



12<sup>th</sup>  
**ECONOMICS GUIDE**  
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# Chapter – 1

## INTRODUCTION TO MACRO ECONOMICS

### Two Marks

#### 1. Define Macro Economics.

##### Macro Economics – Definition:

- ✘ The word 'Macro' is derived from the Greek word 'Makros' meaning 'large'.
- ✘ Hence, Macro Economics is the study of the economy as a whole.

#### 2. Define the term 'Inflation'.

##### Inflation – Definition:

- ✘ Inflation refers to steady increase in general price level.
- ✘ Estimating the general price level by constructing various price index numbers such as Wholesale Price Index, Consumer Price Index, etc, are needed.

#### 3. What is meant by an 'Economy'?

##### Economy – Meaning:

- ✘ An economy is referred to any system or area where economic activities are carried out.
- ✘ Each economy has its own character.
- ✘ Accordingly, the functions or activities also vary.
- ✘ An economy, the fundamental economic activities are production and consumption.

#### 4. Classify the economics based on status of development.

##### Classification of the economics based on Status of Development:

- Developed,
- Underdeveloped,
- Undeveloped and developing economies.

#### 5. Define 'Economic Model'.

##### 'Economic Model':

- ✘ A model is a simplified representation of real situation.
- ✘ Economists use models to describe economic activities, their relationships and their behaviour.
- ✘ A model is an explanation of how the economy, or part of the economy, works.
- ✘ Most economic models are built with mathematics, graphs and equations, and attempt to explain relationships between economic variables.

#### 6. What do you mean by Capitalism?

##### Capitalism – Meaning:

- ✘ Adam Smith is the 'Father of Capitalism'.
- ✘ In capitalism, there is total freedom and private ownership of means of production.

#### 7. 'Circular Flow of Income' - Define.

##### 'Circular Flow of Income' – Definition:

- ✘ The circular flow of income is a model of an economy - showing connections between different sectors of an economy.
- ✘ Factors of production between - economic agents such as firms, households, government and nations.

## Chapter – 2 - NATIONAL INCOME

### 1. Define National Income?

#### National Income – Definition:

- ♣ National Income means the total money value of all final goods and services produced in a country during a particular period of time (one year).

### 2. Write the formula for calculating GNP.

#### Formula for calculating GNP

- ✎ GNP is the total measure of the flow of final goods and services at market value resulting from current production in a country during a year, including net income from abroad.
- ✎ GNP at Market Prices = GDP at Market Prices + Net Factor income from Abroad.
- ✎  $GNP = (C + I + G + (X - M) + (R - P))$ .

### 3. What is the difference between NNP and NDP?

#### Difference between NNP and NDP

NNP:	NDP:
1. NNP refers to the market value of output. 2. NNP at factor cost is the total of income payment made to factors of production.	1. NDP is the value of net output of the economy during the year 2. The country's capital equipment wears out or becomes outdated each year during the production process.

### 4. Trace the relationship between GNP and NNP?

#### Relationship between GNP and NNP

GNP	NNP
1. Total money value of final goods and services produced in a country during a particular year (one year).	1. Total money value of final goods and services produced in a country in a country during a particular year (one year).

### 5. What do you mean by the term 'Personal Income'?

#### 'Personal Income' – Meaning:

- ♣ Personal income is the total income received by the individuals of a country from all sources before payment of direct taxes in a year.

### 6. Define GDP deflator.

#### GDP deflator – Definition:

- ✎ GDP deflator is an index of price changes of goods and services.
- ✎  $GDP\ deflator = \frac{Nominal\ GDP}{Real\ GDP} \times 100$
- ✎ Real GDP

### 7. Why is self consumption difficult in measuring national income?

#### Self consumption difficult in measuring national income because,

- ♣ Farmers keep a large portion of food and other goods produced on the farm for self consumption.
- ♣ The problem is whether that part of the produce which is not sold in the market can be included in national income or not.

## Chapter – 3

### THEORIES OF EMPLOYMENT AND INCOME

#### 1. Give the meaning of full employment?

##### Meaning of Full Employment

- ✘ Keynes defines full employment as the absence of involuntary unemployment.
- ✘ Full employment means that persons who are willing to work and able to work must have employment or a job.

#### 2. What is the main feature of rural unemployment ?

##### The major feature of rural unemployment is the existence of unemployment in the form of -

- \* Disguised unemployment
- \* Seasonal unemployment.

#### 3. Give short note on frictional unemployment. (Frictional Unemployment /Temporary Unemployment)

##### Short note on Frictional Unemployment

- ✘ Frictional unemployment arises due to imbalance between supply of labour and demand for labour.
- ✘ This is because of immobility of labour, lack of necessary skills, break down of machinery, shortage of raw materials etc.

#### 4. Give reasons for labour retrenchment at present situation.

##### Reasons for labour retrenchment at present situation

- ✘ Now a days, Invention and Innovations leads to the adoption of new techniques there by the existing workers are retrenched
- ✘ Labour saving devices are responsible for technological unemployment.

#### 5. List out the assumptions of Say's law.

##### Assumptions of Say's law

1. Full employment.
2. There will be a perfect competition in labour and product market.
3. There is wage-price flexibility.
4. Money acts only as a medium of exchange.

#### 6. What is effective demand ?

##### Effective Demand

- ✘ Effective demand denotes money actually spent by the people on products of industry.
- ✘  $ED=Y=C+I = \text{Output} = \text{Employment}$

#### 7. What are the components of aggregate supply ?

##### The components of aggregate supply are :

- ✘ Aggregate (desired) consumption expenditure (C)
- ✘ Aggregate (desired) private savings (S)
- ✘ Net tax payments (T)
- ✘ Personal (desired) transfer payments to the foreigners (Rf)
- ✘  $\text{Aggregate Supply} = C + S + T + Rf = \text{Aggregate income generated in the economy.}$

## Chapter – 4

### CONSUMPTION AND INVESTMENT FUNCTIONS

#### 1. What is consumption function?

##### Consumption Function:

- ✘ Consumption function is a “Functional relationship between two aggregates viz., total consumption and gross national income”.
- ✘ It is represented as  $C = f(Y)$   
where,  
C = Consumption  
Y = Income  
f = Function

#### 2. What do you mean by propensity to consume?

##### Meaning of propensity to consume:

- ✘ It is the relationship between income and consumption.
- ✘ When income increases consumption also increases.

#### 3. Define average propensity to consume (APC).

##### Average propensity to consume (APC) – Definition:

- ✘ The average propensity to consume is the ratio of consumption expenditure to any particular level of Income.
- ✘  $APC = C/Y$   
Where, C = Consumption Y = Income

#### 4. Define marginal propensity to consume (MPC).

##### Marginal Propensity to Consume (MPC) – Definition:

- ✘ The Marginal propensity to consume may be defined as the ratio of the change in the consumption to the change in income.
- ✘  $MPC = \Delta Y / \Delta C$   
Where,  
 $\Delta C$  = Change in Consumption  
 $\Delta Y$  = Change in Income  
MPC is positive but less than unity

#### 5. What do you mean by propensity to save?

##### Meaning of Propensity to Save:

- ✘ Propensity to save is a “functional relationship between two aggregates viz
- ✘ Total Savings and Gross National Income.
- ✘ The propensity to save is merely the propensity not to consume.

#### 6. Define average propensity to save (APS).

##### Average Propensity to Save (APS)

- ✘ The average propensity to save is the ratio of saving to consume.
- ✘ In other words, it is the ratio of total savings to total income.
- ✘  $APS = S/Y$   
Where, S = Saving, Y = Income

#### 7. Define Marginal Propensity to Save (MPS).

##### Marginal Propensity to Save (MPS) – Definition:

- ✘ Marginal Propensity to Save is the ratio of change in saving to a change in income.
- ✘ MPS is obtained by dividing change in savings by change in income.

$$MPS = \Delta S / \Delta Y$$

Where,  $\Delta S$  = Change in Saving,  $\Delta Y$  = Change in Income

### 8. Define Multiplier.

#### Multiplier – Definition:

- ✎ The multiplier is defined as the ratio of the change in national income to change in Investment.
- ✎ Multiplier(K) =  $\Delta Y / \Delta I$
- ✎ Multiplier is also called as investment multiplier.

### 9. Define Accelerator.

#### Accelerator – Definition:

- ✎ Accelerator is the numerical value of the relation between an increase in consumption and the resulting increase in investment.
  - ✎ Accelerator ( $\beta$ ) =  $\Delta I / \Delta C$
- Where,  $\Delta I$  = Change in investment outlays (Say 100),  $\Delta C$  = Change in consumption demand (Say 50).

## Chapter – 5 MONETARY ECONOMICS

### 1. Define Money?

#### Money – Definition:

- ✓ “Money is, what money does” – Walker.
- ✓ “Money can be anything that is generally acceptable as a means of exchange and at the same time acts as a measure and a store of value”. – Crowther

### 2. What is barter?

#### Barter – Meaning:

- ✓ Before money was invented, exchange took place by Barter, that is, commodities and services were directly exchanged for other commodities and services.
- ✓ Such exchange of goods for goods was known as “Barter Exchange” or “Barter System”.

### 3. What is commodity money?

#### Commodity Money – Meaning:

- ✓ After the barter system and commodity money system, modern money systems evolved.
- ✓ Among these, metallic standard is the premier one. ,
- ✓ Under metallic standard, some kind of metal either gold or silver is used to determine the standard value of the money and currency.

### 4. What is gold standard?

#### Gold Standard – Meaning:

- ✓ Gold Standard is a system in which the value of the monetary unit or the standard currency is directly linked with gold.
- ✓ The monetary unit is defined in terms of a certain weight of gold.
- ✓ The purchasing power of a unit of money is maintained equal to the value of a fixed weight of gold.

### 5. What is plastic money? Give example?

#### Plastic money – Meaning:

- ✓ The latest type of money is plastic money.
- ✓ Plastic money is one of the most evolved forms of financial products.
- ✓ Plastic money is an alternative to the cash or the standard “money”.
- ✓ Plastic money is a term that is used predominantly in reference to the hard plastic cards used every day in place of actual bank notes.

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- ✓ **Examples:** Cash cards, Credit cards, Debit cards, Pre-paid Cash cards, Store cards, Forex cards and Smart cards.

## 6. Define inflation.

### Inflation – Definition:

- ✎ Inflation is a consistent and appreciable rise in the general price level.
- ✎ “Too much of Money chasing too few goods” - **Coulbourn.**
- ✎ “A state of abnormal increase in the quantity of purchasing power” – **Gregorye.**

## 7. What is Stagflation?

### Stagflation – Meaning:

- ✓ Stagflation is a combination of stagnant economic growth, high unemployment and high inflation.

# Chapter – 6 - BANKING

## 1. Define Commercial banks.

### Commercial Banks – Definition:

- ✎ Commercial bank refers to a bank, or a division of a large bank, which more specifically deals with deposit and loan services provided to corporations or large/ middle-sized business.

## 2. What is credit creation?

### Credit Creation – Meaning:

- \* Credit Creation means the multiplication of loans and advances.
- \* Commercial banks receive deposits from the public and use these deposits to give loans.

## 3. Define Central bank.

### Central bank - Definition

- ✎ A central bank, reserve bank, or monetary authority is an institution that
- ✎ manages a state’s currency, money supply, and interest rates.
- ✎ Central banks also usually oversee the commercial banking system of their respective countries.

## 4. Distinguish between CRR and SLR.

### Distinguish between CRR and SLR

BASIS FOR COMPARISON	CRR	SLR
1. Meaning	1. CRR is the percentage of money which the bank has to keep with the Central Bank of India in the form of cash.	1. The bank has to keep a certain percentage of their Net Time and Demand Liabilities in the form of liquid assets as specified by RBI.
2. Form	2. Cash.	2. Cash and other assets like gold and government securities viz.

## 5. Write the meaning of Open market operations.

### Meaning of Open market operations:

- \* In narrow sense, the Central Bank starts the purchase and sale of Government securities in the money market.
- \* In Broad Sense, the Central Bank purchases and sells not only Government securities but also other proper eligible securities like bills and securities of private concerns.

**6. What is rationing of credit?****Rationing of Credit – Meaning:**

- \* This is the oldest method of credit control.
- \* It aims to control and regulate the purposes for which credit is granted by commercial banks.

**7. Mention the functions of agriculture credit department.****Functions of Agriculture Credit Department:**

- ✎ To maintain an expert staff to study all questions on agricultural credit;
- ✎ To provide expert advice to Central and State Government, State Co-operative Banks and other banking activities.

**Chapter – 7 - INTERNATIONAL ECONOMICS****1. What is International Economics?****International Economics:**

- ✎ International Economics is that branch of economics which is concerned with the exchange of goods and services between two or more countries.

**2. Define international trade.****International Trade:**

- ✎ International trade refers to the trade or exchange of goods and services between two or more countries.
- ✎ In other words, it is a trade among different countries or trade across political boundaries.

**3. State any two merits of trade.****Merits of Trade**

- ✎ Trade is one of the powerful forces of economic integration.
- ✎ It brings foreign exchange to our country.
- ✎ Equitable distribution of scarce materials.

**4. What is the main difference between Adam Smith and Ricardo with regard to the emergence of foreign trade?****Main difference between Adam Smith and Ricardo with regard to the emergence of foreign trade:**

- \* According to Adam Smith, the basis of international trade was absolute cost advantage.
- \* According to Ricardo a country can gain from trade when it produces at relatively lower costs.

**5. Define Terms of Trade.****Trade – Definition:**

- ✎ It is the rate at which the goods of one country are exchanged for goods of another country.
- ✎ It is expressed as the relation between export prices and import prices.

**6. What do you mean by balance of payments?****Balance of Payments - Meaning:**

- ✎ Balance of Payment is a systematic record of a country's economic and financial transactions with the rest of the world over a period of time.

**7. What is meant by Exchange Rate?****Exchange Rate – Meaning:**

- ✎ Exchange Rate is the external value of domestic currency.
- ✎ Thus, exchange rate may be defined as the price paid in the home currency (say Rs.75) for a unit of foreign currency (say 1 US \$).



## Chapter – 8

### INTERNATIONAL ECONOMIC ORGANISATIONS

#### 1. Write the meaning of Special Drawing Rights.

##### Special Drawing rights – Meaning:

- ✎ Special Drawing Rights (SDRs) is otherwise called 'Paper Gold'.
- ✎ They are a form of international reserves created by the IMF in 1969 to solve the problem of international liquidity.

#### 2. Mention any two objectives of ASEAN.

##### Objectives of ASEAN:

- To accelerate the economic growth, social progress and cultural development in the region.
- To serve as a centre of information and as an ASEAN link with other international organizations.

#### 3. Point out any two ways in which IBRD lends to member countries.

##### Two ways in which IBRD lends to member countries:

- i) Loans out of its own fund, ii) Loans out of borrowed capital

#### 4. Define Common Market.

##### Common Market – Definition:

- ✎ A group formed by countries within a geographical area to promote duty free trade and free movement of labour and capital among its members.

#### 5. What is Free trade area?

##### Free Trade Area – Meaning:

- A region encompassing a trade bloc whose member countries have signed a Free Trade Agreement.
- These agreements involve cooperation between at least two countries to reduce trade barriers.

#### 6. When and where was SAARC Secretariat established?

##### SAARC Secretariat Established:

- The SAARC Secretariat was established in Kathmandu (Nepal) on 16th January 1987.

#### 7. Specify any two affiliates of World Bank Group.

##### Affiliates of World Bank Group:

- 1) International Development Association.(IDA)
- 2) International Finance corporation.(IFC)

## Chapter – 9 - FISCAL ECONOMICS

#### 1. Define public finance.

##### Public Finance – Definition:

- ✎ "Public finance is an investigation into the nature and principles of the state revenue and expenditure". - Adam Smith

#### 2. What is public revenue?

##### Public Revenue – Meaning:

- ✎ Public revenue deals with the methods of raising public revenue.
- ✎ For (e.g.) Tax and Non Tax principles and rate of taxation.

