Enablers for Scoring Centum

XII STANDARD
ECONOMICS STUDY MATERIAL

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ECONOMICS – XII – Enablers for Scoring Centum

Chapter – 1 Nature Scope of Economics

Economics is a Social Science
- Deals with human wants and their satisfaction

Society chooses to employee Scarce resources and alternative uses

Political Economy Another name for Economics
- Polis – in Greek word means state

The Existence of human wants Starting point of all economic activity

Wants, Efforts and satisfaction Circle of Economics

Means are Time and Money limited

Economics is the science of scarcity

Scarcity the basis fact of life

Wants Unlimited

Means Limited

Choice is the essence of economic activity

Economics Science of choices

Air and Sunshine Free goods
- Available in abundance
- Very essential for our life
- Not pay price of them

Economic goods We pay price for scarcity in nature

Economics Science that deals with pricing process

Modern Economy is a monetary economy
- Prices are paid in money

Money Play an important role in economic life of a Society

Economics Social Science which studies about human wants and their satisfaction

Scarcity Is the fundamental fact of life

All wants are not of equal importance leads to choice
Economics - is the science of choice
- Studies about the pricing process

Scarce goods - Satisfy our wants are known as Wealth

Wealth - is produced to promote human welfare

Adam Smith - Definition Wealth
- 1723 – 90
- Economics in the science of wealth
- He is the author of the famous book “Wealth of Nations” (1776)
- Father of Political Economy

Ordinary Language - Wealth we mean money

Economics - Wealth refers to the goods which satisfy human wants

Goods - Which satisfy human wants and not wealth
- Goods which are relatively scarce and have money Value as wealth

J.S. Mill - Defined economics the practical science of the production and distribution wealth

Adam Smith View - Economics was concerned problem – wealth getting and wealth using activities

Ruskin and Carlye - Called a “Dismal Science” a “Dark Science”

Adam Smith - Study only wealth alone not other part man
- Economics as “an enquiry in to the nature and causes of wealth of nation

Alfred Marshall - Definition Welfare
- 1842 – 1924
- Principles of Economics is 1870
- “A study of Mankind in the ordinary business life”
- Altered form of this definition Economics is a “study of man’s action in the ordinary business of life”
- One side a study of wealth and on the other side study of man.
- Man is the centre of his study
- According to him, the study of man is more important the study of wealth

Cairncross puts it - Economics studies about Man as “buyer and
seller and consumer

**Economics**
- Studies to increase the material “means of well-being”
- Study of the causes of material welfare

**Marshall definition**
- Material Welfare definition
- Link between men and materials welfare
- Lionel Robbins strongly critic
- Promote material welfare
- Was does not promote the material welfare

**Second**
- Activities doctors, promote welfare not material

**Marshall’s**
- Definition is classificatory not analytical

**Lionel Robbins says**
- “We do not say the production of potatoes is activity
  and the production of philosophy is not”

**Modern Definitions**
- Economics are based on theory of Scarcity and Choice.

**Lionel Robbins**
- Scarcity definition
- “Studies human behaviours relationship between ends and scarce means which have alternative uses”

**Book**
- An essay on the Nature and significance of Economic Science
- “Ends” means to wants. Human wants unlimited
- Means are limited
- Means like time, money and resources
- Time and money to alternative uses

**Book**
- Economics studies human behaviour as a relationship
  Between unlimited wants and scarce means

- Means are limited
- Scarcity and Choice are Central problems in Economics.
- Economics is the science of choice
- Choice between alternative is the basis principle of all economics activity
- Capitalist economy is also known as Market Economy. Consumer have wider choice

**Socialist Economy**
- is a planned economy
- Decision taken by the government
- Consumer have a limited choice
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| Mixed Economy                | - India best example  
- Public and Private sector unit together |
| Robbins puts it              | - To plan is to act with a purpose, to choose, and choice is the essence of economic activity |
| Lionel Robbins               | - Definition known as Scarcity definition                                |
| Criticism                    | - Marshall classified human behaviour into economic activity and non-economic activity  
- Robbins definition economics a Scientific Study |
| Great depression             | - 1930 caused by scarcity but by plenty  
- Depression was described as poverty in the midst of plenty  
- Economics is the science of Scarcity |
| Samuelson’s Definition       | - Modern definition of Economics  
- Society chooses to employ its resources, which have alternative uses  
- Discusses how a society uses limited resources present and future consumption  
- NEW |
| Net Economic Welfare         | - Samuelson has coined the concept of Net Economic welfare               |
| Total National Output        | - Consumption and Investment items contribute directly to economic welfare. |
| More leisure                 | - Gross national product may come down  
- welfare goes up  
- Derived from leisure by giving it a value in Net economic welfare  
- Illegal activities they are called “Social bads” |
| Un accounted money           | - Included in GNP estimate                                               |
| Concept of Net Economic Welfare | - Very Important in the study of National Income                   |
| Main division of Economics   | - Four                                                                   |
| Consumption                  | - Deals with the satisfaction of human wants  
- When a want is satisfied, the process is known as Consumption  
- Means usage  
- Distription of utility |
| Production                   | - Creation of utility  
- Creation of Wealth |

S.Mohanasundaram, P.G Assistant in Economics
Utility refers to the ability of a good to satisfy want.
Three kinds of utility:
- Form utility
- Place utility
- Time utility
They include Malthusian theory of population and the laws of returns.

Money Economy
- Money Economy
- Goods may be exchanged for foods – barter

Public Finance
- Deals with the economics of government
- Study mainly about the income and expenditure of Government

Aim Production
- Promotion of human welfare
- Production is means and consumption is the end

Criticism of Economics
- Interrelated and Interdependent

Asimakopulos puts it
- Positive economics and Normative economics
- Positive economics systematized knowledge concerning what is
- Normative economics to develop criteria for what ought to be

Positive economics
- Description of economics events tries to formulate theories to explain

Normative Economics
- Importance to ethical Judgement
- Ideal rather than the actual situations

Sociology
- Is the Science of Society
- It studies human behaviour in relation to scarce means and ultimated wants.

Socialism
- Was born of economic inequalities and exploitation
- Karl Marx is considered as the Father of Scientific Socialism
- Economic is the fruit of history and history is the root of Economics

Ethics
- Deals with moral questions given right conduct and morality
- Deals with questions of right and wrong
- Aims of promote good life

Good Laws
- Promote economic progress

Bad Laws
- Act as an impediment to growth

Taxation and Labour Legislation
- To promote economic progress

Psychology
- Is the science of mind
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<th>- Studies human behaviour with reference to unlimited wants are limited means</th>
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<td>- Based on Psychology</td>
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| Statistics | - Is the science of average  
- Science of Counting  
- Many table’s and diagram used  
- Largely used in modern economics  
- New Science are called econometrics  
- It make use of statistics and mathematics |
| The Econometric Society | - Founded in 1930 |
| First Nobel Prize | - Jan Tinbergen and Ragnar Frisch Contribution to econometrics |
| Time element | - Useful in studying the working of an economy |
| Static analysis | - Short period rather than Single point  
- Short period is known as comparative statics |
| Comparative Statics | - The state economy at one movement to the state of the economy another moment  
- Marshall’s analysis of supply and demand good example comparative statics |
| Dynamic Analysis | - Path or Process move economy one state from another state of equilibrium |
| Time element | - Important factor is dynamic analysis  
- Investment during a period may depend upon the rate of interest in the previous period  
- Trade cycle good example Dynamic analysis |
| Stock and flows | - basic concepts in economics. |
| Stock can be | - Measured at a given point of time |
| Flow | - Is a quantity measured only it terms of Specific period of time. |
| Wealth | - Is a stock |
| Income | - Is a flow |
| Economic Theory | - Broadly divided into macro and micro economics |
| Micro economics | - Small  
- Deal with problem such as the output of single firm or
industry.
- Price of Single Commodity
- Spending on goods single household

| Macro | - Means large
- Studies
- The economics system as a whole
- Complete picture of the work of the economy
- Study of the relations between broad economic aggregate such as total employment saving and Investment.
- Studied under the title Income and Employment Analysis |

| Science | - Is a systematized body of knowledge
- Broadly divided into physical science and social science |

| Physical Science, Social Science | Broadly divided science |

| Physics and Chemistry | - Example of physical science |

| Methods of Economic analysis | - Two methods
- Deductive method
- Inductive method |

| The deductive method | - is also knows abstract or analytical method
- Very popular Greeks
- Moves from general assumption to the specific application. |

| Ricardo | - Classical economist made use of deductive method. |

| Inductive method | - Moves from specific observation to generalization. |

| Francis Bacon | - Advocate – Inductive method in scientific enquiry. |

| Darwin | - Theory of evolution Introduce concept of
Combined deductive and inductive method. |

| Economics deals | - With man and his behaviour
- Its laws are complex and inexact. |

| Marshall said | - The laws of economics are to be compared with of tedious
rather the simple and exact law of gravitation. |

| Economic Laws | - Also probable trend
- More exact than the laws of history and politics.
- Laws of economics are hypothetical |

| The Law of diminishing Return | - Universal application |

| The Law of dimensioning utility | - Is based on actual experience
- It explain relationship between price of
good and satisfaction. |

| Price | - Is related to marginal utility. |
Progressive taxation - Is based on the diminishing utility
Law of Demand pp - Is based on actual experience
Law of Diminishing return - Application Agriculture and Industry

Wealth - Ordinary speech wealth we mean money
- Economics means scare goods satisfy own wants. Which have money value.
- All economics goods have value –in-exchange

Marshall says “they must be desirable”

Characteristics of wealth 5 Characters

Free goods - Air and sunshine
- Cannot live without them
- do not consider wealth because available in large
- They not consider command price in the market.

Classification Wealth - Four
- Personal Wealth
- Social Wealth – Collective
- National Wealth
- Cosmopolitan Wealth – Ocean Sea

Goods - Anything that satisfies a human want.
- refers to material and non-material

Goods - Can be classified into free goods and economics goods.

Economics goods - Command a price in the market
- Value in exchange
- Scarce in relation in demand.

Income - economics refers money income
- Seligman “Income in the economic sense
  is the flow of satisfactions from economic goods.
- Two points about income time and amount.

Two kinds of Income - Money Income and Real Income
- Also known as nominal Income
- Depends upon how many goods they can command.

Real Income - Standard of living of people depends on their real Income
- Depends purchasing power of money and depend upon on the price level.
National Income - Refers to the value of commodities and Service produced by a country during a year.

Marshall - “True net annual Income or revenue of the country, or the national divided.

Value - Refers to the exchange qualities of a good.

Marshall “term value, is relative and expresses the relation between two things at a particular place and time”.

Value - Two kinds
   Value – in –use
   Value-in-exchange

Value-in-use - Air, rain and sunshine

Value-in-exchange - Possess utility, scarce in relation to demand

Value - Generally measured in money
   - It changes according to time and situation

Price - When value is expressed in many it is called price
   - Price system plays a very important role in a capitalistic economy
   - Price system regulate the economic activity of a society

Market - Refers to a place where good are bought and sold

Classification of Markets - classified to space, time and nature of competition
   - According to the type of competition
   - Perfect and imperfect competitive.

Market classified - time short period and long period

Short period - Demand plays important role

Longer period - Supply plays an important role

German economy - Recovered quickly by following advice of an economist ludwig Erhard

J.M.Keynes - Great influence on the economic policies of the USA- during great economic trouble during 1930
Chapter 2 Basic Economic Problems

Choices - any economic society, three important problems
-what, whom, how
-these three basic problems are inter dependent

General economic system - Traditional economy
-Capitalist economy
-Socialist economy
-Mixed economy

Traditional economy - basic problem solved by tradition and custom rules every aspect of behavior
-produce exactly consumption requirement
-only small scale producers
-same product will be produced by every generation

Capitalist economy - Mechanism of free markets
-Hence it is also called market economy (or) free trade economy
-freedom of buy and sell

Salient features
Right to private property - there is no limit to buy and sell the property

Profit motive - only functioning of capitalism
-basic force that drive the capitalist economy

Freedom of choice - what to produce? will be decided by the producer

Market force - demand, supply and price are signals to direct system

Economic activity - centered on price mechanism

Minimal role of government - regulation of market, defence, foreign policy, currency etc.

