

XII – ECONOMICS

Name :

Class : Sec:

School :

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PART - A

MULTIPLE CHOICE QUESTIONS 1 MARK

1. The branches of the subject Economics is

- (a) Wealth and welfare
- (b) Production and consumption
- (c) Demand and supply
- (d) Micro and macro

[Ans. (d) micro and macro]

2. Who coined the word 'Macro'?

- (a) Adam Smith
- (b) J M Keynes
- (c) Ragnar Frisch
- (d) Karl Marx

[Ans. (c) Ragnar Frisch]

3. Who is regarded as Father of Modern Macro Economics?

- (a) Adam Smith
- (b) J M Keynes
- (c) Ragnar Frisch
- (d) Karl Marx

[Ans. (b) J M Keynes]

4. Identify the other name for Macro Economics.

- (a) Price Theory
- (b) Income Theory
- (c) Market Theory
- (d) Micro Theory

[Ans. (b) Income Theory]

5. Macro economics is a study of _____.

- (a) individuals
- (b) firms
- (c) a nation
- (d) aggregates

[Ans. (d) aggregates]

6. Indicate the contribution of _____ J M Keynes to economics.

- (a) Wealth of Nations
- (b) General Theory
- (c) Capital
- (d) Public Finance

[Ans. (b) General Theory]

7. A steady increase in general price level is termed as _____.

- (a) Wholesale price index
- (b) Business Cycle
- (c) Inflation
- (d) National Income

[Ans. (c) Inflation]

8. Identify the necessity of Economic policies.

- (a) to solve the basic problems
- (b) to overcome the obstacles
- (c) to achieve growth
- (d) all the above

[Ans. (d) all the above]

9. Indicate the fundamental economic activities of an economy.

- (a) Production and Distribution
- (b) Production and Exchange
- (c) Production and Consumption
- (d) Production and Marketing

[Ans. (c) Production and Consumption]

10. An economy consists of

- (a) Consumption sector
- (b) Production sector
- (c) Government sector
- (d) All the above

[Ans. (d) All the above]

11. Identify the economic system where only private ownership of production exists.

- (a) Capitalistic Economy
- (b) Socialistic Economy
- (c) Globalistic Economy
- (d) Mixed Economy

[Ans. (a) Capitalistic Economy]

12. Economic system representing equality in distribution is _____.

- (a) Capitalism (b) Globalism
(c) Mixedism (d) Socialism

[Ans. (d) Socialism]

13. Who is referred as 'Father of Capitalism'?

- (a) Adam Smith (b) Karl Marx
(c) Thackeray (d) J M Keynes

[Ans. (a) Adam Smith]

14. The country following Capitalism is _____.

- (a) Russia (b) America
(c) India (d) China

[Ans. (b) America]

15. Identify The Father of Socialism.

- (a) J M Keynes (b) Karl Marx
(c) Adam Smith (d) Samuelson

[Ans. (b) Karl Marx]

16. An economic system where the economic activities of a nation are done both by the private and public together is termed as _____.

- (a) Capitalistic Economy
(b) Socialistic Economy
(c) Globalistic Economy
(d) Mixed Economy

[Ans. (d) Mixed Economy]

17. Quantity of a commodity accumulated at a point of time is termed as _____.

- (a) production (b) stock
(c) variable (d) flow

[Ans. (b) stock]

18. Identify the flow variable.

- (a) money supply
(b) assets
(c) income
(d) foreign exchange reserves

[Ans. (c) income]

19. Identify the sectors of a Two Sector Model.

- (a) Households and Firms
(b) Private and Public
(c) Internal and External
(d) Firms and Government

[Ans. (a) Households and Firms]

20. The Circular Flow Model that represents an open Economy.

- (a) Two Sector Model
(b) Three Sector Model
(c) Four Sector Model
(d) All the above

[Ans. (c) Four Sector Model]

PART - B

ANSWER THE FOLLOWING QUESTIONS IN ONE OR TWO SENTENCES **2 MARKS**

21. Define Macro Economics.

Ans. The word 'Macro' is derived from the Greek word 'Makros' meaning 'large' - Hence, Macro Economics is the study of the economy as a whole. In other words macro economics deals with aggregates such as national income, employment and output. Macro Economics is also known as "Income theory".

22. Define the term Inflation.

Ans. Inflation refers to steady increase in general price level.

23. What is meant by an 'Economy'?

J.R. Hicks defined as, "An economy is a cooperation of producers and workers to make goods and services that satisfy the wants of the consumer".

24. Classify the economies based on status of development.

- Ans.** (i) Status of Development
(ii) System of Activities
(iii) Scale of Activities
(iv) Nature of Functioning
(v) Nature of Operation

25. What do you mean by Capitalism?

Ans. Adam Smith is the Father of Capitalism. He defined that "capitalistic economy is also termed as a free economy (Laissez faire, in Latin) or market economy where the role of the government is minimum and market determines the economic activities.

26. Define 'Economic Model'.

Ans. A Model is a simplified representation of real situation. Economists use models to describe economic activities, their relationships and their behaviour.

27. 'Circular Flow of Income' - Define.

Ans. It shows flows of income, goods and services and factors of production between economic agents such as firms, house - holds government and nations.

PART - C

ANSWER THE FOLLOWING QUESTIONS IN ONE PARAGRAPH **3 MARKS**

28. State the importance of Macro Economics.

Ans. (i) There is a need to understand the functions of an economy at the aggregate level to evolve suitable strategies and to solve the basic problems prevailing in an economy.

(ii) Understanding the future problems needs and challenges of an economy as a whole.

(iii) Macro economics provides ample opportunities to use scientific investigation to understand the reality.

(iv) Macro economics helps to make meaningful comparison and analysis of economic indicators.

(v) Macro economics helps for better prediction about future.

29. Describe the different types of economic systems.

Ans. There are three major types of economic systems. They are,

(i) Capitalistic Economy (Capitalism) :

Capitalistic economy is also known as and Market economy / free trade economy. Where in capitalistic economy the role of the government is minimum.

(ii) Socialistic Economy (Socialism) :

Socialism refers to a system of total planning, public and state control on economic activity.

(iii) Mixed Economy (Mixedism) :

In a mixed economy system both private and public sectors co-exist and work together towards economic development.

30. Outline the major merits of capitalism.

Ans. (i) Automatic Working :

Without any government intervention the economy works automatically.

(ii) Efficient use of Resources :

All resources are put into optimum use.

(iii) Incentives for Hard work :

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

(iv) Consumers sovereignty :

All production activities are aimed at satisfying the consumers,

(vi) Higher Rates of Capital Formation :

Leads to higher rates of capital formation.

31. Indicate the demerits of socialism.

Ans. (i) As decision are taken by government agencies, approval of many officials and movement of files from one table to other takes time and leads to red tapism.

(ii) The major limitation of socialism is that this system does not provide any incentive for efficiency.

(iii) Consumers do not enjoy freedom of choice over the consumption of goods and services.

(iv) The state takes all major decisions.

32. Enumerate the features of mixed economy.

Ans. Features of Mixed Economy :

1. **Ownership of Property and Means of Production :** The means of production and properties are owned by both private and public. Public and Private have the right to purchase, use or transfer their resources.

2. **Coexistence of Public and Private Sectors :** In mixed economies, both private and public sectors coexist. Private industries undertake activities primarily for profit. Public sector firms are owned by the government with a view to maximize social welfare.

3. **Economic Planning** : The central planning authority prepares the economic plans. National plans are drawn up by the Government and both private and public sectors abide in general, all sectors of the economy function according to the objectives, priorities and targets laid down in the plan.
4. **Solution to Economic Problems** : The basic problems of what to produce, how to produce, for whom to produce and how to distribute are solved through the price mechanism as well as state intervention.
5. **Freedom and Control** : Though private has freedom to own resources, produce goods and services and distribute the same, the overall control on the economic activities rests with the government.

33. Distinguish between Capitalism and Globalism.

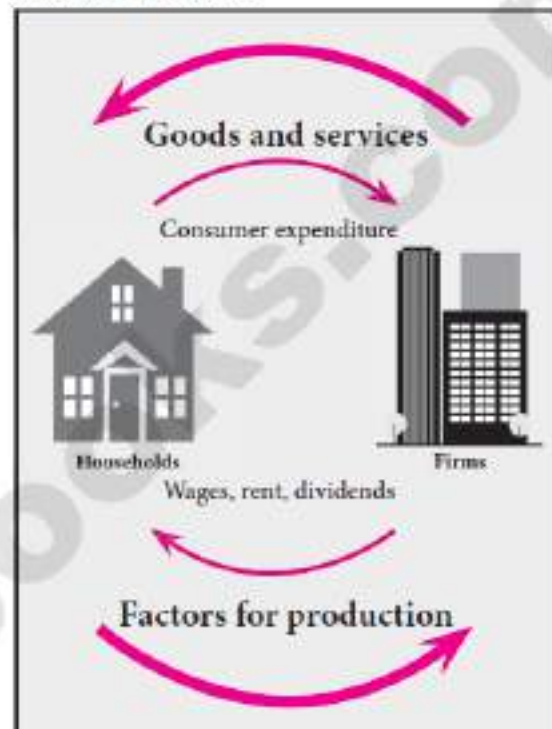
Ans.

| S. No. | Capitalism | Globalism |
|--------|---|--|
| 1. | The system where the means of production are privately owned and market determines the economic activities. | An economic system where the economic activities of a nation are inter connected and inter dependent on each other nation. |
| 2. | The role of the government is limited. | Governments of various nations plays a major role in policy making. |
| 3. | All economic activities are regulated by price mechanism. i.e. demand and supply. | All economic activities are regulated by government policies on imports and exports. i.e. Import policy and Export policy. |

34. Briefly explain the two sector circular flow model.

Ans. **Circular flow of Income in a Two-Sector economy** :

There are only two sectors namely house hold sector and firm sector.



- (i) In a two-sector economy, production and sales are equal and there will be a circular flow of income and goods.
- (ii) Outer circle represents real flow (factors and goods)
- (iii) The inner circle represents the monetary flow factor prices and commodity prices.
- (iv) Real flow indicates the factor services flow from house hold sector to the business sector and goods and services flow from business sector to the household.
- (v) The basic identities of the two sector economy are as under $Y = C + I$

Where :

Y is Income, C is Consumption, I is Investment.

PART - D

ANSWER THE FOLLOWING QUESTIONS IN ONE PAGE **5 MARKS**

35. Discuss the scope of Macro Economics.

Ans. The study of macro economics has wide scope and it covers the major areas as follow.

- (i) Measurement of national income and its composition by sectors are the basic aspects of macro economic analysis.
- (ii) The trends in National Income and its composition provide a long term understanding at the growth process of an economy.

Inflation :

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

Business Cycle :

- (i) Almost all economies face the problem of business fluctuations and business cycle.
- (ii) The cyclical movements (boom, recession, depression and recovery) in the economy need to be carefully studied based on aggregate economic variables.

Poverty and Unemployment : The major problems of most resource - rich nations are poverty and unemployment. This is one of the economic paradoxes. A clear understanding about the magnitude of poverty and unemployment facilitates allocation of resources and initiating corrective measures.

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

Economic Policies :

- (i) Macro Economics is significant for evolving. Suitable economic policies.
- (ii) Economic policies are necessary to solve the basic problems, to over come the obstacles and to achieve growth.

36. Illustrate the functioning of an economy based on its activities.

Ans. (i) The functioning of an economy by its activities is explained in the flow chart.



- (ii) In an economy the fundamental economic activities are production and consumption.
- (iii) The ultimate aim of these activities is to achieve growth.
- (iv) The exchange activity supports the production and consumption activities.
- (v) The major economic activities include transportation banking advertising planning government policy and others the major non-economic activities are environment, health regulations, etc.,
- (vi) Other economies such as imports, exports, International relations, emigration, immigration foreign investment, foreign exchange earning etc. also influence the entire functioning of the economy.

37. Compare the features of capitalism and socialism.

Ans.

| 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 |
| 5. | Income Distribution | Unequal | Equal |
| 6. | Nature of Enterprise | Private Enterprise | Government Enterprise |
| 7. | Economic Freedom | Complete Freedom | Lack of Freedom |
| 8. | Major problem | Inequality | Inefficiency |

38. Compare the features among Capitalism, Secularism and Mixedism.

Ans.

| 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 & profit motive |
| 3. | Solution of central problems | Free market system | Central planning system. | Central planning system and free market system |
| 4. | Government Role | Internal Regulation only | Complete Involvement | Limited Role |
| 5. | Income Distribution | Unequal | Equal | Less unequal |
| 6. | Nature of Enterprise | Private Enterprise | Government Enterprise | Both private and state enterprises |
| 7. | Economic Freedom | Complete Freedom | Lack of Freedom | Limited freedom |
| 8. | Major problem | Inequality | Inefficiency | Inequality and Inefficiency |

PART - A

MULTIPLE CHOICE QUESTIONS 1 MARK

1. Net National product at factor cost is also known as
 (a) National Income
 (b) Domestic Income
 (c) Per capita Income
 (d) Salary.
 [Ans. (a) National Income]
2. Primary sector is _____.
 (a) Industry (b) Trade
 (c) Agriculture (d) Construction.
 [Ans. (c) Agriculture]
3. National income is measured by using _____ methods.
 (a) Two (b) Three
 (c) Five (d) Four
 [Ans. (b) Three]
4. Income method is measured by summing up of all forms of _____.
 (a) Revenue (b) Taxes
 (c) expenditure (d) Income
 [Ans. (d) Income]
5. Which is the largest figure?
 (a) Disposable income
 (b) Personal Income
 (c) NNP
 (d) GNP [Ans. (d) GNP]
6. Expenditure method is used to estimate national income in _____.
 (a) Construction sector
 (b) Agricultural Sector
 (c) Service sector
 (d) Banking sector
 [Ans. (a) Construction sector]
7. Tertiary sector is also called as _____ sector
 (a) Service (b) Income
 (c) Industrial (d) Production
 [Ans. (a) Service]
8. National income is a measure of the _____ performance of an economy.
 (a) Industrial (b) Agricultural
 (c) Economic (d) Consumption
 [Ans. (c) Economic]
9. Per capita income is obtained by dividing the National income by _____.
 (a) Production
 (b) Population of a country
 (c) Expenditure
 (d) GNP [Ans. (b) Population of a country]
10. $GNP = \text{_____} + \text{Net factor income from abroad.}$
 (a) NNP (b) NDP
 (c) GDP (d) Personal income
 [Ans. (c) GDP]
11. NNP stands for _____.
 (a) Net National Product
 (b) National Net product
 (c) National Net Provident
 (d) Net National Provident
 [Ans. (a) Net National Product]
12. _____ is deducted from gross value to get the net value.
 (a) Income
 (b) Depreciation
 (c) Expenditure
 (d) Value of final goods
 [Ans. (b) Depreciation]
13. The financial year in India is _____.
 (a) April 1 to March 31
 (b) March 1 to April 30
 (c) March 1 to March 16
 (d) January 1 to December 31
 [Ans. (a) April 1 to March 31]
14. When net factor income from abroad is deducted from NNP, the net value is _____.
 (a) Gross National Product
 (b) Disposable Income
 (c) Net Domestic Product
 (d) Personal Income
 [Ans. (c) Net Domestic Product]

15. The value of NNP at production point is called _____.

- (a) NNP at factor cost
- (b) NNP at market cost
- (c) GNP at factor cost
- (d) Per capita income

[Ans. (a) NNP at factor cost]

16. The average income of the country is _____.

- (a) Personal Income
- (b) Per capita income
- (c) Inflation Rate
- (d) Disposal Income

[Ans. (b) Per capita income]

17. The value of national income adjusted for inflation is called _____.

- (a) Inflation Rate
- (b) Disposal Income
- (c) GNP
- (d) Real national income

[Ans. (d) Real national income]

18. Which is a flow concept ?

- (a) Number of shirts
- (b) Total wealth
- (c) Monthly income
- (d) Money supply

[Ans. (c) Monthly income]

19. PQLI is the indicator of _____.

- (a) Economic growth
- (b) Economic welfare
- (c) Economic progress
- (d) Economic development

[Ans. (b) Economic welfare]

20. The largest proportion of national income comes from _____.

- (a) Private sector
 - (b) Local sector
 - (c) Public sector
 - (d) None of the above
- [Ans. (a) Private sector]

PART - B

ANSWER THE FOLLOWING QUESTIONS IN
ONE OR TWO SENTENCES **2 MARKS**

21. Define National Income.

Ans. "The labour and capital of a country acting on its natural resources produce annually a certain net aggregate of commodities, material and immaterial including services of all kinds. This is the true net annual income or revenue of the country or national dividend".