#### 3. Differentiate tax and fee.

##### Differentiation of Tax and Fee:

- ✎ Tax is a compulsory payment by the citizens to the government to meet the public expenditure.
- ✎ A fee is charged by public authorities for rendering a service to the citizens.

**4. Write a short note on zero based budget.****Short note on Zero Based Budget:**

- ✎ Zero base - budgeting involves fresh evaluation of expenditure in the government budget Assuming it as a new item.
- ✎ Indian Government presented ZBB first in 1987 - 88.

**5. Give two examples for direct tax.****Examples for Direct Tax are,**

- (i) Income Tax
- (ii) Wealth Tax.

**6. What are the components of GST?****The component of GST are of 3 types. They are,**

- (i) CGST
- (ii) SGST
- (iii) IGST

**7. What do you mean by public debt?****Meaning of Public Debt:**

- ✎ Public debt deals with the methods of raising loans from internal and external sources.
- ✎ The burden, effects and redemption of public debt fall under this head.

**Chapter – 10 - ENVIRONMENTAL ECONOMICS****1. State the meaning of environment.****Environment meaning:**

- ✎ “All the conditions, circumstances, and influences surrounding and affecting the development of an organism or group of organisms”.

**2. What do you mean by ecosystem?****Meaning of Ecosystem:**

- ✎ An ecosystem includes all living things (plants, animals and organisms) in a given area, interacting with each other, and also with their non-living environments (weather, earth, sun, soil, climate, atmosphere).

**3. Mention the countries where per capita carbon dioxide emission is the highest in the world.****The countries where per capita carbon dioxide emission is the highest in the world:**

<u>Countries</u>	<u>Per capita CO2 emission</u>
1. Saudi Arabia	16.85
2. Australia	15.83
3. United states	15.53
4. Canada	15.32
5. South Korea	11.58

**4. What are environmental goods? Give examples.****Environmental goods:**

- ✎ Environmental goods are typically non-market goods.
- ✎ **Examples:** Clear air, clean water, landscape, green transport infrastructure, public parks, urban parks, rivers, mountains, forests and beaches.

**5. What are the remedial measures to control noise pollution?****Remedial measures to control noise pollution**

- 1) Use of noise barriers.
- 2) Newer roadways for surface transport.
- 3) Traffic control
- 4) Regulating times for heavy vehicles.

**6. Define Global warming.****Global warming – Definition:**

- ✎ Global warming is the current increase in temperature of the earth's surface (both land and water) as well as its atmosphere.

**7. Specify the meaning of seed ball.****Seed Ball Meaning:**

- ✎ A seed ball (or seed bomb) is a seed that has been wrapped in soil materials, usually a mixture of clay and compost, and then dried.
- ✎ Seed balls are an easy and sustainable way to cultivate plants that provide a larger window of time when the sowing can occur.

## Chapter – 11

### ECONOMICS OF DEVELOPMENT AND PLANNING

**1. Define Economic Development****Economic Development – Definition:**

- ✎ “Development is a multidimensional process involving major changes in social, structures, popular attitudes and national institutional as well as the acceleration of growth the reduction of inequality and eradication of absolute poverty” - **Michal P.Todaro**

(or)

- ✎ **From the welfare perspective**, economic development is defined as sustained improvement in health, literacy and standard of living.

**2. Mention the indicators of development.****Indicators of development**

- Gross National Product (GNP)
- GNP per capita
- Welfare
- Social Indicators - health, education, food, water, sanitation and housing facilities

**3. Distinguish between economic growth and development****Distinguish between economic growth and development**

Economic Growth	Economic Development
Deals with the problems of Developed countries Change is gradual and steady Narrow.	Deals with the problems of UDCs change in discontinuous and spontaneous Wider concept Development = Growth+ Change.

**4. What is GNP?****GNP – Meaning:**

- GNP is the total market value of all final goods and services produced within a nation in a particular year, plus income earned by its citizens minus income of non-residents located in that country.

**5. Define Economic Planning.**

✎ According to Robbins - economic planning is collective control or suppression of private activities of production and exchange.

(or)

✎ According to Dalton - economic planning in the widest sense is the deliberate direction by persons incharge of large resources of economic activity towards chosen ends.

**6. What are the social indicators of economic development?**

**Social indicators of economic development:**

✎ The basic needs for development such as health, education, sanitation, water, food etc.

**7. Write a short note on NITI Aayog**

**Short note on NITI Aayog**

✎ NITI Aayog was formed on 1st January, 2015 through a union cabinet resolution.

✎ NITI Aayog is a policy think tank.

✎ It replaced the Planning Commission from 13th August, 2014.

## Chapter – 12

### INTRODUCTION TO STATISTICAL METHODS AND ECONOMETRICS

**1. What is Statistics?**

**Statistics – Meaning:**

✎ Statistics as a science of estimates and probabilities.

✎ Statistics may be defined as the collection, organizations, presentation, analysis and interpretation of numerical data

**2. What are the kinds of Statistics?**

**There are two major types of statistics.**

1) Descriptive statistics

2) Inferential statistics

**3. What do you mean by Inferential Statistics?**

**Inferential Statistics – Meaning:**

• The branch of statistics concerned with using sample data to make an inference about a population of data is called Inferential Statistics.

**4. What are the kinds of data?**

**Kinds of Data**

→ **BASED ON CHARACTERISTICS**

i) Quantitative data

a) Primary data b) Secondary data

ii) Qualitative data

a) Primary data b) Secondary data

→ **BASED ON SOURCES**

i) Primary data

ii) Secondary data

**5. Define Correlation.****Correlation – Definition:**

- Correlation is a statistical device that helps to analyze the co-variation of two more variables,
- Sir Francis Galton is responsible for the calculation of correlation coefficient.

**6. Define Regression.****Regression meaning:**

- Regression means going back and it is a mathematical measure showing the average relationship between two variables

**7. What is Econometrics?****“Econometrics” – Meaning:**

- “Econometrics may be defined as the social science in which the tools of economic theory, mathematics and statistical inference are applied to the analysis of economic phenomena”.

## Chapter – 1 - INTRODUCTION TO MACRO ECONOMICS

### Three Marks

**1. State the importance of Macro Economics.**

**Importance of Macro Economics**

- A. Helps to frame suitable solutions to the basic problems in an economy.
- B. It helps to use many scientific investigations to understand the reality.
- C. It helps to make comparison and analysis of economic indicators.

**2. Describe different types of economic systems.**

**The different types of economic systems are**

**A. Capitalistic Economy:**

- ♣ It is the system where the means of production are privately owned and market determines the economic activities
- ♣ Ex. USA, West Germany, Australia etc.

**B. Socialistic Economy :**

- ♣ It is the system where the major economic activities are owned and controlled by the government, Social welfare is a main motive of it.
- ♣ Ex. Russia, China, Poland etc.

**C. Mixed Economy:**

- ♣ In a mixed economic system, both private and public sectors coexist and work together towards economic development.
- ♣ Ex.: India, England, France, etc.

**3. Outline the major merits of capitalism.**

**Major merits of Capitalism.**

**1. Automatic working:**

- ♣ The economy works automatically without any government intervention

**2. Efficient use of resources:**

- ♣ All resources are put into optimum use.

**3. Incentives for hard work:**

- ♣ Hard work is encouraged and entrepreneurs get more profit for more efficiency.

**4. Indicate the demerits of Socialism.**

**Demerits of Socialism**

**1. Red-tapism and bureaucracy:**

- ♣ Work cannot be started easily for its lengthy process.

**2. Absence of Incentive:**

- ♣ This system does not provide any incentive for efficiency. So, productivity also suffers.

**3. Limited freedom of choice:**

- ♣ consumers do not enjoy freedom of choice over consumption of goods and services

### 5. Enumerate the features of mixed economy.

#### Features of Mixed Economy

##### Ownership of property and means of production:

- ♣ Both the public and private have rights over property and means of production.

##### Co-existence of public and Private sector:

- ♣ public sector aims at social welfare whereas private sectors aims at for profits.

##### Economic plan:

- ♣ National plans are drawn up by the government and both public and private sectors abide.

### 6. Distinguish between Capitalism and Globalization.

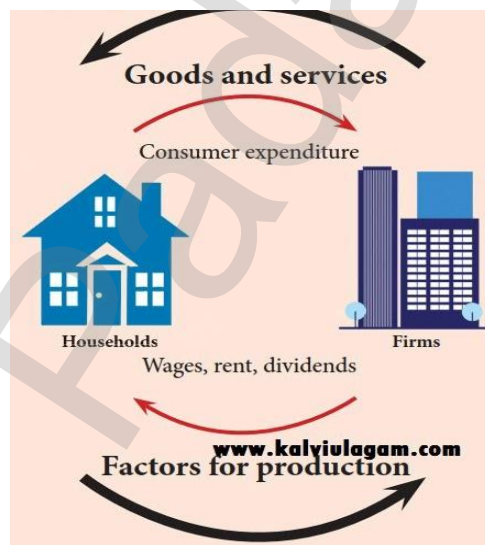
#### Distinguish between Capitalism and Globalization

<u>Capitalism</u>	<u>Globalization</u>
<ul style="list-style-type: none"> <li>♣ It is the system where the means of production are privately owned and market determines the economic activities.</li> </ul>	<ul style="list-style-type: none"> <li>♣ It is an economic system where the economic activities of a nation are interconnected and interdependent on each other.</li> </ul>

### 7. Briefly explain the two sector circular flow model.

#### Circular Flow Model:

- There are only two sectors namely, household sector and firm sector.
- In a two-sector economy; production and sales are equal and there will be a circular flow of income and good.
- The **outer circle** represents real flow (factors and goods) and
- The **inner circle** represents the monetary flow (factor prices and commodity prices).
- **Real flow** indicates the factor services flow from household sector to the business sector, and goods and services flow from business sector to the household.



## Chapter – 2 NATIONAL INCOME

### 1. Write a short note on per capital income.

#### Per Capital Income

- ♣ The average income of a person of a country in a particular year is called per capita income.
- ♣ Per capita income is obtained by dividing national income by Population.

National income

- ♣ Per capita income =  $\frac{\text{National income}}{\text{Population}}$

### 2. Differentiate between personal and disposable income.

#### Difference between personal and disposable income

Basis of Difference	Personal Income	Disposable Income
Meaning	Personal income is the total income received by the individuals before payment of direct taxes in a year.	Disposable Income is the individuals income after the payment of income tax.
Implication	Personal income is never equal to the national income.	This is the amount available For households for consumption.
Formula	Personal Income = National Income – (Social Security Contribution) + Transfer payments.	Disposable Income = Personal income – Direct Tax. Disposable income = consumption + saving.

### 3. Explain briefly NNP at factor cost.

#### NNP at Factor Cost - Explanation

- ♣ NNP at factor cost is the total of income payment made to factors of production.
- ♣ Thus from the money value of NNP at market price, we **deduct** the amount of indirect taxes and **add** subsidies to arrive at the net national income at factor cost.
- ♣  $NNP \text{ at factor cost} = NNP \text{ at Market prices} - \text{Indirect taxes} + \text{Subsidies}$ .

### 4. Give short note on Expenditure Method.

#### The Expenditure Method (Outlay method):

- ♣ Under this method, the total expenditure incurred by the society in a particular year is added together.
- ♣ To *calculate* the expenditure of a society, it includes personal consumption expenditure, net domestic investment, government expenditure on consumption as well as capital goods and net exports.

Symbolically,  $GNP = C + I + G + (X - M)$

C - Private consumption expenditure

I - Private Investment Expenditure

G - Government expenditure

X-M = Net exports.



**5. What is the solution to the problem of double counting in the estimation of national income?****Solution to the problem of double counting in the estimation of national income**

- ✘ Double counting is to be avoided under value added method.
- ✘ Any commodity which is either raw material or intermediate good for the final production should not be included.
- ✘ To avoid double counting, either the value of the final output should be taken into the estimate of GNP or the sum of values added should be taken.
- ✘ **For example**, value of cotton enters value of yarn as cost, and value of yarn in cloth and that of cloth in garments.

**6. Write briefly about national income and welfare****National Income and Welfare – Explanation:**

- National Income is considered as an indicator of the economic wellbeing of a country.
- The economic progress of countries is measured in terms of their GDP per capita and their annual growth rate.
- A country with a higher per capita income is supposed to enjoy greater economic welfare with a higher standard of living.

**7. List out the uses of national income.****Uses of national income:**

- i) To know the relative importance of the various sectors of the economy and their contribution towards national income
- ii) To formulate the national policies such as monetary policy, fiscal policy and other policies
- iii) To formulate planning and evaluate plan progress

**Chapter – 3****THEORIES OF EMPLOYMENT AND INCOME****1) Explain the following in Short**

**A. Seasonal unemployment    B. Frictional unemployment    C. Educated Unemployment**

**B. Seasonal unemployment:**

- ♣ In agriculture and agro-based industries like sugar production activities are carried out only in some seasons.
- ♣ People may remain unemployed during off seasons.

**C. Frictional unemployment:**

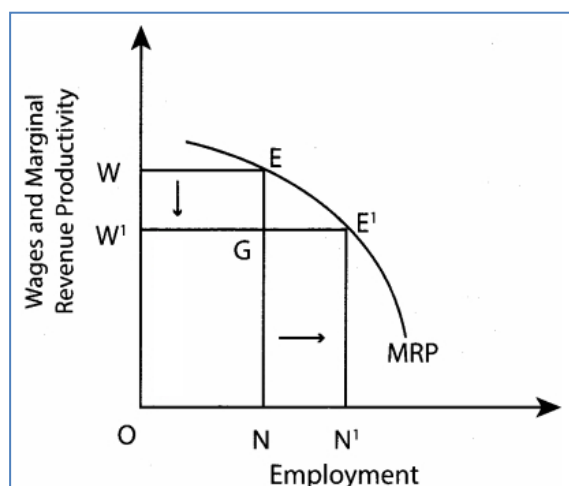
- ♣ It arises due to imbalance between supply of labour and demand for labour.
- ♣ This is because of immobility of labour lack of necessary skills, breakdown of machinery, etc.

**D. Educated unemployment:**

- ♣ Educated people are unemployed or underemployed when qualifications do not match the job.

2) **According to classical theory of employment, how wage reduction solves the problem of unemployment? Diagrammatically explain?**

- The classical theory of employment assumes that the economy operates at the level of full employment without inflation in the long period.
  - It also assumes that wages and prices of goods are flexible and the competitive market exists in the economy (laissez – faire economy).
  - According to the classical theory of employment, full employment condition can be achieved by cutting down the wage rate.
  - Unemployment would be eliminated when wages are determined by the mechanism of economy itself.
- e) **The following figure shows the relationship between wage rate and employment:**



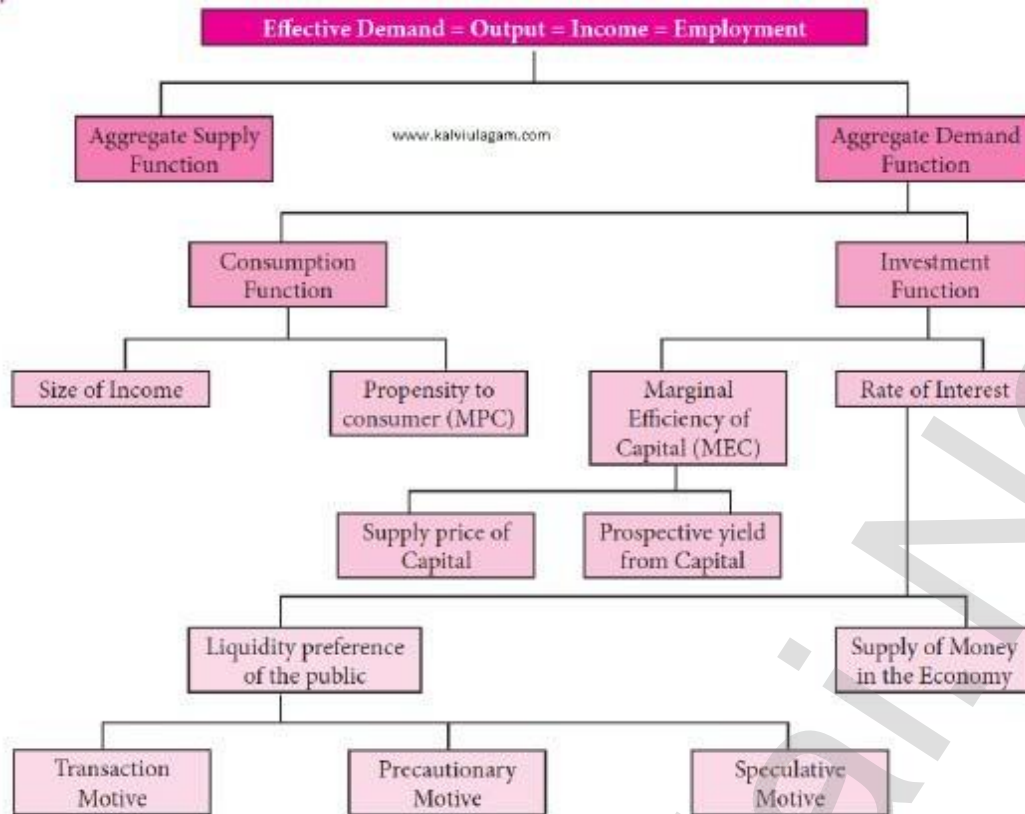
- In the figure, when the wage rate is  $OW$ , then the employment is  $ON$ .
- As the wage rate is reduced to  $OW^1$ , then the employment has increased to  $ON^1$ .
- Prof. Pigou has taken this theory as base for developing the solution of unemployment problem.