Merits of capitalist economy
Increase in productivity - leads to increase in income and saving and investment

Maximizes the welfare - self interest and individual promotes society’s welfare

Flexible system - the shortage and surpluses in the economy are generally adjusted forces of demand and supply
Low cost and qualitative products

Technology improvement - innovative something new

Demerits of capitalism
Inequalities - extreme income and wealth
- gap between the rich and poor

Leads to monopoly - inequality leads to monopoly

Depression - over production leads to gult in the market leads depression

Mechanism and automation - fire and hire policy will become the order of the day

Socialist economy - production are owned and created by the state
- all decisions regarding production and distribution taken by the central planning authority
- hence socialist economy is called planned economy or command economy
- government plays an active role
- socialist economy China, Cuba, Vietnam and North Korea

Social welfare motive - social or collective welfare will be two prime motive

Limited right to private property - all properties of the country will be owned by state

Central planning authority - economic policy decisions will be taken by a centralized planning authority

No market forces - planned welfare motive

Merits of socialist economy
Efficient use of resources - production is increased by avoiding waste competition

Economic stability - Economy is free from business fluctuation
- Government plans and avoid over production or unemployment

Maximisation of social welfare - the elements of corporation and monopoly are eliminated
- extreme inequality is prevented socialist system

Demerits of socialist economy
Bureaucratic expansion - socialist economy

No freedom - consumer choice is very limited

Absence of new technology - technological changes are limited
Mixed economy - both public and private institute exercise economic control

Public sector - function as a socialist economy

Private sector - free enterprise economy

Economic planning - important features of mixed economy

Merits of mixed economy
Resources utilized efficiently
Prices are administered - government goods are also rationed
Social welfare - planning centralized
- incentive and reward for any innovations

Demerits of mixed economy
Lack of co-ordination
Red-tapism and delay by private sector - red-tapism and corruption leading to delays in decision making

Economic fluctuation
Production possibilities - choice must be made from alternatives
- it involves comparison of cost and benefit
Opportunity cost - particular alternative, the next best alternative must be given up
- cost of something in terms of opportunity forgone
- in the value of next best alternative forgone
Opportunity cost - key difference between the concept of “economic cost” and “accounting cost”

Choices - mostly made on the basis of opportunity cost
- choices emanates from scarcity
- choices can be made with help of production possibility curve
- assume only two goods
- maximum benefit at minimum cost
- production possibility curve is also known as transformation curve or production possibility frontier
- economy moves from one possibility point to the other

Combination inside - resources are not use best-known way

Combination outside - indicate economic development and technological advancement
Chapter 3 Theory of Consumer Behaviour

Wants in economics - all desires, tastes and motives of human being

Wants may arise due to - elementary and psychological causes
- social causes
- customs and habits
- advertisement

Wants - have become unlimited and also complex
- systematic survey of this process is called consumption

Consumption - using up of goods and services in the satisfaction of human wants

Characteristics of wants
Wants are unlimited - no limit to human wants
Every want is satiable - single or particular want satiable
Wants are competitive - choose the more urgent want and get maximum satisfaction
Wants are complementary - pen and ink
- wants may be both “competitive” and “complementary”
- example - Labour and Machinery
Wants are alternative - wants can be satisfied by two Example: tea or coffee
- alternative goods are called substitute

Wants vary with time and person - wants are not static in character
Some wants recur again - felt again and again
Wants become habits and customs - wants become habits and habits are responsible for wants

Classification of wants - necessaries
- comforts
- luxuries

Comforts - which are not essential for living but which are required for happy living
- comforts promote efficiency also

Concept of utility - there are two basic approach to study of consumer demand theory
- 1. Utility approach
- 2. Indifference curve approach
Utility approach
- cardinal measurable
- Marshal is the chief exponent of this approach to the theory of demand
- known as cardinal utility analysis or marginal utility analysis or
  marshalian utility analysis

Indifference curve
- comparative utility or ordinal utility
- J.R. Hicks and R.G.D. Allen introduced the indifference curve approach

Concept of utility
- utility means usefulness
- economics utility is defined as the power of a commodity or a service to
  satisfy human wants
- utility is a subjective or psychological concept
- utility depends on the consumer and his need for the commodity

Total utility
- of all units of a commodity consumed

Marginal utility of commodity
- addition made to the total utility by consuming one more unit of
  commodity
- \( MU_n = TU_n - TU_{n-1} \)

Marginal utility
- reaches zero total utility reaches maximum
- declines total utility increase

Marginal utility
- becomes negative total utility decline

Law of diminishing marginal utility – explain an ordinary experience of a consumer
- According to Law, the marginal utility decreases with the
  increase in the consumption of a commodity

Gossen, Bentham, Jevons, Karl Menger – initially for the development of these ideas

Alfred Marshal
- perfected these ideas and made law
- this law is also known as Gossen I Law
- utility derived by a person from successive units of consumption

The Law of demand
- the result of the operation of the law of diminishing marginal utility
- the law of DMU operates in the case of money also

Alfred Marshall
- assumed marginal utility of money remain constant
- law is a handy tool for the finance minister for increasing tax rate on rich
- law based on a single commodity consumption mode

Law of Equi-Marginal utility
- First mention by H.H. Gossen (1810 – 1858)
- Hence it is called Gossen’s Second law
- Alfred Marshall made law in this principles of economics
-in equilibrium at the point where the utility derived from the last rupee spent on each is equal
\[ \frac{-MU_x}{P_x} = \frac{MU_y}{P_y} = MU_M \]

Limitations of the law -indivisibility – car, a house, etc.
- marginal utility of money not constant

Marshall states that price of the consumer is willing to pay equal to its marginal utility

Utility is subjective concept and cannot be measured in quantitative terms

Marginal utility independent not possible real world are interdependent

According to Prof. K.E. Boulding, -Indefinite budget period another difficulty in the law

Importance –According to Marshall, “the applications of this principle extent over almost every field of economic activity”

It applies to consumption
\[ -\frac{MU_x}{P_x} = \frac{MU_y}{P_y} = \frac{MU_z}{P_z} \]
-set maximum satisfaction

The aim of producer
- maximum output at minimum cost
- profit will be maximum
\[ -\frac{MP_1}{P_1} = \frac{MP_C}{P_C} = \frac{MP_n}{P_n} \]

Marshall -marginal utility of the last rupee put in savings is equal to the marginal utility of the last rupee spent on consumption

The general theory of distribution -involves the principle of substitutes

The principle of “Maximum social advantage” -as enunciated by professors Hicks and Dalton
-last unit of expenditure on various programme bring equal welfare

Consumer surplus -concept first mentioned by J.A. Dupit, a French engineer economist in 1884

- developed the concept in his book principle of economics 1890

Consumer surplus -is experienced in commodities which are highly useful but relatively cheap
-Example : Newspaper, Salt, Match box, postage stamp, etc.
-for these commodities we are ready to pay more than what we actually pay, if the alternative is to go without them
extra satisfaction a consumer derives is called consumer’s surplus

Marshall - assumes that there is definite relationship between expected satisfaction (utility) and realized satisfaction (actual)

Consumer surplus - single commodity is measured
- Potential price – Actual price

Potential price - is the price which a consumer is willing to pay commodity

Actual price - is the price which the consumer actually pay for that commodity

Consumer surplus - is determined by the potential price of the commodity purchased and the actual price in the market price

Consumer surplus - the difference between marginal utility and market price
- a rise in market price reduces consumer’s surplus
- a fall in the market price increase the consumer’s surplus

J. R. Hicks - Utility is not measurable because it is a psychological phenomenon

Marginal utility of money - increases with the fall in the stock of money

Consumer’s surplus - is useful to the finance minister in formulating taxation policies
- helpful in fixing a higher price by a monopolist in the market
- enables comparison of the standard of living of people of different regions or countries

Marshall’s demand analysis based on - cardinal measurement of utility

Indifference curve - approach based on ordinal ranking preference was evolved

Vilfred Pareto, Wicksteed and Slutsky - developed this approach

Prof. J.R. Hicks and Prof. Allen - two English Economists
- provided a refined version of indifference curve approach
- According to him utility cannot measured can only be ranked or ordered

The concept of scale of preference - has been explained by indifference curve

Indifference curve - difference combination of two commodities
- and equal satisfaction
Definition
-An indifference curve is the locus of different combination of two commodities give equal satisfaction

Indifference schedule
-is a statement of various combinations of two commodities that will equally be accepted by the consumer
-the various combinations of the two commodities are plotted and joined to form a curve
-all the points on this curve give equal level of satisfaction to the consumer

Indifference curve
-is otherwise called “iso-utility curve”

Indifference map
-is a group of indifference curve for two commodities showing different level of satisfaction

Higher indifference curve
-denote higher level of satisfaction

Lower indifference curve
-denote lower level of satisfaction

Indifference curve properties
-slope downwards to the right
-convex to the origin
-no two indifference curve cut each other

Indifference curve
-operation of a principle known as ‘Diminishing Marginal Rate of substitution’

If concave origin
-it will mean that MRS is increasing

Indifference curve
-cannot be straight line except when the goods are perfect substitution

Indifference curve
-represents for scale of preference of a consumer for the two goods
-to the right represent higher satisfaction

Budget line income
-represents the various amount the consumer can buy with his income
-it is also known as price ratio line

Producer equilibrium
-MRS_{XY} = \frac{P_X}{P_Y}
Chapter 4  Demand and Supply

Demand for commodity refers to the desire backed by ability to pay and willingness to buy.

Desire backed by purchasing power is demand.

The demand for commodity mainly depends on the price of that commodity.

Demand function: \( D_x = f(P_x, P_s, Y, T, W) \)

Law of demand states that there is a negative or inverse relationship between the price and quantity demanded.

Alfred Marshall stated that “the greater the amount sold, the smaller must be the price.”

Ferguson’s law of demand is that the quantity demanded varies inversely with price.

Demand schedule is a tabular statement showing how much of commodity is demanded at different prices.

Individual demand schedule shows a list of prices and corresponding quantities demanded by an individual consumer.

Demand curve slopes downwards from left to right, showing that, when price rises, less is demanded and vice versa.

The demand curve represents the inverse or indirect relationship between price and quantity.

Why demand curve slope downwards: Mainly due to Law of diminishing marginal utility.

Law of diminishing marginal utility states that an additional unit of a commodity gives lesser satisfaction.

The demand curve slopes downwards because the marginal utility curve slope downwards.

Normal demand curve is convex to the origin.