22. Write the formula for calculating GNP.

Ans. GNP at market prices = GDP at market prices + Net factor income from Abroad.

$$\text{GNP} = C + I + G + ((X-M) + (R - P))$$

C - Consumption Expenditure

I - Investment Expenditure

G - Government Expenditure

X-M - Difference between value exports and imports of goods.

R-P - Net factor income from abroad

23. What is the difference between NNP and NDP?

Ans. Net Domestic Produce (NDP) is the value of net output of the economy during the year.

$$\text{Net Domestic product} = \text{GDP} - \text{Depreciation}$$

Net National Product (NNP) refers to the value of the net output of the economy during the year.

$$\text{NNP} = \text{GNP} - \text{depreciation allowance}$$

24. Trace the relationship between GNP and NNP.

Ans. Gross National Product (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.

Net National Product (NNP) refers to the value of the net output of the economy during the year. NNP is obtained by deducting the value of depreciation.

$$\text{NNP} = \text{GNP} - \text{depreciation allowance}$$

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

Ans. (i) Personal income is the total income received by the individuals of a country from all sources before payment of direct taxes in a year.

(ii) Personal income is never equal to the national income, because the former includes the transfer payments whereas they are not included in national income.

26. Define GDP deflator.

Ans. GDP deflator is an index of price changes of goods and services included in GDP.

$$\text{GDP deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$

27. Why is self consumption difficult in measuring national income?

Ans. Self consumption is difficult in measuring national income because it is not clear that the produce which is not sold in the market can be included in the national income or not.

PART - C

ANSWER THE FOLLOWING QUESTIONS IN ONE PARAGRAPH

3 MARKS

28. Write a short note on per capita income.

Ans. (i) The average income of a person of a country in a particular year is called per capita income.
(ii) Per capita income is obtained by dividing national income by population.

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

29. Differentiate between personal and disposable income.

| S. No. | Personal Income | Disposable Income |
|--------|--|---|
| 1. | Personal income is the total income received by the individuals of a country from all sources before payment of direct taxes in a year. | Disposable Income is also known as Disposable personal income. It is the individuals income after the payment of income tax. |
| 2. | Personal income is never equal to the national income, because the former includes the transfer payments whereas they are not included in national income. | This is the amount available for households for consumptions. |
| 3. | Personal Income = National income – social security contribution and undistributed corporate profits) + Transfer payments. | Disposable Income = Personal Income – Direct tax. As the entire disposable income is not spent of consumption. Disposable income = Consumption + Saving |

30. Explain briefly NNP at factor cost.

Ans. (i) NNP refers to the market value of output.
(ii) NNP at factor cost is the total of income payment made to factors of production.
(iii) 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.

$$\text{NNP at factor cost} = \text{NNP at Market prices} - \text{Indirect taxes} + \text{subsidies.}$$

31. Give short note on Expenditure method.

Ans. (i) The total expenditure incurred by the society in the particular year is added together.
(ii) To calculate the expenditure of the society, it includes personal consumption expenditure, net domestic investment, government expenditure on consumption as well as capital goods and net exports.

$$\text{GNP} = C + I + G + (X - M)$$

C = Private consumption expenditure.
I = Private investment expenditure.
G = Government expenditure.
X - M = Net exports.

32. What is the solution to the problem of double counting in the estimation of national income?

Ans. (i) Double counting is to be avoided under value added method.
(ii) Any commodity which is either raw material or intermediate good for the final production should not be included.
(iii) For example, value of cotton enters value of yarn as cost, and value of yarn in cloth and that of cloth in garments. At every stage value added only should be calculated.

33. Write briefly about national income and welfare.

- Ans.** (i) National income is considered as an indicator of the economic well-being of a country.
- (ii) The economic progress of country is measured in terms of their GDP per capita and their annual growth rate.
- (iii) A country with a higher per capita income is supposed to enjoy greater economic welfare with a higher standard of living.

34. List out the uses of national income.

Ans. Uses of National Income :

- (i) The National Income of a country describes the economic performance or production performance of a country.
- (ii) Economists, planners, Government, business man and international agencies (IMF, World Bank etc.) use national income data and analysis them for various purposes.
- (iii) National income data help in measuring changes in the standard of living over time and also enable us to compare standard of living of different countries.
- (iv) Level of development of a country is also measured by using national income figures.

PART - D

ANSWER THE FOLLOWING QUESTIONS IN ONE PAGE 5 MARKS

35. Explain the importance of national income.

Ans. Importance of National Income :

- (i) The national income is considered as accounts of the economy, which are known as social accounts.
- (ii) To know the relative importance of the various sector of the economy and the contribution towards national income.
- (iii) To formulate the national policies such as monetary policy, fiscal policy and other policies.
- (iv) The proper measures can be adopted to bring the economy to the right path.
- (v) To formulate planning and evaluate plan progress. It is essential that the data pertaining to a country's gross income.

(vi) To build economic models both in short and long-run.

(vii) To make international comparison, inter regional comparison and inter-temporal comparison for the growth of the economy.

(viii) To know a country's per capita income which reflects the economic welfare of the country.

(ix) To know the distribution of income for the various factors of productions.

To arrive at many macro economic variables namely, Tax - GDP ratio, Current Account Deficit - GDP ratio, Fiscal Deficit GDP ratio, Debt - GDP ratio etc.

36. Discuss the various methods of estimating the national income of a country.

Ans. There are three methods of measuring national income. They are,

- (i) Production (or) Value added method.
- (ii) Income method (or) Factor earning method.

(iii) Expenditure method.

(i) **Production Method :**

(1) Product method measures the output of the country.

(2) It is also called inventory method.

(3) In this method, the gross value of output from different sectors like agriculture, industry and commerce etc. is obtained for the entire economy during a year.

(4) The value obtained is actually the GNP at market prices.

(5) Care must be taken to avoid double counting.

(6) The value of the final product is derived by summation of all the values added in the productive process.

(7) To avoid double counting, either the value of the final output should be taken into the estimate of GNP.

(8) Double counting is to be avoided under value added method.

(9) Any commodity which is either raw material or intermediate good for the final production should not be included.

(ii) **Income Method : (Factor Earning Method)**

- (1) This method approaches national income from the distribution side.
- (2) In this method national income is calculated by adding up all the incomes generated in the course of producing national product.
- (3) Factor incomes are grouped under labour income, capital income and mixed income.
- (4) National Income is calculated as domestic factors income plus net factor incomes from abroad.

$$Y = w + r + i + \pi + (R - P)$$

w - wages, r - rent, i - interest,
 π - profit, R - exports and
P - imports.

(iii) **The Expenditure Method : (Outlay method)**

- (1) Under this method, the total expenditure incurred by the society in a particular year is added together.
- (2) 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.

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

C - Private consumption expenditure

I - Private Investment Expenditure

G - Government Expenditure

X - M - Net Exports

37. What are the difficulties involved in the measurement of national income?

Ans. **Difficulties in measuring National Income :**

In India, a special conceptual problem is posed by the existence of a large, unorganised and non-monetised subsistence sector where the barter system still prevails for transacting goods and services.

- (i) Transfer payments
 - (ii) Difficulties in assessing depreciation allowance
 - (iii) Unpaid services
 - (iv) Income from illegal activities
 - (v) Production for self-consumption and changing price
 - (vi) Capital gain
 - (vii) Statistical problems
- (i) **Transfer payments :**

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

(ii) **Difficulties in assessing depreciation allowance :**

- (1) The deduction of depreciation allowances, accidental damages, repair and replacement charges from the national income.
- (2) It requires high degree of judgement to assess the depreciation allowance and other charges.

(iii) **Unpaid services :**

- (1) A housewife renders a number of useful services like preparation of meals, serving, tailoring, cleaning, washing etc., She is not paid for them and her service are not directly included in national income.
- (2) Such services performed by paid servants are included in the national income.
- (3) Housewife's services (domestic work) cannot be measured in monetary terms.

(iv) **Income from illegal activities :**

- (1) Income earned through illegal activities like gambling, smuggling, illicit extraction of liquor etc., is not included in national income.
- (2) Such incomes have value and satisfy the wants of the people, so it is considered as productive income.

(v) **Production for self-consumption and charging price :**

- (1) Farmers keep a large portion of food and other goods produced on the farm for self consumption.
- (2) The produce which is not sold in the market can be included in national income or not.

(vi) **Capital gains :**

- (1) The gain is the difference between a higher selling price and the lower purchasing price.
- (2) Capital gains are excluded from the national income.

(vii) **Statistical problems :**

The following are some of the statistical problems.

- (1) In animal husbandry, there are no authentic production data available.
- (2) Different languages, customs etc., also create problems in computing estimates.
- (3) People in India are indifferent to the official inquiries.

(4) Most of the statistical staff are untrained and inefficient.

(5) National income estimates in our country are not accurate and adequate.

(6) National income is over estimated or under estimated by atleast 10%.

38. Discuss the importance of social accounting in economic analysis.

Ans. (i) National Income is also being measured by the social accounting method.

(ii) Under this method, the transaction among various sectors such as firms, households, government etc., are recorded and their inter relationship traced.

(1) The social accounting framework is useful for economists as well as policy makers.

(2) It represents the major economic flows and statistical relationship among various sectors of the economic system.

(3) It becomes possible to forecast the trends of economy more accurately.

PART - A

MULTIPLE CHOICE QUESTIONS 1 MARK

1. Every able bodied person who is willing to work at the prevailing wage rate is employed called as _____.
(a) Full employment
(b) Under employment
(c) Unemployment
(d) Employment opportunity
[Ans. (a) Full employment]
2. Structural unemployment is a feature in a _____.
(a) Static society (b) Socialist society
(c) Dynamic society (d) Mixed economy
[Ans. (c) Dynamic society]
3. In disguised unemployment, the marginal productivity of labour is _____.
(a) Zero (b) One
(c) Two (d) Positive
[Ans. (a) Zero]
4. The main contention of the Classical Economic Theory is _____.
(a) Under employment
(b) Economy is always in the state of equilibrium
(c) Demand creates its supply
(d) Imperfect competition
[Ans. (b) Economy is always in the state of equilibrium]
5. J.B. Say is a _____.
(a) Neo Classical Economist
(b) Classical Economist
(c) Modern Economist
(d) New Economist
[Ans. (b) Classical Economist]
6. According to Keynes, which type of unemployment prevails in capitalist economy?
(a) Full employment
(b) Voluntary unemployment
(c) Involuntary unemployment
(d) Under employment
[Ans. (d) Under employment]
7. The core of the classical theory of employment is _____.
(a) Law of Diminishing Return
(b) Law of Demand
(c) Law of Markets
(d) Law of Consumption
[Ans. (c) Law of Markets]
8. Keynes attributes unemployment to _____.
(a) A lack of effective supply
(b) A lack of effective demand
(c) A lack of both
(d) None of the above
[Ans. (b) A lack of effective demand]
9. _____ Flexibility brings equality between saving and investment.
(a) Demand (b) Supply
(c) Capital (d) Interest
[Ans. (d) Interest]
10. _____ theory is a turning point in the development of modern economic theory.
(a) Keynes' (b) Say's
(c) Classical (d) Employment
[Ans. (a) Keynes']
11. The basic concept used in Keynes Theory of Employment and Income is _____.
(a) Aggregate demand
(b) Aggregate supply
(c) Effective demand
(d) Marginal Propensity Consume
[Ans. (c) Effective demand]
12. The component of aggregate demand is _____.
(a) Personal demand
(b) Government expenditure
(c) Only export
(d) Only import
[Ans. (b) Government expenditure]
13. Aggregate supply is equal to _____.
(a) $C + I + G$
(b) $C + S + G + (x - m)$
(c) $C + S + T + (x - m)$
(d) $C + S + T + R_f$ [Ans. (d) $C + S + T + R_f$]

14. Keynes theory pursues to replace laissez faire by _____.

- (a) No government intervention
- (b) Maximum intervention
- (c) State intervention in certain situation
- (d) Private sector intervention

[Ans. (c) State intervention in certain situation]

15. In Keynes theory of employment and income, _____ is the basic cause of economic depression.

- (a) Less production
- (b) More demand
- (c) Inelastic supply
- (d) Less aggregate demand in relation to productive capacity.

[Ans. (d) Less aggregate demand in relation to productive capacity.]

16. Classical theory advocates _____.

- (a) Balanced budget
- (b) Unbalanced budget
- (c) Surplus budget
- (d) Deficit budget [Ans. (a) Balanced budget]

17. Keynes theory emphasized on _____ equilibrium.

- (a) Very short run
- (b) Short run
- (c) Very long run
- (d) Long run [Ans. (b) Short run]

18. According to classical theory, rate of interest is a reward for _____.

- (a) Investment
- (b) Demand
- (c) Capital
- (d) Saving [Ans. (d) Saving]

19. In Keynes theory, the demand for and supply of money are determined by _____.

- (a) Rate of interest
- (b) Effective demand
- (c) Aggregate demand
- (d) Aggregate supply [Ans. (a) Rate of interest]

20. Say's law stressed the operation of _____ in the economy.

- (a) Induced price mechanism
- (b) Automatic price mechanism
- (c) Induced demand
- (d) Induced investment [Ans. (b) Automatic price mechanism]

PART - B

ANSWER THE FOLLOWING QUESTIONS IN ONE OR TWO SENTENCES **2 MARKS**

21. Define full employment.

Ans. Full employment means that persons who are willing to work and able to work must have employment or a job.

22. What is the main feature of rural unemployment?

Ans. The major feature of rural unemployment is the existence of unemployment in the form of disguised unemployment and seasonal unemployment.

23. Give short note on frictional unemployment.

Ans. (i) Frictional unemployment arises due to imbalance between supply of labour and demand for labour.

(ii) The persons who lose jobs and in search of jobs are also included under frictional unemployment.

24. Give reasons for labour retrenchment at present situation.

Ans. (i) Employers must classify what the reason is for the possible retrenchment during the consultation process.

(ii) Israelstam explains that employers have to consult with labour unions as the representatives of employers in cases where there is unionisation.

25. List out the assumptions of Say's law.

Ans. (i) No single buyer or seller of commodity or an input can effect price.