3) **Write a note on the implications of the Say's law.**

**Implications of the Say's Law:**

- ♣ There is no general over production or unemployment
- ♣ Automatic price mechanism
- ♣ Interest flexibility rate brings equality between savings and investment
- ♣ Money acts as only medium of exchange.

4) Explain Keynes' theory in the form of flow chart.



5) What do you mean by aggregate demand? Mention its components.

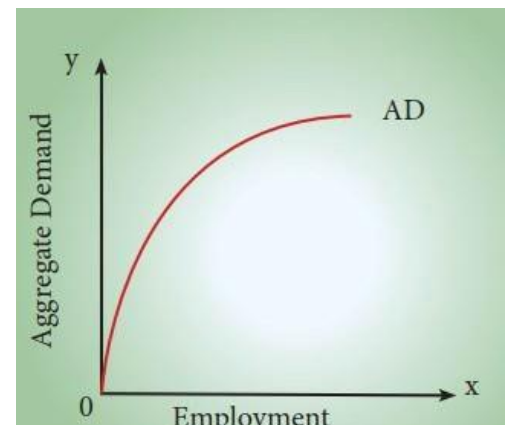
**Aggregate Demand – Meaning:**

- In the Keynesian model, output is determined mainly by **aggregate demand**.
- The aggregate demand is *the amount of money which entrepreneurs expect to get by selling the output produced by the number of labourers employed.*

**Components of Aggregate Demand:**

- Aggregate demand has the following **four components**.
  1. Consumption Demand
  2. Investment Demand
  3. Government Expenditure and
  4. Net Export (export - import)

$$AD = C + I + G + (X - M)$$



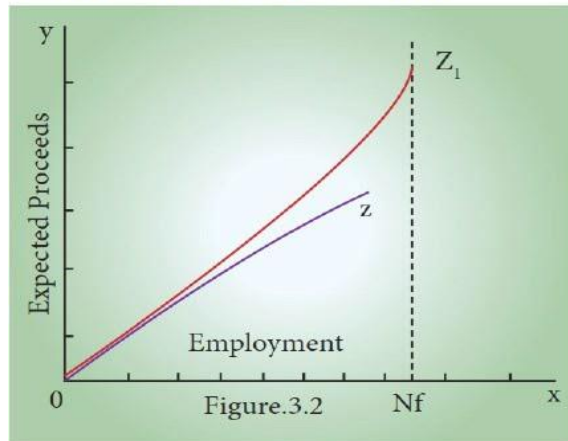
6) Explain about aggregate supply with the help of diagram.

**Aggregate Supply:**

- Aggregate supply function is an increasing function of the level of employment.
- Aggregate supply refers to the value of total output of goods and services produced in an economy in a year.
- In other words, aggregate supply is equal to the value of national product, i.e., national income.

- **Aggregate Supply = C + S + T + Rf = Aggregate income generated in the Economy**

### AGGREGATE SUPPLY CURVE



1. **Z curve is linear** where money wages remains fixed.
2. **Z1 curve is non - linear** since wage rate increases with employment.
3. When **full employment level of Nf** is reached it is impossible to increase output by employing more men.
4. So aggregate supply curve becomes inelastic (Vertical straight line).

Thus aggregate supply is an important factor in determining the level of economic activity.

### 7) Write any five differences between classism and Keynesianism.

#### Differences between classism and Keynesianism

Sl. No.	Keynesianism	Classicism
1	Short-run equilibrium	Long-run equilibrium
2	Saving is a vice	Saving is a social virtue.
3	The function of money is a medium of exchange on the one side and a store of value on the other side	The function of money is to act as a medium of exchange
4	Macro approach to national problems	Micro foundation to macro problems
5	State intervention is advocated.	Champions of Laissez-fair policy

## Chapter – 4 CONSUMPTION AND INVESTMENT FUNCTIONS

### 1) State the propositions of keynes's psychological Law of consumption.

#### The propositions of keynes's psychological Law of consumption

- ✎ When **income** increases, consumption also increases but by a smaller amount.
- ✎ The increased income will be divided in some proportion between **consumption expenditure** and **saving**
- ✎ Increase in income always leads to an increase in both consumption and saving.

2) **Differentiate autonomous and induced investment**

**Differences between autonomous and Induced Investment**

Sl.No.	Autonomous Investment	Induced investment
1	Independent	Planned
2	Income inelastic	Income elastic
3	Welfare Motive	Profit motive

3) **Explain any three subjective and objective factors influencing the consumption function.**

**A) Subjective Factors**

1. **The motive of precaution:** To build up a reserve against unforeseen contingencies.
2. **The motive of foresight:** The desire to provide for anticipated future needs. Eg. Old age
3. **The motive of calculation:** The desire to enjoy interest and appreciation.

**B) Objective Factors**

- 1) **Income Distribution:** There is large disparity between rich and poor.
- 2) **Price level:** When the price falls, real income goes up;
- 3) **Wage level:** Wage level plays an important role in determining the consumption function.

4) **Mention the differences between accelerator and multiplier effect.**

**Differences between Accelerator and Multiplier Effect**

Sl.No.	Accelerator	Multiplier
1	It is the ratio of change in induced investment to change in consumption	It is the ratio of change in income to change in investment
2	Induced investment plays vital role in it	Autonomous investment plays vital role in it

5) **State the concept of super multiplier.**

**Meaning of Super Multiplier**

- In order to measure the total effect of initial investment on income, Hicks has combined the  $k$  and  $\beta$  mathematically and given it the name of the Super Multiplier.
- The super multiplier is worked out by combining both induced consumption and induced investment.
- The combined name of the super multiplier and the accelerator is also called the leverage effect. which may lead the economy to very high or low level of income propagation.  $Y = C + IA + IP$

6) **Specify the limitations of the multiplier.**

**Limitations of the multiplier**

- The multiplier assumes that those who earn income are likely to spend a proportion of their additional income on consumption. But in practice, people tend to spend their additional income on other items.
- Such expenses are known as leakages. These leakages are the limitations of the multiplier.
- Payment towards past debts.
- Purchase of existing wealth
- Import of goods and services

## Chapter – 5

### MONETARY ECONOMICS

#### 1) Write a note on metallic money.

##### Short note on Metallic Money:

- Under metallic standard, some kind of metal either gold or silver is used to determine the standard value of the money and currency.
- Standard coins made out of the metal are the principal coins used under the metallic standard.
- These standard coins are full bodied or full weighted legal tender. Their face value is equal to their intrinsic metal value.

#### 2) What is money supply?

##### Money Supply

- Money supply means the total amount of money in an economy.
- It refers to the amount of money which is in circulation in an economy at any given time. Money supply plays a crucial role in the determination of price level and interest rates.
- In India, currency notes are issued by the Reserve Bank of India (RBI) and coins are issued by the Ministry of Finance, Government of India (GOI).

#### 3) What are the determinants of money supply?

##### Determinants of Money Supply

##### 1) Current Deposit Ratio (CDR) :

- ♣ It is the ratio of money held by the public in currency to that they hold in bank deposits.

##### 2) Reserve Deposit Ratio (RDR) :

- ♣ Reserve money consists of two things  
(a) vault cash in banks and (b) Deposits of commercial banks with RBI.

##### 3) Cash Reserve Ratio (CRR) :

- ♣ It is the fraction of the deposits the banks must keep with RBI.

##### 4) Statutory Liquidity Ratio (SLR) :

- ♣ It is the fraction of the total demand and time deposits of the commercial banks in the form of specified liquid assets.

#### 4) Write the types of inflation.

##### The four types of inflation are indicated below.

##### (i) Creeping Inflation:

- ♣ It is slow moving and very mild.
- ♣ The rise in prices will not be perceptible but spread over a long period.

##### (ii) Walking Inflation:

- ♣ When prices rise moderately and the annual inflation rate is a single digit, it is called walking inflation.

##### (iii) Running Inflation :

- ♣ When prices rise rapidly like the running of a horse at a rate of speed of 10% - 20% per annum, it is called running inflation.

**(iv) Galloping Inflation :**

- ♣ inflation or hyper inflation points out to unmanageably high inflation rates that run into two or three digits.

**5) Explain Demand-pull and Cost push inflation.****(i) Demand-Pull Inflation**

- ♣ Demand and supply a crucial role in deciding the inflation levels in the society at all the points of time.
- ♣ For instance, if the demand is high for a product and supply is low, the price of the products increases.

**(ii) Cost-Push Inflation**

- ♣ When the cost of raw materials and other inputs rise inflation results.
- ♣ Increase in wages paid to labour also leads to inflation

**6) State Cambridge equations of value of money.****(i) Marshall's equation:**

The Marshall's equation is expressed as :  $M = KPY$ ,

where,

- M is the quantity of money
- Y is the aggregate real income of the community.
- P is purchasing power of money.
- K represents the fraction of the real income which the public desires to hold in the form of money.

Thus, the price level =  $M/KY$  (or)

value of money (The reciprocal of price level) is  $1/P = KY/M$ .

- ♣ According to Marshall's equation, the value of money is influenced not only by changes in M, but also by changes in K.

**(ii) Keynes' equation :**

Keynes equation is expressed as :  $n = PK$  (or)  $P = n/K$

Where ,

- n is the total supply of money,
- P is the general price level of consumption goods.
- K is the total quantity of consumption units the people decide to keep in the form of cash.

Keynes indicates that K is a real balance, because it is measured in terms of consumer goods.

- ♣ According to Keynes', people's desire to hold money is unaltered by monetary authority.
- ♣ So, price level and value of money can be stabilized through regulating quantity of money (n) by the monetary authority.

**7) Explain disinflation:****Disinflation – Explanation:**

- Disinflation is the slowing down the rate of inflation by controlling the amount of credit (bank loan, hire purchase) available to consumers without causing more unemployment.
- Disinflation may be defined as the process of reversing inflation without creating unemployment or reducing output in the economy.

**Chapter – 6 - BANKING****1) Write the mechanism of credit creation by commercial banks:****Mechanism of credit creation by commercial banks:**

- Credit Creation means the multiplication of loans and advances.
- Banks have the power to expand or contract demand deposits and they exercise this power through granting more or less loans and advances and acquiring other assets.
- This power of commercial bank to create deposits through expanding their loans and advances is known as credit creation.

**2) Give a brief note on NBFI.****NBFI – Meaning:**

- These banks do not have full bank licence or supervised by RBI.
- Do not carry on pure banking business but carry other financial Transaction.
- They receive deposits and give loans.
- Just undertakes borrowing and lending handling both money market and capital market.
- NBFIs can be broadly classified into two categories. Viz.
  - ✎ Stock Exchange and
  - ✎ Other Financial Institutions.
- **Examples** for the latter category are Finance corporations, Chit funds, Building societies etc.

**3) Bring out the methods of credit control.**

Quantitative (or) General Method	Qualitative (or) Selective Method
(i) Bank Rate Policy	(i) Rationing of Credit
(ii) Open Market Operations	(ii) Direct Action
(iii) Variable Reserve Ratio	(iii) Moral persuasion
(iv) Cash Reserve Ratio	(iv) Method of Publicity
(v) Statutory Liquidity Ratio (SLR)	(v) Regulation of Consumer's Credit
	(vi) Regulating the marginal requirement on security loans.

**4) What are the functions of NABARD?****Functions of NABARD**

- NABARD acts as a refinancing institution for all kinds of production and investment credit to **agriculture, small-scale industries, cottage and village industries, handicrafts and rural crafts**
- It provides short-term, medium term and long-term credit to **state cooperative Banks, RRB, LDBs and other financial institutions** approved by RBI.



- NABARD gives **long-term loans (upto 20 years)** to State government
- NABARD gives long-term loans to any institution approved by the Central Government.

5) **Specify the functions of IFCI.**

**Functions of IFCI:**

- ✎ Long term loans, both in rupees and foreign currencies.
- ✎ Underwriting of equity, preference and debenture issue
- ✎ Subscribing to equity, preference and debenture issues.
- ✎ Guaranteeing the deferred payments in respect of machinery imported from abroad or purchased in India.
- ✎ Guaranteeing of loans raised in foreign currency from foreign financial institutions.

6) **Distinguish between money market and capital market.**

**Differences between money market and capital market**

- ✎ Money market deals with short-term loans. It designates financial institutions which handle the purchase, sale and transfer of short-term credit instrument.
- ✎ Capital market deals in raising capital by dealing in shares, bonds, equities and mortgages.

7) **Mention the objectives of demonetizations.**

**Objectives of Demonetisation :**

- Removing Black Money from the country.
- Stopping of corruption.
- Stopping terror funds.

## Chapter – 7 INTERNATIONAL ECONOMICS

1) **Describe the subject matter of International Economics.**

**Subject matter of International Economics**

**1. Pure Theory of Trade**

- ✎ This component explains the causes for foreign trade, composition, direction and volume of trade, determination of the terms of trade and exchange rate, issues related to balance of trade and balance of payments.

**2. Policy Issues**

- ✎ Policy issues such as free trade vs. protection, methods of regulating trade, capital and technology flows, use of taxation, subsidies and dumping, exchange control and convertibility, foreign aid, external borrowings and foreign direct investment.

**3. International Financial and Trade Regulatory Institutions**

- ✎ The financial institutions like International Monetary Fund IMF, IBRD, WTO etc., which influence international economic transactions and relations shall also be the part of international economics.

## 2. Compare the Classical Theory of international trade with Modern Theory of International trade.

### Comparison of the Classical Theory of international trade with Modern Theory of International trade

Sl.No.	Classical Theory of International Trade	Modern Theory of International Trade
1	The classical theory explains the phenomenon of international trade on the basis of labour theory of value.	The modern theory explains the phenomenon of international trade on the basis of general theory of value.
2	It presents a one factor (labour) model.	It presents a multi- factor (labour and capital) model.
3	It attributes the differences in the comparative costs to difference in the productive efficiency of workers in the two countries.	It attributes the differences in comparative Costs to the differences in factor endowments in the two countries.

### 3) Explain the Net Barter Terms of Trade and Gross Barter Terms of Trade.

#### 1. Net Barter Terms of Trade

- This type was developed by Taussig in 1927.
- The ratio between the prices of exports and of imports is called the “**net barter terms of trade**”.
- It is named by Viner as the ‘**commodity terms of trade**’.