Exceptions of the Law of demand: more will be demanded at a higher price and less will be demanded.
at a lower price
-demand curves slope upward to the right
-positive or direct relationship between price and quantity demanded

Veblen effect – there are some goods demanded very rich people for their social prestige
-e.g. Diamond price rice more purchase, price less not even purchase

Giffen paradox - Sir Robert Giffen discovered that people will demand more on inferior goods and less if the price fall
-Example: Poor people spend the major part of their income on coarse grains and small part on rice
-Example: ragi, cholam

Expansion and contraction of demand - the demand curve does not change its position here
-when change in demand for a commodity is entirely due to a change in its price

Shifts in demand or increase and decrease in demand - one of the basic assumptions of economic theory is “Other things being equal”

Other things are - income, tastes, population, government policy, technology, price of related goods

Price above equilibrium price - supply is greater than demand S > D
Price below equilibrium price - demand greater than supply D > S
Price “discounts” - are advertised by sellers in the name of “annual stock clearance” sale

At equilibrium price - there is no force to change the price or quantity demanded of a commodity

Price of substitutes - the demand for substitutes more in the opposite direction

Demand for a commodity - may change due to change in climate conditions

State of business - during boom demand will expand
- during depression demand will contract

Elasticity of demand - the law of demand explained that demand will change due to a change
due to a change in the price of the commodity

The concept of elasticity of demand - measure the rate of change in demand
-was introduced by Alfred Marshall

Types of elasticity of demand - Three types they are
-1. Price elasticity of demand
-2. Income elasticity of demand
-3. Cross elasticity of demand

Price elasticity of demand - the degree of responsiveness of a quantity demanded to a change in price is called price elasticity of demand

\[ e_P = \frac{\Delta Q}{Q} \times \frac{\Delta P}{P} \]

Measurement of price elasticity of demand - four types

Percentage method - relative change in demand divided by relative change in price

\[ e_P = \frac{\% \Delta q}{\% \Delta p} \]

There are - five measures of elasticity

Relative elasticity demand - if the value of the elasticity is greater than 1

Relative inelastic demand - if the value of the elasticity is less than 1

Unitary elastic demand - if the value of elasticity is equal to 1

Perfectly inelastic demand - if the value of elasticity is zero

Perfectly elastic demand - if the value of elasticity is infinity

Point method - calculate the price elasticity of demand at a point on the linear demand curve

\[ e_P = \frac{\text{Lower segment of the demand curve}}{\text{Upper segment of the demand curve}} \]

- length of the demand curve AB is 4 cm

Demand is elastic - if total outlay or expenditure increases for a fall in price, \( e_P > 1 \)

Demand is inelastic - if total outlay or expenditure fall for a fall in price, \( e_P < 1 \)

Elasticity of demand is unityary - if the total expenditure does not change for a fall in price, \( e_P = 1 \)
Arc method - segment of a demand curve between two points

Income elasticity of demand - the degree of responsiveness demand to the change in income
\[ ey = \frac{\Delta q}{q} \div \frac{\Delta y}{y} \]

Cross elasticity of demand - the responsiveness of demand to changes in price of related goods
\[ ec = \frac{\text{Percentage change in the quantity demanded of Commodity X}}{\text{Percentage change in the price of Commodity Y}} \]
\[ ec = \frac{\Delta qx}{\Delta py} \times \frac{p_Y}{q_X} \]

Substitute goods - Tea and Coffee

Complementary goods - Pen and Ink

Measures of Cross elasticity of demand

Infinity - Commodity X is nearly a perfect substitute for commodity Y
Zero - Commodities X and Y are not related
Negative - Commodities X and Y are complementary

Exports - enjoy inelastic demand in the world market

Nature of elastic and inelastic demand - keeps in the determination of the value of output

Demand for labour - elastic - not increase wage rate
- inelastic - increase wage rate

Concept of elasticity of demand - explains the paradox of poverty i.e. poverty is the midst of plenty

Law of supply - establishes a direct relationship between price and supply
- or positive relationship

Supply means - the goods offered for sale at a price during a specific period of time

Supply schedule - statement of the various quantity of a given commodity offered for sale at various prices per unit of time

Law of supply - positive slope
- it move upward to the right

When more units - are supplied at a higher price it is called expansion of supply
When fewer units are supplied at a lower price it is called contraction in supply.

Tax is improved—inputs of a commodity cost of production will go up supply will be reduced.

Subsidy—will encourage them to produce more
-means a part of the cost of commodity will be borne by the government.

Non economic factors—like war, political climate and natural calamities create scarcity in supply.

Concept of elasticity of supply—the rate of change in supply as a result of change in price
\[ ep = \frac{\Delta qs}{qs} \frac{\Delta p}{p} \]

Elasticity supply—defined as “the degree of responsiveness of change in supply to change in price on the part of sellers”
-there are five types.
Chapter 5  Equilibrium price

The demand curve - reflects the price–quantity relationship

The preference - firms and consumer are opposed to each other

Equilibrium price - preference of sellers and buyers meet together
occurs at the point of intersection of the supply and demand curve
particular point of price and quantity
supply and the demand will be in balance in equilibrium
defined as the state of rest or balance from which there is no tendency for change

Original equilibrium - position will be restored by market forces

Concepts of equilibrium applied - sub system of the economy lies agriculture, industry, growth and distribution

Price - above the equilibrium, supply is greater than demand S>D
excess supply
price “discounts” are advertised by sellers in the name of “annual stock clearance” sales
below the equilibrium excess demand D>S

Excess supply - price has a downward tendency
Excess demand - price has an upward tendency
Equilibrium - price is stable \( D = S \)

Market equilibrium - attain above is temporary
it cannot be retained for a long period

Shift in demand - other things that affect demand are also called as the determinants of demand
changes in these determinants will change demand independently of price

Other things - income of the consumer tastes, price of substitutes

Price - is the major determinant of supply

Time element - plays an important role in economics
Modern economists - divide time period into short period and long period

Inputs - two types, they are fixed inputs and variable inputs
The fixed inputs - is one whose quantity cannot be adjusted in a limited time period
- Example: Heavy machinery, building and capital equipment

The variable inputs - like labour, raw materials and electricity can be changed quickly

The short period - firm is the time period during which at least one of the inputs is fixed inputs

Long period - is the time period during which all the inputs are variable inputs

Alfred Marshall - introduced time element in the determination of equilibrium
- divided into market, short and long period

Market period - the ability of the firm to affect any changes in supply
- any change in demand is extremely limited or almost nil
- supply is more or less fixed without any change
- demand may vary during this period
- supply is fixed in the market period it shown as a vertical line
- it is also called as inelastic supply curve
- demand determines the equilibrium price in the market period

Short period - which at least one of the factors will be fixed input
- supply will be adjusted by changing the variable inputs
- both demand and supply exert their influence on price

Long period - supply can be changed by changing all the inputs
- supply curve is more elastic and flatter than that of the short period
- supply curve
- supply plays a significant role in determining the lower equilibrium price in the long run
Chapter 6  Production

Production in Economics - refers to the creation of utilities and exchange value

Nature of utility - Form utility
- time utility
- place utility

Form utility - physical form of a commodity is changed

Place utility - transported from one place to another

Time utility - commodity is stored for future usage

Possession utility - commodity in the transaction change from one person to another person

Human activity can be broken down into - two components production and consumption

Factors of production - fourth factor organization or entrepreneurship
- classified into primary factors and derived factors

Primary factors - land and labour produce naturally

Derived factors - capital and organization are derived from the primary factors
- combined with primary factors

Land - free gift of nature
- inelastic supply
- imperishable
- immobile
- differs in fertility and situation
- passive factors of production
- initial supply price of land is zero

Labour - Marshall “the use or exertion of body or mind partly or wholly”
- perishable
- an active factors of production
- not homogeneous
- skill and dexterity vary from person to person
- cannot be separated from the labourer
- mobile
- individual labour has only limited bargaining power
- trader union bargaining power rise
Division of labour - concept was introduced by Adam Smith
-introduce an enquiry into the nature and causes of wealth of nations
-mean dividing the process of production into distinct and several component process each components in the hands of labour
-division of labour is limited by the extent or market

Division of Labour Merits - Improve efficiency
-resulting in inventions
-time and materials are put to the best

Division of Labour Demerits - repetition of the same task makes labour full monotonous and stale
-narrow specialization reduce alternative avenues
-increased unemployment
-kills the growth of handicrafts

Capital - man made physical goods used to produce other goods
-ordinary language – means money
-economics – part of man made wealth further production of wealth
-Marshall - other than free gifts of nature, which yield income
-terms capital and wealth are not synonymous
-all wealth is not capital but
-all capital is wealth

Physical capital - all man made physical assets
-result it undergoes wear and tear or depreciation
-it gives a series of annual income flows called annuities
-accumulation of more and more physical capital is called physical capital formation

Money capital - the investment that is made in the form of money or monetary instrument is called money capital
-Example: Bank deposits, shares

Characteristics of capital - passive factors of production
-man made
-capital is not indispensible factors of production
-highest mobility
-is elastic
-is productive
-lasts over time
-involve present sacrifice to get further benefits
Organisation or entrepreneur - who combines the different factors of production
- bears the risk involved
- is also called organizer
- risk taking
- modern times called “the changing agent of the society”

New idea available in the market - foremost function of an entrepreneur

The optimum combination of factors of production - at minimum cost

According to Schumpeter - entrepreneur is an innovator
- innovation
- new cost cutting technique

Deciding the reward payment - productivity
- crucial function of an entrepreneur

According to Hawley - business is nothing but a bundle of risks products are produced for future demand

According to Knight - Important function of entrepreneur is uncertainty bearing

Production function - functional relationship between inputs and outputs

Inputs - refers to the factor services which are used in production

Output - refers to the volume of goods produced

Production function is given - \( Q = f(x_1,x_2,x_3, \ldots \ldots) \)

When Marginal Product is positive - the total product increases

When marginal product increases - the total product will be increasing at an increasing rate

Marginal product remain constant - the total product will be increasing at a constant rate

When marginal product decrease but is positive constant - the total product reaches the maximum and remains constant

When the marginal product is negative – the total product decreases

When the marginal product is zero - the total product will be increasing at decreasing rate
Production function may be classified into two
- short run
- long run

Short-run production function - through law of variable proportions

Long-run production function - explained by returns to scale

Short-run production function - one variable factors other factors fixed or constant
- variable factors units are homogeneous
- divided into three stages
- increasing returns stage
- decreasing
- negative

Stage 1 Increasing return - average product maximum
- marginal product starts declining it in greater than average product

Stage II Decreasing return - marginal product is zero
- marginal product and average product decline but positive
- total product is maximum and the marginal product is zero

Stage III Negative returns - marginal product become negative
- producer will choose
- marginal product of both the fixed factor and variable factor are positive
- total product maximum

Long-run production function - return to scale
- studied in three phases
- increasing return to scale
- constant return to scale
- decreasing return to scale

Marginal product increases total product increases – increasing returns to scale

Marginal product remain constant, total product increase – constant returns to scale

Marginal product decreases total product increases at decreasing rate – decreasing return to scale

Law of returns - short run production function
- only one factor is varied all other factors are kept constant
- law does not apply when the factors must be used in fixed
Return to scale - long run production function
- all factors are varied
- factors proportions are not changed, the scale changes
- law does apply when the factors must be used in fixed proportions
to produce a product
- increasing return to scale are due to economies of scale
- diminishing return to scale are due to diseconomies of scale

Production function - through iso-quants two or more factors are used to produce
- considering two factors of production - capital and labour
- curve is known as an equal product curve or an isoquant curve
- two factors of production that yield the same level of output

Characteristics of an isoquant - downward sloping from left to right
- negatively sloped
- convex to the origin because of the diminishing marginal rate of technical substitution
- \[ \text{MRTS}_{CL} = \frac{\Delta L}{\Delta C} \]
- higher the isoquant, higher will be the level of output produced
- set of isoquants which represents the level of output is called isoquant map
- isoquant map – isoquant right side represent higher level of output

Isocost line - defined as locus of points representing various combinations of factors
- higher isocost line represent higher outlays
- lower isocost lines represent lower outlays
- slope of the isocost line is equal to the ratio of the prices of two factors
- slope of isocost line

Slope of isocost line - \( \frac{\text{Price of factor X (Capital)}}{\text{Price of factor Y (Labour)}} \)

Producer equilibrium - slope of the isoquant and the iso cost line are equal
marginal rate of technical substitution is equal to the price of ratio of factors

\[ \text{MRTS}_{XY} = \frac{P_X}{P_Y} \]

The Cobb-Douglas production function - it is a statistical production function

\[ Q = bL^aC^{1-a} \]

