation?
8. WhatisPhilip"scurve?
9. Whatis cost push inflation?
10. Whatarethecausesfor inflation?
11. Whatarethemeasuresforreducinginflation?
12. What is moneymarket?
13. Whatdoyoumean bymarket policy?
14. Definethe meaning of moneymarket equilibrium.
15. What doesmonetarypolicy deal?
16. Definemarketresearch?
17. What is deflation?
18. Whatdoyou meanbydemand for money?
19. What is moneysupply?
20. Whatisfrictional unemployment?

PartB(16MARKS)

1. Criticallyevaluate theimpact ofunemployment.

2. Enumerateand explain theimpact of monetarypolicyonbusiness.
3. Discussin detailthevarious determinantsof moneysupply?
4. Whatisunemployment?ListtheimpactsofUnemployment
5. Whatis Inflation? Listthereasonsandimpactsof inflation
6. Discussaboutmoneymarket
7. Writeabout theroles ofmonetarypolicies
8. Enunciatethe factors involvedin determining thedemand and supplymoney
9. Identifythe causesof inflation anddiscuss its effectson multi-dimensional policy.
10. Discussaboutunemploymentanditsimpactinthenationaleconomy.