It is expressed as:

$$T_n = (P_x / P_m) \times 100$$

Where,

$T_n$  = Net Barter Terms of Trade

$P_x$  = Index number of export prices  
 $P_m$  = Index number of import prices

#### 2. Gross Barter Terms of Trade

- This was developed by Taussig in 1927 as an improvement over the net terms of trade.
- It is an index of relationship between total physical quantity of imports and the total physical quantity of exports.

$$T_g = (Q_m / Q_x) \times 100$$

Where,

$Q_m$  = Index of import quantities

$Q_x$  = Index of export quantities

### 4) Distinguish between Balance of Trade and Balance of Payments.

#### Differences between Balance of Trade and Balance of Payments.

BALANCE OF TRADE	BALANCE OF PAYMENT
Balance of Trade (BOT) refers to the total value of a country's exports of commodities and total value of imports of commodities.	Balance of Payment is a systematic record of a country's economic and financial transactions with the rest of the world over a period of time.

Only export and import of commodities are included in the statement of Balance of Trade of a country.	When a payment is received from a foreign country, it is a credit transaction while a payment to a foreign country is a debit transaction.
Movements of goods (export and imports of commodities) are also known as 'visible trade'.	The principal items on the debit side include imports of goods and services, transfer payments to foreigners, lending to foreign countries, investments by residents in foreign countries

5) **What are import quotas?**

**i. Import Quotas - Meaning**

- \* Import quota means physical limitation of the quantities of different products to be imported from foreign countries within a specified period of time, usually one year.
- \* The import quota may be fixed either in terms of quantity or the value of the product.

**ii. Example**

- ❖ The government may specify that 60,000 colour T.V. sets may be imported from Japan.

6) **Write a brief note on flexible exchange rate.**

- \* Under the flexible exchange rate (also known as floating exchange rate) system, exchange rates are freely determined in an open market by market forces of demand and supply.
- \* The economic position of the country determines the market demand and supply for its currency.
- \* The higher the demand for a particular currency, the higher is its exchange rate and the lower the demand, the lesser is the value of currency compared to other currencies.

7) **State the objectives of Foreign Direct Investment.**

**Objectives of Foreign Direct Investment**

- \* Sales Expansion      □ Acquisition of resources
- \* Diversification        □ Minimization of competitive risk.

## Chapter – 8

### INTERNATIONAL ECONOMIC ORGANISATIONS

1) **Mention the various forms of economic integration.**

**Various forms of economic integration**

- ✎ Economic integration takes the form of Free Trade Area, Customs Union, Common Market and Economic Union.
- ✎ A free trade area is the region encompassing a trade bloc whose member countries have signed a freetrade agreement (FTA). e.g. SAFTA, EFTA.
- ✎ A customs union is defined as a type of trade block which is composed of a free trade area with no tariff among members and with a common external tariff. e.g. BENELUX.

2) **What are trade blocks?**

**Trade blocks – Meaning:**

- ✎ Trade blocks are a set of countries which engage in international trade together and are usually related through a free trade agreement or other associations.
- ✎ Trade blocks cover different kinds of arrangements between or among countries for mutual benefit.
- ✎ Some countries create business opportunities for themselves by integrating their economies in order to avoid unnecessary competition among them.

**3) Mention any three lending programmes of IMF.****Lending programmes of IMF****1. Basic Credit Facility :**

- ✎ The IMF provides financial assistance to its member nations to overcome their temporary difficulties relating to balance of payment.

**2. Extended Fund Facility:**

- ✎ Under this arrangement, the IMF provides additional borrowing facility up to 140% of the member's quota, over and above the basic credit facility.

**3. Buffer Stock Facility:**

- ✎ The Buffer Stock financing facility was started in 1969.
- ✎ The purpose of this scheme was to help the primary goods (food grains) producing countries to finance contributions to buffer stock arrangements for the stabilisation of primary product prices.

**4) What is Multilateral Agreement?****Multilateral Agreement**

- i. A International agreements involving three or more parties.
- ii. For example - GATT has been, since its establishment in 1947.
- iii. Seeking to promote trade liberalization through multilateral negotiations.

**5) Write the agenda of BRICS Summit, 2018.****Agenda of BRICS Summit, 2018**

- i. South Africa hosted the 10th BRICS summit in July 2018.
- ii. The agenda for BRICS summit 2018 includes Inclusive Growth, Trade issue Global Governance, Shared prosperity, International peace and security.

**6) State briefly the functions of SAARC.****The main Functions of SAARC are as follows.**

1. Maintenance of the cooperation in the region.
2. Prevention of common problems associated with the member nations.
3. Ensuring strong relationship among the member nations.
4. Removal of the poverty through various packages of programmes.
5. Prevention of terrorism in the region.

**7) List out the achievements of ASEAN.****Achievements of ASEAN**

- The main achievement of ASEAN has been the maintenance of an uninterrupted period of peace and stability.
- ASEAN's modernization efforts have brought about changes in the region's structure of production.
- ASEAN has been the fourth largest trading entity in the world.

## Chapter – 9 - FISCAL ECONOMICS

### 1) Describe canons of Taxation.

#### Canons of Taxation

##### (1) Canon of Ability:

- ✎ The Government should impose tax in such a way that the people have to pay taxes according to their ability.

##### (2) Canon of Certainty:

- ✎ The Government must ensure that there is no uncertainty regarding the rate of tax or the time of payment.

##### (3) Canon of Convenience:

- ✎ The method of tax collection and the timing of the tax payment should suit the convenience of the people.

### 2) Mention any three similarities between public finance and private finance.

#### Similarities between public finance and private finance

- (1) **Rationality:** Both public finance and private finance are based on rationality
- (2) **Limit to borrowing :** Both have to apply restraint with regard to borrowing.
- (3) **Resource utilisation:** Both the private and public sectors have limited resources.
- (4) **Administration:** The effectiveness of measures depends on the administrative machinery

### 3) What are the functions of a modern state? Modern state is a welfare state.

#### Function of Modern state:

- (1) Creating economic and social overhead.
- (2) Ensuring stability in both internal and external.
- (3) Conserving resources for sustainable development.
- (4) Defense.
- (5) Judiciary.
- (6) Enterprises.
- (7) Social welfare.
- (8) Infrastructure.
- (9) Macro - economic policy
- (10) Social justice.
- (11) Control monopoly.

### 4) State any three characteristics of taxation.

#### Three characteristics of taxation.

- ✎ A tax is a compulsory payment made to the government.
- ✎ Every tax involves some sacrifice on part of the tax payer.
- ✎ A tax is not levied as a fine or penalty for breaking law.

**5) Point out any three differences between direct tax and indirect tax.****Differences between direct tax and indirect tax**

Basis For Comparison	Direct Tax	Indirect Tax
Meaning	Direct tax is referred to as the tax, levied on person's income and wealth.	Indirect Tax is referred to as the tax, levied on a person who consumes the goods and services.
Nature	Progressive	Regressive
Impact	Falls on the same person.	Falls on different persons.

**6) What is primary deficit?****Primary deficit**

- ✎ Primary deficit is equal to fiscal deficit minus interest payments.
- ✎ It shows the real burden of the government and it does not include the interest burden on loans taken in the past.
- ✎ Thus, primary deficit reflects borrowing requirement of the government exclusive of interest payments.
- ✎ Primary Deficit (PD) = Fiscal deficit (FD) - Interest Payment (IP)

**7) Mention any three methods of redemption of public debt.****Methods of redemption of public debt****1. Budgetary Surplus:**

- When the government presents surplus, it can be utilized for repaying the debt.

**2. Terminal Annuity:**

- In this method, government pays off the public debt on the basis of terminal annuity in equal annual installments.

**3. Reduction in Rate of Interest:**

- Another method of debt redemption is the compulsory reduction in the rate of interest, during the time of financial crisis.

## Chapter – 10

### ENVIRONMENTAL ECONOMICS

**1) Brief the linkage between economy and environment.****Linkage between economy and environment**

- ✎ Human's life depends on social, political, ethical, philosophical and other aspects of economic system.
- ✎ The life of human beings is shaped by his living environment
- ✎ The relationship between the economy and the environment is generally explained in the form of a "Material Balance Model" developed by **Alen Kneese and Ayres**.

**2) Specify the meaning of material balance principle.****Meaning of material balance principle:**

- The material balance principle considers the total economic process as a physically balanced flow between inputs and outputs.

**3) Explain different types of air pollution****Types of air pollution****• Indoor Air pollution:**

It refer to the toxic contaminates we face in ourdaily lives at our homes, schools and work places.

e.g. Cooking and heating with solid fuels on open fires, etc.

**• Outdoor Air pollution:**

It refers to ambient air caused by combustion processes from motor vehicles, solid fuel burning and industry.

**4) What are the causes of water pollution?****Causes of Water Pollution**

1. Discharge of sewage and waste water
2. Dumping of solid waste
3. Discharge of Industrial waste
4. Oil Spill
5. Acid rain
6. Global warming
7. Eutrophication

**5) State the meaning of e-waste.****Meaning of E-waste:**

- a. It can be defined as the result when consumer, business and household devices are disposed or re-cycled.
- **Example :** Television, Computers, Wireless devices, Xerox machines etc.

**6) What is land pollution? Mention the causes of land pollution:****Land Pollution:**

- a. Unnecessary addition to the soil which threaten the public health and cause unpleasant conditions and nuisances.

**Causes:**

- a) Deforestation and soil erosion
- b) Agricultural activities
- c) Mining
- d) Landfills
- e) Industrialization
- f) Construction activities and
- g) Nuclear Waste.

**7) Write a note on (a) Climate change, (b) Acid rain****a) Climate Change:**

- a) It refers to any significant change in temperature, precipitation, or wind pattern that occurs over long period.

**b) Acid rain:**

- b) It is the resultant of sulphur di-oxide and nitrogen oxides reacting in the atmosphere with water and returning to earth as rain, or snow.

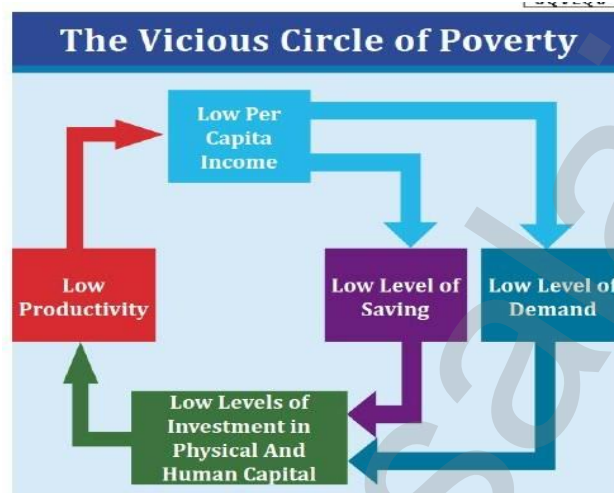
## Chapter – 11

### ECONOMICS OF DEVELOPMENT AND PLANNING

#### 1) Elucidate major causes of vicious circle of poverty with diagram

##### Major causes of vicious circle of poverty with diagram

1. There are circular relationships known as the '*Vicious Circles of Poverty*' that tend to perpetuate the low level of development in less developed countries (LDCs).
2. A country is poor because of low capital income.
3. The vicious circle of poverty operates both on the demand side and the supply side.
4. It is associated with low rate of saving and investment on the supply side and low level of income leads to low level of demand on the demand side.
5. **For example** A poor man may not have enough to eat, being underfed etc



#### 2) What are the non-economic factors determining development?

##### The non-economic factors determining development

1. Human Resource
2. Technical Know-how
3. Political Freedom
4. Social Organization
5. Corruption free administration
6. Desire for Development
7. Moral, ethical and social values
8. Casino Capitalism
9. Patrimonial Capitalism

#### 3) How would be break vicious circle of poverty?

##### Break vicious circle of poverty

1. By increasing rate of investment and capital formation without reducing consumption and with more marginal rate of save than that of average rate of saving.
2. Balanced Growth developing all kinds of industries in order to raise income and to raise consumption capacity.



**4) Trace the evolution of Economic planning in India.**

**Planning Commission was created on March 15, 1950 and its evolution is as follows:**

1. Sir M. Vishveshwarya (1934) “Planned Economy of India” with 10 year plan.
2. Jawaharlal Nehru (1938) “National Planning Commission”
3. Bombay plan (1940) - 8 industrialists with 10 year investment plan.
4. S.N. Agarwal (1944) - “Gandhian Plan” focusing on agricultural and rural Economy.
5. M.N. Roy (1945) drafted “People’s Plan”
6. J.P. Narayan (1950) advocated “Sarvodaya Plan” with Vinoba Bhava’s idea.

**5) Describe the case for planning**

**Economic planning can be justified for the following reasons:**

- (1) To accelerate and strengthen market mechanism
- (2) To remove unemployment
- (3) To achieve Balanced development
- (4) To remove poverty and inequalities

**6) Distinguish between functional and structural planning.**

**Differences between functional and structural planning**

Sl.No	Functional Planning	Structural Planning
1	It refers to that planning which seeks to remove economic difficulties	It refers to a good deal of changes in the socio economic framework of the economy
2	It is directing all the planning activities within the existing economic and social structure	This type of planning is adopted mostly in under developed countries.

**7) What are the functions of NITI Aayog.**

**Functions of NITI Aayog**

1. **Co-operative and Competitive Federation:**
  - \* Helps states to participate in the formulation of National policy.
2. **Shared National Agenda:**
  - \* Welcomes states to share their vision for national development with priorities and strategies.
3. **Decentralised planning:**
  - \* Bottom-up Planning process for easy and effective administration.
4. **Vision and Scenario planning:**
  - \* To design medium and long term strategic plans towards India’s future.
5. **Network of Expertise:**
  - \* To implement External ideas and expertise into government policies and programmes.

## Chapter – 12

### INTRODUCTION TO STATISTICAL METHODS AND ECONOMETRICS

1) What are the functions of statistics?

Functions of Statistics:

1. Presents facts in a definite form
2. Simplifies mass of figures
3. facilitates Comparison
4. helps in formulating and testing
5. helps in prediction
6. It helps in the formulation of suitable policies.

2) Find the Standard Deviation of the following data:14,22,9,15,20,17,12,11

No	Values (X)	$X - \bar{X}$	$(X - \bar{X})^2$
1	14	$14 - 15 = -1$	1
2	22	$22 - 15 = 7$	49
3	9	$9 - 15 = -6$	36
4	15	$15 - 15 = 0$	0
5	20	$20 - 15 = 5$	25
6	17	$17 - 15 = 2$	4
7	12	$12 - 15 = -3$	9
8	11	$11 - 15 = -4$	16
N=8	$\Sigma X = 120$		$\Sigma (X - \bar{X})^2 = 140$

$$N = 8$$

$$\bar{X} = \frac{120}{8} = 15$$

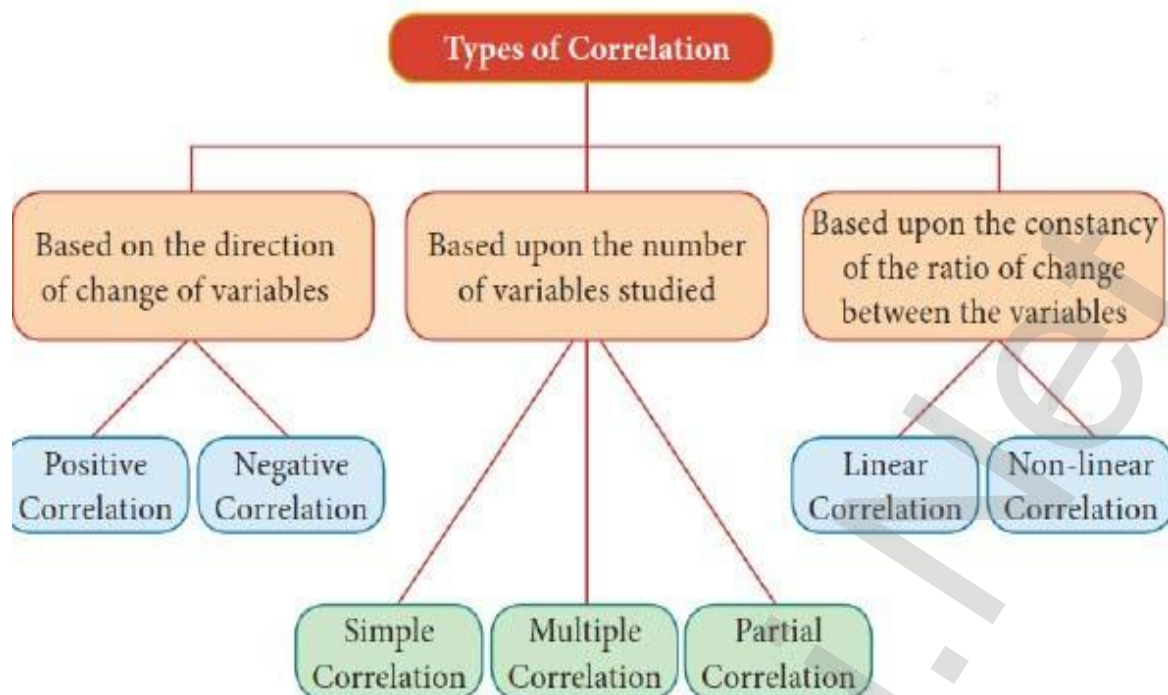
$$\sigma = \sqrt{\frac{\Sigma(x - \bar{X})^2}{N}}$$

$$= \sqrt{\frac{140}{8}}$$

$$= \sqrt{17.5}$$

$$\sigma = 4.18$$

3) **State and explain the different kinds of Correlation.**



4) **Mention the uses of Regression Analysis.**

**Uses of Regression Analysis**

1. It indicates the cause and effect relationship between the variables and establishes functional relationship.
2. Besides verification it is used for the prediction of one value, in relation to the other given value.
3. Regression coefficient is an absolute figure. If we know the value of the independent variable, we can find the value of the dependent variable.