(ii) There will be a perfect competition in labour and product market.

(iii) Money acts only as a medium of exchange.

(iv) Long-run analysis.

26. What is effective demand?

Ans. (i) Effective demand denotes money actually spend by the people on products of Industry.

(ii) The money which entrepreneurs receive is paid in the form of rent, wages, interest and profit.

27. What are the components of aggregate supply?

Ans. The components of aggregate supply are

- (i) Aggregate (desired) consumption expenditure (C).
- (ii) Aggregate (desired) savings (S).
- (iii) Net tax payments (T).
- (iv) Personal desired transfer payments to the foreigners (RF).

PART - C

ANSWER THE FOLLOWING QUESTIONS IN ONE PARAGRAPH 3 MARKS

28. Explain the following in short

- (i) Seasonal unemployment
- (ii) Frictional unemployment
- (iii) Educated unemployment

Ans. (i) Seasonal unemployment :

- (1) This type of unemployment occurs during certain seasons of the year.
- (2) In agriculture and agro based industries like sugar production activities are carried out only in some seasons.

(ii) Frictional unemployment (Temporary unemployment) :

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

(iii) Educated unemployment :

- (1) Sometimes educated people are under employment or unemployed when qualification does not match the job.
- (2) Faulty education system, Lack of Employable skills, mass student turnout etc., jobs are highly responsible for educated unemployment in India.

29. According to classical theory of employment, how wage reduction solve the problem of unemployment diagrammatically explain.

Ans. (i) During the days of the great depression Prof. A.C. Pigou supplied the most logical part of unemployment.

(ii) According to Pigou, under free competition the tendency of the economic system is automatically provide full employment in the labour market.

(iii) Unemployment results from rigidity in the wage structure and state interference in the market economy.

(iv) According to Prof. Pigou if all government interferences are removed and forces of competition are allowed to work freely, the market induced changes of wage rates will lead to full employment.

(v) Prof. Pigou illustrated the following equation.

$$N = q \cdot Y/W$$

N = No. of workers, Q = Fraction of income earned as wages and salaries.

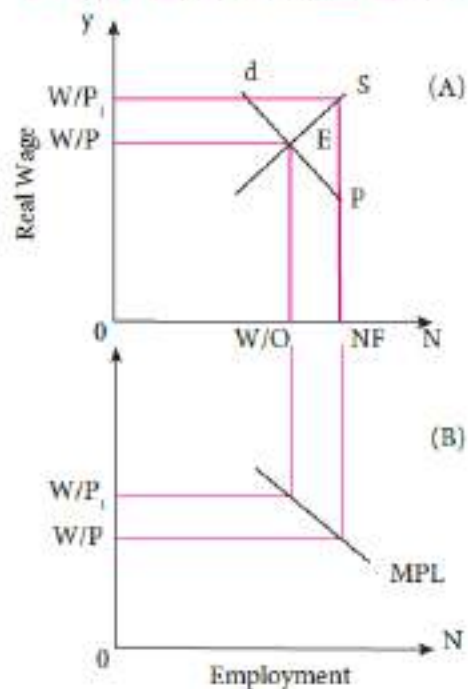
Y = Full employment level of national income.

W = Wage rate

(vi) If Y is given, N can be increased only by reduction in W.

(vii) This can be explained with following figure.

Reduced wage rate increases employment



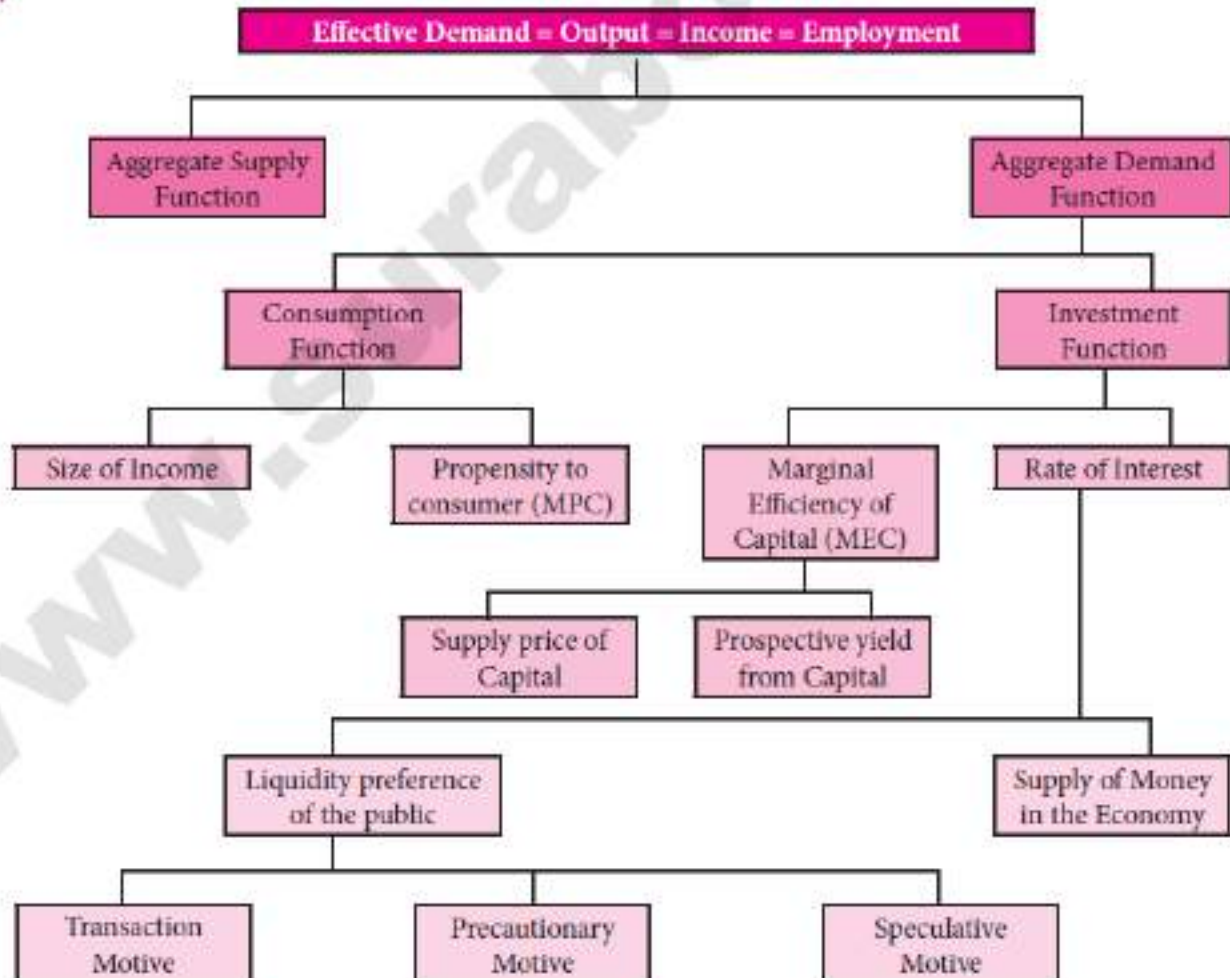
- (viii) S - is the supply curve of labour.
- (ix) D - is the demand curve of labour.
- (x) The intersection of two curves shows full employment at E.
- (xi) If the wage is reduced to the level of W/P then unemployment disappears and attain full employment.
- (xii) This is shown in panel (B).
- (xiii) MP_1 is the Marginal product of labour curve which slopes downward as more labour is employed.
- (xiv) The full employment level is reached when the wage rate falls from W/P_1 to W/P level.
- (xv) There is a cut in the money wage, the real wage is also reduced to the same extent which reduces unemployment and ultimately brings full employment.

30. Write short note on the implications of Say's law.

- Ans. (i) There is no possibility for over production or unemployment.
- (ii) If there exist unutilized resources in the economy it is profitable to employ them upto the point of full employment.
- (iii) As automatic price mechanism operates in the economy, there is no need for government intervention.
- (iv) Interest flexibility brings about equality between saving and investment.
- (v) Money performs only the medium of exchange function in the economy, as people will not hold idle money.

31. Explain Keynes' theory in the form of flow chart.

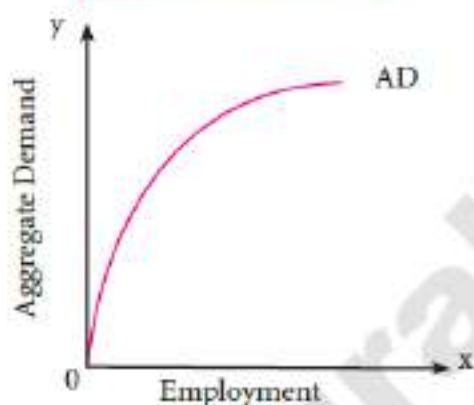
Ans.



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

- Ans.** (i) In the Keynesian model, output is determined mainly by aggregate demand.
 (ii) The aggregate demand is the amount of money which entrepreneurs expect to get by selling the output produced by the number of labourers employed.
 (iii) Aggregate demand has the following four components.
- (1) Consumption Demand
 - (2) Investment Demand
 - (3) Government Expenditure and
 - (4) Net Export (export - import)

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



33. Explain about aggregate supply with the help of diagram.

- Ans.** (i) Aggregate supply function is an increasing function of the level of employment.
 (ii) Aggregate supply refers to the value of total output of goods and services produced in an economy in a year.

The components of aggregate supply are :

- (i) Aggregate desired consumption expenditure (C)
- (ii) Aggregate (desired) private savings (S)
- (iii) Net tax payments (T)
- (iv) Personal (desired) transfer payments to the foreigners (Rf)

$$\text{Aggregate Supply} = C + S + T + Rf = \text{Aggregate income generated in the economy}$$

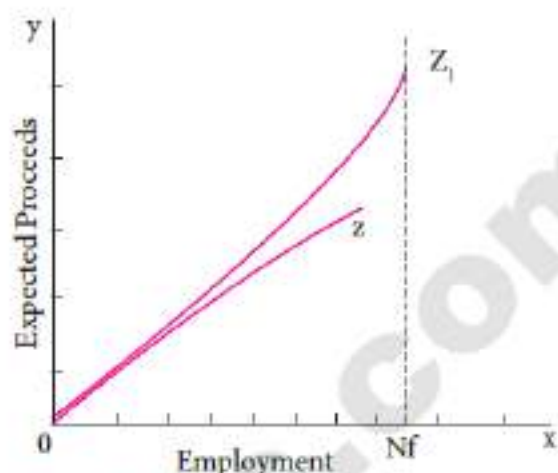


Diagram Explanation :

- (i) Z curve is linear where money wages remains fixed; Z curve is non-linear since wage rate increases with employment.
- (ii) When full employment level of NF is reached it is impossible to increase output by employing more men.
- (iii) The slope of the aggregate supply curve depends on the relation between the employment and productivity.
- (iv) Thus aggregate supply is an important factor in determining the level of economic activity.

34. Write any five differences between Classism and Keynesianism.

Ans.

| S. No. | Keynesianism | Classicism |
|--------|--|------------------------------------|
| 1. | Saving is a vice | Saving is a social virtue |
| 2. | Short-run equilibrium | Long-run equilibrium |
| 3. | Macro approach to national problems | Micro foundation to Macro problems |
| 4. | Capitalism has inherent contradictions | Capitalism is well and good |
| 5. | Rate of interest is a flow | Rate of interest is a stock |

PART - D

ANSWER THE FOLLOWING QUESTIONS IN ONE PAGE **5 MARKS**

35. Describe the types of unemployment.

Ans. Types of Unemployment are,

- (i) Cyclical Unemployment
- (ii) Seasonal Unemployment
- (iii) Frictional Unemployment
- (iv) Educated Unemployment
- (v) Technical Unemployment
- (vi) Structural Unemployment
- (vii) Disguised Unemployment

(i) **Cyclical Unemployment :**

- (1) This unemployment exists during the downturn phase of Trade cycle in the economy.
- (2) It is caused by deficiency of effective demand.

(ii) **Seasonal Unemployment :**

- (1) This type of unemployment occurs during certain seasons of the year.
- (2) In agriculture and agro based industries like sugar, production activities are carried out only in some seasons.

(iii) **Frictional Unemployment :**

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

(iv) **Educated Unemployment :**

- (1) Sometimes educated people are under employed or unemployed when qualification does not match the job.
- (2) Faulty education system, Lack of employable skills, mass student turnout etc., are highly responsible for educated unemployment in India.

(v) **Technical Unemployment :**

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

- (2) Labour saving devices are responsible for technological unemployment.

(vi) **Structural Unemployment :**

- (1) Structural unemployment is due to drastic change in the structure of the society.
- (2) For example rise in demand for mobile phone has adversely affected the demand for cameras, tape recorders etc.

(vii) **Disguised unemployment :**

Disguised unemployment occurs when more people are working than what is actually required.

36. Critically explain Say's law of market.

Ans. According to Say, "When goods are produced by firms in the economy, they pay reward to the factors of production. The households after receiving rewards of the factors of production spend the amount on the purchase of goods and services produced by them. Therefore, each product produced in the economy creates demand equal to its value in the market.

Criticisms of say's law :

The following are the criticisms against say's law.

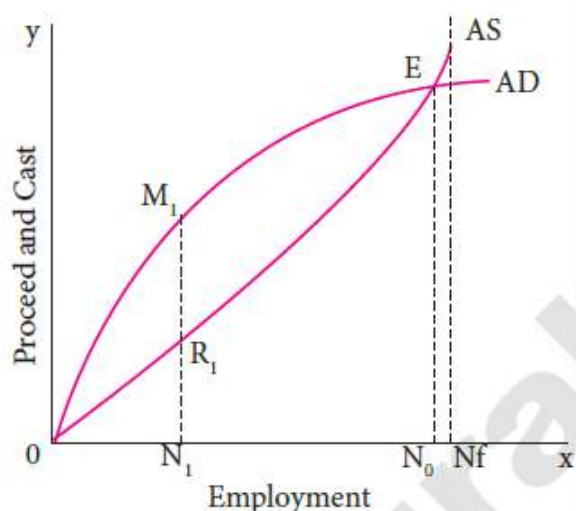
- (i) According to Keynes, supply does not create its demand. It is not applicable where demand does not increase as much as production increases.
- (ii) Automatic adjustment process will not remove unemployment.
- (iii) Money is not neutral. Individuals hold money for unforeseen contingencies while businessmen keep cash reserve for future activities.
- (iv) Say's law is based on the proposition that supply creates its own demand and there is no over production.
- (v) Keynes regards full employment as a special case because there is under employment in capitalist economies.
- (vi) The need for state intervention arises in the case of general over production and mass unemployment.

37. Narrate the equilibrium between ADF and ASF with diagram.

Ans. (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 to determination of the equilibrium level of income in Keynesian theory these are :

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.

(vii) The tendency to employ more labour will stop once they reach point E.

(viii) At all levels of employment beyond ON_0 , the aggregate demand curve is below the aggregate supply curve indicating loss to the producers.

(ix) Thus the concept of effective demand becomes significant in explaining the under employment equilibrium.