- it explain only constant returns to scale
- in addition of \( Q = bL^aC^b \)

\[ a + b > 1: \text{Increasing return to scale} \]
\[ a + b = 1: \text{Constant return to scale} \]
\[ a + b < 1: \text{Decreasing return to scale} \]

Economies - means advantages

Scale - refers to the size of unit

Economies of scale - refers to the cost advantages due to the larger size of production
- volume of production increases the overhead cost will come down

Economies of scale - two types
- internal economies
- external economies

Internal economies of scale - advantages enjoyed within the production unit
- five kinds of internal economies

Producer first buyer - is the producer who buys the raw materials

External economies of scale - industry grows the enjoy number of advantages

Inter diseconomies of scale - firm continues to grow and expand beyond the optimum capacity
- the economies of scale disappear
- diseconomies will start operating
### Chapter 7  Cost and revenue

| Cost of production | - Means expenses incurred in the production of a commodity.  
| - Refers to the total amount of money spend on the production of a commodity. |
| Cost function | - Functional relationship between costs and output.  
| - C=f(q) |
| Money cost or nominal cost | - Total money expenses incurred by a firm in producing a commodity. |
| Real cost | - Is a subjective concepts it expresses the pain and sacrifices involved in producing a commodity |
| Opportunity cost | - Of any goods are the next best alternative goods that are sacrificed. |
| Accounting cost or explicit cost | - Are the payments made by the entrepreneur to the suppliers of various productive factors.  
| - Are directly paid out or accounted for by the producer. |
| Economic cost | - Include not only the explicit cost but also the implicit cost.  
| - The money rewards for the services of the entrepreneur.  
| - Factors owned by himself and employed in production are known as implicit cost or imputed costs.  
| - Economic cost=explicit+ implicit cost  
| - Economic profit=total revenue-economic costs. |
| Private cost | - Incurred by a firm for production.  
| - It includes both implicit cost and explicit cost. |
| Social cost | - Which are not borne by the producing firm  
| - But are incurred by others in society. |
| Fixed costs and variable factors | - With reference to short-run production function |
| Fixed costs and variable cost | - Helpful in understanding the behavior of costs over different level of output. |
| Short-run | - Fixed factors of production cannot be changed.  
| - Such factors are called fixed factors.  
| - The costs incurred on fixed factors are called fixed costs. |
| Variable factors | - Changed in the short run.  
| - Costs incurred on variable factors are called variable costs.  
| - Fixed costs are those which are independent of output. |
Variable costs
- Do not change with change output.
- Whose amount can be altered in the short-run.
- Total variable costs change with the level of output.
- It rises when output expand.
- Falls when output contracts.
- Output is nil, variable cost become zero.

Total cost
- TC=TFC+TVC
- Total fixed cost is the same irrespective of the level of output.
- Change in total cost is influenced by the change in variable cost only.

Short-run average cost curve
Average fixed cost-AFC
- AFC=TFC/Q
- Is the fixed cost per unit of output.
- It is obtained by dividing the total fixed cost by the number of units of the commodity produced.

Average variable cost-AVC
- AVC=TVC/Q
- Is the variable cost per unit of output.
- Total variable cost divided by the number of units of output produced.
- Average variable cost curve is “U” shaped.
- As the output increases the AVC will fall.
- Up to normal capacity output due to the operation of increasing return.

Beyond the normal capacity of output
- The AVC will rise due to the operation of diminishing return.

Average total cost or average cost
- AC=TC/Q
- AC=AFC+AVC
- Average cost is also known as the unit cost since it is the cost per unit of output produced.

Average total cost curve
- Depends on the behavior of AFC and AVC curve.
- Both AFC and AVC fall so ATC curve falls.

When AVC curve begin rising
- AFC curve falls steeply is fall in AFC more than the rise in AVC.
- ATC curve continues to fall.
- Output increases further there is a sharp increase in AVC

Which is more than the fall in AFC
- ATC curve rises after a point
- ATC curve like AVC curve falls first.
- Reaches the minimum value and then rises hence it called a u shape

Marginal cost
- Defined as the addition made to the total
cost by the produced of one additional unit of output.
- MC \( n = TC_n - TC_{n-1} \)
- Marginal cost curve is “U” shaped.
- The shape of the cost curve is determined by the law of variable proportions.
- Economics of scale is operation the marginal cost curve will be declining
- As the cost will be decreasing with the increase in output.

Increasing return

When the diminishing return

Relationship between
Short-run average and short-run marginal cost
- Increasing return
- Economics of scale is operation the marginal cost curve will be declining
- The shape of the cost curve is determined by the law of variable proportions.
- As the cost will be decreasing with the increase in output.
- Diseconomies of scale are in operation.
- The MC curve will be increasing as it is the situation of increasing cost

Relationship between
Short-run average and short-run marginal cost
- Is less than the average cost, average cost is falling
- Is greater than the average cost, average cost is rising.

The marginal cost curve
- Cut the average cost curve at Ac minimum point from below.
- At the minimum point of AC MC is equal to AC.

Long run average cost curve
- All factors and variable.
- Firm can change the size of plant to meet the changes in demand.
- Technologically there are only three size of plant.
- Relevant for small size plant.
- Short period
- The firm is tired with plant.
- For medium size plant.
- Output beyond OB,
- Firm will choose medium size plant.
- Average cost of small size plant is higher for the same output JC>KC.
- Large size plant.
- Output beyond OD
- Long-run the firm move from one plant to another.
- As the scale of production is changed a new plant is added.
- The least possible cost of production.
- When all inputs become variable.

Long run cost curve
- Is called planning curve firm it helps in choosing a plant level of output.
- Is also called envelope curve as supports
- Group of short-run cost curves
- Falls with increase in output
- Certain rises making a boat shape

Revenue
- Firm receive by the sale of its output in the market.

Total revenue
- Refers total amount of money that a firm
receive from the sale of its products  
- TR=PQ  
- Revenue per unit of the commodity sold.  
- AR=TR/Q  
- Means price of the product  

<table>
<thead>
<tr>
<th>Marginal revenue</th>
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<tbody>
<tr>
<td>- Addition made to the total revenue selling one more unit of a commodity</td>
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<td>- MR n = TRn-TRn-1</td>
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<tr>
<th>Average revenue</th>
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<tr>
<td>- Remain constant</td>
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<td>- MR also remain constant</td>
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<td>- Of the product falls</td>
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<tr>
<td>- When AR falls MR will also falls.</td>
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<tr>
<td>- But fall in MR will be more than fall in the AR</td>
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<th>Marginal revenue curve</th>
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<td>- Will lie below the average revenue curve</td>
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<tr>
<td>Profit</td>
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<td>- Total revenue-total cost</td>
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<td>Break-even point</td>
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<tr>
<td>- TR=TC</td>
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<tr>
<td>- At these point the firm is making neither profits nor losses.</td>
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Chapter 8  
Market structure and pricing

Characteristics of a market:
- existence of buyers and sellers
- deal with same commodity or variety
- similarity of the product is very essential
- price for the commodity bought and sold in the market

Classification of markets:
- market according to area
- market according to time
- market according to competition

According to area:
- local market
- demand and supply conditions are influenced by local condition only
- ex. perishable goods

National market:
- demanded and supplied throughout the country
- ex. Wheat, rice, cotton

Regional market:
- demanded and supplied over a region

Global market:
- demand and supply conditions and influenced by global level
- ex. Gold, silver

Market according to time:
- Marshall classified market based on the time element
- It means only the division of time
- Based on extent of adjustability of supply of a commodity
- Change in its demand

Major division are:
- Very short period
- Short period
- Long period

Very short period:
- Refers to the type of competitive market.
- The supply of commodity cannot be change at all
- The market supply is perfectly inelastic

Price of the commodity depends on:
- The demand for the product alone
- Ex. Perishable commodity

Short-period:
- That period supply can be adjusted to a limited extent
- By varying the variable factor alone
- Supply curve is relatively elastic
- Price is determined by the interaction of the short-run supply and demand curves

Long-period:
- Supply fully able to new demand conditions
- Fixed and variable factors are variable
- Supply curve in the long run is perfectly elastic
- Demand influence price in the long-run

Market according to competition:
- Perfect competition
- Large number of sellers selling
<table>
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<th>Imperfect competition</th>
<th>Perfect competition</th>
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<td>Monopoly-single seller</td>
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<td>Duopoly-2seller</td>
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<tr>
<td>Oligopoly-a few sellers selling homogenous or differentiated products</td>
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<td>Monopolistic competition-large number of sellers selling differentiated products</td>
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<th>Features of the perfect competition</th>
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<td>Homogeneous product</td>
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<tr>
<td>Uniform price</td>
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<td>Each producers is perfectly elastic</td>
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<th>A large number of buyers</th>
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<td>No power to fix the price of the product</td>
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<td>Uniform price</td>
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<td>Sellers accept this price</td>
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<tr>
<td>Adjust the quantity produced</td>
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<td>To maximize their profit</td>
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<td>Sellers in the perfect competitive market</td>
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<td>Price taker</td>
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<td>Quantity adjusters</td>
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<th>Homogeneous product</th>
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<td>Homogenous and identical</td>
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<td>Perfect substitute</td>
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<td>Cross-elasticity is infinite</td>
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<th>Perfect knowledge about market conditions</th>
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<td>Both buyers and seller are fully aware of the current price</td>
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<th>Free entry and free exit</th>
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<td>Existing firms are earning super-normal profits</td>
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<td>Free entry and free exit are possible only in the long run</td>
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<tr>
<td>Size of the plant cannot be changed in the short-run</td>
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<th>Perfectly mobility of factors of production</th>
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<td>Easily to get better remuneration</td>
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<td>Perfectly mobility of factors is essential to fulfill the first condition</td>
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<th>Absence of transport cost</th>
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<td>No transport cost</td>
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<td>Uniform price in the market</td>
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<td>Near market-low price far was high price</td>
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<th>Absence of government collusions</th>
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<td>Price in the perfectly competitive market is free</td>
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<td>To change in response to changes in demand and supply</td>
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<th>Nature of revenue curve</th>
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<td>Uniform price in the market</td>
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<td>All units of the output are sold at the same price</td>
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<td>Average revenue is perfectly elastic</td>
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<td>Average revenue curve is horizontally parallel to x-axis</td>
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<td>Average revenue and marginal revenue constant</td>
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<td>AR curve represents the demand curve for the product</td>
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<th>Short run equilibrium price and output</th>
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<td>Determination</td>
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<td>Super normal profit</td>
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<td>Demand curve equilibrium</td>
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<td>Long run perfect competition</td>
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<td>Normal profit</td>
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<td>Operating at minimum point of LAC</td>
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<td>Advantage of perfect competition</td>
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<td>Characteristics of monopoly</td>
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- But he cannot control demand for the product
- Many buyers
  2 No close substitutes
- The buyers have no alternative or choice
- Either they have to buy or go without it
  3 Price
- Control over the supply so as to increase the price
- Adopt price discrimination
- Fix different prices for different sets of consumers
- Either fix the price or quantity of output
- He cannot do both same time
  4 No entry
- Enjoying monopoly power
- Block the entry of new producers
- Legal
  - Technological
  - Economic and natural obstacles
  5 Firm and industry
- No difference between a firm and an industry

Causes for monopoly
- Monopoly arise available minerals
- Example-south Africa-diamonds, Canada-nickel, middle east-oil

technical
- Technical reasons
- Firm control over raw materials technical knowledge, scientific and formula
  - Ex- coco cola

legal
- Monopoly power through patent right and copy right

Large amount of capital
- All firm cannot enter because investment lumpiness
  - Ex- iron and steel industry railway

state
- Government sole right of producing and selling
  - Public utilities like electricity and railways

Price and output determination monopoly
- Maximize his profits
- Monopoly firm faces a downward sloping demand curve