5) **Specify the objectives of econometrics.**

**The specific objectives are as follows:**

1. It helps to explain the behaviour of a forthcoming period that is forecasting economic phenomena.
2. It helps to prove the old and established relationships among the variables or between the variables
3. It helps to establish new theories and new relationships.

6) **Differentiate the economic model with econometric model.**

**Differences the economic model with econometric model**

S.No.	Economic Model	Econometric Model
1	An Economic Model is a local representation of knowledge.	An Econometric Model is an integration at dependent variable with explanatory variables to analyse the particular economic activity and test the theories.
2	It is adapted to yield a definite and precise formulation of the economic processes at work.	It represent a set of hypotheses that permits statistical inference from the particular date under review.
3	It is prepared after formulation of economic laws	Construction of econometric model is the starting point of any econometric investigation

7) **Discuss the important statistical organizations (offices) in India.**

**Important Statistical Organizations (offices) in India.**

- \* The Ministry has **two wings**, Statistics and Programme Implementation.
- \* The Statistics Wing called the National Statistical Office (NSO) consists of the Central Statistical Office (CSO), the Computer Centre and the National Sample Survey Office (NSSO).

**Central Statistical Office (CSO)**

- a. The Central Statistical Office is one of the two wings of the National Statistical Organisation (NSO).
- b. It is responsible for co-ordination of statistical activities in the country and for evolving and maintaining statistical standards.
- c. National Sample Survey Organisation (NSSO)
- d. The National Sample Survey Organisation, now known as National Sample Survey Office, is an organization under the Ministry of Statistic of the Government of India.
- e. It is the largest organisation in India, conducting regular socio-economic surveys.

The Programme Implementation Wing has three Divisions, namely,

- i Twenty Point Programme
- ii Infrastructure Monitoring and Project Monitoring
- iii Member of Parliament Local Area Development Scheme.

## Chapter – 1

### INTRODUCTION TO MACRO ECONOMICS

### Five Marks

**1) Discuss the scope of Macro Economics.**

**Scope of Macro Economics:**

**i. National Income:**

- Measurement of national income and its composition by sectors are the basic aspects of macro-economic analysis.

**ii. Inflation:**

- Inflation refers to steady increase in general price level. Estimating the general price level by constructing various price index numbers such as Wholesale Price Index, Consumer Price Index, etc,

**iii. Business Cycle:**

- Almost all economies face the problem of business fluctuations and business cycle.
- The cyclical movements in the economy need to be carefully studied based on aggregate economic variables.

**iv. Poverty and Unemployment:**

- The major problems of most resource - rich nations are poverty and unemployment.
- This is one of the economic paradoxes.

**v. Economic Growth:**

- The growth and development of an economy and the factors determining them could be understood only through macro analysis.

**vi. Economic Policies:**

Economic policies are necessary to solve the basic problems, to overcome the obstacles and to achieve growth.

**2) Illustrate the functioning of an economy based on its activities.**

Economic System refers to the manner in which individuals and institutions are connected together to carry out economic activities in a particular area.

- In an economy, the fundamental economic activities are production and consumption. These two activities are supported by several other activities.
- The ultimate aim of these activities is to achieve growth.
- The 'exchange activity' supports the production and consumption activities. These activities are influenced by several economic and non-economic activities.
- The major economic activities include transportation, banking, advertising, planning, government policy and others.
- The major non-economic activities are environment, health, education, entertainment, governance, regulations etc.
- In addition to these supporting activities, external activities from other economies such as import, export.

### 3) Compare the feature of Capitalism and Socialism

S.No.	Features	Capitalism	Socialism
1	Ownership of Means of Production	Private Ownership	Public Ownership
2	Economic Motive	Profit	Social Welfare
3	Solution of Central Problems	Free Market System	Central Planning System
4	Government Role	Internal Regulation only	Complete Involvement

### 4) Compare the feature among Capitalism, Secularism and Mixedism.

#### Comparison of the feature among Capitalism, Secularism and Mixedism

S. No.	Features	Capitalism	Socialism	Mixedism
1	Ownership of Means of Production	Private Ownership	Public Ownership	Private Ownership and Public Ownership
2	Economic Motive	Profit	Social Welfare	Social Welfare and Profit Motive
3	Government Role	Internal Regulation only	Complete Involvement	Limited Role
4	Income Distribution	Unequal	Equal	Less unequal
5	Nature of Enterprise	Private Enterprise	Government Enterprise	Both Private and State Enterprises

## Chapter – 2 NATIONAL INCOME

### ♣ Explain the importance of national income:

#### Importance of national income:

National income is of great importance for the economy of a country. Nowadays the national income is regarded as accounts of the economy, which are known as social accounts.

It enables us,

- ♣ To know the relative importance of the various sectors of the economy and their contribution towards national income; from the calculation of national income.
- ♣ To formulate the national policies such as monetary policy, fiscal policy and other policies; the proper measures can be adopted to bring the economy to the right path with the help of collecting national income data.
- ♣ To formulate planning and evaluate plan progress; it is essential that the data pertaining to a country's gross income, output, saving and consumption from different sources should be available for economic planning.

- ♣ To build economic models both in short - run and long - run.
- ♣ To know a country's per capita income which reflects the economic welfare of the country.
- ♣ To know the distribution of income for various factors of production in the country.

♣ **Discuss the various methods of estimating the national income of a country.**

There are three methods that are used to measure national income.

1. Production or value added method
2. Income method or factor earning method
3. Expenditure method.

**1. Production or value added method:**

- Product method measures the output of the country. The gross value of out-put from different sectors like agriculture, industry, trade and commerce etc is obtained from the entire economy during a year.

**2. Income Method (Factor Earning Method):**

- Income method approaches national income from the distribution side.
- Under this method, national income is calculated by **adding up all the in- comes** generated in the course of producing national product.
- Factors incomes are grouped under *labour income, capital income and mixed income*.
- National income is calculated as domestic factor income plus net factor in-comes from abroad.
- In short,  $Y = w + r + i + \pi + (R - P)$

$w = \text{wages, } r = \text{rent, } i = \text{interest, } \pi = \text{profits, } R = \text{Exports and } P = \text{Imports}$

**3. The Expenditure Method (Outlay method)**

- Under this method, the **total expenditure incurred by the society** in a particular year is added together.
- To calculate the expenditure of a society, it includes personal consumption expenditure, net domestic investment, government expenditure on consumption as well as capital goods and net exports.
- Symbolically,  $GNP = C + I + G + (X - M)$

C - Private consumption expenditure, I - Private Investment Expenditure

G - Government expenditure, X-M = Net exports

♣ **What are the difficulties involved in the measurement of national income?**

**Difficulties involved in the measurement of national income**

**1. Transfer payments**

- Government makes payments in the form of pensions, unemployment allowance, subsidies, etc.
- These are government expenditure. But they are not included in the national income.

**2. Difficulties in assessing depreciation allowance**

- The deduction of depreciation allowances, accidental damages, repair and replacement charges from the national income is not an easy task.

**3. Unpaid services**

- A housewife renders a number of useful services like preparation of meals, serving, tailoring, mending, washing, cleaning, bringing up children, etc.

**4. Income from illegal activities**

- Income earned through illegal activities like gambling, smuggling, illicit extraction of liquor, etc., is not included in national income.

**5. Production for self-consumption and changing price**

- Farmers keep a large portion of food and other goods produced on the farm for self consumption.

**4. Discuss the importance of social accounting in economic analysis.**

- ♣ National Income and Social Accounting
- ♣ National income is also being measured by the social accounting method.
- ♣ Under this method, the transactions among various sectors such as firms, households, government, etc.,
- ♣ Social Accounting and Sector Under this method, the economy is divided into several sectors.

The Importance of social accounting are as follows:

**(1) In Classifying Transactions:**

Economic activity in a country involves innumerable transactions relating to buying and selling, paying and receiving income, exporting and importing, paying taxes, etc.

**(2) In Understanding Economic Structure:**

Social accounting helps us to understand the structure of the body economic.

**(3) In Understanding Different Sectors and Flows:**

Social accounts throw light on the relative importance of the different sectors and flows in the economy.

(Eg):production sector, consumption sector, investment sector and the rest of the world sector

**(4) In Clarifying Relations between Concepts:**

Social accounts help in clarifying the relationships between such related concepts as net national product at factor cost and gross national product at market prices.

**(5) In Guiding the Investigator:**

Social accounts are a guide for the economic investigator by indicating the type of data which might be collected for analysing the behaviour of the economy.

**Chapter – 3****THEORIES OF EMPLOYMENT AND INCOME****1. Describe the types of unemployment.**

**The following are the types of unemployment.**

**1. Cyclical Unemployment:-**

- In a business cycle during the period of recession and depression, income and output fall leading to widespread unemployment.
- It is caused by deficiency of effective demand.

**2. Seasonal Unemployment:-**

- This type of unemployment occurs during certain seasons of the year.



**3. Frictional Unemployment:-**

- Frictional unemployment arises due to imbalance between supply of labour and demand for labour.
- The persons who lose jobs and in search of jobs are also included under frictional unemployment.

**4. Educated Unemployment:-**

- Sometimes educated people are underemployed or unemployed when qualification does not match the job.

**5. Technical Unemployment:-**

- Modern technology being capital intensive requires less labourers and contributes to technological unemployment.

**2) Critically explain Say's law of market.****The classical theory of employment is based on says law of market.**

- He stated that **supply creates its own demand**
- It tells that supply is always equals to demand ( $S=D$ ). A person receives his income from production which is spent in the purchase of goods and services produced by others for the economy as a whole total production equals total income.

**Assumptions of the Say's law of market**

The Say's Law of market is based on the following assumptions:

- 1) No single buyer or seller of commodity or an input can affect price.
- 2) Full employment.
- 3) People are motivated by self-interest and self-interest determines economic decisions.
- 4) The laissez faire policy
- 5) There will be a perfect competition in labour and product market.
- 6) There is wage-price flexibility.

**Implications**

There is no general over production or unemployment

- Automatic price mechanism
- Interest flexibility rate brings equality between savings and investment
- Money acts as only medium of exchange.

**Criticisms**

1. According to Keynes, supply does not create its demand.
2. Automatic adjustment process will not remove unemployment.
3. Money is not neutral.
4. Keynes said overproduction is possible the need for state intervention arises in case of general overproduction and Mass unemployment.

**3) Narrate the equilibrium between ADF and ASF with diagram.****Equilibrium between ADF and ASF**

(i) Under the Keynes theory of employment, a simple two sector economy consisting of the households sector and the business sector is taken to understand the equilibrium between ADF and ASF.

(ii) All the decisions concerning consumption expenditure are taken by the individual households, while the business firms take decisions concerning investment.

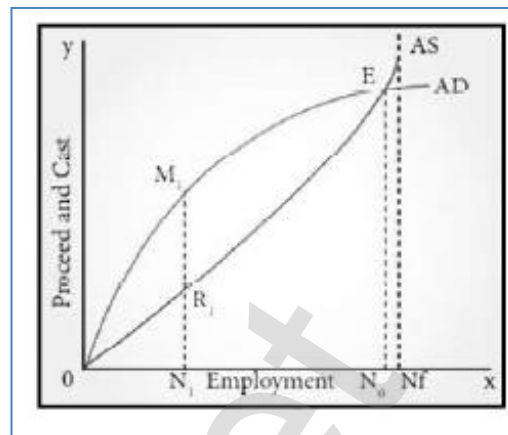
(iii) It is also assumed that consumption function is linear and planned investment is autonomous.

**There are two approaches**

1. Aggregate demand - Aggregate supply approach
2. Saving - Investment approach

**Diagram explanation :**

- (i) In the figure, the aggregate demand and aggregate supply reach equilibrium at point - E.
- (ii) The employment level is  $N_0$  at that point.
- (iii) At  $ON_1$  employment, the aggregate supply is  $N_1 R_1$
- (iv) They are able to produce  $M_1 N_1$
- (v) The expected level of profit is  $M_1 R_1$
- (vi) To attain this level of profit, entrepreneurs will employ more labourers.

**4) Explain the difference between classical theory and Keynes theory.**

S. NO	BASIS OF DIFFERENCES	CLASSICAL THEORY	KEYNES THEORY
1	Equilibrium	Long-run equilibrium	Short-run equilibrium
2	Savings and Investment	Saving and investment equilibrium through interest rate	Saving and investment equilibrium through income levels
3	Money	The function of money is to act as a medium of exchange	The function of money is a medium of exchange on the one side and a store of value on the other side.
4	Approach	Micro foundation to macro problems	Macro approach to national problems
5	Intervention	No government intervention	Government intervention is necessary for stabilization of economy

**Chapter – 4****CONSUMPTION AND INVESTMENT FUNCTIONS****1) Explain Keynes psychological law of consumption function with diagram.****Meaning of Psychological law of consumption**

The law implies that there is a tendency on the part of the people to spend on consumption less than the full increment of income.

**Assumptions:**

1. The other variables such as income distribution, tastes, habits, social customs, price movements, population growth, etc. do not.
2. Existence of Normal Conditions: The law holds good under normal conditions. People may spend the whole of increased income on consumption.
3. Existence of a Laissez-faire Capitalist Economy: The law operates in a rich capitalist economy where there is no government intervention.

The three propositions of the law Diagrammatically, the three propositions Explanations

**Proposition (1):** When income increases from 120 to 180 consumption also increases from 120 to 170 but the increase in consumption is less than the increase in income, 10 is saved.

**Proposition (2):** When income increases to 180 and 240, it is divided in some proportion between consumption by 170 and 220 and saving by 10 and 20 respectively.

**Proposition (3):** Increases in income to 180 and 240 lead to increased consumption 170 and 220 and increased saving 20 and 10 than before.

## 2) Briefly explain the subjective and objective factors of consumption function?

### A) Subjective Factors

1. The motive of precaution: To build up a reserve against unforeseen contingencies. Eg. Accidents, sick.
2. The motive of foresight: The desire to provide for anticipated future needs. Eg. Old age
3. The motive of calculation: The desire to enjoy interest and appreciation.
4. The motive of improvement: The desire to enjoy for improving standard of living.

### B) Objective Factors

#### 1) Income Distribution

If there is large disparity between rich and poor, the consumption is low because the rich people have low propensity to consume and high propensity to save.

#### 2) Price level

Price level plays an important role in determining the consumption function. When the price falls, real income goes up.

#### 3) Wage level

Wage level plays an important role in determining the consumption function and there is positive relationship between wage and consumption.

#### 4) Fiscal Policy

When government reduces the tax the disposable income rises and the propensity to consume of community increases.