38. Explain the differences between Classical theory and Keynes theory.

Ans.

| S. 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. |
| 6. | Applicable to all situations. Full employment and less than full employment. | Applicable only to the full employment situation. |
| 7. | Capitalism has inherent contradictions | Capitalism is well and good |
| 8. | Budgeting should be adjusted to the requirements of economy. | Balanced budget. |

| | | |
|-----|---|---|
| 9. | The equality between saving and investment is advanced through changes in income. | The equality between saving and investment is achieved through changes of rate of interest. |
| 10. | Rate of interest is determined by the demand for and supply of money. | Rate of interest is determined by saving and investment. |
| 11. | Rate of interest is a flow | Rate of interest is a stock. |
| 12. | Demand creates its own supply. | Supply creates its own demand. |
| 13. | Rate of interest is a reward for parting with liquidity. | Rate of interest is a reward for savings. |

PART - A

MULTIPLE CHOICE QUESTIONS 1 MARK

1. The average propensity to consume is measured by
 - (a) C/Y
 - (b) $C \times Y$
 - (c) Y/C
 - (d) $C + Y$

[Ans. (a) C/Y]
2. An increase in the marginal propensity to consume will:
 - (a) Lead to consumption function becoming steeper
 - (b) Shift the consumption function upwards
 - (c) Shift the consumption function downwards
 - (d) Shift savings function upwards

[Ans. (a) Lead to consumption function becoming steeper]
3. If the Keynesian consumption function is $C=10+0.8 Y$ then, if disposable income is Rs 1000, what is amount of total consumption?
 - (a) ₹0.8
 - (b) ₹800
 - (c) ₹810
 - (d) ₹0.81

[Ans. (c) ₹810]
4. If the Keynesian consumption function is $C=10+0.8Y$ then, when disposable income is Rs 100, what is the marginal propensity to consume?
 - (a) ₹0.8
 - (b) ₹800
 - (c) ₹810
 - (d) ₹0.81

[Ans. (a) ₹0.8]
5. If the Keynesian consumption function is $C=10+0.8 Y$ then, and disposable income is ₹100, what is the average propensity to consume?
 - (a) ₹0.8
 - (b) ₹800
 - (c) ₹810
 - (d) ₹0.9

[Ans. (d) ₹0.9]
6. As national income increases
 - (a) The APC falls and gets nearer in value to the MPC.
 - (b) The APC increases and diverges in value from the MPC.
 - (c) The APC stays constant
 - (d) The APC always approaches infinity.

[Ans. (a) The APC falls and gets nearer in value to the MPC.]
7. As increase in consumption at any given level of income is likely to lead
 - (a) Higher aggregate demand
 - (b) An increase in exports
 - (c) A fall in taxation revenue
 - (d) A decrease in import spending

[Ans. (a) Higher aggregate demand]
8. Lower interest rates are likely to :
 - (a) Decrease in consumption
 - (b) increase cost of borrowing
 - (c) Encourage saving
 - (d) increase borrowing and spending

[Ans. (d) increase borrowing and spending]
9. The MPC is equal to :
 - (a) Total spending / total consumption
 - (b) Total consumption/total income
 - (c) Change in consumption /change in income
 - (d) none of the above.

[Ans. (c) Change in consumption /change in income]
10. The relationship between total spending on consumption and the total income is the _____.
 - (a) Consumption function
 - (b) Savings function
 - (c) Investment function
 - (d) aggregate demand function

[Ans. (a) Consumption function]

11. The sum of the MPC and MPS is _____.
- (a) 1 (b) 2
(c) 0.1 (d) 1.1

[Ans. (a) 1]

12. As income increases, consumption will _____.
- (a) fall (b) not change
(c) fluctuate (d) increase

[Ans. (d) not change]

13. When investment is assumed autonomous the slope of the AD schedule is determined by the _____.
- (a) marginal propensity to invest
(b) disposable income
(c) marginal propensity to consume
(d) average propensity to consume

[Ans. (c) marginal propensity to consume]

14. The multiplier tells us how much _____ changes after a shift in _____.
- (a) Consumption, income
(b) investment, output
(c) savings, investment
(d) output, aggregate demand

[Ans. (d) output, aggregate demand]

15. The multiplier is calculated as
- (a) $\frac{1}{1-MPC}$ (b) $1/MPS$
(c) $1/MPC$ (d) a and b

[Ans. (d) a and b]

16. If the MPC is 0.5, the multiplier is _____.
- (a) 2 (b) 1/2 (c) 0.2 (d) 20

[Ans. (a) 2]

17. In an open economy import _____ the value of the multiplier
- (a) reduces (b) increase
(c) does not change (d) changes

[Ans. (a) reduces]

18. According to Keynes, investment is a function of the MEC and _____.
- (a) Demand (b) Supply
(c) Income (d) Rate of interest

[Ans. (d) Rate of interest]

19. The term super multiplier was first used by
- (a) J.R.Hicks (b) R.G.D. Allen
(c) Kahn (d) Keynes

[Ans. (a) J.R.Hicks]

20. The term MEC was introduced by
- (a) Adam Smith (b) J.M. Keynes
(c) Ricardo (d) Malthus

[Ans. (b) J.M. Keynes]

PART - B

ANSWER THE FOLLOWING QUESTIONS IN ONE OR TWO SENTENCES **2 MARKS**

21. What is consumption function?

Ans. (i) Consumption function is a "Functional relationship between two aggregates viz total consumption and gross national income".

(ii) It is represented as $C = f(Y)$

where,

C = Consumption

Y = Income

f = Function

22. What do you mean by propensity to consume?

Ans. (i) Propensity to consume refers to income consumption relationship.

(ii) When income increases consumption also increases.

23. Define average propensity to consume (APC).

Ans. (i) The average propensity to consume is the ratio of consumption expenditure to any particular level of Income.

(ii) $APC = \frac{C}{Y}$

24. Define marginal propensity to consume (MPC).

Ans. (i) The Marginal propensity to consume may be defined as the ratio of the change in the consumption to the change in income.

(ii) $MPC = \frac{\Delta C}{\Delta Y}$

25. What do you mean by propensity to save?

Ans. (i) Propensity to save in economics, the proportion of total income or of an increase in income that consumers save rather than spend on consumption.

(ii) The propensity to save is merely the propensity not to consume.

26. Define average propensity to save (APS).

- Ans.** (i) The average propensity to save is the ratio of saving to consume.
 (ii) In other words, it is the ratio of total savings to total income.

(iii)
$$APS = \frac{S}{Y}$$

33. Mention the differences between accelerator and multiplier effect.

Ans.

| Sl. No. | Accelerator Effect | Multiplier Effect |
|---------|--|--|
| 1. | Accelerator is the numerical value of the relation between an increase in consumption and the result increase in investment. | The multiplier is defined as the ratio of the change in national income to change in investment. |
| 2. | (i) Increase in consumer demand. (ii) Firms get close to fill capacity. (iii) Firms invest to meet rising demand. | If ΔI stands for increase in investment and ΔY stands for resultant increase in income. |
| 3. | Accelerator $\beta = \frac{\Delta I}{\Delta C}$ | $K = \Delta Y / \Delta I$ since ΔY results from ΔI , the multiplier is also called as investment multiplier. |

34. State the concept of Super multiplier.

Ans. Super Multiplier : (K and β interaction)

- (i) In order to measure the total effect of initial investment on income, Hicks has combined the K and β mathematically and given in the name of the Super multiplier.
 (ii) It is worked out by combining both induced consumption and induced investment.
 (iii) The super multiplier is greater than simple multiplier which includes only autonomous investment and no induced investment while Super multiplier includes induced investment.

35. Specify the limitations of the multiplier.

Ans. Limitations of multiplier :

- (i) Payment towards past debts : If a portion of the additional income is used for repayment of old loan, the MPC is reduced.

31. Differentiate autonomous and induced investment.

Ans.

| Sl. No. | Autonomous Investment | Induced Investment |
|---------|--|--|
| 1. | Additional investment that is independent of | Additional investment demand that result |

- (ii) Purchase of existing wealth.
 (iii) Import of goods and services.
 (iv) Non-availability of consumer goods : The multiplier theory assumes instantaneous supply of consumer goods following demand. But there is often a time lag.
 (v) Full employment situation : Under conditions at full employment, resources, are almost fully employed. So it will lead to inflation.

PART - D

ANSWER THE FOLLOWING QUESTIONS IN ONE PAGE 5 MARKS

36. Explain Keynes psychological law of consumption function with diagram.

Ans. Keynes's Psychological Law of consumption :

Keynes propounded the fundamental psychological law of consumption which forms the basis of the consumption function.

Assumptions :

Keynes's law is based on the following assumptions.

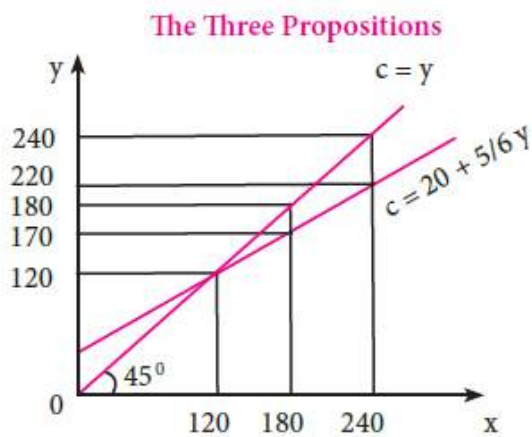
- (i) Ceteris paribus (constant extraneous variables)
 (ii) Existence of Normal conditions.
 (iii) Existence of a Laissez - faire capitalist economy.

Propositions of the law :

This law has three propositions.

- (i) When income increase consumption expenditure also increases but by a smaller amount.
 (ii) The increased income will be divided in some proportion between consumption expenditure and saving.
 (iii) Increase in income always leads to an increase in both consumption and saving.

| Income Y | Consumption C | Savings S = Y - C |
|-------------|------------------|----------------------|
| 120 | 120 | 0 |
| 180 | 170 | 10 |
| 240 | 220 | 20 |



Figure

- (i) Diagrammatically, the three propositions are explained with the help of above diagram.
- (ii) Here, income is measured horizontally and consumption and saving are measured on the vertical axis.
- (iii) C is the consumption function curve and 45° line represents income consumption equality.

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. It is clear from the widening area below the C curve and the saving gap between 45° line and C curve.

37. Briefly explain the subjective and objective factors of consumption function?

Ans. J.M. Keynes has divided factors influencing the consumption function into two namely, subjective factors and objective factors.

Subjective Factors :

Subjective factors are the internal factors related to psychological feelings.

- (i) **The motive of precaution :** To build up a reserve against unforeseen contingencies. Eg. Accident, Sickness.
- (ii) **The motive of foresight :** The desire to provide for anticipated future needs. Eg. Old age.
- (iii) **The motive of calculation :** The desire to enjoy interest and appreciation.
- (iv) **The motive of improvement :** The desire to enjoy for improving standard of living.
- (v) **The motive of financial independence.**
- (vi) **The motive of enterprise :** Desire to do forward trading.
- (vii) **The motive of pride :** Desire to bequeath a fortune.
- (viii) **The motive of avarice :** Purely miserly instinct.

Objective Factors :

Objective factors are the external factors which are real and measurable.

- (i) **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 consume and high propensity to save.
- (ii) **Price Level :** Price Level plays an important role in determining the consumption function.
- (iii) **Wage Level :** Wage Level plays an important role in determining the consumption function and there is positive relationship between wage and consumption.
- (iv) **Interest Rate :** Higher rate of interest will encourage people to save more money and reduces consumption.
- (v) **Fiscal policy :** The progressive tax system increases the propensity to consume of the people by altering the income distribution in favour of poor.
- (vi) **Consumer credit :** The availability of consumer credit at easy installments will encourage households to buy consumer durables like automobiles, fridge, computer. This pushes up consumption.

(vii) **Demographic factors** : Ceteris paribus, the larger the size of the family, the greater is the consumption.

(viii) **Duesenberry hypothesis** : Duesenberry has made two observations regarding the factors affecting consumption.

- (1) The consumption expenditure depends not only on his current income but also past income and standard of living.
- (2) Consumption is influenced by demonstration effect. The consumption standards of low income groups are influenced by the consumption standards of high income groups.

38. Illustrate the working of Multiplier.

- Ans. (i)** Suppose the Government undertakes investment expenditure equal to ₹100 crore on some public works, by way of wages, price of materials etc.
- (ii)** Suppose the MPC is 0.8 that is 80%. A sum of ₹80 crores is spent on consumption (A sum of ₹20 crores is saved).
- (iii)** They inturn spend ₹64 crores (80% of ₹80 crore).
- (iv)** In this manner consumption expenditure and increase in income act in a chain like manner.

The final result is $\Delta Y = 100 + 100 \times 4/5 + 100 \times [4/5]^2 + 100 \times [4/5]^3$ or,
 $\Delta Y = 100 + 100 \times 0.8 + 100 \times (0.8)^2 + 100 \times (0.8)^3$
 $= 100 + 80 + 64 + 51.2 \dots\dots\dots$
 $= 500$

That is $100 \times 1/1-4/5$
 $100 \times 5 = 500$ crores

for instance if $C = 100 + 0.8Y, I = 100,$
 Then $Y = 100 + 0.8Y + 100$
 $0.2Y = 200$
 $Y = 200 / 0.2 = 1000 \rightarrow$ point B.

If I is increased to 110, then,
 $0.2Y = 210$
 $Y = 210/0.2 = 1050 \rightarrow$ point D.

For ₹10 increase in I, Y has increased by ₹50.
 This is due to multiplier effect.

At point A, $Y = C = 500$

$C = 100 + 0.8 (500) = 500, S = 0$

At point B, $Y = 1000$

$C = 100 + 0.8 (1000) = 900; S = 100 = I$

At point D, $Y = 1050$

$C = 100 + 0.8 (1050) = 940; S = 100 = I$

When I is increased by 10, Y increases by 50.

This is multiplier effect ($K = 5$)

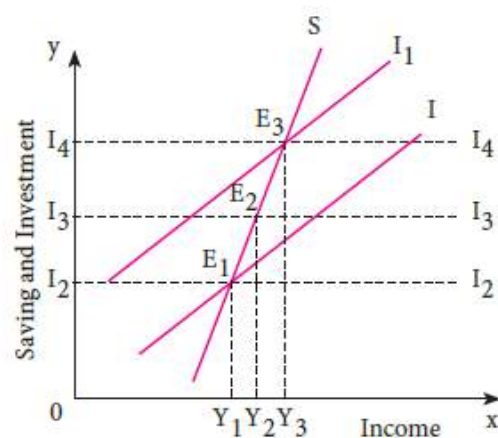
$K = \frac{1}{0.2} = 5$

39. Explain the operation of the Accelerator.

Ans. (a) Operation of Accelerator :

- (i) Let us consider a simple example. The operation of the accelerator may be illustrated as follows.
- (ii) Let us suppose that in order to produce 1000 consumer goods, 100 machines are required.
- (iii) Suppose the demand for consumer goods rises by 10%, ie. from 1000 to 1100.
- (iv) This results in increase in demand for 10 more machines. So that total demand for machines is 20.
- (v) 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).
- (vi) A mild change in demand for consumer goods will lead to wide change in investment.

Operation of Accelerator



- (i) SS is the saving curve.
- (ii) II is the investment curve.
- (iii) At point E_1 , the economy is in equilibrium with OY_1 income. Saving and investment are equal at OI_1 .
- (iv) Investment is increased from OI_1 to OI_4 . This increases income from OY_1 to OY_3 , the equilibrium point being E_3 .
- (v) In this diagram, it is assumed that exogenous investment is only by I_2I_3 and induced investment is by I_3I_4 .
- (vi) Therefore, increase in income by Y_1Y_2 is due to the multiplier effect and the increase in income by Y_2Y_3 is due to the accelerator effects.