Result downward sloping demand curve
- Larger output can be sold only by reducing the price
  - Marginal revenue curve will be below the average revenue curve
  - The average cost curve is ‘u’ shaped
  - Equilibrium MC=MR
  - MC curve cuts the MR curve from below
  - AR curve is falling and MR curve lies below AR
Earning maximum profit
- The monopoly price is higher than the marginal revenue marginal cost

Advantages of monopoly
- Large scale production possibilities enjoy both internal and external economics
- Result reduction cost of production
- Output sold at low prices
- Beneficial to the consumers
- Vast financial resources used research and development
- Firms to innovate quickly

disadvantages
- Monopolist always charges a high price
- Which is higher than the competitive price
- Monopolist exploit the consumers
- Getting maximum profit and restrict the output and rise the price
- Different prices for the same product
- Monopolist extracts maximum price according to the ability to pay of different price
- Adopt wrong practices to establish absolute monopoly power
- It will lead to inequality of income

Method of controlling monopoly
Legislative method
- government can control monopolist by legal action
Anti-monopoly legislation
- enacted to check the growth of monopoly
- the monopolies and restrictive trade practices act passed in 1969
Controlling price and output
- government would fix either price or output or both
Taxation
- government can impose a lump-sum tax on a monopoly firm
- its total profit will fall
Nationalization
- big companies is one of the solution
Consumer’s association
- to improve the bargaining power of consumers

Perfect competition
- AR curve is a horizontal straight line parallel to x axis
- Marginal revenue(MR) is equal to average revenue and price

equilibrium
- MC=MR=AR
- Price changed is equal to marginal cost of production

The long run
- Comes to equilibrium at the minimum point or a the lowest point of the long run average cost curve
- Optimum size operating at the minimum average cost

equilibrium
- Can be achieved only under increasing cost
The firm earns - Not under decreasing cost or constant cost conditions
- Normal profit long-run
- Super-normal profit in the short-run
- Price will be lower and the output is larger

Monopoly
- Both AR and MR curve are downward falling curves
- Marginal revenue is less than average revenue and price

Equilibrium
- MC=MR<AR
- Price changed in above marginal cost

Long run
- Equilibrium will be operating at a higher level of average cost

Equilibrium
- Possible at increasing, decreasing or constant cost conditions

Short run and long run
- Earns super normal profit
- Is higher and the output will be smaller

Price discrimination
- Practice of selling the same commodity at different price to different buyers
- It is called price discrimination or discriminating monopoly
- Example- cinema theater electrical charges

Two conditions
- The demand must not be more from the high priced market to the low priced market
- The monopolist should keep the two markets or different markets separate not moving one market to the other market

Monopolistic competition
- Is a blending of monopoly and competition
- Refers to large number of sellers produce goods which close substitute of one another
- The product are similar but not identical
- The essential features of monopolistic competition are product differentiation
- Existence of many sellers

Existents of large number of firms
- Firm will act independently on the basis of product differentiation
- Each firm determines its price-output policies

Product differentiation
- Essence of monopolistic competition
- They differ in minor way
- Physical difference, quantity, purchase benefit difference, imaginary
- Through effective advertisement
- Increase sales known as sales promotion

Selling cost
- Expenditure involved in selling product is called selling cost
According to Chamberlin, selling cost is defined as "the cost incurred in order to alter the position or shape of the demand curve" for the product.

- Most important form of selling cost is advertisement.

Sales promotion
- By advertisement is called non-price competition.

Pricing
- Is not the problem but product differentiation is the problem.
- Competition is not on price but on products.

Monopolistic competition
- Features of monopoly and perfect completion are partially present.

Wastages of monopolistic competition
- Firm less than optimum output.
- Result the productive capacity in not used fullest extent.
- Unemployment lead.

Excess capacity
- Is the difference between the optimum output that can be produced and the actual output produced by the firm.
- Firm produce output which is less than the optimum output to the minimum average cost.
- Lead to high cost be consumers.
- Cost per unit can be increased.
- Change prices higher than their marginal cost.

Advertisement
- Too many varieties of goods.
- Inefficient firms.

Oligopoly
- Refers only a few sellers producing either homogeneous or differentiated products.

Characteristics of oligopoly
1. Interdependence
- Important features of oligopoly is interdependence in decision-making.

Oligopolistic firm
- Not only the market demand for its product.
- They will have a tendency of collusion.
- Firm realize the importance of mutual cooperation.
- Co-operative and collusive trend as well as competitive trend.

Price rigidity
- Important feature of oligopoly is price rigidity.
- Oligopolistic firm lower its price rival firm will follow price reduction.

Rising price
- Rival firm will not follow because losing customers.
Chapter 9  Marginal productivity theory of distribution

The marginal productivity theory of distribution - Is the general theory of distribution
- Condition of perfect competition
Variable factors - Reward equal to its marginal product
- There is no fundamental difference between factor price and prices of commodities
Demand for commodities - Is direct demand
The demand for factors of production - Is derived demand
Marginal productivity theory of distribution - Perfectly competitive market
- Each factor will be paid a price equal to the value of its physical product
The condition of equilibrium in the labour market - MCL=VMPL
- The price is assumed to be constant under condition of perfect competition
The left of L - Each unit of labour cost less than the value of its product VMPL>W
The right of VMPL<W - The profits of the firm will be reduced
VMPL=W - Profit will be maximum
Demand curve - Firm for a single variable factor(ex - labour)
- Is its value of marginal product curve
- The employer adopts the principle of substitution
The reward for each factor is determined - By its marginal productivity
- It is called general theory of distribution
- To explain the determination of rent, wage, interest and profits
The marginal productivity theory assumption - Perfect competition
- Factor and homogeneous
- Substituted each other
- Theory based on the law of diminishing returns
- If employing more and more units of a factor
- Its marginal returns will diminish
Criticism - Difficult to measure productivity of labour like doctors and teacher
- It based on demand side ignore supply side
- Based on perfect competitive an full employment
- Real world only imperfect competition
Words of Marshall - The doctrine throws into clear light one of the causes that govern wages
Rent - Ordinary language rent refers to any periodic payment made for the use of good
- This rent is contract payment
Ricardo referred by rent - To the payment made for the use of
agricultural land
- Rent arises peculiar characteristics of land
- The supply of land is inelastic
- Difference in fertility
Rent
- Arises because of difference in fertility of land
The Ricardo theory of rent
- Is one of the earliest theories of rent
- Ricardo classical economist
- 19th century
According to Ricardo
- Rent paid for the use of the “original and indestructible powers of the soil”
- That is original power
- Ricardo believed rent arose on account of difference in the fertility of land
- Only superior land get rent
- Rent is a differential surplus
Rent
- May also arise on account of situational advantages
Explained his theory
- Example of colonization
- Three grade of land cultivate
- First and second grade land get rent
- Third grade land will not get rent
- It is known as no-rent land
According to Ricardo
- Rent is price determined
Ricardo
- Came to the conclusion that rent did not enter price
- No-rent land gets its price
- Argued that rents did not enter price
criticism
- Fertility of land decline after continue cultivation
- Modern economists rent factors like labour and capital
Rent
- Whenever the supply of factor is inelastic in relation to the demand
- Enters the price from the Point of a single firm
- Does not take scarcity rent
Modern theory of rent
- The term rent refers to payment made for factors of production and imperfectly elastic supply
- Rent does not supply to land alone
- Differ in their ability
Marshall
- Introduced the concept of ‘Quasi-rent’
- With regard other machines and other man made appliances
supply
- Factors is inelastic in relation to the demand for it
- Rent theory of profits
Marshall
- Has introduced the concept of “quasi-rent”
- With regard to machine and other man-
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply of factor</td>
<td>- Made appliances</td>
</tr>
<tr>
<td></td>
<td>- Modern view rent can be applied to all factors of production</td>
</tr>
<tr>
<td></td>
<td>- Inelastic in relation to the demand for it</td>
</tr>
<tr>
<td></td>
<td>- Rent arises</td>
</tr>
<tr>
<td>Transfer earnings</td>
<td>- Refers to the amount that factor earn in its best paid alternative employment</td>
</tr>
<tr>
<td></td>
<td>- It represent the opportunity cost of its present employment</td>
</tr>
<tr>
<td></td>
<td>- Any payment in excess of transfer earning is economic rent</td>
</tr>
<tr>
<td>Quasi-rent</td>
<td>- Marshall</td>
</tr>
<tr>
<td></td>
<td>- According to Marshall &quot;quasi-rent&quot; is the income derived from machine and other appliances for production by man</td>
</tr>
<tr>
<td></td>
<td>- Example- boats</td>
</tr>
<tr>
<td></td>
<td>- Supply may be inelastic in the short-run</td>
</tr>
<tr>
<td></td>
<td>- So they will earn some extra income over and above the normal income they receive</td>
</tr>
<tr>
<td>Quasi-rent</td>
<td>- Disappear when once the supply of boats increase</td>
</tr>
<tr>
<td>wages</td>
<td>- Reward for labour</td>
</tr>
<tr>
<td></td>
<td>- Two main kinds of wages</td>
</tr>
<tr>
<td></td>
<td>- Money wage known as nominal wage</td>
</tr>
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<td></td>
<td>- Real wage refer which money wages command</td>
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<tr>
<td>Real wage</td>
<td>- Depends upon the price level</td>
</tr>
<tr>
<td></td>
<td>- Depends mainly on the purchasing power of money</td>
</tr>
<tr>
<td></td>
<td>- Standard of living of workers country depends upon the real wages</td>
</tr>
<tr>
<td>Subsistence theory of wages</td>
<td>- Wages paid to a worker bare needs of subsistence</td>
</tr>
<tr>
<td>Less than subsistence wage</td>
<td>- There will be starvation and death result in shortage of supply of labour</td>
</tr>
<tr>
<td>paid</td>
<td>The standard of living theory</td>
</tr>
<tr>
<td></td>
<td>- Wages depend upon the standard of living of workers</td>
</tr>
<tr>
<td>The wage fund theory</td>
<td>- According to wages fund theory wages depend upon the proportion between population and capital</td>
</tr>
<tr>
<td>capital</td>
<td>- Refers to the fund set apart for payment of wages</td>
</tr>
<tr>
<td>Population</td>
<td>- Refers to worker</td>
</tr>
<tr>
<td></td>
<td>- If the supply of workers increase, wage will fall</td>
</tr>
<tr>
<td>The residual claimant theory</td>
<td>- According to this theory wages equal the whole product minus rent interest and profit</td>
</tr>
<tr>
<td></td>
<td>- Walker</td>
</tr>
<tr>
<td>The marginal productivity theory of wages</td>
<td>- marginal productivity theory of</td>
</tr>
</tbody>
</table>

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distribution - general theory of distribution
- wages will be equal to the value of the marginal product of labour
- employing more and more units of labour its marginal product will fall
- because the law of diminishing marginal returns

Marshall - the doctrine throws into clear light the action of one of the causes that govern wages

The market theory of wages - as the price of labour
- wages are determined by the market forces of supply and demand

Supply of labour - refers to the total number of people available for employment
- estimating the cost of labour which determine its supply

The demand for labour - is a derived demand
The bargaining theory of wage - influence of trade unions on wages through collective bargaining
According to the theory - the level of wages in an industry depends on the bargaining strength of trade union concerned

During periods of full employment and good trade - trade union will be strong position
During depression and bad trade mass of unemployment - trade union will be weak position
Closed shop policy - a trade union may increase wages by restricting the supply of labour

Interest - price paid for the use of capital
- this “net interest” or pure interest

A good example pure interest - we get interest on government securities
- it may be regarded as net interest

Gross interest includes - besides net interest and reward for risk remuneration for inconvenience and payment for services

Gross interest cover - trade risk and personal risks
People prefer to have cash balances - known as liquidity preference
The abstinence or waiting theory of interest - Nassau senior
- Interest is the reward for abstaining from the immediate consumption ;of wealth