### C) Illustrate the working of Multiplier

#### Definition of Multiplier

- The multiplier is defined as the ratio of the change in national income to change in investment.
- If  $\Delta I$  stands for increase in investment and  $\Delta Y$  stands for resultant increase in income, the multiplier

$$K = \Delta Y / \Delta I.$$

The value of multiplier depends on MPC

$$\text{Multiplier } K = 1 / 1 - \text{MPC}$$

The multiplier is the reciprocal of one minus marginal propensity to consume. Since marginal propensity to save is  $1 - \text{MPC}$ . ( $\text{MPC} + \text{MPS} = 1$ ).

Multiplier is  $1 / \text{MPS}$ .

### 3) Illustrate the Working of Multiplier.

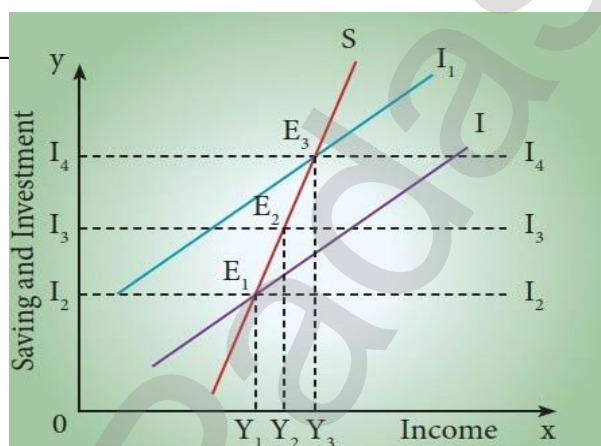
#### Working of Multiplier – Illustration

- Suppose the Government undertakes investment expenditure equal to Rs.100 crore on some public works, by way of wages, price of materials etc.
- Thus income of labourers and suppliers of materials increases by Rs.100 crore. Suppose the MPC is 0.8 that is 80%. A sum of Rs.80 crores is spent on consumption (Rs.20 Crores is saved).
- As a result, suppliers of goods get an income of Rs.80 crores. They inturn spend Rs.64 crores (80% of Rs.80cr).
- In this manner consumption expenditure and increase in income act in a chain like manner.
- The final result is  $\Delta Y = 100 + 100 \times \frac{4}{5} + 100 \times [\frac{4}{5}]^2 + 100 \times [\frac{4}{5}]^3 + \dots$

### 4) Explain the operation of the Accelerator.

#### Operation of the Acceleration Principle

- Let us consider a simple example.
- Let us suppose that in order to produce 1000 consumer goods, 100 machines are required. Also suppose that working life of a machine is 10 years.
- This means that every year 10 machines have to be replaced in order to maintain the constant flow of 1000 consumer goods. This might be called replacement demand.
- Suppose that demand for consumer goods rises by 10 percent (ie from 1000 to 1100). This results in increase in demand for 10 more machines.
- So that total demand for machines is 20. (10 for replacement and 10 for meeting increased demand). It may be noted here a 10 percent increase in demand for consumer goods causes a 100 percent increase in demand for machines (from 10 to 20).
- So we can conclude even a mild change in demand for consumer goods will lead to wide change in investment.



#### Diagrammatic illustration:

#### Operation of Accelerator.

- SS is the saving curve.
- II is the investment curve.
- E1, the economy is in equilibrium with OY1 income. Saving and investment are equal at OI2.
- Now, investment is increased from OI2 to OI4.

- This increases income from OY1 to OY3, the equilibrium point being E3.
- If the increase in investment by I2 I4 is purely exogenous, then the increase in income by Y1 Y3 would have been due to the multiplier effect.
- But in this diagram it is assumed that exogenous investment is only by I2 I3 and induced investment is by I3 I4.
- Therefore, increase in income by Y1 Y2 is due to the multiplier effect and the increase in income by Y2 Y3 is due to the accelerator effect. MPC is positive but less than unity.

5) What are the differences between MEC and MEI.

Differences between MEC and MEI

No	Marginal Efficiency of Capital (MEC)	Marginal efficiency of investment (MEI)
1	Based on a given supply price of Capital	Based on the induced change in the price due to changes in demand for Capital
2	It represents the rate of return on the successive units of Capital without regard to existing Capital	It shows the rate of return on just those units of Capital over and above the existing Capital stock.
3	It is a stock concept	It is flow concept
4	It determines the optimum capital stock in an Economy at each level of interest rate	It determines the net investment of the economy at each interest rate given the Capital Stock.

## Chapter – 5 MONETARY ECONOMICS

1) Illustrate Fisher's Quantity theory of money.

The general form of equation given by Fisher is  $MV = PT$ .

Where,

- **M** = Money Supply/quantity of Money
  - **V** = Velocity of Money
  - **P** = Price level
  - **T** = Volume of Transaction.
- ✓ Fisher points out that in a country during any given period of time, the total quantity of money (MV) will be equal to the total value of all goods and services bought and sold (PT).  $MV = PT$

This equation is referred to as “Cash Transaction Equation”.

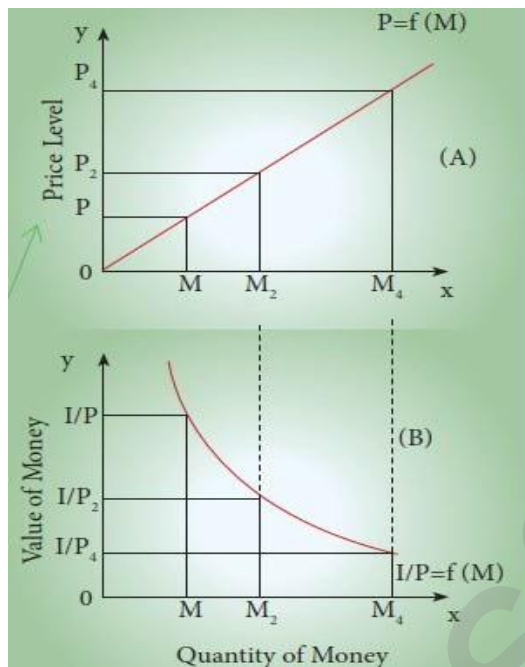
- ✓ But, in a modern economy, bank's demand deposits or credit money and its velocity play a vital part in business.
- ✓ Therefore, Fisher extended his original equation of exchange to include bank deposits  $M^1$  and its velocity  $V^1$ .

✓ The revised equation was:  $PT = MV + M^1 V^1$

$$P = \frac{MV + M^1 V^1}{T}$$

From the revised equation, it is evident, that the price level is determined by

- The quantity of money in circulation 'M'
- The velocity of circulation of money 'V'
- The volume of bank credit money M1
- The velocity of circulation of credit money V1
- The volume of trade (T)



- **Figure (A)** shows the effect of changes in the quantity of money on the price level.
  1. The quantity of money is OM, the price level is OP.
  2. When the quantity of money is doubled to OM<sub>2</sub>, the price level is also doubled to OP<sub>2</sub>. when the quantity of money is increased four fold to OM<sub>4</sub>, the price level also increases by four times to OP<sub>4</sub>.
- **Figure (B)**, shows the inverse relation between the quantity of money and the value of money, where the value of money is taken on the vertical axis.
- But, with the quantity of money increasing by four fold to OM<sub>4</sub>, the value of money is reduced by O I/P<sub>4</sub>
- This inverse relationship between the quantity of money and the value of money is shown by downward sloping curve  $I/P = f(M)$ .

## 2) Explain the functions of money Functions

### Functions of money are in four forms

- 1) Primary functions
- 2) Secondary functions

3) Contingent functions

4) Other functions.

### **1. Primary functions**

1. Medium of Exchange

2. Measure of Value

- **Money as a Medium of Exchange:** Money acts as the medium of Exchange(intermediary) in Sales and purchases.
- **Money as a measure of Value:** The value (price) of goods and services are in terms of money.
- 

### **2. Secondary functions**

1. Money as store of value

2. Standard of deferred payments.

- **Money as a Store of Value** - Value (or savings) can be stored in the form of money. The value of money is more or less stable.
- **Money acts as a standard of deferred payment** Future transaction can be carried on in terms of money. The loans which are taken at present can be repaid in money in future.

### **3. Contingent functions**

- Basis of the Credit system
- Money facilitates distribution of National income
- Money helps to equalize marginal utilities and marginal productivities
- Money increases productivity of Capital.

### **Other functions**

- Money helps to maintain repayment capacity
- Money represents General purchasing power money gives liquidity to Capital.

### **3) What are the causes and effects of inflation on the economy?**

#### **Causes of inflation::**

**i) Increase in Money Supply:** Inflation is caused by an increase in the supply of money which leads to increase in aggregate demand.

**ii) Increase in Public Expenditure:** Government activities have been expanding due to developmental activities and social welfare programmes.

**iii) Cheap Monetary Policy:** Cheap monetary policy or the policy of credit expansion also leads to increase in the money supply.

**iv) Deficit Financing:** In order to meet its mounting expenses, the government resorts to deficit financing by borrowing from the public and even by printing more notes.

#### **Effects of Inflation**

The effects of inflation can be classified into two heads:

(1) Effects on Production (2) Effects on Distribution.

#### **1. Effects on Production:**

- The profit due to rising prices encourages and induces business class to increase their investments in production, leading to generation of employment and income.
- However, hyper-inflation results in a serious depreciation of the value of money and it discourages savings

## 2. Effects on Distribution

- i) Debtors and Creditors: During inflation, debtors are the gainers while the creditors are losers.
- ii) Fixed-income Groups: The fixed income groups are the worst hit during inflation because their incomes being fixed do not bear any relationship with the rising cost of living.

## 4) Describe the phases of Trade cycle.

### Phases of Trade cycle

- ✓ A Trade cycle refers to oscillations in aggregate economic activity particularly in employment, output, income, etc.

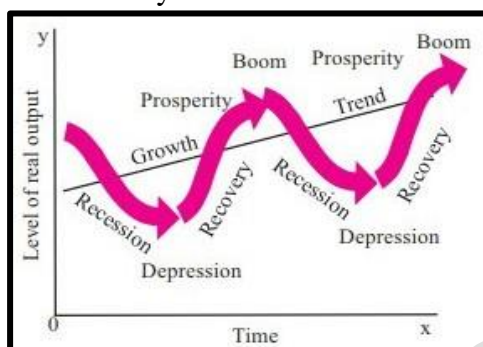
### Definition:

- ✓ “A trade cycle is composed of periods of good trade characterised by rising prices and low unemployment percentages altering with periods of bad trade characterised by falling prices and high unemployment percentages”:

### Phases of Trade Cycle:

The four different phases of trade cycle is referred to as

1. Boom
2. Recession
3. Depression
4. Recovery



### (1) Boom (or) Prosperity Phase:

1. The full employment and the movement of the economy beyond full employment.
2. Money wages rise, profits increase and interest rates go up.
3. It is characterized as boom period.

### (2) Recession:

1. The turning point from boom condition is called recession.
2. This happens at higher rate, than what was earlier.
3. Liquidity preference of the people rises and money market becomes tight.

### (3) Depression:

1. During depression the level of economic activities becomes extremely low.
2. Firms incur losses and closure of business becomes a common feature and the ultimate result is unemployment.
3. Interest prices, profits and wages are low.
4. Depression is the worst phase of the business cycle.
5. Extreme point of depression is called as ‘trough’



**(4) Recovery:**

1. After a period of depression, recovery sets in.
2. It begins with the revival of demand for capital goods.
3. Recovery may be initiated by innovation (or) investment (or) by government expenditure.

## Chapter – 6 - BANKING

**1) Explain the role of Commercial Banks in economic development.****Role of Commercial Banks in economic development****(1) Capital Formation:**

- Banks play an important role in capital formation which is essential for the economic development of a country.
- It is utilized for productive purpose.

**(2) Creation of Credit:**

- Banks create credit for the purpose of providing more funds for development project.
- Credit Creation leads to increased production, employment, sales and prices.

**(3) Channelizing the Funds towards Productive Investment:**

- Pooled savings should be allocated to various sectors of the economy with a view to increase the productivity.

**(4) Finance to Government**

- Banks provide long-term credit to Government by investing their funds in Government securities and short term finance by purchasing Treasury Bills.

**(5) Employment Generation**

- After the nationalization of big banks, banking industry has grown to a great extent. Bank's branches are opened frequently, which leads to the creation of new employment opportunities.

**2) Elucidate the functions of Commercial Banks****Functions of Commercial Banks****(a) Primary Functions:****1. Accepting Deposits:**

There are two types of deposits, which are discussed as follows

**Demand Deposits**

- It refers to deposits that can be withdrawn by individuals without any prior notice to the bank.

**Time Deposits**

- It refers to deposits that are made for certain committed period of time.
- Banks pay higher interest on time deposits.

**2. Advancing Loans :**

- Commercial banks grant loans in the form of *overdraft*, *cash credit*, and *discounting bills of exchange*.

**(b) Secondary Functions :**

- The secondary functions can be classified under three heads, namely, *agency functions*, *general utility functions*, and *other functions*.

**1. Agency Functions :**

It implies that commercial banks act as agents of customers by performing various functions.

- **Collecting Cheques:** Banks collect cheques and bills of exchange on the behalf of their customers through clearing house facilities provided by the central bank.
- **Collecting Income :** Commercial banks collect dividends, pension, salaries, rents, and interests on investments on behalf of their customers.
- **Paying Expenses :** Commercial banks make the payments of various obligations of customers, such as telephone bills, insurance premium, school fees, and rents.

**(2) General Utility Functions:**

- **Providing Locker Facilities:** Commercial banks provide locker facilities to its customers for safe custody of jewellery, shares, debentures, and other valuable items.
- **Issuing Traveler's Cheques:** Banks issue traveler's cheques to individuals for traveling outside the country.
- **Dealing in Foreign Exchange:** Commercial banks help in providing foreign exchange to businessmen dealing in exports and imports.

**(3) Transferring Funds :**

It refers to transferring of funds from one bank to another.

**(4) Letter of Credit :**

Commercial banks issue letters of credit to their customers to certify their creditworthiness.

- **Underwriting Securities:** Commercial banks also undertake the task of underwriting securities.
- **(ii) Electronic Banking:** It includes services, such as debit cards, credit cards, and Internet banking.

**c). Other Functions**

- **Money Supply:** It refers to one of the important functions of commercial banks that help in increasing money supply.
- **Credit Creation:** Credit Creation means the multiplication of loans and advances. Commercial banks receive deposits from the public and use these deposits to give loans.
- **Collection of Statistics :** Banks collect and publish statistics relating to trade, commerce and industry.

**3) Describe the functions of Reserve Bank of India.****Functions of RBI :****(1) Monetary Authority :**

- It controls the supply of money.
- To stabilize exchange rate, maintain healthy balance of payment;

**(2) The issue of currency:**

- (i) To maintain the currency and credit.
- (ii) It is the sole authority to issue currency.
- (iii) To control the circulation of fake currency.

**(3) The issuer of banking licence:**

- As per Sec 22 of Banking Regulation Act, every bank has to obtain a banking license from RBI to conduct banking business in India.

**(4) Bankers to the Government:**

- It acts as banker both to the Central and the State Government.

(5) **Banker's Bank:** RBI is the bank of all banks in India.

(6) **Lender of last resort:** The banks can borrow from the RBI by keeping eligible securities as collateral at the time of need or crisis.

(7) **Act as clearing house :** RBI manages 314 clearing houses.

(8) Custodian of foreign exchange reserves.

(9) Regulator of economy.

(10) Managing government securities.

(11) Regulator and supervisor of payment and settlement system.

(12) Developmental Role.

(13) Publisher of monetary data and other data.

(14) Exchange manager and controller.

(15) Banking Ombudsman Scheme.

(16) Banking Codes and Standards Boards of India.

**4) Mention the objectives of demonetization:****The objectives of monetary policy****1. Neutrality of Money**

- The monetary authority should aim at neutrality of money in the economy.
- Monetary changes could be the root cause of all economic fluctuations.

**2. Exchange Rate Stability**

- Exchange rate stability was the traditional objective of monetary authority.
- This was the main objective under Gold Standard among different countries.