(b) Limitations :

- (1) The assumption of constant capital output ratio is unrealistic.
- (2) Resources are available only before full employment.
- (3) Accelerators will work only if the increased demand is permanent.
- (4) Accelerator will work only when credit is available easily.
- (5) If there is excess capacity in the consumer goods accelerator principle would not work.

40. What are the differences between MEC and MEI.

Ans.

| Sl. No. | Marginal Efficiency of Capital (MEC) | Marginal Efficiency of Investment (MEI) |
|---------|--|---|
| 1. | It is based on given supply price for capital. | It is based on the induced change in the price due to change in the demand for capital. |
| 2. | It represents the rate of return on all successive unit 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. | The capital stock is taken on the X axis of diagram. | The amount of investment is taken on the X axis of diagram. |
| 4. | It is a "Stock" concept. | It is a "Flow" concept. |
| 5. | 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. |

PART - A

MULTIPLE CHOICE QUESTIONS 1 MARK

1. The RBI Headquarters is located at
 (a) Delhi (b) Chennai
 (c) Mumbai (d) Bengaluru
 [Ans. (c) Mumbai]
2. Money is
 (a) acceptable only when it has intrinsic value
 (b) constant in purchasing power
 (c) the most liquid of all assets
 (d) needed for allocation of resources
 [Ans. (c) the most liquid of all assets]
3. Paper currency system is managed by the
 (a) Central Monetary authority
 (b) State Government
 (c) Central Government
 (d) Banks
 [Ans. (a) Central Monetary authority]
4. The basic distinction between M_1 and M_2 is with regard to .
 (a) post office deposits
 (b) time deposits of banks
 (c) saving deposits of banks
 (d) currency
 [Ans. (b) time deposits of banks]
5. Irving Fisher's Quantity Theory of Money was popularized in
 (a) 1908 (b) 1910
 (c) 1911 (d) 1914
 [Ans. (c) 1911]
6. MV stands for
 (a) demand for money
 (b) supply of legal tender money
 (c) Supply of bank money
 (d) Total supply of money
 [Ans. (b) supply of legal tender money]
7. Inflation means
 (a) Prices are rising
 (b) Prices are falling
 (c) Value of money is increasing
 (d) Prices are remaining the same
 [Ans. (a) Prices are rising]
8. _____ inflation results in a serious depreciation of the value of money.
 (a) Creeping (b) Walking
 (c) running (d) Hyper
 [Ans. (d) Hyper]
9. _____ inflation occurs when general prices of commodities increases due to increase in production costs such as wages and raw materials.
 (a) Cost-push (b) demand pull
 (c) running (d) galloping
 [Ans. (a) Cost-push]
10. During inflation, who are the gainers?
 (a) Debtors
 (b) Creditors
 (c) Wage and salary earners
 (d) Government
 [Ans. (a) Debtors]
11. _____ is a decrease in the rate of inflation.
 (a) Disinflation (b) Deflation
 (c) Stagflation (d) Depression
 [Ans. (a) Disinflation]
12. Stagflation combines the rate of inflation with
 (a) Stagnation (b) employment
 (c) output (d) price
 [Ans. (a) Stagnation]
13. In Economics, the study of alternating fluctuations in business activity is referred as
 (a) Boom (b) Recession
 (c) Recovery (d) Trade cycle
 [Ans. (d) Trade cycle]

14. During depression the level of economic activity becomes extremely

- (a) high (b) bad
(c) low (d) good

[Ans. (c) low]

15. "Money can be anything that is generally acceptable as a means of exchange and that the same time acts as a measure and a store of value", This definition was given by

- (a) Crowther (b) A.C.Pigou
(c) F.A.Walker (d) Francis Bacon

[Ans. (a) Crowther]

16. Debit card is an example of

- (a) currency (b) paper currency
(c) plastic money (d) money

[Ans. (c) plastic money]

17. Fisher's Quantity Theory of money is based on the essential function of money as

- (a) measure of value
(b) store of value
(c) medium of exchange
(d) standard of deferred payment

[Ans. (c) medium of exchange]

18. V in $MV = PT$ equation stands for

- (a) Volume of trade
(b) Velocity of circulation of money
(c) Volume of transaction
(d) Volume of bank and credit money

[Ans. (b) Velocity of circulation of money]

19. When prices rise slowly, we call it

- (a) galloping inflation (b) mild inflation
(c) hyper inflation (d) deflation

[Ans. (b) mild inflation]

20. _____ inflation is in no way dangerous to the economy.

- (a) walking (b) running
(c) creeping (d) galloping

[Ans. (c) creeping]

PART - B

ANSWER THE FOLLOWING QUESTIONS IN ONE OR TWO SENTENCES **2 MARKS**

21. Define Money.

Ans. (i) "Money is, what money does".

- (ii) 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.

22. What is barter?

Ans. Barter is nothing but commodities and services were directly exchanged for other commodities and services.

23. What is commodity money?

Ans. (i) Commodity money is money whose value comes from a commodity of which it is made.

- (ii) Commodity money consist of an object that have value in themselves as well as value in their use of money.

24. What is gold standard?

Ans. Gold standard is a system in which the value of the monetary unit or the standard currency is directly linked with gold.

25. What is plastic money? Give example.

Ans. (i) The latest type of money is plastic money.

- (ii) Plastic money is one of the most evolved forms of financial products.

(iii) Plastic money is an alternative to the cash (or) the standard money.

For example : Cash cards, Credit cards, Debit cards, Pre-paid, Smart cards etc.

26. Define Inflation.

Ans. (i) Inflation is a consistent and appreciable rise in the general price level.

- (ii) Inflation is the rate at which the general level of prices for goods and services are rising consequently the purchasing power of currency is falling.

27. What is Stagflation?

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

PART - C

ANSWER THE FOLLOWING QUESTIONS IN ONE PARAGRAPH **3 MARKS**

28. Write a note on metallic money.

- Ans. (i)** After the barter system and commodity money system, modern money system evolved.
- (ii)** Among these metallic standard is the premier one.
- (iii)** Under Metallic standard, some kind of metal either gold or silver is used to determine the standard value of money.
- (iv)** Standard coins made out of the metal are the principal coins used under the metallic standard.
- (v)** The face value of metallic money is equal to their intrinsic metal value.

29. What is money supply?

- Ans. (i)** Money supply means the total amount of money in an economy.
- (ii)** It refers to the amount of money which is in circulation in an economy at any given time.
- (iii)** Money supply plays a crucial role in the determination of price level and interest rates.
- (iv)** 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)

30. What are the determinants of money supply?

- Ans. (i) Current Deposit Ratio (CDR) :**
It is the ratio of money held by the public in currency to that they hold in bank deposits.
- (ii) Reserve Deposit Ratio (RDR) :**
Reserve money consists of two things (a) vault cash in banks and (b) deposits of commercial banks with RBI.
- (iii) Cash Reserve Ratio (CRR) :**
It is the fraction of the deposits the banks must keep with RBI.
- (iv) 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.

31. Write the types of inflation.

Ans. 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 :** Galloping inflation or hyper inflation points out to unmanageably high inflation rates that run into two or three digits.

32. Explain Demand-pull and Cost push inflation.

Ans. (i) Demand - pull Inflation :

- (1)** Demand and supply a crucial role in deciding the inflation levels in the society at all the points of time.
- (2)** 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 rises inflation results. Increase in wages paid to labour also leads to inflation.

33. State Cambridge equations of value of money.

Ans. (i) Marshall's equation : The Marshall's equation is expressed as :

$$M = KPY, \text{ where}$$

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

The value of money in terms of this equation can be found out by dividing the total quality of goods which the public desires to hold out of the total income by the total supply of money.

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 :

$$n = PK \text{ (or) } P = n/K$$

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.

34. Explain Disinflation.

Ans. Disinflation is 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.

PART - D

ANSWER THE FOLLOWING QUESTIONS IN ONE PAGE

5 MARKS

35. Illustrate Fisher's Quantity theory of money.

Ans. Quantity theories of money explain the relationship between quantity of money and value of money.

Here, we are given two approaches of Quantity Theory of Money, viz. Fisher's Transaction Approach and Cambridge Cash Balance Approach.

Fisher's Quantity Theory of Money :

- (1) The quantity theory of money is a very old theory.
- (2) It was first propounded in 1588 by an Italian economist, Davanzatti.

The general form of equation given by Fisher is

$$MV = PT$$

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).

$$MV = PT$$

Supply of Money = Demand for Money

This equation is referred to as "Cash Transaction Equation".

Where M = Money supply / Quantity of Money

V = Velocity of Money

P = Price Level

T = Volume of Transaction

It is expressed as $P = MV/T$ which implies that the quantity of money determines the price level and the price level in its turn varies directly with the quantity of money, provided "V" and "T" remain constant.

Fisher extended his original equation of exchange to include bank deposits M1 and its velocity V1. The revised equation was:

$$PT = MV + M1V1$$

$$P = \frac{MV + M1V1}{T}$$

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

- (a) The quantity of money in circulation 'M'
- (b) The velocity of circulation of money 'V'
- (c) The volume of bank credit money M1
- (d) The velocity of circulation of credit money V1 and the volume of trade (T).

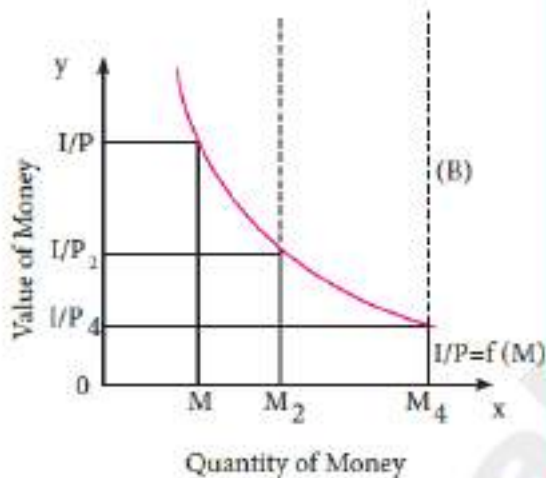
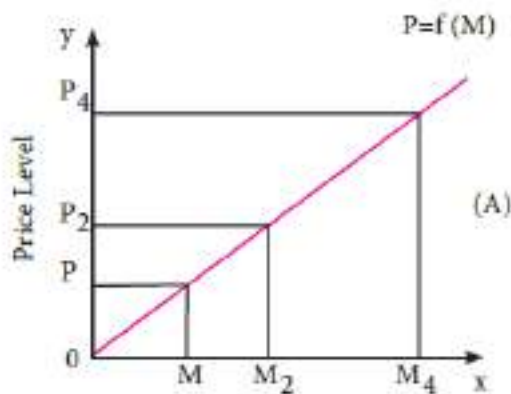


Figure (A) shows the effect of changes in the quantity of money on the price level.

- (1) The quantity of money is OM , the price level is OP .
- (2) When the quantity of money is doubled to OM_2 , the price level is also doubled to OP_2 . when the quantity of money is increased four fold to OM_4 , the price level also increases by four times to OP_4 .

Figure (B), shows the inverse relation between the quantity of money and the volume 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_4 , the value of money is reduced by OI/P_4

This inverse relationship between the quantity of money and the value of money is shown by downward sloping curve

$$IO/P = f(M).$$

36. Explain the functions of money.

Ans. Functions of Money :

The main functions of money can be classified into four categories.



(I) Primary Functions :

(1) Money as a medium of Exchange :

- (i) This is considered as the basic function of money.
- (ii) Money has the quality of general acceptability and all exchanges take place in terms of money.

(2) Money as a measure of value :

It measures the value of goods and services.

(II) Secondary Functions :

(1) Money as a Store of value :

- (i) Savings done in terms of commodities were not permanent. But, with the invention of money, savings are now done in terms of money.
- (ii) It can be easily converted into other marketable assets such as, land, machinery, plant etc.

(2) Money as a Standard of Deferred Payments :

- (i) Borrowing and lending were very difficult in Barter system.
- (ii) In the absence of money, the borrowed amount could be returned only in terms of goods and services.
- (iii) But money acts as the standard of deferred payments.

(III) Contingent Functions :

- (i) **Basis of credit system :** Business transactions are either in cash or on credit. Money is at the back of all credits.
- (ii) Money facilitates distribution of national income. The task of distribution of national income was exceedingly complex under the barter system.
- (iii) But money has facilitated the distribution of income as rent, wage, interest and profit.
- (iv) Money helps to equalize marginal utilities and marginal productivities.
- (v) Money increases productivity of capital.

(IV) Other Functions :

- (i) Money helps to maintain **repayment capacity**. Money possesses the quality of general acceptability.
- (ii) Money represents generalized **purchasing power** and can be put to any use.
- (iii) Money gives **liquidity** to capital and can be put to any use.

37. What are the causes and effects of inflation on the economy?

Ans. Causes of Inflation :

- (1) **Increase in Money Supply :** Inflation is caused by an increase in the supply of money which leads to increase in aggregate demand.
- (2) **Increase in Disposable Income :** When the disposable income of the people increases, it raises their demand for goods and services.
- (3) **Increase in Public Expenditure :** Government activities have been expanding due to developmental activities and social welfare programmes. This is also a cause for price rise.
- (4) **Increase in Consumer Spending :** The demand for goods and services increases when they have given credit.

(5) **Cheap Monetary Policy :** Cheap money policy (or) policy of credit expansion also leads to increase in the money supply which raises the demand for goods and services.

(6) **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.

(7) Black Assets, Activities and Money :

- (i) The existence of black money and black assets due to corruption, tax evasion etc., increases the aggregate demand.
- (ii) Black marketing and hoarding reduces the supply of goods and increases the price level further.

(8) **Repayment of Public Debt :** The government repays its past internal debt to the public which increases in the money supply to the public. This tends to raise the aggregate demand for goods and services.

(9) **Increase in Exports :** When exports are encouraged, domestic supply of goods decline. So prices raise.

Effects of Inflation :

(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.

- (i) However, hyper-inflation results in a serious depreciation of the value of money and it discourages savings on the part of the public.
- (ii) When the value of money undergoes considerable depreciation, this may even drain out the foreign capital already invested in the country.
- (iii) With reduced capital accumulation, the investment will suffer a serious set-back which may have an adverse effect on the volume of production in the country. This may discourage entrepreneurs and business men from taking business risk.

- (iv) Inflation also leads to hoarding of essential goods both by the traders as well as the consumers and thus leading to still higher inflation rate.
- (v) Inflation encourages investment in speculative activities rather than productive purposes.

(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. Examples are wage, salary, pension, interest, rent etc.
- (iii) **Entrepreneurs** : Inflation is the boon to the entrepreneurs whether they are manufacturers, traders, merchants or businessmen, because it serves as a tonic for business enterprise.
- (iv) **Investors** : The investors, who generally invest in fixed interest yielding bonds and securities have much to lose during inflation. On the contrary those who invest in shares stand to gain by rich dividends and appreciation in value of shares.

38. Describe the phases of Trade cycle.

Measuring 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".