Marshall preformed the word - Waiting to abstinence
Agio theory of interest - Bohm- Bawerk
- Tells that as the present carries a premium (agio) over the future
- People prefer present consumption to future consumption

Time preference theory - Irving fisher is more or less the same as agio theory of interest
Interest - Equal to marginal productivity of capital
Marginal productivity theory of distribution

Supply of capital

The theory is based on the assumption

Classical economist believe

Equilibrium

Loanable funds theory or neo classical theory of interest

The term

saving

Bank credit

Classical theory

According to loanable funds theory

The classical theory

According to loanable funds theory

Liquidity preference theory or Keynesian theory of interest

According to Keynes

Transaction motive

Precautionary motive

Speculative motive

Keynes view

Keynesian theory
<table>
<thead>
<tr>
<th>Subject</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jacob vainer</td>
<td>Superior to the earlier theories of interest</td>
</tr>
<tr>
<td>The rate of interest is the return for</td>
<td>Without saving, there can be no liquidity to surrender</td>
</tr>
<tr>
<td>profit</td>
<td></td>
</tr>
<tr>
<td>Gross profit</td>
<td>Saving without liquidity</td>
</tr>
<tr>
<td></td>
<td>The reward for organization</td>
</tr>
<tr>
<td></td>
<td>Risk taking and uncertainty bearing are the main function of an entrepreneur</td>
</tr>
<tr>
<td>Net profit or pure profit</td>
<td>Includes besides net profit other things such as interest on capital</td>
</tr>
<tr>
<td>Net profit</td>
<td>Rent of land wage of management</td>
</tr>
<tr>
<td>Pure profit</td>
<td>Deduct all the above things from gross profit</td>
</tr>
<tr>
<td>The early economists</td>
<td>The reward for risk-taking and uncertainty-bearing main function of entrepreneur</td>
</tr>
<tr>
<td>Pure profit</td>
<td>Can be divided into normal profit and supernormal profit (excess profit)</td>
</tr>
<tr>
<td>The entrepreneur</td>
<td>Made no distinction between interest and profit</td>
</tr>
<tr>
<td>The entrepreneur</td>
<td>Because one or same person</td>
</tr>
<tr>
<td>Profit differ from other income three ways</td>
<td>Need not necessarily owner of capital</td>
</tr>
<tr>
<td></td>
<td>It is leadership rather than ownership</td>
</tr>
<tr>
<td>Market rate of interest $r_m$</td>
<td>First it is a residual income</td>
</tr>
<tr>
<td></td>
<td>Second there may be wide fluctuations in profits and sometimes, they may be negative</td>
</tr>
<tr>
<td></td>
<td>Third profits are uncertain</td>
</tr>
<tr>
<td>The aggregate demand for loanable funds</td>
<td>Is determined by the intersection of STM curve and ITC curve</td>
</tr>
<tr>
<td>Classical theory $r_n$</td>
<td>Is equal to the aggregate supply of loanable funds at this rate of interest</td>
</tr>
<tr>
<td>Nominal rate of interest</td>
<td>May be called the natural rate of interest</td>
</tr>
<tr>
<td></td>
<td>Is determined by the intersection of I and S curve</td>
</tr>
<tr>
<td>Rent theory of profit</td>
<td>Prof. walker</td>
</tr>
<tr>
<td></td>
<td>Is the author of the rent theory of profit</td>
</tr>
<tr>
<td></td>
<td>Profit are the rent of ability and they are similar to rent</td>
</tr>
<tr>
<td></td>
<td>Profits arise because of difference in ability</td>
</tr>
<tr>
<td></td>
<td>Called the rent of ability</td>
</tr>
<tr>
<td>The marginal productivity theory of profits</td>
<td>The general theory of distribution</td>
</tr>
<tr>
<td></td>
<td>Profit will equal to the value of marginal product organization</td>
</tr>
<tr>
<td>The wages theory of profit</td>
<td>Prof. Taussig</td>
</tr>
<tr>
<td></td>
<td>Profits are not different from wages</td>
</tr>
<tr>
<td></td>
<td>Are the wages of the entrepreneur for his special ability</td>
</tr>
</tbody>
</table>

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The dynamic theory of profits
- Are the wages of management
- Prof. clark
- Is the author of two theory
- According to him profits are the result of dynamic changes in society
Clark has defined
- Profits as the excess of the prices of goods over their costs
- Dynamic theory is one of the modern theories of profits
- The difference between a change that is foreseen a reasonable time is advance and one that is unforeseen
Innovation theory of profits
- Schumpeter
- Profits are the reward for innovations
An innovation
- Is something more than an invention
An invention
- Becomes an innovation only when it is applied to industrial processes
Innovation
- Introduction of new goods or new methods of production and opening new markets
The risk – bearing theory of profit
- Prof. Hawley
- Profit are the reward for are entrepreneur for risk taking
Risk taking
- Is an important function of an entrepreneur
Known risks
- Theft, fire can be insured against
Profit
- Are the reward for taking unknown risks
The uncertainty –bearing theory of profits
- Prof. knights
- Profit is reward for uncertainty – bearing
- Future is uncertain
Uncertainty –bearing
- Is an essential function of an entrepreneur
Unknown risks
- Example competition risks, risks of government action
- Cannot be insured against
- These risks be uncertain
Chapter 10  Simple Theory of Income Distribution

Classical Economists
- Adam Smith – 1723-90
- Thomas Malthus – 1766-1834
- Ricardo – 1772-1823
- Jean Baptist Say – 1767-1832
- Their thinking on the macro economic issues
- 18th Century and 19th Century

Ideas
- How free market would solve unemployment
- accepted until the great depression of 1930

The Great Depression
- Crippled the free enterprise economics of US and UK
- with high level of unemployment and glut in the market

J M Keynes 1883-1964 writing
- Revolutionized the macro economic thinking through his writing

Ideas of Keynes
- Government and their role in solving unemployment
- Under lies all modern macro economic theories

Classical theory of full unemployment
- The classical economist believed

The classical economist believed
- productive capacity of a country decides how much to be produced.
- it assumes the existence of full employment
- market makes it possible to sell everything that is produced

is based upon Say’s law.

Say’s law of market derived of the possibility - general over productivity or mass of unemployment

Deficiency of aggregate demand in a free economy

Say’s law of market – J.B. Say, a French Economist
- Propounded his law of market

This means
- Production of every good generates sufficient income
- to ensure that there is enough demand for the goods

The level of output
- the income created that equal amount of spending
- deficiency of aggregate demand cannot occur

Say rejected
- the view that there could be general over production and mass Unemployment
Assumption
- All incomes spent on consumption of goods and services
- No government activity
- Closed economy

Whatever is produced
- Represents the demand for another product
- Additional supply is additional demand

J.B. Say
- Analysis is carried on in terms of barter

Money-based economy
- More efficient than barter economy

Dis equilibrium
- Disappears by the operation of the self-adjusting market forces

Flexible
- Wage rate
- Rate of interest in the economy

Not possible
- Over production
- Unemployment

J.B. Say
- Law applicable only long-run

Keynes
- Clearly exposed the weakness of Say’s law.
- 1936
- Revolution in economic theory
- 1930 Great economic depression Say’s law was unacceptable

J.B. Say’s Law assume
- Always be full employment as a result of equality between aggregate demand and aggregate supply
- They cannot be deficiency of aggregate demand

Keynesian theory of income determination
Keynes
- Is considered to be the greatest economist of the 20th century
- Book “The General theory of employment Interest and money -1936”
- The book revolutionized macro economic thought

Keynesian economics
- Is called the Keynesian revolution

The central problem
- Is macro economics is the determination of income and employment of a nation as a whole

Modern economists
- Also call macro economics as the theory of income determination

Keynesian economics
- Itself can be called macro economics

Keynes
- Attacked the classical economics and rejected the Say’s law
Keynes believed that in the short-run

The level of income of economy depends on the level of employment

Higher the level of employment - higher will be the level of income

Total income depends on total employment

Total employment depends on effective demand

Effective demand depends on consumption expenditure and investment expenditure

Consumption depends on income and propensity to consume

Investment depends upon the marginal efficiency of capital and the rate of interest

The principle of effective demand occupies a key position in the Keynesian theory of employment

Effective demand is the ability and willingness to spend - aggregate demand curve and aggregate supply curve

Unemployment causes deficiency in aggregate demand

According to Keynes - effective demand is that point where the ADF and ASF are equal

ASF represent cost

ADF represent receipts

Cost must not exceed receipt

Entrepreneurs find receipts are less than their costs - they will stop offering employment of new workers

Receipts higher than costs - they will increase employment - increase profits

According to Keynes - the level of employment depends on total demand

Unemployment result - fall in total demand

Unemployment averted - increasing the effective demand
Aggregate demand - The total expenditure of an economy can be divided into categories of spending
- \( AD = C + I + G + (X - M) \)

Aggregate demand - is the total value of all planned expenditure of all buyers in the economy

One man’s expenditure - is another man’s income
- the total expenditure of the economy must be equivalent to the total income

Keynes gives - all attention to the ADF
- this aspect was neglected by economists for over 100 years

ASF - Assuming is Constant

Keynesian theory of employment - depends on aggregate demand which itself depends on two factors

Propensity to consume - Consumption function

Inducement to investment - Investment function

People spend - most of their income or commodities

Consumption function - explains the relationship between income and consumption
- link between two or more variables

Propensity to consume - the proportion of income spent on actual consumption at different levels of income

Keynes made it clear - there is a direct relation between income and consumption

Consumption function or propensity to consume - ratio that measures the functional relationship between income and consumption
- \( C = a + by \)
- \( C = 4 + 0.8y \)

Consumption function - generally described in terms of linear equation \( y = a + by \)
- ‘a’ is the amount of autonomous consumption
- slope ‘b’ is MPC
The rate of change in consumption - due to change in income depends on the MPC

+(Plus) sign indicates - as income increases consumption will also increases

The rate of increase in consumption - will be little less than that of the rate of increase in income

Keynes also made it clear - is the short-run
-the consumption function is stable

The straight line - consumption function CC is defined in terms of equation $C=4+0.8y$

Consumption - takes place even when income is zero

The level of initial income - is 4
-when income is zero is not affected by income

Consumption - which is not related to income is called as autonomous consumption

MPC - is the ratio of change in consumption to the change in income

$$MPC = \frac{\text{Change in consumption}}{\text{Change in income}}$$

(OR)

$$MPC = \frac{\Delta C}{\Delta Y}$$

Slope of the consumption function (OR) Any other straight line is measured - Slope Vertical change
Horizontal change

Propensity to consume - is stable in the short-run
-income how much will be spent depends on the slope of the curve

The consumption of an economy - depends upon the level of income

When the income of an economy rises - consumption also rises

People spend more - in an economy is relation to their income
-their MPC will be more

Keynesian law of consumption - implies the following three aspects
Concept of consumption function - plays a vital role in Keynesian income determination

Increase in income and increase in consumption - not at the same proportion

Consumption function - is positive but less than one

Saving function

The portion of the income not spent - on consumption is saving

Saving - is consumption forgone

Marginal propensity to save MPS - is the ratio of change in saving to change in income

\[ \text{MPC} = \frac{\Delta S}{\Delta Y} \]

With an increase income - if MPC tends to fall

\[ \text{MPC} + \text{MPS} = 1 \]

In an economy - people spend less of their additional income

- MPC will be less and the CC curve will be less steep

Autonomous consumption - which unrelated to income

- will be zero in the long run

Long run - the consumption purely depends upon income and the curve C starts from the origin

Aggregate demand consists - two parts namely consumption function and investment function

Consumption function - remains constant in the short run

Investment function - It means addition to the existing productive capacities

- the basis for future production

Investment - is the key structural component of total spending or aggregate spending

- Keynes means real investment and not financial investment

Investment - is the addition to real capital assets

Financial investment - purchase of bonds or shares

Fundamental in Keynesian theory - the distinction between consumption and investment

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Consumption - is a stable function of income

Keynes found that - Investment is an autonomous expenditure determined independently of the level of income

The world wide depression - 1930 was also caused by a fall in investment

According to Keynes - employment depends on investment

Employment fluctuate - on account of fluctuation in investment

Investment spending - determined by future profitability and rate of interest

The decision of invest - based on rate of interest and business confidence

The rate of interest - Stable in the short-run

Saving - it is directly connected with investment

Saving and investment - are the basic economic activities of an economy

Saving - is inevitable for capital formation and economic growth

The classical economists - believed that savings were automatically invested

Decision to save, decision to invest - same person classical believes

Keynes argued - saving and investment were made by different persons for different factors

Savings exceed investment - there would be deficiency of aggregate demand and general unemployment

Keynes thought - the gap between S and I filled by government intervention

Either - directly by increasing government expenditure

Indirectly - by actions influencing the supply of money - S = I

Rate of interest - business move which influence the current supply of money namely interest
The rate of interest is another major determinant that influence aggregate investment.