**3. Price Stability**

- Economists like Crustave Cassel and Keynes suggested price stabilization as a main objective of monetary policy.

**4. Full Employment**

- During world depression, the problem of unemployment had increased rapidly.
- It was regarded as socially dangerous, economically wasteful and morally deplorable.

**5. Economic Growth**

- Economic growth is the process whereby the real per capita income of a country increases over a long period of time.
- It implies an increase in the total physical or real output.

## Chapter – 7 - INTERNATIONAL ECONOMICS

**1) Discuss the differences between Internal Trade and International Trade.****Differences between Internal Trade and International Trade.**

S.No	Internal Trade	International Trade
1	Trade takes place between different individuals and firm within the same	Trade takes place between different individuals and firms in different countries.
2	Labour and capital move freely from one region to another.	Labour and capital do not move easily from one nation to another.

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3	There will be free flow of goods and services.	Goods and services do not easily move from one country to another.
4	There is only one common currency.	There are different currencies.
5	Trade and financial regulations are more or less the same	Trade and financial regulations such interest rate laws differ between countries.

## 2) Explain briefly the Comparative Cost Theory.

### Comparative Cost Theory

- According to Ricardo, a country can gain from trade when it produces at relatively lower costs.
- Even when a country enjoys absolute advantage in both goods, the country would specialize in the production and export of those goods which are relatively more advantageous.
- Similarly, even when a country has absolute disadvantage in production of both goods.

### Assumptions

1. There are only two nations and two commodities
2. Labour is the only element of cost of production.
3. All labourers are of equal efficiency.
4. No change in technology.
5. No transport cost.
6. Perfect competition.
7. Full employment.
8. No government intervention.

### Diagrammatic Explanation

- India should concentrate on the production of wheat in which she enjoys a comparative cost advantage. ( $80/120 < 90/100$ ).
- America will specialize in the production of cloth and export it to India in exchange for wheat.
- With trade, India can get 1 unit of cloth and 1 unit of wheat by using its 160 labour units.
- With trade, America can get 1 unit of cloth and one unit of wheat by using its 200 units of labour.

## 3) Discuss the Modern Theory of International Trade.

### Modern Theory of International Trade - Introduction :

- It was developed by Swedish economist **Eli Heckscher** and his student **Bertil Ohlin** in 1919.
- This theory says that the basis for international trade is the difference in factor endowments.
- That is otherwise called as ***Factor endowment theory***.

### The Theory :

1. **The classical theory** argued that the basis for foreign trade was comparative cost difference and its labour factor.
2. But the **modern theory of international trade** explains the causes for such comparative cost difference.

### Differences in comparative cost :

- Difference in the endowments of factors of production between countries.
- Differences in the factor proportions required in production.

**Assumptions :**

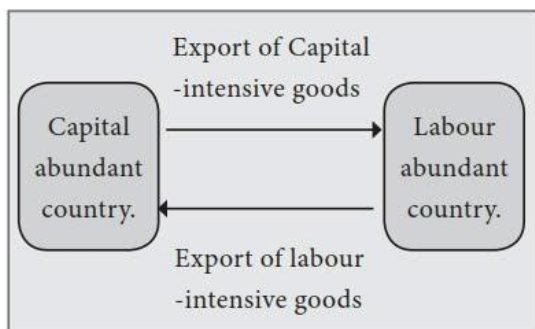
1. There are two countries ( $2 \times 2$  model)
2. Differ in factor endowments.
3. Commodities are categorized in terms of factor intensity.
4. Same production technology.
5. There is perfect competition in both product and factor markets.

**Explanation :**

According to Heckscher - Ohlin, a capital abundant country will export the capital intensive goods while the labour abundant country will export the labour intensive goods.

**Limitations**

1. Factor endowment of a country may change over time.
2. The efficiency of the same factor (say labour) may differ in the two countries.

**4) Explain the types of Terms of Trade given by Viner.****The single factoral terms of trade:**

1. Viner has devised another concept called the **Single Factoral Terms of Trade**.
2. It is an improvement upon the *Commodity Terms of Trade*.
3. It represents the ratio of export price index to the import price index adjusted for changes in the productivity of a country's factors in the production of exports.

$$TF = (P_X / P_M) F_X$$

T stands for single factoral.

$F_X$  stands for productivity in exports.

**Double Factoral Terms of Trade:**

1. Viner constructed another index called double factoral terms of trade.
2. Which takes into account the productivity in country's exports, as well as the productivity of foreign factors.
3.  $F_M$  represents import index.

$$T_{FF} = (P_X / P_M) (F_X / F_m)$$

**5) Bring out the components of balance of payments account.****Components of BOPs are divided into three categories. They are,**

- (a) The Current Account
- (b) The Capital Account and
- (c) The Official Settlements Accounts or Official Reserve Assets Account.

**(a) The Current Account:**

- It includes all international trade transaction of goods and services.
- It is also includes international unilateral transfers.

**(b) The Capital Account:**

- Financial transactions consisting of direct investment and purchases of interest bearing financial instruments.
- They includes non interest bearing demand deposits and gold.

**(c) The Official Reserve Assets Account:**

- Official Reserve Transactions consist of movements of international re-serves by Government.
- Official agencies also accommodate in balance arising from the current and capital accounts.
- The official reserve assets of a country include its gold stock, SDRs & IMF etc.

**6) Discuss the various types of disequilibrium in the balance of payments.****Types BOP Disequilibrium :**

There are three main types of BOP Disequilibrium.

**(a) Cyclical Disequilibrium.**

**(b) Secular Disequilibrium.**

**(c) Structural Disequilibrium.**

**(a) Cyclical Disequilibrium:**

- First, two countries may be passing through different phases of business cycle.
- Secondly, the elasticities of demand may differ between countries.

**(b) 'Secular Disequilibrium:**

- The secular or long run disequilibrium in BOP occurs because of long - run.
- In the initial stages of development domestic investment exceeds domestic savings and imports exceed exports, as it happens in India since 1951.

**(c) Structural Disequilibrium:**

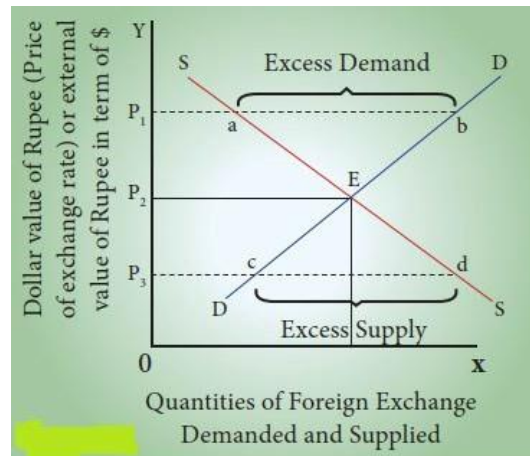
- Structural changes in the economy may also cause balance of payments disequilibrium.
- Structural changes include development of alternative sources of supply, development of better substitutes exhaustion of productive resources or changes in transport routes and costs.

**7) How the Rate of Exchange is determined? Illustrate.****Definition of Equilibrium Exchange Rate.**

The equilibrium exchange rate is that rate which over a certain period of time, keeps the balance of payments in equilibrium.

**Determination of Equilibrium Exchange Rate.**

1. The equilibrium rate of exchange is determined in the foreign exchange market in accordance with the general theory of value.
2. The equilibrium determined in the interaction of the forces of demand and supply.
3. Thus, the rate of exchange is determined at the point where demand for fo-rex is equal to the supply of forex.



In the above diagram, Y axis represents exchange rate, that is, value of rupee interms of dollars.

- **X axis** represents demand and supply of forex.
- **E** is the *point of equilibrium* where **DD** intersects **SS**.
- The exchange rate is **P2**.

### 8) Explain the relationship between Foreign Direct Investment and Economic development.

#### Relationship between Foreign Direct Investment and Economic development

1. FDI is an important factor in the global economy.
2. Foreign trade and FDI are closely related.
3. In developing countries like India FDI in the natural resource sector, including plantation increases trade volumes.
4. FDI is also influenced by the income generated from the trade and regional integration schemes.
5. Many developing countries, strongly prefer foreign investment to imports.

## Chapter – 8

### INTERNATIONAL ECONOMIC ORGANISATIONS

#### 1) Explain the objectives of IMF.

##### Objectives of IMF

1. To promote international monetary cooperation among the member nations.
2. To facilitate faster and balanced growth of international trade.
3. To ensure exchange rate stability by curbing competitive exchange depreciations.
4. To eliminate or reduce exchange controls imposed by member nations.
5. To promote the flow of capital from developed to developing nations.
6. To solve the problem of international liquidity.

**2) Bring out the functions of World Bank.****Functions of World Bank****1. Investment for productive purposes:**

- The World Bank performs the function of assisting in the reconstruction and development of territories of member nations through facility of investment for productive purposes.
- It also encourages the development of productive facilities and resources in less developed countries.

**2. Balanced growth of international trade :**

- Promoting the long range balanced growth of trade at international level and the maintaining equilibrium in BOPs of member nations by encouraging international investment.

**3. Provision of loans and guarantees :**

- Arranging the loans or providing guarantees on loans by various other channels so as to execute important projects.

**4. Promotion of foreign private investment:**

- The promotion of private foreign investment by means of guarantees on loans and other investment made by private investors.
- The Bank supplements private investment by providing finance for productive purpose out of its own resources or from borrowed funds.

**5. Technical services :**

- The World Bank facilitates different kinds of technical services to the member countries through Staff College and experts.

**3) Discuss the role of WTO in India's socio economic development .****Role of WTO in India's socio economic development**

- ❖ India is the founding member of the WTO.
- ❖ India favours multilateral trade approach. India benefited from WTO on following grounds.
  - 1) By reducing tariff rates on raw materials, components and capital goods, it was able to import more for meeting her developmental requirements.
  - 2) India's imports go on increasing.
  - 3) India gets market access in several countries without any bilateral trade agreements.
  - 4) Advanced technology has been obtained at cheaper cost.
  - 5) India is in a better position to get quick redressal from the trade disputes.
  - 6) The Indian exporters benefited from wider market information.

**4) Write a note on a) SAARC b) BRICS****SAARC**

- The South Asian Association for Regional Co-operation (SAARC) is an organisation of South Asian nations, which was established on 8 December 1985 for the promotion of economic and social progress, cultural development within the South Asia region and also for friendship and co-operation with other developing countries.
- The SAARC Group (SAARC) comprises of Bangladesh, Bhutan, India, The Maldives, Nepal, Pakistan and Sri Lanka.
- In April 2007, Afghanistan became its eighth member.



- The basic aim of the organisation is to accelerate the process of economic and social development of member states through joint action in the agreed areas of cooperation.
- The SAARC Secretariat was established in Kathmandu (Nepal) on 16<sup>th</sup> January 1987.
- The first SAARC summit was held at Dhaka in the year 1985.
- SAARC meets once in two years. Recently, the 20th SAARC summit was hosted by Srilanka in 2018.

### **BRICS**

- BRICS is the acronym for an association of five major emerging national economies: Brazil, Russia, India, China and South Africa.
- Originally the first four were grouped as "BRIC" before the induction of South Africa in 2010.
- The term 'BRIC' was coined in 2001.
- The BRICS members are known for their significant influence on regional affairs.
- Since 2009, the BRICS nations have met annually at formal summits.
- South Africa hosted the 10th BRICS summit in July 2018. The agenda for BRICS summit 2018 includes Inclusive growth, Trade issues, Global governance, Shared Prosperity, International peace and security.
- It's headquarters is at Shanghai, China. The New Development Bank (NDB) formerly referred to as the BRICS Development Bank was established by BRICS States.
- The first BRICS summit was held at Moscow and South Africa hosted the Tenth Conference at Johannesburg in July 2018.
- India had an opportunity of hosting fourth and Eighth summits in 2012 and 2016 respectively.

## **Chapter – 9 - FISCAL ECONOMICS**

### **1) Explain the scope of public finance.**

#### **Scope of public finance:**

The subject 'Public Finance' includes five major sub-divisions, viz., Public Revenue, Public Expenditure, Public Debt, Financial Administration and Fiscal Policy.,

#### **1. Public Revenue**

Public revenue deals with the methods of raising public revenue such as tax and non-tax, the principles of taxation, rates of taxation, impact, incidence and shifting of taxes and their effects.

#### **2. Public Expenditure**

This part studies the fundamental principles that govern the Government expenditure, effects of public expenditure and control of public expenditure.

#### **3. Public Debt**

Public debt deals with the methods of raising loans from internal and external sources. The burden, effects and redemption of public debt fall under this head.

#### **4. Financial Administration**

This part deals with the study of the different aspects of public budget. The budget is the Annual master financial plan of the Government.

#### **5. Fiscal Policy**

Taxes, subsidies, public debt and public expenditure are the instruments of fiscal policy.

**2) Bring out the merits of indirect taxes over direct taxes.****Merits of indirect taxes over direct taxes:****1. Convenient:**

- ✘ Indirect taxes are levied on commodities and services.
- ✘ Whenever consumers make purchase, they pay tax along with the price.
- ✘ They do not feel the pinch of paying tax.

**2. Tax Evasion:**

- ✘ Tax Evasion is possible in direct tax but it is hardly possible in Indirect Tax.
- ✘ Because indirect taxes is includes in the price of the goods and services.

**3. Wider coverage:**

- ✘ All the consumers, whether they are rich or poor, have to pay indirect taxes.
- ✘ In India, everyday pays indirect tax as against just 2 % paying income tax. (indirect tax).

**4. Less Burdensome:**

- ✘ As the tax is hidden in price, the consumers feel it less Burdensome, but the direct tax is inconvenient to be paid in lump sum.

**3) Explain the methods of debt redemption.**

**The process of repaying a public debt is called redemption. The following methods are adopted for debt redemption.**

**1. Conversion:**

- Conversion means that on old loan is converted into a new loan.
- Under this system a high interest public debt is converted into a low interest public debt.

**2. Budgetary Surplus:**

- When the government presents surplus budget, it can be utilized for repaying the debt.

**3. Terminal Annuity:**

- In this method, government pays off the public debt on the basis of terminal annuity in equal annual installments.

**4. Repudiation:**

- In such cases, the government does not recognize its obligation to repay the loan.
- It is certainly not paying off a loan but destroying it.

**5. Reduction in Rate of Interest:**

- It is the method of reduction in the rate of interest, during the time of financial crisis.

**4) State and explain instruments of fiscal policy.****Fiscal Instruments**

Fiscal Policy is implemented through fiscal instruments also called 'fiscal tools' or fiscal levers: Government expenditure, taxation and borrowing are the fiscal tools.

**i) Taxation:**

- Taxes transfer income from the people to the Government.
- Taxes are either direct or indirect.
- An increase in tax reduces disposable income.
- So taxation should be raised to control inflation.

**ii) Public Expenditure:**

- Public expenditure raises wages and salaries of the employees and thereby the aggregate demand for goods and services.
- Hence public expenditure is raised to fight recession and reduced to control inflation.

**iii) Public debt:**

- When Government borrows by floating a loan, there is transfer of funds from the public to the Government.
- At the time of interest payment and repayment of public debt, funds are transferred from Government to public.

**5) Explain the principles of federal finance.****Principles of federal finance****1. Principle of Independence**

- Under the system of federal finance, a Government should be autonomous and free about the internal financial matters concerned.
- It means each Government should have separate sources of revenue, authority to levy taxes, to borrow money and to meet the expenditure.

**2. Principle of Equity**

- From the point of view of equity, the resources should be distributed among the different states so that each state receives a fair share of revenue.

**3. Principle of Uniformity**

- In a federal system, each state should contribute equal tax payments for federal finance.
- But this principle cannot be followed in practice because the taxable capacity of each unit is not of the same.

**4. Principle of Adequacy of Resources**

- The principle of adequacy means that the resources of each Government i.e.
- Central and State should be adequate to carry out its functions effectively.

**5. Principle of Fiscal Access**

- In a federal system, there should be possibility for the Central and State Governments to develop new source of revenue within their prescribed fields to meet the growing financial needs.