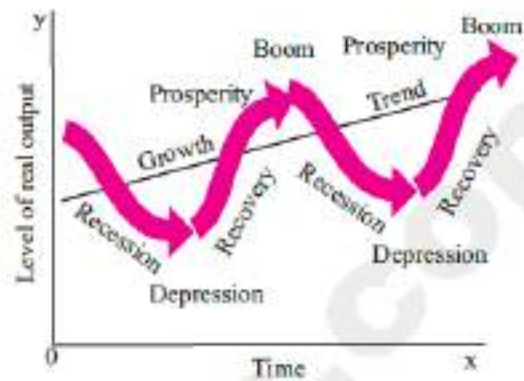
Phases of Trade Cycle :

The four different phases of trade cycle is referred to as (1) Boom (2) Recession (3) Depression and (4) Recovery.

- (v) Extreme point of depression is called as 'trough'.
- (vi) Keynes advocated that autonomous investment of the government alone can help the economy to come out from the depression.

(4) **Recovery :**

- (i) After a period of depression, recovery sets in.



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

- (i) The full employment and the movement of the economy beyond full employment.
- (ii) During this period, there is hectic activity in economy.
- (iii) Money wages rise, profits increase and interest rates go up.
- (iv) It is characterized as boom period.

(2) **Recession :**

- (i) The turning point from boom condition is called recession.
- (ii) This happens at higher rate, than what was earlier.
- (iii) The failure of a company or bank bursts the boom and brings a phase of recession.
- (iv) Investments are drastically reduced production comes down and income and profits decline.
- (v) Liquidity preference of the people rises and money market becomes tight.

(3) **Depression :**

- (i) During depression the level of economic activities becomes extremely low.
- (ii) Firms incur losses and closure of business becomes a common feature and the ultimate result is unemployment.
- (iii) Interest prices, profits and wages are low.
- (iv) Depression is the worst phase of the business cycle.

- (ii) It begins with the revival of demand for capital goods.
- (iii) The demand slowly picks up and in due course the activity is directed towards the upswing with more production, profit, income, wages and employment.
- (iv) Recovery may be initiated by innovation (or) investment (or) by government expenditure.

PART - A

MULTIPLE CHOICE QUESTIONS

1. A Bank is a
 - (a) Financial institution
 - (b) Corporate
 - (c) An Industry
 - (d) Service institutions

[Ans. (a) Financial institution]
2. A Commercial Bank is an institutions that provides services
 - (a) Accepting deposits
 - (b) Providing loans
 - (c) Both a and b
 - (d) None of the above

[Ans. (c) Both a and b]
3. The Functions of commercial banks are broadly classified into
 - (a) Primary Functions
 - (b) Secondary functions
 - (c) Other functions
 - (d) a, b, and c

[Ans. (d) a, b, and c]
4. Bank credit refers to
 - (a) Bank Loans
 - (b) Advances
 - (c) Bank loans and advances
 - (d) Borrowings

[Ans. (c) Bank loans and advances]
5. Credit creation means.
 - (a) Multiplication of loans and advances
 - (b) Revenue
 - (c) Expenditure
 - (d) Debt

[Ans. (a) Multiplication of loans and advances]
6. NBFI does not have.
 - (a) Banking license
 - (b) government approval
 - (c) Money market approval
 - (d) Finance ministry approval

[Ans. (a) Banking license]
7. Central bank is _____ authority of any country.
 - (a) Monetary
 - (b) Fiscal
 - (c) Wage
 - (d) National Income

[Ans. (a) Monetary]
8. Who will act as the banker to the Government of India?
 - (a) SBI
 - (b) NABARD
 - (c) ICICI
 - (d) RBI

[Ans. (d) RBI]
9. Lender of the last resort is one of the functions of.
 - (a) Central Bank
 - (b) Commercial banks
 - (c) Land Development Banks
 - (d) Co-operative banks

[Ans. (a) Central Bank]
10. Bank Rate means.
 - (a) Re-discounting the first class securities
 - (b) Interest rate
 - (c) Exchange rate
 - (d) Growth rate

[Ans. (a) Re-discounting the first class securities]
11. Repo Rate means.
 - (a) Rate at which the Commercial Banks are willing to lend to RBI
 - (b) Rate at which the RBI is willing to lend to commercial banks
 - (c) Exchange rate of the foreign bank
 - (d) Growth rate of the economy

[Ans. (b) Rate at which the RBI is willing to lend to commercial banks]
12. Moral suasion refers.
 - (a) Optimization
 - (b) Maximization
 - (c) Persuasion
 - (d) Minimization

[Ans. (c) Persuasion]
13. ARDC started functioning from
 - (a) June 3, 1963
 - (b) July 3, 1963
 - (c) June 1, 1963
 - (d) July 1, 1963

[Ans. (d) July 1, 1963]

PART - B

ANSWER THE FOLLOWING QUESTIONS IN ONE OR TWO SENTENCES

14. NABARD was set up in.
(a) July 1962 (b) July 1972
(c) July 1982 (d) July 1992
[Ans. (c) July 1982]
15. EXIM bank was established in.
(a) June 1982 (b) April 1982
(c) May 1982 (d) March 1982
[Ans. (d) March 1982]
16. The State Financial Corporation Act was passed by
(a) Government of India
(b) Government of Tamilnadu
(c) Government of Union Territories
(d) Local Government.
[Ans. (a) Government of India]
17. Monetary policy his formulated by.
(a) Co-operative banks
(b) Commercial banks
(c) Central Bank
(d) Foreign banks
[Ans. (c) Central Bank]
18. Online Banking is also known as.
(a) E-Banking (b) Internet Banking
(c) RTGS (d) NEFT
[Ans. (b) Internet Banking]
19. Expansions of ATM.
(a) Automated Teller Machine
(b) Adjustment Teller Machine
(c) Automatic Teller mechanism
(d) Any Time Money
[Ans. (a) Automated Teller Machine]
20. 2016 Demonetization of currency includes denominations of
(a) ₹500 and ₹1000 (b) ₹1000 and ₹2000
(c) ₹200 and ₹500 (d) All the above
[Ans. (a) ₹500 and ₹1000]

21. Define Commercial banks.

Ans. A commercial bank is a type of bank that provides services such as accepting deposits, making business loans, and offers checking accounts services, and offers basic financial products like certificates of deposit (CDS) and saving accounts to individuals and small business.

22. What is credit creation?

Ans. (i) Banks create for the purpose of providing more funds.

(ii) Credit creation leads to increased production, employment, sales and prices.

23. Define Central bank.

Ans. A national bank that provides financial and banking services for its country's government and commercial banking system, as well as implementing the Government's monetary policy and issuing currency.

24. Distinguish between CRR and SLR.

Ans. (i) CRR is the percentage of money, which a bank has to keep with RBI in the form of cash on the other hand.

(ii) SLR is the proportion of liquid assets to time and demand liabilities.

(iii) CRR regulates the flow of money in the economy whereas SLR ensures the solvency of the banks.

25. Write the meaning of Open market operations.

Ans. (i) The Central Bank purchases and sells not only government securities but also other proper eligible securities like bills and securities of private concerns.

(ii) When the banks and the private individuals purchase these securities they have to make payments for these securities to the Central Bank.

26. What is rationing of credit?

- Ans.** (i) Rationing of credit as an instrument of credit control.
(ii) It aims to control and regulate the purposes for which credit is granted by commercial banks.

27. Mention the functions of agriculture credit department.

- Ans.** (i) To maintain an expert staff to study all questions on agricultural credit.
(ii) To provide expert advice to Central and State Government, State Co-operative Banks.
(iii) To finance the rural sector through eligible institutions.

PART - C

ANSWER THE FOLLOWING QUESTIONS IN ONE PARAGRAPH

28. Write the mechanism of credit creation by commercial banks.

Ans. Bank Credit refers to bank loans and advances.

- (i) Money is to be created when the bank provides loans.
- (ii) Money is to be destroyed when the loan is repaid.
- (iii) 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.
- (iv) This power of commercial bank to create deposits through expanding their loans and advances is known as credit creation.

29. Give a brief note on NBFI.

Ans. (i) NBFI means Non-Banking Financial Institution (or) Non-Bank Financial Company (NBFC)

- (ii) It is a financial institution that does not have full banking license or is not supervised by the central bank.
- (iii) It doesn't carry on pure banking services but it carries on other financial transactions.
- (iv) They receive deposits and provide loans.

(v) They operate in both the money and the capital markets.

(vi) NBFIs can be broadly classified into two categories. Viz.

- (1) Stock Exchange and
- (2) Other Financial Institutions.

(vii) Examples for the latter category are Finance corporations, Chit funds, Building societies etc.

30. Bring out the methods of credit control.

Ans. (I) Quantitative (or) General Method

(II) Qualitative (or) Selective Method

(I) **Quantitative Method :**

- (i) Bank Rate Policy
- (ii) Open Market Operations
- (iii) Variable Reserve Ratio
- (iv) Cash Reserve Ratio, Statutory Liquidity Ratio (SLR)

(II) **Qualitative Method :**

- (i) Rationing of Credit
- (ii) Direct Action
- (iii) Moral persuasion
- (iv) Method of Publicity
- (v) Regulation of Consumer's Credit
- (vi) Regulating the marginal requirement on security loans.

31. What are the functions of NABARD?

Ans. (i) NABARD has inherited its apex role from RBI.

(ii) It is performing all the functions performed by RBI with regard to agricultural credit.

(iii) 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 and other allied economic activities with a view to promoting integrated rural development.

(iv) It provides short-term, medium term and long-term credit to state cooperative Banks, RRB, LDBs and other financial institutions approved by RBI.

(v) NABARD gives long-term loans (upto 20 years) to State government.

- (vi) NABARD gives long-term loans to any institution approved by the Central Government.
- (vii) NABARD has the responsibility of co-ordinating the activities of Central and State Governments, NITI Aayog, etc.

32. Specify the functions of IFCI.

Ans. Functions of IFCI :

- (i) Long term loans, both in rupees and foreign currencies.
- (ii) Underwriting of equity, preference and debenture issues.

- (iii) Subscribing to equity, preference and debenture issues.
- (iv) Guaranteeing the deferred payments in respect of machinery imported from abroad or purchased in India.
- (v) Guaranteeing of loans raised in foreign currency from foreign financial institutions.
- (vi) The IFCI also provides financial assistance on concessional terms for setting up industrial projects in industrially less developed districts in the States or Union Territories notified by the Central Government.

33. Distinguish between money market and capital market.

Ans.

| S. No. | Money Market | Capital Market |
|--------|---|---|
| (1) | Money Market is a mechanism in which short term funds are loaned and borrowed. | It is a part of financial system. |
| (2) | It handles the purchase, sales and transfer of short term credit instruments. | It is raising capital by dealing in shares, bonds and other long term investments. |
| (3) | Commercial banks, acceptance houses, non banking financial institutions and the Central Bank are the institutions catering to the requirements of short term funds in the money market. | The market where investment instruments like bonds, equities and mortgages are traded is known as the capital market. |

34. Mention the objectives of demonetizations.

Ans. Objectives of Demonetisation :

- (i) Removing Black Money from the country.
- (ii) Stopping of corruption.
- (iii) Stopping terror funds.
- (iv) Curbing fake notes.

PART - D

ANSWER THE FOLLOWING QUESTIONS IN ONE PAGE

35. Explain the role of Commercial Banks in economic development.

Ans. Role of Commercial Banks in Economic Development of Country :

(1) Capital Formation :

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

(2) Creation of Credit :

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

(3) Channelizing the Funds towards Productive Investment :

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

(4) **Encouraging Right type of Industries :**

- (i) Commercial banks help in the development of the right type of Industries by extending loan to right type of persons.
- (ii) It helps not only for industrialization of the country but also the economic development of the country.
- (iii) They grant loans and advances to manufacturers whose products are in great demand.

(5) **Bank monetize debt :**

- (i) Commercial banks transform the loan to be repaid after a certain period into cash, which can be immediately used for business activities.
- (ii) As banks are lending money by discounting bills of exchange, business concerns are able to carryout the economic activities without any interruption.

(6) **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.

(7) **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.

(8) **Banks promote entrepreneurship**

- (i) In recent days, banks have assumed the role of developing entrepreneurship particularly in developing countries like India by inducing new entrepreneurs to take up the well-formulated projects and provision of counseling services like technical and managerial guidance.
- (ii) Banks provide 100% credit for worthwhile projects, which is also technically feasible and economically viable.

36. Elucidate the functions of Commercial Banks.

Ans. Functions of Commercial Banks

(a) **Primary Functions:**

1. **Accepting Deposits :** There are two types of deposits, which are discussed as follows

(i) **Demand Deposits**

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

(ii) **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.

(i) **Collecting Cheques :** Banks collect cheques and bills of exchange on the behalf of their customers through clearing house facilities provided by the central bank.

(ii) **Collecting Income :** Commercial banks collect dividends, pension, salaries, rents, and interests on investments on behalf of their customers.

(iii) **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 :** It implies that commercial banks provide some utility services to customers by performing various functions.

- (i) **Providing Locker Facilities :** Commercial banks provide locker facilities to its customers for safe custody of jewellery, shares, debentures, and other valuable items.
 - (ii) **Issuing Traveler's Cheques :** Banks issue traveler's cheques to individuals for traveling outside the country.
 - (iii) **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.
- (i) **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 :**
- (i) **Money Supply :** It refers to one of the important functions of commercial banks that help in increasing money supply.
 - (ii) **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.
 - (iii) **Collection of Statistics :** Banks collect and publish statistics relating to trade, commerce and industry.

37. Describe the functions of Reserve Bank of India.

Ans. Functions of RBI :

- (1) **Monetary Authority :**
- (i) It controls the supply of money.
 - (ii) To stabilize exchange rate, maintain healthy balance of payment, attain financial stability, control inflation, strengthen banking system.
- (3) **Price stability :**
- (i) Price stability is considered the most genuine objectives of monetary policy.
 - (ii) Stable prices repose public confidence.
 - (iii) It promotes business activity and ensure equitable distribution of income and wealth.
- (4) **Full employment :** Full employment was considered as the main goal of monetary policy.
- (5) **Economic Growth :** Monetary policy promote sustained and continuous economic growth by maintaining

- (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 14 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.

38. What are the objectives of Monetary Policy? Explain.

Ans. Objectives of Monetary Policy :

- (1) **Neutrality of Money :** The monetary authority should aim at neutrality of money and it is the root cause of all economic fluctuation.
- (2) **Exchange rate stability :** Exchange rate stability, gold standard among different countries are the main objectives.

equilibrium between the total demand for money and total production capacity and further creating favourable conditions for saving and investment.

- (6) **Equilibrium in the balance of payments:**
- (i) Increasing of deficit in the balance of payments reduces the ability of an economy to achieve other objectives.
 - (ii) As a result many less developed countries have to curtail their imports which adversely affects development activities.
 - (iii) Monetary authority makes efforts to maintain equilibrium in the balance of payments.