The Keynesian theory of employment starts with the rate of interest.

Interest affects investment and employment.

Keynes propounded his famous liquidity preference theory of interest.

The concept of liquidity preference is a remarkable contribution.

According to Keynes, the rate of interest is “the reward for parting with liquidity for a specified period.

Liquidity preference refers to the cash holding of the people.

Liquidity means cash.

Keynes give three motives for the liquidity preference of the people.

Transaction motive: day-to-day transaction people prefer to keep cash.

Precautionary motive: to meet unforeseen expenditure like sudden medical expense.

Speculative motive: to take advantage of market movements of prices of bonds, shares, etc.

Keynes speculative motive refers to the object of securing profit from knowing better than the market what the future will bring forth.

Liquidity preference depends on rate of interest.

Higher the rate of interest, lower will be the liquidity preference.

Lower the rate of interest, higher will be the liquidity preference.

According to Keynes, the liquidity preference is more stable.

Liquidity preference relates to the demand for money.

Liquidity preference demand side is determining the price of capital.

Supply of money which depends on government monetary policy, credit creation by commercial banks.
If the rate of interest - remains constant
- investment increases with an increase in the business confidence

According to Keynes - The level of income of a country in the short-run change as a result of change in employment

Full employment - prevails when there is equality between the aggregate demand and aggregate supply

Aggregate supply curve - represents equality of total income and output
- 45-degree line drawn from the origin representing AS curve
- 45-degree line divides the quadrant into two equal halves with equal distance

Aggregate demand represents - the total expenditure on consumption and investment

The aggregate demand curve - combination of consumption and investment function

The equilibrium level of output also - determines the equilibrium level of employment

Government increases its expenditure - shifts the entire AD line upward
- AD falls shifts the line downward and lowers equilibrium output

The ultimate determinant - of income and employment is the multiplies

Multiplier effect - any increase in investment increase income manifold

Concept of multiplier - expresses the relationship between an initial investment and the final increase in the GNP

The magnified or amplified effect - initial investment on income is called as the multiplier effect

Multiplier (K) = \[
\frac{\text{Change in equilibrium income}}{\text{Change in expenditure}}
\]

\[K = \frac{\Delta Y}{\Delta I}
\]

(OR)

\[K = \frac{1}{\text{MPS}}
\]

\[K = \frac{1}{1 - \text{MPC}}
\]

The classical economists view - that government was unproductive
Keynes rejected the idea and argued that government activities influence the level of economy.

Taxation and public spending can be used to achieve macro goals and economic stability.

Keynes proved that fiscal policy is more effective in recovering economies from depression.

Public expenditure can be used to increase effective demand during depression.

Role of government and fiscal policy become important in macroeconomic management.

According to the theory of multiplier, increase in investment generates manifold increase in income, increase in income increases consumption, and encourages more investment to meet the expanding demand. The level of investment depends upon the rate of change in income and the resultant change in consumption, this is what is called the principle of accelerator.

According to the accelerator, net investment is positively related to change in income.

The theory of multiplier states the effect of investment upon the level of income.

The principle of accelerator states that the effect of an increase in income upon the level of investment.

Keynes represented a monetary theory of interest, it is known as the liquidity preference theory of interest.

The essence of Keynesian theory is that liquidity preference is that the quantity of money along with liquidity preference determine the rate of interest.

Keynes made it clear that interest is not the reward for savings as assumed by the classical writers, the rate of interest is the “reward for parting with liquidity for a period.”
Chapter – 11 Monetary Policy

Modern Economy -is described as money economy

Barter -is the direct exchange of goods for goods

Barter -require double coincidence of wants

Barter -a person must have what the other person wants

Money -has overcome the difficulties of barter

Crowther -has defined money as “anything that is generally acceptable as a means of exchange and that at the sometime act as a measure and as a stock of value”

Prof. Walker has said -“Money is that which money does”

The most important functions of Money
- Money is a medium of exchange
  -Measure of value
  -Stock of value
  -Standard of deferred payments

Medium of exchange -the most important function of money

Measure of value -money acts as a common measure of value
  -it is a unit of a account and a standard of measurement

Price -is nothing but value expressed in term of money

Store of value -money it acts as a store of value

Standard of deferred payment -money is used as a standard for future payments

Money -to be used as a medium of exchange must be universally acceptable

Money -is one of the most fundamental invention of mankind
  -every branch of knowledge has its fundamental discovery

Crowther -in the whole commercial side of man’s social existence, money is the essential invention on which all the rest is based

Money -is indispensible in an economy whether it is capitalistic or socialistic

Price Mechanism -plays a vital role in capitalism

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Socialist economy - price system does not play so important a role

Reserve Bank of India - is the central bank of our country
- it manages the monetary system of our country

Money supply - in India have classified into four components
- they are M1, M2, M3, M4

\[ \text{M1} = \text{Currency with the public} \]
- it includes coins and currency notes + demand deposits of public
- M1 is also known as narrow money

\[ \text{M2} = \text{M1} + \text{post office savings deposits} \]

\[ \text{M3} = \text{M1} + \text{Time deposits of the public with the banks} \]
- M3 is also known as broad money

\[ \text{M4} = \text{M3} + \text{total post office deposits} \]

Reserve Money (RM) - may be considered as government money
- is the cash held by the public and the banks
- It is composed of
  - Reserve money (RM) = C + OD + CR

\[ \text{C} = \text{currency with the public in circulation} \]
\[ \text{OD} = \text{Other deposits of the public with RBI} \]
\[ \text{CR} = \text{Cash reserves of banks} \]

Cash reserve - Composed of two parts, they are
- 1. Cash reserves with banks themselves
- 2. Bankers deposit with RBI

Simple theory of money supply - states that supply of money is an increasing function of reserve money

Reserve money changes - supply of money also changes

The reserve money is also called - high powered money
- on account of its great influence on money supply

Fiat money - currency notes in circulation are normally referred to as fiat money
- one rupee notes issued the Government of India is fiat money

The notes issued by RBI - are usually to as bank notes
- they are in the nature of promissory notes
Basic goals of macroeconomic policy
- Full employment
- Price stability
- Rapid economic growth
- Balance of payments equilibrium
- Economic justice

The Government tries to achieve the goals through macroeconomic policy.

Macroeconomic policy can be broadly divided into monetary policy and fiscal policy.

Edward Shapiro - “Monetary policy is policy that employs the central bank’s control over the supply and cost of money as an instrument for achieving the objectives of economic policy”

Monetary policy - is credit control policy

The instrument of credit control can be broadly divided into two
- Quantitative credit control
- Selective credit control

Quantitative credit control - Bank rate
- Variation of cash reserve ratios
- Open market operation

Bank rate - is the minimum rate
- which the central bank of a country will lend money to all other banks

Increasing Bank rate - Bank rate goes up
- the rate charged other bank goes up
- the rate of interest goes up
- business men will be discouraged to borrow more money
- produces less investment

Variation of cash reserve ratio - the central bank of a country has the power to vary the cash reserve ratios

The ability of a commercial bank to create credit - deposits upon its cash reserves

During inflation - to check the sharp rise in commodity prices
- control credit

Open market operation - have not became a powerful weapon of credit control in our country
- largely used in India
- to assist the government in its borrowing operations rather than controlling credit
Selective credit control - can play as important role in an underdeveloped money market - planned economy also suitable

Reserve Bank of India - started applying the selective credit controls since 1955

The weapons of selective controls - fixing minimum margin lending - ceiling on the amount of credit for expansion - different rates of interest

The central banks will persuade the commercial bank - to follow certain policies through moral suasion

Monetary policy - is usually effective for controlling inflation

Keynes suggested - bold and dynamic fiscal policy to tackle the problems - mass unemployment - bad trade - falling price - deficiency in aggregate demand

1970 - world has been facing the problem of stagflation

Stagflation - marked by stagnation and lack of demand on the one land and inflation on the other

Stagflation - both monetary and fiscal policy ineffective

Complement to the monetary and fiscal policy - income policy and price by producer

Income policy - such as voluntary restraint on wages by employees

Transmission mechanism tells - that monetary policy affects income through the interest rate and investment

Money supply - affects income

RBI follow cheap money policy - reduce bank rate - this will result in a fall in the market rate of interest - investment will go up - this will increase employment and income

Increase in money supply - can also be caused by variation of cash reserve ratios and open market operation

Many modern economists argue - that this view of transmission mechanism is rather narrow
-they say that like investment, consumption may vary with the interest rate

The classical economists assumed that consumption is inversely related to the rate of interest. Fall interest rate will cause an increase in consumption.

Consumption - is a component of aggregate demand

The monetary economists further argue that monetary policy may also affect income by altering net private wealth.

Net private wealth - may be defined as society’s capital stock, money supply and government debt.

Consumption - is positively related to net private wealth.

If the nominal money supply increases, price level is constant the real money supply increases.

Component of net private wealth, wealth increases turn consumption increases.

Wealth and consumption increase without regard to changes in the rate of interest.

Monetary policy - is effective even in the liquidity trap.

According to Keynes, liquidity trap refers to a situation in which our increase in the money supply does not result in a fall in the rate of interest but merely in an addition to idle balances.

Dear money - when there is inflation in a country, the central bank tries to control following dear money policy. It refers to a phase or policy when interest rates are high.

Cheap money policy - during depression period followed which loans are available at low rates of interest to increase the supply of money stimulate investment.

Value of money - mean the purchasing power of money.

Purchasing power of money - depends upon the price level.

A general rise in the price level indicates a fall in the value of money.
A general fall in the price level - indicates a rise in the value of money.

The quality theory of money was formulated - by Irving Fisher.
- In its original form, the quality theory states: “prices always change in exact proportion to change in the quality of money.”

If the amount of money is doubled - price double.

If the amount of money is halved - prices fall to the half their original level.

The main point about the quantity theory - price level changes because of change in the quantity of money.

The quantity theory of money has been put forward in the form of an - equation known as the “Equation of exchange.”
- It is also known as Fisher’s equation.
- \( MV = PT \)
  
  (OR)
  
  \( P = \frac{MV}{T} \)

Velocity of circulation - refers to the number of times that each unit of money is used during a given period.
- If M is doubled, \( P \) will be doubled.

Large proportion of money consists - cheque, bills, other form of credit instruments.

Modified equation of exchange - \( PT = MV + MV \)

The quantity theory of money is a - statement of tendency.
- Indicates relationship between prices and the quantity of money.

Crowther - “Inflation is a state in which the value of money is falling i.e, prices are rising.”
- Too much money chases too few goods resulting in an abnormal increase of price level.

Shapiro - “A persistent and appreciable rise in the general level of prices.”