**6) Describe the various types of deficit in budget.****Types of deficit in budget:****1) Revenue Deficit:**

- It refers to the excess of the government revenue expenditure over revenue receipts.
- It does not consider capital receipts and capital expenditure.
- Revenue deficit implies that the government is living beyond its means to conduct day-to-day operations.

$$\text{Revenue Deficit (RD)} = \text{Total Revenue Expenditure (RE)} - \text{Total Revenue Receipts (RR)}$$

$$\text{When, } RE - RR > 0$$

**2) Budget Deficit:**

- Budget deficit is the difference between total receipts and total expenditure.

$$\text{Budget Deficit (BD)} = \text{Total Expenditure} - \text{Total Revenue}$$

3) **Fiscal Deficit:**

$$\text{Fiscal Deficit (FD)} = \text{Budget Deficit} + \text{Governments Market Borrowing and Liabilities.}$$
4) **Primary Deficit:**

- It shows the real burden of the government and it does not include the interest burden on loans taken in the past.
- Thus, primary deficit reflects borrowing requirement of the government exclusive of interest payment.

$$\text{Primary Deficit} = \text{Fiscal Deficit (FD)} - \text{Interest Payment (IP)}$$
7) **What are the reasons for the recent growth in public expenditure?****Reasons for the recent growth in public expenditure**1) **Defense Expenditure:**

- There has been enormous increase in defense expenditure in India during planning period.
- The defense expenditure has been increasing tremendously due to modernization of defense equipment.

2) **Debt Servicing:**

- The government has been borrowing heavily both from the internal and external sources.
- As a result the government has to make huge amounts of repayment towards debts servicing.

3) **Development Projects:**

- The government has been undertaking various development projects.
- The Development Projects involve huge investment.

4) **Urbanization:**

- There has been an increase in urbanization.
- The increase in urbanization requires heavy expenditure on law and order, education and civic amenities.

5) **Increase in grants in aid to state and union territories:**

- There has been tremendous increase in grant-in-aid to state and union territories to meet natural disasters.

## Chapter – 10

### ENVIRONMENTAL ECONOMICS

1) **Briefly explain the relationship between GDP growth and the quality of environment.****GDP growth and the quality of Environment:**

- Environmental quality is a set of properties and characteristics of the environment either generalized or local, as they impinge on human beings.

- It is a measure of the condition of an environment relative to the requirements of one or more species.
- Environment is a pure public good that can be consumed simultaneously by everyone and from which no one can be excluded.
- A pure public good is one for which consumption is non-rival and from which it is impossible to exclude a consumer.
- The contribution of the nature to GDP as well as depletion of natural resources are not accounted in the present system of National Income Enumeration.
- Economic growth is often pointed out to be the cause of environmental issues based on the notion that increased production equals increased pollution.

## 2) Explain the concepts of externality and its classification.

### Concepts of externality and its classification

#### Positive Consumption Externality

When some residents of a locality hire a private security agency to patrol their area, the other residents of the area also benefit from better security without bearing cost.

#### Negative Consumption Externality

A person smoking cigarette gets may give satisfaction to that person, but this act causes hardship (dissatisfaction) to the non-smokers who are driven to passive smoking.

#### Positive Production Externality

The ideal location for beehives is orchards (first growing fields). While bees make honey, they also help in the pollination of apple blossoms. The benefits accrue to both producers (honey as well as apple).

#### Negative Production Externality

Negative production externalities include pollution generated by a factory that imposes costs on others. The emissions and effluents of a factory cause air and water pollution.

## 3) Explain the importance of sustainable development and its goals.

- (i) Sustainable development is concerned with the welfare of present and future generations.
- (ii) It **aims** at not only satisfying the luxury wants of rich but also basic necessities of the poor like food, sanitation, health care, education etc.

### Important goals of sustainable development

1. End poverty in all its forms everywhere.
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
3. Ensure healthy lives and promote well being for all at all ages.
4. Ensure inclusive and equality education for all and promote lifelong learning.
5. Achieve gender equality and empower women and girls.
6. Ensure access to water and sanitation for all.
7. Ensure access to affordable, reliable sustainable and modern energy for all.
8. Promote inclusive and sustainable, economic growth, employment and de-cent work for all.
9. Build resilient infrastructure, promote sustainable industrialization and foster innovation.
10. Reduce inequality within and among countries.
11. Make cities inclusive, safe, resilient and sustainable.
12. Ensure sustainable consumption and production pattern.

13. Take urgent action to contact climate change and its impacts.
14. Conserve and sustainably use the Oceans, seas and marine resources.
15. Sustainably manage forests, compatible certification, halt and reverse land degradation, halt biodiversity loss.
16. Promote just, peaceful and inclusive societies.
17. Revitalize the global partnership for sustainable development.

## Chapter – 11

### ECONOMICS OF DEVELOPMENT AND PLANNING

#### 1) Discuss the economic determinants of economic Development.

##### Discuss the economic determinants of economic Development.

##### 1. Natural Resource:

- The principal factor affecting the development of an economy is the availability of natural resources.
- The existence of natural resources in abundance is essential for development.

##### 2. Capital Formation:

- Capital formation is the main key to economic growth.
- It facilitates adoption of advanced techniques of production. It leads to better utilization of natural resources,

##### 3. Size of the Market:

- Large size of the market would stimulate production, increase employment and raise the National per capita income.

##### 4. Structural Change:

- Structural change refers to change in the occupational structure of the economy.
- Any economy of the country is generally divided into three basic sectors: Primary sector, Secondary sector, Tertiary sector.

##### 5. Foreign Trade:

- The country which enjoys favorable balance of trade and terms of trade is always developed.
- It has huge forex reserves and stable exchange rate.

#### 2) Describe different types of Planning.

##### Types of Planning

##### Democratic Planning:

- Democratic planning implies planning within democracy.
- People are associated at every step in the formulation and implementation of the plan.
- The plan prepared by the Planning Commission is not accepted as such.
- It can be accepted, rejected or modified by the Parliament of the country.

##### Totalitarian Planning:

- Under totalitarian planning, there is central control and direction of all economic activities in accordance with a single plan.

**Centralized Planning:**

- Under centralized planning, the entire planning process in a country is under a central planning authority.

**Decentralized Planning:**

- Under decentralized planning local organizations and institutions formulate, adopt, execute and supervise the plan without interference by the central authorities.

**Planning by Direction:**

- Under planning by direction, there is a central authority which plans, directs and orders the execution of the plan in accordance with predetermined targets and priorities.

**Planning by Inducement:**

- Under planning by inducement, the people are induced to act in a certain way through various monetary and fiscal measures.

**Indicative Planning:**

- Under this plan, the outline of plan is prepared by the Government.
- Then it is discussed with the representatives of private management, trade unions, consumer groups, finance institutions and other experts.
- The essential function of planning is coordination of different economic units.

**Imperative Planning:**

- Under imperative planning, the state is all powerful in preparation and implementation of the plan. Once a plan is drawn up, its implementation is a matter of enforcement.
- The Government policies and procedures are rigid. China and Russia follow imperative planning.

**Short, Medium and Long term Planning:**

- **Short-term plans** are also known as '**controlling plans**': They encompass the period of one year, therefore, they are also known as 'annual plans'.
- The **medium-term plans** last for the period of **3 to 7 years**. But normally, the medium term plan is made for the period of five years.
- **Long-term plans** last for the period of **10 to 30 years**. They are also known as '**perspective plans**'. The basic philosophy behind long-term planning is to bring structural changes in the economy.

**Financial Planning Vs Physical Planning :**

- **Financial planning** refers to the technique of planning in which resources are allocated in terms of money while **physical planning** pertains to the allocation of resources in terms of men, materials and machinery.

**Functional Planning:**

- **Functional planning** refers to that planning which seeks to remove economic difficulties by directing all the planning activities within the existing economic and social structure.

**Structural Planning:**

- The **structural planning** refers to a good deal of changes in the socio-economic framework of the country.
- This type of planning is adopted mostly in under developed countries.

**Comprehensive Vs Partial Planning:**

- **General planning** which concerns itself with the major issues for the whole economy is known as **comprehensive planning**
- whereas **partial planning** is to consider only the few important sectors of the economy.

**3) Bring out the arguments against planning.****Arguments against planning**

- The failure of market mechanism invited state intervention in economic activities through planning. The arguments against planning are discussed below.

**(I) Loss of Freedom:**

1. The absence of freedom in decision making may act as an obstacle for economic growth.
2. Regulations and restrictions are the backbones of a planned economy.
3. The decision by the Government are not always rational.
4. Freedom to private producers will be misused.
5. Profit will be given top priority welfare will be relegated

**(ii) Elimination of Initiative :**

1. Under centralized planning, there will be no incentives and innovations.
2. The absence of private ownership and profit motive discourage entrepreneurs from taking bold decisions and risk taking.
3. As all enjoy equal reward under planned economy irrespective of their effort efficiency and productivity.
4. The bureaucracy and red-tapism which are the features of planned economy cripple the initiative as they cause procedural delay and time loss.

**(iii) High cost of management:**

1. No doubt the fruits of planning such as industrialization, social justice and regional balance are good.
2. The cost of management of the economic affairs outweighs the benefits of planning.
3. As Lewis remarks, "the better we try to plan, the more planners we need":

**(iv) Difficulty in advance calculations:**

1. Price mechanism provides for the automatic adjustments among price demand and supply in Laissez Faire economy.
2. Excess supply and excess demand can also happen in the market oriented economy.
3. The arguments against planning are mostly concerned with centralized and totalitarian planning



## Chapter – 12

### INTRODUCTION TO STATISTICAL METHODS AND ECONOMETRICS

#### 1) Elucidate the nature and scope of Statistics.

##### Definition of Statistics

According to Croxton & Cowden “Statistics may be defined as the collection, organisation, presentation, analysis and interpretation of numerical data”

##### Nature of Statistics

- 1) Statistics are an aggregate of facts.
- 2) Statistics are numerically enumerated, estimated and expressed.
- 3) Statistics should be collected in a systematic manner for a predetermined purpose.
- 4) Should be capable of being used as a technique for drawing comparison
- 5) Statistics are numerated or estimated according to reasonable standard of accuracy.
- 6) Statistics are affected to a marked extent by a multiplicity of causes.

##### Scope of Statistics

- 1) Statistics and Economics
- 2) Statistics and Commerce
- 3) Statistics and Education
- 4) Statistics and Planning
- 5) Statistics and Medicine
- 6) Statistics and Modern applications

#### 2) Calculate the Karl Pearson Correlation Co-efficient for the following data

DEMAND OF PRODUCT X	23	27	28	29	30	31	33	35	36	39
SALE OF PRODUCT Y	18	22	23	24	25	26	28	29	30	32

LET A=30 AND B=26 THEN  $dx = X - A$   $dy = Y - B$

X	Y	$d_x$	$d_y$	$D_x^2$	$D_y^2$	$d_x d_y$
23	18	-7	-8	49	64	56
27	22	-3	-4	9	16	12
28	23	-2	-3	4	9	6
29	24	-1	-2	1	4	2
30	25	0	-1	0	1	0
31	26	1	0	1	0	0
33	28	3	2	9	4	6
35	29	5	3	25	9	15
36	30	6	4	36	16	24
39	32	9	6	81	36	54
		11	-3	275	159	175

$$r(x,y) = \frac{N \sum d_x d_y - \sum d_x \sum d_y}{\sqrt{N \sum d_x^2 - (\sum d_x)^2} \sqrt{N \sum d_y^2 - (\sum d_y)^2}}$$

$$= \frac{10(175) - (11)(-3)}{\sqrt{2150 - 121 - (11)^2} \sqrt{1590 - 9}}$$

$$= \frac{1783}{\sqrt{(45.044)} \sqrt{39.761}}$$

$$= \frac{1783}{1790.94}$$

Ans:  $r(x,y) = 0.9955$

3) Find out the regression equation Y on X and X on Y for the following data.

X	45	48	50	55	65	70	75	72	80	84
Y	25	30	35	30	40	50	45	55	60	65

X	Y	U=x-65	U = Y - 45	U <sup>2</sup>	UV	V <sup>2</sup>
45	25	-20	-20	400	400	400
48	30	-17	-15	489	255	225
50	35	-15	-10	225	150	100
55	30	-10	-15	100	150	225
65	40	0	-5	0	0	25
70	50	5	5	25	25	25
75	45	10	0	100	0	0
72	55	7	5	49	35	25
80	60	15	15	225	225	225
84	65	20	20	400	400	400
$\Sigma Y=645$	$\Sigma X=435$	$\Sigma U=5$	$\Sigma V=20$	$\Sigma U^2=1813$	$\Sigma V=1415$	$\Sigma V^2=1675$

We have,  
 $\bar{x} = \frac{\Sigma x}{N} = \frac{435}{10} = 43.5$  and  $\bar{y} = \frac{\Sigma Y}{N} = \frac{645}{10} = 64.5$

$$b_{yx} = \frac{NEUV - (\Sigma UEV)}{NEU^2 - (\Sigma V)^2}$$

$$= \frac{(10) \times 1415 - (5) \times (-20)}{(10) \times 1813 - (25)^2}$$

$$= \frac{14150 + 100}{18130 - 25} = \frac{14250}{18105} = 0.787$$

Regression equation of Y on X is

$$Y - \bar{y} = b_{yx} (X - \bar{x})$$

$$Y - 64.5 = 0.787 (X - 43.5)$$

$$\text{or } Y = 0.787X + 7.26$$

Similarly  $b_{xy}$  can be calculated as

$$b_{xy} = \frac{NEUV - (\Sigma UEV)}{NEU^2 - (\Sigma V)^2}$$

$$= \frac{(10) \times 1415 - (5) \times (-20)}{(10) \times 1675 - (-20)^2}$$

$$= \frac{14150 + 100}{16750 - 400} = \frac{14250}{16350} = 0.87$$

Regression equation of X on Y will be

$$X - \bar{x} = b_{xy} (Y - \bar{y})$$

$$Y - 64.5 = 0.87 (Y - 43.5)$$

$$\text{or } X = 0.87Y + 26.65$$

4) Describe the application of Econometrics in Economics.

Application of Econometrics in Economics

- Econometrics may be considered as the intergration of economics, Statistics and Mathematics.

i.e., Econometrics = Economics + Statistics + Mathematics.

Forecasting macroeconomic indicators :

- Some macroeconomics are concerned with the expected effects of monetary and fiscal policy on the aggregate performance of the economy.

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- **Time series models** can be used to make predictions about these economic indicators.

#### **Estimating the impact of immigration on native workers:**

- *Immigration increases* the supply of workers, so standard economic theory predicts that equilibrium wages will decrease for all workers.
- However, since immigration can also have positive demand effects, econometric estimates are necessary to determine the net impact of immigration in the labor market

#### **Determining the influence of minimum wage laws on employment levels:**

- *The minimum wage* is an example of a price floor, so higher minimum wages are supposed to create a surplus of labor (higher levels of unemployment).
- However, the impact of price floors like the minimum wage depends on the shapes of the demand and supply curves.
- Therefore, labor economists use econometric techniques to estimate the actual effect of such policies.

#### **Predicting revenue increases in response to a marketing campaign:**

- The field of marketing has become increasingly dependent on empirical methods.
- A marketing or sales manager may want to determine the relationship between marketing efforts and sales.
- How much additional revenue is generated from an additional dollar spent on advertising?
- Which type of advertising (radio, TV, newspaper, and so on) yields the largest impact on sales?
- These types of questions can be addressed with econometric techniques.

#### **Econometrics and other related subjects :**

- Econometrics, as a result of certain outlook on the role of economics, consists of application of mathematical statistics to economic data to lend empirical support to the models constructed by mathematical economics and to obtain numerical results.
- Econometrics means economic measurement. Econometrics deals with the measurement of economic relationship.

#### **Objectives of Econometrics :**

- It helps to explain the behaviour of a forthcoming period that is forecasting economic phenomena.
- It helps to prove the old and established relationships among the variables or between the variables
- It helps to establish new theories and new relationships.
- It helps to test the hypotheses and estimation of the parameter.

\*\*\*\*\* All the Best Children \*\*\*\*\*