BOOK EXERCISE QUESTIONS - MULTIPLE CHOICE QUESTIONS

PART - A

1. Trade between two countries is known astrade
 - a) External
 - b) Internal
 - c) Inter-regional
 - d) Home
2. Which of the following factors influence trade?
 - a) The stage of development of a product
 - b) The relative price of factors of productions
 - c) Government
 - d) All of the above
3. International trade differs from domestic trade because of
 - a) Trade restrictions
 - b) Immobility of factors
 - c) Different government policies
 - d) All the above
4. In general, a primary reason why nations conduct international trade is because
 - a) Some nations prefer to produce one thing while others produce another
 - b) Resources are not equally distributed among all trading nations
 - c) Trade enhances opportunities to accumulate profits
 - d) Interest rates are not identical in all trading nations
5. Which of the following is a modern theory of international trade?
 - a) absolute cost
 - b) comparative cost
 - c) Factor endowment theory
 - d) none of these
6. Exchange rates are determined in
 - a) money market
 - b) foreign exchange market
 - c) stock market
 - d) capital market
7. Exchange rate for currencies is determined by supply and demand under the system of
 - a) Fixed exchange rate
 - b) Flexible exchange rate
 - c) Constant
 - d) Government regulated
8. Net export equals
 - a) Export x Import
 - b) Export + Import
 - c) Export – Import
 - d) Exports of services only
9. Who among the following enunciated the concept of single factorial terms of trade?
 - a) Jacob Viner
 - b) G.S.Donens
 - c) Taussig
 - d) J.S.Mill
10. Terms of Trade of a country show
 - a) Ratio of goods exported and imported
 - b) Ratio of import duties
 - c) Ratio of prices of exports and imports
 - d) Both (a) and (c)
11. Favourable trade means value of exports are Than that of imports.

- a) More b) Less
c) More or Less d) Not more than
12. If there is an imbalance in the trade balance (more imports than exports), it can be reduced by
a) decreasing customs duties
b) increasing export duties
c) stimulating exports
d) stimulating imports
13. BOP includes
a) visible items only
b) invisible items only
c) both visible and invisible items
d) merchandise trade only
14. Components of balance of payments of a country includes
a) Current account
b) Official account
c) Capital account
d) All of above
15. In the case of BOT,
a) Transactions of goods are recorded.
b) Transactions of both goods and services are recorded.
c) Both capital and financial accounts are included.
d) All of these
16. Tourism and travel are classified in which of balance of payments accounts?
a) merchandise trade account
b) services account
c) unilateral transfers account
d) capital account
17. Cyclical disequilibrium in BOP occurs because of
a) Different paths of business cycle.
b) The income elasticity of demand or price elasticity of demand is different.
c) long-run changes in an economy
d) Both (a) and (b).
18. Which of the following is not an example of foreign direct investment?
a) the construction of a new auto assembly plant overseas
b) the acquisition of an existing steel mill overseas
c) the purchase of bonds or stock issued by a textile company overseas
d) the creation of a wholly owned business firm overseas
19. Foreign direct investments not permitted in India
a) Banking
b) Atomic energy
c) Pharmaceutical
d) Insurance
20. Benefits of FDI include, theoretically
a) Boost in Economic Growth
b) Increase in the import and export of goods and services
c) Increased employment and skill levels
d) All of these

| Answers | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| a | d | d | b | c | b | b | c | a | c |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| a | c | c | d | a | b | d | c | b | d |

PART - B

Answer the following questions in one or two sentences

21. What is International Economics?

- ❖ International Economics is that branch of economics which is concerned with the exchange of goods and services between two or more countries.
- ❖ Hence the subject matter is mainly related to foreign trade.

22. Define 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.
- ❖ It is also called as 'external trade' or 'foreign trade' or 'inter-regional trade'.

23. State any two merits of trade.

- ❖ Trade is one of the powerful forces of economic integration.
- ❖ International trade helps a country to export its surplus goods to other countries and secure a better market for it.
- ❖ Similarly, international trade helps a country to import the goods which cannot be produced at all or can be produced at a higher cost.

24. What is the main difference between Adam Smith and Ricardo with regard to the emergence of foreign trade?

- ❖ 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.

25. Define Terms of Trade.

- ❖ Terms of Trade 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.

$$\text{Terms of Trade (TOT)} = \frac{\text{Index of Export prices}}{\text{Index of Import prices}} \times 100$$

26. What do you mean by balance of payments?

- ❖ 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.
- ❖ 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.

27. What is meant by Exchange Rate?

- ❖ Exchange rate may be defined as the price paid in the home currency (say ₹ 75) for a unit of foreign currency (say 1 US \$).
- ❖ The transactions in the exchange market are carried out at exchange rates. It is the external value of domestic currency.

PART - C

Answer the following questions in one Paragraph.

28. Describe the 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

Under this part, 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, measures of correcting disequilibrium in the balance of payments etc are covered.

3. International Cartels and Trade Blocs

This part deals with the economic integration in the form of international cartels, customs unions, monetary unions, trade blocs, economic unions and the like. It also discusses the operation of Multi National Corporations (MNCs).

4. 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.

29. Compare the Classical Theory of international trade with Modern Theory of International trade.

| S. 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. |

30. 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

31. Distinguish between Balance of Trade and Balance of Payments.

| BASIS FOR COMPARISON | BALANCE OF TRADE | BALANCE OF PAYMENT |
|----------------------|---|---|
| Meaning | Balance of Trade (BOT) refers to the total value of a country's exports of commodities and total value of imports of commodities. | BoP is a systematic record of a country's economic and financial transactions with the rest of the world over a period of time. |
| Records | Transactions related to goods only. vwvv | Transactions related to both goods and services are recorded. |

| BASIS FOR COMPARISON | BALANCE OF TRADE | BALANCE OF PAYMENT |
|----------------------|---|---|
| Capital Transfers | Are not included in the Balance of Trade. | Are included in Balance of Payment. |
| Limit | It gives a partial view of the country's economic status. | It gives a full view of the economic position of the country. |
| Effect | It can be Favorable, Unfavorable or balanced. | Both the receipts and payment sides tallies. |
| Component | It is a component of Current Account of Balance of Payment. | Current Account and Capital Account. |

32. What are import quotas?

i. Meaning

- ❖ The 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

- ❖ For instance, the government may

specify that 60,000 colour T.V. sets may be imported from Japan.

- ❖ Alternatively, it may specify that T.V. sets of the value of Rs. 50 crores can be imported from that country during a given year.

33. 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.
- ❖ In this system, the currency price is market determined, concerning other currencies, i.e. 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.
- ❖ Therefore, the exchange rate is not under the control of the government or central bank.

34. State the objectives of Foreign Direct Investment.

FDI has the following objectives.

1. Sales Expansion
2. Acquisition of resources
3. Diversification
4. Minimization of competitive risk.

PART - D

Answer the following questions in about a page.

35. Discuss the differences between Internal Trade and International Trade.

| Sl. No. | Internal Trade | International Trade |
|---------|---|---|
| 1. | Trade takes place between different individuals and firm within the same nation. | 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. |
| 3. | There will be free flow of goods and services since there are no restrictions. | Goods and services do not easily move from one country to another since there are a number of restrictions like tariff and quota. |
| 4. | There is only one common currency. | There are different currencies. |
| 5. | The physical and geographical conditions of a country are more or less similar. | There are differences in physical and geographical conditions of the two countries. |
| 7. | Trade and financial regulations are more or less the same | Trade and financial regulations such as interest rate, trade laws differ between countries. |
| 8. | There is no difference in political affiliations, customs and habits of the people and government policies. | Differences are pronounced in political affiliations, habit and customs of the people and government policies. |

36. Explain briefly the Comparative Cost Theory.

Introduction

David Ricardo, the British economist in his 'Principles of Political Economy and Taxation' published in 1817, formulated a systematic theory called 'Comparative Cost Theory'.

Meaning of Comparative Cost

Ricardo demonstrates that the basis of trade is the comparative cost difference. In other words, trade can take place even if the absolute cost difference is absent but there is comparative cost difference.

Explanation

- i. According to Ricardo, a country can gain from trade when it produces at relatively lower costs.
- ii. 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.
- iii. Similarly, even when a country has absolute disadvantage in production of both goods, the country would specialize in production and export of the commodity in which it is relatively less disadvantageous.

Assumptions

1. There are only two nations and two commodities (2x2 model)
2. Labour is the only element of cost of production.
3. All labourers are of equal efficiency.
4. Labour is perfectly mobile within the country but perfectly immobile between countries.
5. Production is subject to the law of constant returns.
6. Foreign trade is free from all barriers.

7. No change in technology.
8. No transport cost.
9. Perfect competition.
10. Full employment.
11. No government intervention.

Table and Diagrammatic Illustration

| Country | Cloth | Wheat | Domestic Exchange ratios |
|---------|-------|-------|--------------------------|
| America | 100 | 120 | 1 wheat = 1.2 cloth |
| India | 90 | 80 | 1 wheat = 0.88cloth |



It is evident from the example that India has an absolute advantage in production of both cloth and wheat.

Diagrammatic Explanation

- i. However, India should concentrate on the production of wheat in which she enjoys a comparative cost advantage. ($80/120 < 90/100$).
- ii. For America the comparative cost disadvantage is lesser in cloth production.
- iii. Hence America will specialize in the production of cloth and export it to India in exchange for wheat. (Any exchange ratio between 0.88 units and 1.2 units of cloth against one unit of wheat represents gain for both the nations).

- iv. With trade, India can get 1 unit of cloth and 1 unit of wheat by using its 160 labour units. In the absence of trade, for getting this benefit, India will have to use 170 units of labour. America also gains from this trade.
- v. With trade, America can get 1 unit of cloth and one unit of wheat by using its 200 units of labour.
- vi. Otherwise, America will have to use 220 units of labour for getting 1 unit of cloth and 1 unit of wheat.

37. Discuss the Modern Theory of International Trade.

Introduction

The modern theory of international trade was developed by Swedish economist Eli Heckscher and his student Bertil Ohlin in 1919. This model was based on the Ricardian theory of international trade.

Meaning

This theory says that the basis for international trade is the difference in factor endowments. It is otherwise called as 'Factor Endowment Theory'.

The Factor endowment model

- ❖ Developed by Heckscher and Ohlin
- ❖ Countries with a relative factor abundance can specialise and trade
- ❖ Abundance of skilled labour → specialisation → export → exchange for goods and services produced by countries with abundance of unskilled labour

The Theory

The modern theory of international trade explains the causes for such comparative cost difference. This theory attributes

international differences in comparative costs to:

- i) difference in the endowments of factors of production between countries, and
- ii) differences in the factor proportions required in production.

Assumptions

1. There are two countries, two commodities and two factors. (2x2x2 model)
2. Countries differ in factor endowments.
3. Commodities are categorized in terms of factor intensity.
4. Countries use same production technology.
5. Countries have identical demand conditions.
6. There is perfect competition in both product and factor markets in both the countries.

Explanation

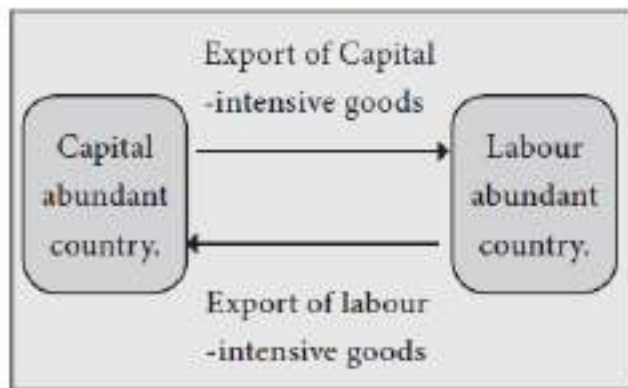
According to Heckscher - Ohlin, "a capital-abundant country will export the capital-intensive goods, while the labour-abundant country will export the labour-intensive goods". A factor is regarded abundant or scarce in relation to the quantum of other factors. A country can be regarded as richly endowed with capital only if the ratio of capital to other factors is higher than other countries.

| Particulars | India | America |
|----------------------|------------|------------|
| Supply of Labour | 50 | 24 |
| Supply of Capital | 40 | 30 |
| Capital-Labour Ratio | 40/50= 0.8 | 30/24=1.25 |

In the above example, even though India has more capital in absolute terms, America is more richly endowed with capital because the ratio of capital in India is 0.8 which is less than

that in America where it is 1.25. The following diagram illustrates the pattern of world trade.

H-O: Illustration Chart



38. Explain the types of Terms of Trade given by Viner.

1. Net Barter Terms of Trade or Commodity 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

This is used to measure the gain from international trade. If ' T_n ' is greater than 100, then it is a favourable terms of trade which will mean that for a rupee of export, more of imports can be received by a country.

2. The Single Factoral Terms of Trade

Viner has devised another concept called "the single factoral terms of trade" as an improvement upon the commodity terms of trade. 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. Symbolically, it can be stated as

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

Where, T_f stands for single factoral terms of trade index. P_x stands for productivity in exports (which is measured as the index of cost in terms of quantity of factors of production used per unit of export).

3. Double Factoral Terms of Trade

Viner constructed another index called "Double factoral terms of Trade". It is expressed as

$$T_{ff} = (P_x / P_m) (F_x / F_m)$$

which takes into account the productivity in country's exports, as well as the productivity of foreign factors.

Here, F_m represents import index (which is measured as the index of cost in terms of quantity of factors of production employed per unit of imports).

39. Bring out the components of balance of payments account.

Components of BOPs

The credit and debit items are shown vertically in the BOP account of a country. Horizontally, they are divided into three categories, i.e. a) The current account, b) The capital account and c) The official settlements account or official reserve assets account.

a) The Current Account:

It includes all international trade transactions of goods and services, international service transactions (i.e. tourism, transportation and royalty fees) and international unilateral transfers (i.e. gifts and foreign aid).

b) The Capital Account:

Financial transactions consisting of direct investment and purchases of interest-bearing financial instruments, non-interest bearing demand deposits and gold fall under the capital account.

c) The Official Reserve Assets Account:

Official reserve transactions consist of movements of international reserves by governments and official agencies to accommodate imbalances arising from the current and capital accounts.

40. Discuss the various types of disequilibrium in the balance of payments.

Occurs when: Disequilibrium Demand \neq Supply
Debit $>$ Credit \rightarrow Deficit

Types BOP Disequilibrium:

There are three main types of BOP Disequilibrium, which are discussed below.

- (a) Cyclical Disequilibrium,
- (b) Secular Disequilibrium,
- (c) Structural Disequilibrium.

a) Cyclical Disequilibrium:

Cyclical disequilibrium occurs because of two reasons. 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 and deep seated changes in an economy as it advances from one stage of growth to another. In the initial stages of development, domestic investment exceeds do-

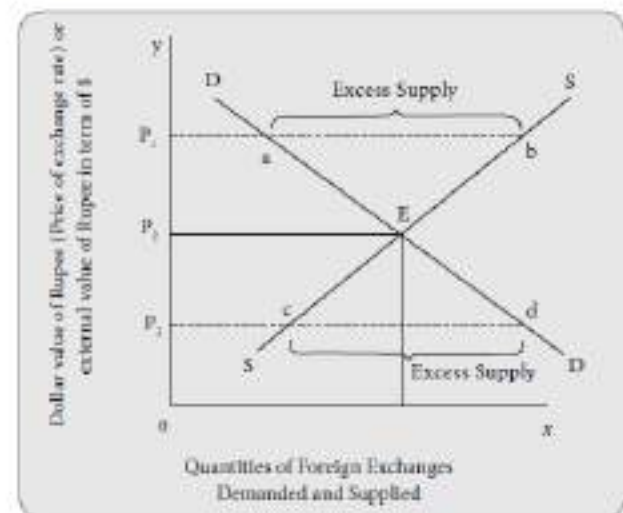
mestic savings and imports exceed exports, as it happens in India since 1951.

c) Structural Disequilibrium:

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

41. How the Rate of Exchange is determined? Illustrate.

The equilibrium rate of exchange is determined in the foreign exchange market in accordance with the general theory of value, i.e., by the interaction of the forces of demand and supply. Thus, the rate of exchange is determined at the point where demand for forex is equal to the supply of forex.