Harry Johnson - “Sustained rise in prices.”

Repressed inflation - these can be inflation even without a rise in the price level.
- Usually this happen during war period.
Whatever businessmen and producer – make huge profits

Demand – pull inflation -loosely described “too much money chasing too few goods”
-this refers to the situation where general price level rises
-demand for goods and services exceeds the supply available at the existing prices

Creeping or persistent inflation -since the end of World war II – 1945
-tendency for prices and wages to push one another upwards

Runway or Galloping or Hyper-Inflation -experienced in Germany after World war I
-Hungary and China after World war II
-in this situation prices rise to a very great extent at high speed
-high prices have to be paid even for cheap things
-money becomes quite worthless and new currency has to be introduced
-this situation is known as galloping inflation or hyper inflation

Cost – push inflation -induced by rising costs including wages
-so rising wages and other costs push up prices

Profit – push inflation -trade unions manage to push up wages
- generally during war and post war period there will be inflation

Inflation breeds inflation -it means that inflation leads to inflation

“Wages force up prices Price force up wages” –this is the inflationary spiral

“Deficit financing” -is another cause of inflation
-this applies particularly to under developed countries with planned economics

Inflationary trends -during the boom period of a trade cycle

Inflation took place in 1923 -Germany destroyed her economic system

Wage freeze -recommended to check inflation
-trade union will be requested not to ask for an increase in wage during a given period

Deflation -Crowther defined “state in which the value of money is rising i.e, price is falling”
Both inflation and deflation refer to the movement of prices.

Deflation -is the opposite of inflation

Inflation period -rising activity and employment

Deflation -they will be bad trade and unemployment
-prices fall faster than costs
-heavy losses businessmen and producer

Wage cut -is sometimes recommended as a remedy for depression

Rapid fall in the value of money, money become worthless –“flight from currency”

During depression -money may be cheaply low price, no investment, no employment, no income,
-no demand for goods
-situation has been described “poverty is the midst of plenty”
-the great depression of 1930 is a case in point

Inflation -is unjust

Deflation -is inexpedient

Roberston says that “money which is a source of a so many blessings to mankind, becomes also unless we can control it a source of peril and confusion”
Chapter 12  Fiscal Policy

Public finance - deals with budgeting the revenues and expenditure of government
               - deals with the financing of the state activities
               - discuss the financial operations of the public treasury

Fiscal economics - is another name for public finance

The early state - was a police state

The modern state - was a welfare state

According to Dalton - “Public finance is concerned with the income and expenditure of public authorities and with the adjustment of the one with the other”

Findlay Shirras says - “Public finance is the study of the principles underlying the spending and raising of funds by public authorities”

The quote Lutz - “Public finance deals with the provision, custody, and functions of resources needed for the conduct of public or government functions”

Public expenditure - modern government represents a welfare state
                   - it deals with principles of taxation

Raising of tax revenue and non tax revenue - is the subject matter or public revenue

Tax revenue deals - kinds of taxes and the impact and incidence of various taxes

Non-tax Revenue - commercial revenue
                 - profit earned by public sector enterprises

Administrative revenue - fees, license fees, special assessments
                       - gifts and grants

Public debt - borrowing by the government from the public is called public debt

Government borrow debt - internal and external

Internal debt - government borrows from the people commercial bank and the central bank
External debt - borrowing from international monetary institutions like IMF and World Bank and foreign countries

Financial administration - preparing the budget for the particular financial year

Methods of preparing presentation of the budget - execution, auditing, implementation, etc.

Federal finance - is a part of the study of public finance

Federal form of government - central, state and local government

Tax - is one of the important sources of public revenue
-is a compulsory charge (or) payment levied by the government on an individual or corporation
-element of compulsion is involved in taxation
-there is no direct give and take relationship between tax/rates and the government

Definition, According to Prof. Seligman - “A tax is a compulsory contribution from the person to the state to defray the expenditure incurred in the common interest of all without any reference to the special benefits conferred

According to Dalton - “A tax is a compulsory contribution imposed by the public authority irrespective of the exact amount of service rendered to the taxpayer, in return for which no specific and direct quid pro quo is rendered to the payer

Canons of taxation - are considered as fundamental principles of taxation

Adam smith - laid down the canon of taxation

Canon of equity - this canon is also called the “ability to pay” principle of taxation
-it means that taxes should be imposed according to the capacity of the tax payer
-poor should be less and rich should be taxed more
-this canon involves the principle of justice
-cost of running the government should be equally born by all

Canon of certainty - every tax payer should know the amount of tax to be paid, whom
to be paid, where to be paid
-rate of tax to make investment decision

Canon of convenience
- and less burdensome to the taxpayer
- income tax collected at source
- sales tax collected at the time of sales
- land tax collected after harvest

Canon of economy
-signifies that the cost of collecting the revenue should be kept at the
at the minimum possible level
-administrative expenditure to be kept at a minimum

Direct tax, According to Dalton
- “A direct tax is one which is really paid by a person on whom it is imposed whereas an indirect tax, through
imposed
-on a person, is partly or wholly paid by another”

Direct tax
-the taxpayer who pays a direct tax
-is also the tax bearer
-are collected from the public directly
-these taxes are imposed on and collected from the same person
-one cannot evade paying the tax if it is imposed on him

Example
-Income tax, wealth tax, corporate tax, gift tax, estate duty, expenditure tax

Indirect taxes
-imposed on commodities and services are termed as indirect
taxes
-the taxpayer and the tax bearer are different persons
-there is a chance for shifting the burden of indirect taxes
-the incidence is upon the person who ultimately pays it

Example
-excise duties, customs duties, sales taxes

The classification of direct taxes and indirect taxes based on

Indirect tax
-tax is initially paid by person but ultimately the burden of the tax
is fully or partially borne by another person
-there is a possibility of transfer of burden

Direct taxes
-are paid by the rich

Indirect taxes
-are paid by the poor
The financial system of India is federal in character.

Direct taxes can be also be classified on the basis of the degree of progressiveness.

Ability of the people to pay a tax is measured on the basis of property, income, size of the family and consumption.

The ability to pay in practice implies tax base and tax rate.

Tax base denotes the income, property and expenditure on the basis of which ability to pay the tax measured.

Rate structure indicates equalization of burden of taxation.

Tax rate is the percentage of tax levied per unit of tax base.

The total amount of tax is equal to the tax base multiplied by the tax rate.

Proportional tax tax rate remains constant regardless of whether the tax base is large or small. It means uniform tax rate is imposed on the rich as well as the poor. The tax paid by the people is fixed proportion to their income and wealth and other tax bases.

Progressive tax the tax rate increases as the tax base increases. Increase in income, a taxpayers has to pay a higher tax. Income slab increases, there is increase in the rate of tax.

Regressive tax when the tax liability on income falls with the increase in the tax payer’s income. The tax rate decreases as the tax base increases. The poorer sections of the society are taxed at higher rates than the richer sections. This tax is not just (or) equitable.

Degressive tax is a blend of progressive tax and proportional tax. Uniform rate is charged. Rate of tax does not increase in the same proportion as the increase in income. The higher income groups make less sacrifice.
the lower income groups higher sacrifice

**Budget**
- Government’s revenue and expenditure decision are presented in the budget
- an essential and important element of planning and development
- provide the specific development objective to be pursued and the required policy direction
- they are necessary because income and expenditure do not occur simultaneously

**Budget proposed**
- the annual financial statement of the estimate receipts and expenditure of the government

**Financial year**
- April 1 to March 31 of the next year

**The term budget**
- is derived from the French word “Bougette”
- it means “small bag”

**Budget**
- prepare every financial year

**Government budget**
- indicates the probable income and expenditure of the government

**Budget indicates**
- the financial policies taxation measures investment opportunities extent of saving utilization of resources mobilization of capital

**Prof. Dimock says**
- “A budget is a balanced estimate of expenditures and receipts for a given period of time, record of past performance, a method of current control and a projection of future plans”

**To quote Gladstone**
- “Budgets are not merely matters of arithmetic but in a thousand ways go to the root of prosperity of individuals and relation of classes and the strength of the Kingdom”

**Kinds of Budget**
- Balanced budget and Unbalanced budget

**Balanced budget**
- over a period of time, revenue does not fall short of expenditure
- government budget is said to balanced when its tax revenue and expenditure are equal

**Unbalanced budget**
- over a period of time revenue exceeds expenditure (OR) expenditure exceeds revenue
- government income or tax revenue and expenditure are not equal
<table>
<thead>
<tr>
<th><strong>Surplus budget</strong></th>
<th>-when there is an excess of income over expenditure</th>
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<tr>
<td><strong>Deficit budget</strong></td>
<td>-when there is an excess of expenditure over income</td>
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</table>
| **Classical economists** | -advocated balanced budget  
| | -it is not always helpful in achieving and sustaining economic growth |
| **Modern economists** | -argue that an unbalanced budget  
| | -it is very useful for achieving and maintaining economic stability |
| **Budget** | -most important constituent of the financial administration |
| **Preparation of the budget** | -is one of the main operation of budgeting  
| | -to make a statement of estimated receipts and expenditure |
| **Government budget comprises** | -revenue budget and capital budget |
| **Revenue budget** | -consists of revenue receipts of the government and the expenditure met from these revenue |
| **Expenditure which do not result in creation of assets are called** | -revenue expenditure  
| | -example: current revenue and current expenditure  
| | -interest charges on debt  
| | -other non-developmental expenditure |
| **Capital Budget expenditure** | -Majority of the government expenditure form the capital expenditure |
| **Capital receipts** | -are loans raised by government from the public which are called market loans  
| | -borrowing from the RBI  
| | -sales of treasury bills  
| | -loans received from foreign government |
| **Capital payments** | -are expenditure on assets creation such as land, buildings, machinery, equipments, investment, other development expenditure |
### Performance budgeting

- the process of fund allocation of governments in various countries has been changed from traditional expenditure budgeting to new forms of rationalistic budgeting, such as:
  - performance budgeting
  - programme budgeting
  - zero based budgeting

### Performance budget

- various activities of the government are identified in the budget both in financial and physical terms
- the relationship between input and output
- performance in relation to cost
- reflect the cost of running of government

### A cost-benefit approach

- is employed which facilities meaningful and purposeful allocation of funds

### Method of budget technique

- promotes cost consciousness as well as cost efficiency and suggests corrections

### Traditional technique of budget

- the previous year’s cost level is taken as the base for current year budget

### Zero based budgeting

- every year is considered as new year
- providing a connecting link between the previous year and the current year
- the past performance and programmes are not taken into account
- the budget is viewed as entirely a fresh
- from zero bases
- evaluates and priorities the programmes of action at different levels

### Fiscal policy

- set of principles and decisions of a government regarding the level of public expenditure

**Arthur Smithies points out**

- “Fiscal policy is a policy under which the government uses its expenditure and revenue programmes to produce desirable effects and avoid undesirable effects on the national income, production and employment”

### Keynes

- General theory of employment, Interest and money

### Taxation

- can be a most effective means of increasing the total quantum of saving and investments in any economy

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-where the propensity to consume is normally high

Rebates, relief and liberal depreciation allowances -may be granted to boost the private sector

The fiscal policy -as an instrument for dealing with inflationary or deflationary situations

In India -through the direction of the public expenditure rather than taxation more effective action can be taken to remove deflationary spiral

Redistribution of income -in favour of the poorer sections of the society is essential

Fiscal policy -can affect total spending in two ways

First -direct change in to total spending government increase or decrease own expenditure

Second -increasing or decreasing private spending its own tax revenue

The fiscal policy -to achieve full employment and to maintain stable price consumption -tax instrument to encourage investment and discourage consumption

Capital formation -increase by reducing the high income tax on personal income

Providing social and economic over heads -increase employment

Local and public works of community -more development labour and less capital per head

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