- In the above diagram, Y axis represents exchange rate, that is, value of rupee in terms 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.

42. Explain the relationship between Foreign Direct Investment and economic development

1. FDI may help to increase the investment level and thereby the income and employment in the host country.
2. Direct foreign investment may facilitate transfer of technology to the recipient country.
3. FDI may also bring revenue to the government of host country when it taxes profits of foreign firms or gets royalties from concession agreements.
4. A part of profit from direct foreign investment may be ploughed back into the expansion, modernization or of related industries.
5. It may kindle a managerial revolution in the recipient country through professional management and sophisticated management techniques.
6. Foreign capital may enable the country to increase its exports and reduce import requirements. And thereby ease BoP disequilibrium.
7. Foreign investment may also help increase competition and break domestic monopolies.
8. If FDI adds more value to output in the recipient country than the return on capital from foreign investment, then the social returns are greater than the private returns on foreign investment.
9. By bringing capital and foreign exchange FDI may help in filling the savings gap

and the foreign exchange gap in order to achieve the goal of national economic development.

10. Foreign investments may stimulate domestic enterprise to invest in ancillary industries in collaboration with foreign enterprises.
11. Lastly, FDI flowing into a developing country may also encourage its entrepreneurs to invest in the other LDCs. Firms in India have started investing in Nepal, Uganda, Ethiopia and Kenya and other LDCs while they are still borrowing from abroad. Larger FDI to India comes from a small country (Mauritius).

PART - A

MULTIPLE CHOICE QUESTIONS 1 MARK

1. International Monetary Fund was an outcome of
 (a) Pandung Conference
 (b) Dunkel Draft
 (c) Bretton Woods Conference
 (d) Doha Conference
 [Ans. (c) Bretton Woods Conference]
2. International Monetary Fund is having its headquarters at
 (a) Washington D.C. (b) New York
 (c) Vienna (d) Geneva
 [Ans. (a) Washington D.C.]
3. IBRD is otherwise called
 (a) IMF
 (b) World Bank
 (c) ASEAN
 (d) International Finance Corporation
 [Ans. (b) World Bank]
4. The other name for Special Drawing Rights is
 (a) Paper gold
 (b) Quotas
 (c) Voluntary Export Restrictions
 (d) None of these
 [Ans. (a) Paper gold]
5. The organization which provides long term loan is
 (a) World Bank
 (b) International Monetary Fund
 (c) World Trade Organisation
 (d) BRICS
 [Ans. (a) World Bank]
6. Which of the following countries is not a member of SAARC?
 (a) Sri Lanka (b) Japan
 (c) Bangladesh (d) Afghanistan
 [Ans. (b) Japan]
7. International Development Association is an affiliate of
 (a) IMF (b) World Bank
 (c) SAARC (d) ASEAN
 [Ans. (b) World Bank]
8. _____ relates to patents, copyrights, trade secrets, etc.,
 (a) TRIPS (b) TRIMS
 (c) GATS (d) NAMA
 [Ans. (a) TRIPS]
9. The first ministerial meeting of WTO was held at
 (a) Singapore (b) Geneva
 (c) Seattle (d) Doha
 [Ans. (a) Singapore]
10. ASEAN meetings are held once in every _____ years
 (a) 2 (b) 3 (c) 4 (d) 5
 [Ans. (b) 3]
11. Which of the following is not the member of SAARC?
 (a) Pakistan (b) Sri Lanka
 (c) Bhutan (d) China
 [Ans. (d) China]
12. SAARC meets once in _____ years.
 (a) 2 (b) 3 (c) 4 (d) 5
 [Ans. (a) 2]
13. The headquarters of ASEAN is
 (a) Jaharta (b) New Delhi
 (c) Colombo (d) Tokyo
 [Ans. (a) Jaharta]
14. The term BRIC was coined in
 (a) 2001 (b) 2005
 (c) 2008 (d) 2010
 [Ans. (a) 2001]
15. ASEAN was created in
 (a) 1965 (b) 1967
 (c) 1972 (d) 1997
 [Ans. (b) 1967]

16. The Tenth BRICS Summit was held in July 2018 at
(a) Beijing (b) Moscow
(c) Johannesburg (d) Brasilia

[Ans. (c) Johannesburg]

17. New Development Bank is associated with
(a) BRICS (b) WTO
(c) SAARC (d) ASEAN

[Ans. (a) BRICS]

18. Which of the following does not come under 'Six dialogue partners' of ASEAN?
(a) China (b) Japan
(c) India (d) North Korea

[Ans. (d) North Korea]

19. SAARC Agricultural Information Centre (SAIC) works as a central information institution for agriculture related resources was founded on
(a) 1985 (b) 1988 (c) 1992 (d) 1998

[Ans. (b) 1988]

20. BENELUX is a form of
(a) Free trade area (b) Economic Union
(c) Common market (d) Customs union

[Ans. (d) Customs union]

PART - B

ANSWER THE FOLLOWING QUESTIONS IN ONE OR TWO SENTENCES **2 MARKS**

21. Write the meaning of Special Drawing rights.

Ans. 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.

22. Mention any two objectives of ASEAN.

Ans. (i) To accelerate the economic growth, social progress and cultural development in the region.
(ii) To serve as a centre of information and as an ASEAN link with other international organization.

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

Ans. The Bank advances loans to member in three ways.

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

24. Define Common Market.

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

25. What is Free trade area?

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

26. When and where was SAARC Secretariat established?

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

27. Specify any two affiliates of World Bank Group.

Ans. (i) International Development Association.
(ii) International Finance corporation.

PART - C

ANSWER THE FOLLOWING QUESTIONS IN ONE PARAGRAPH **3 MARKS**

28. Mention the various forms of economic integration.

Ans. Trade Blocks

- (i) Trade blocks cover different kinds of arrangement between countries for mutual benefits.
(ii) Economic integration takes the form of Free Trade Area, Customs Union, Common Market and Economic Union.
(iii) A free trade area is the region encompassing a trade block whose member countries have signed a free-trade agreement (FTA) eg : SAFTA, EFTA.
(iv) 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.

- (v) Common market is established through trade pacts. A group formed by countries within a geographical area to promote duty free trade and free movement of labour and capital among its members, e.g. European Common Market (ECM).
- (vi) An Economic Union is composed of a Common market with a Customs union.

29. What are trade blocks?

- Ans.** (i) Some Countries create business opportunities for themselves by integrating their economies in order to avoid unnecessary competition among them.
- (ii) Trade block covers different kinds of arrangements between countries for mutual benefits.

30. Mention any three lending programmes of IMF.

Ans. (i) Basic Credit Facility :

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

(ii) 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.

(iii) 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.

(iv) Supplementary Financing Facility :

Under the supplementary Financing Facility the IMF makes temporary arrangements to provide supplementary financial assistance to member countries.

(v) Structural Adjustment Facility :

The IMF established Structural Adjustment Facility (SAF) in March 1986 to provide additional balance of payments assistance on concessional terms to the poorer member countries.

31. What is Multilateral Agreement?

- Ans.** (i) A International agreements involving three or more parties.
- (ii) For example GATT (General agreement Tariffs and Trade) has been, since its establishment in 1947.
- (iii) Seeking to promote trade liberalization through multilateral negotiations.
- (iv) GATS is the first multilateral set of rules covering trade in service like banking insurance, transportation, communication, etc.
- (v) All member countries are supposed to extend MFN (Most Favoured Nation) status to all other countries without any discrimination.
- (vi) Transparency should be maintained by publishing all relevant laws and regulations over services.

32. Write the agenda of BRICS Summit, 2018.

- Ans.** (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.

33. State briefly the functions of SAARC.

Ans. 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.

34. List out the achievements of ASEAN.

- Ans.** (i) It facilitates free moment of goods, service and investment within Asean by creating a single regional market like European Union.
- (ii) It provides free access to the marketers of one member country to the markets of all other member country.

- (iii) It improves business competitiveness between business from different countries.
- (iv) It paves way for market and investment opportunities for the member nations.
- (v) It fosters co-operations to industry and trade.

PART - D

ANSWER THE FOLLOWING QUESTIONS IN ONE PAGE 5 MARKS

35. Explain the objectives of IMF.

- Ans.** (i) To promote international monetary co-operation among the member nations.
- (ii) To facilitate faster and balanced growth of international trade.
 - (iii) To ensure exchange rate stability by curbing competitive exchange depreciations.
 - (iv) To eliminate or reduce exchange controls imposed by member nations.
 - (v) To establish multilateral trade and payment system in respect of current transactions instead of bilateral trade agreements.
 - (vi) To promote the flow of capital from developed to developing nations.
 - (vii) To solve the problem of international liquidity.

36. Bring out the functions of World Bank.

- Ans.** (i) The World Bank performs the major role of providing loans for development works to member countries, especially to under developed countries.
- (ii) The World Bank provides long-term loans for various development projects.
- (1) **Investment for productive purpose**: 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.
 - (2) **Balanced Grow of International Trade**: Promoting the long range balanced growth of trade at international level.

(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.

37. Discuss the role of WTO in India's socio economic development.

- Ans.** (i) India is the founding member of the WTO.
- (ii) India favours multilateral trade approach.
 - (iii) 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.

38. Write a note on

- a) SAARC
- b) BRICS.

Ans. (i) South Asian Association for Regional Cooperation (SAARC).

The South Asian Association for Regional cooperation (SAARC) is an organisation of South Asian nations, which was established on 8th December 1985.

- (ii) It was established to the promoting of economic and social progress, cultural development within the South Asia Region.
- (iii) It brings friendship and cooperation with other developing countries.
- (iv) The SAARC Group (SAARC) comprises of Bangladesh, Bhutan, India, the Maldives, Nepal Pakistan and Srilanka.
- (v) In April 2007, Afghanistan became its eighth member.

Objectives of SAARC :

- (i) To promote the welfare of the people of South Asia and improve their quality of life;
- (ii) To accelerate economic growth, social progress and cultural development in the region;
- (iii) To promote and strengthen collective self-reliance among the countries of South Asia;
- (iv) To contribute to mutual trust, understanding and appreciation of one another's problems;

- (v) To promote active collaboration and mutual assistance in the economic, social, cultural, technical and scientific fields;
- (vi) To strengthen co-operation with other developing countries;
- (vii) To strengthen cooperation among themselves in international forums on matters of common interest;
- (viii) To cooperate with international and regional organisations with similar aims and purposes.

BRICS

- (i) BRICS is the acronym for an association of five major emerging national economies. They are Brazil, Russia, India, China and South Africa.
- (ii) It's headquarters is at Shanghai, China.
- (iii) The first BRICS summit was held at Moscow and South Africa hosted the Tenth Conference at Johanesberg in July 2018. India had an opportunity of hosting fourth and Eighth summits in 2012 and 2016 respectively.

PART - A

MULTIPLE CHOICE QUESTIONS 1 MARK

1. The modern state is
 (a) Laissez-faire state (b) Aristocratic state
 (c) Welfare state (d) Police state
 [Ans. (c) Welfare state]
2. One of the following is NOT a feature of private finance
 (a) Balancing of income and expenditure
 (b) Secrecy
 (c) Saving some part of income
 (d) Publicity [Ans. (d) Publicity]
3. The tax possesses the following characteristics
 (a) Compulsory
 (b) No quid pro quo
 (c) Failure to pay is offence
 (d) All the above [Ans. (d) All the above]
4. Which of the following canons of taxation was not listed by Adam Smith?
 (a) Canon of equality
 (b) Canon of certainty
 (c) Canon of convenience
 (d) Canon of simplicity
 [Ans. (d) Canon of simplicity]
5. Consider the following statements and identify the correct ones.
 (i) Central government does not have exclusive power to impose tax which is not mentioned in state or concurrent list.
 (ii) The Constitution also provides for transferring certain tax revenues from union list to states.
 (a) i only (b) ii only
 (c) both (d) none
 [Ans. (b) ii only]
6. GST is equivalence of
 (a) Sales tax (b) Corporation tax
 (c) Income tax (d) Local tax
 [Ans. (a) Sales tax]
7. The direct tax has the following merits except
 (a) equity
 (b) convenient
 (c) certainty
 (d) civic consciousness [Ans. (b) convenient]
8. Which of the following is a direct tax?
 (a) Excise duty (b) Income tax
 (c) Customs duty (d) Service tax
 [Ans. (b) Income tax]
9. Which of the following is not a tax under Union list?
 (a) Personal Income Tax
 (b) Corporation Tax
 (c) Agricultural Income Tax
 (d) Excise duty
 [Ans. (c) Agricultural Income Tax]
10. "Revenue Receipts" of the Government do not include
 (a) Interest
 (b) Profits and dividends
 (c) Recoveries and loans
 (d) Rent from property
 [Ans. (d) Rent from property]
11. The difference between revenue expenditure and revenue receipts is
 (a) Revenue deficit (b) Fiscal deficit
 (c) Budget deficit (d) Primary deficit
 [Ans. (a) Revenue deficit]
12. The difference between total expenditure and total receipts including loans and other liabilities is called
 (a) Fiscal deficit (b) Budget deficit
 (c) Primary deficit (d) Revenue deficit
 [Ans. (a) Fiscal deficit]
13. The primary purpose of deficit financing is
 (a) Economic development
 (b) Economic stability
 (c) Economic equality
 (d) Employment generation
 [Ans. (a) Economic development]

14. Deficit Budget means

- (a) An excess of government's revenue over expenditure
- (b) An excess of government's current expenditure over its current revenue
- (c) An excess of government's total expenditure over its total revenue
- (d) None of above

[Ans. (c) An excess of government's total expenditure over its total revenue]

15. Methods of repayment of public debt is

- (a) Conversion
- (b) Sinking fund
- (c) Funded debt
- (d) All these

[Ans. (d) All these]

16. Conversion of public debt means exchange of

- (a) New bonds for the old ones
- (b) Low interest bonds for higher interest bonds
- (c) Long term bonds for short term bonds
- (d) All the above

[Ans. (b) Low interest bonds for higher interest bonds]

17. The word budget has been derived from the French word "bougette" which means

- (a) A small bag
- (b) An empty box
- (c) A box with papers
- (d) None of the above

[Ans. (a) A small bag]

18. Which one of the following deficits does not consider borrowing as a receipt?

- (a) Revenue deficit
- (b) Budgetary deficit
- (c) Fiscal deficit
- (d) Primary deficit

[Ans. (c) Fiscal deficit]

19. Finance Commission determines

- (a) The finances of Government of India
- (b) The resources transfer to the states
- (c) The resources transfer to the various departments
- (d) None of the above

[Ans. (b) The resources transfer to the states]

20. Consider the following statements and identify the right ones.

- (i) The finance commission is appointed by the President
 - (ii) The tenure of Finance commission is five years
- (a) i only (b) ii only
(c) both (d) none

[Ans. (c) both]

PART - B

ANSWER THE FOLLOWING QUESTIONS IN ONE OR TWO SENTENCES 2 MARKS

21. Define public finance.

Ans. Public finance is an investigation into the nature and principles of the state revenue and expenditure.

22. What is public revenue?

Ans. (i) Public revenue deals with the methods of raising public revenue.

(ii) For (e.g.) Tax and Non Tax principles and rate of taxation.

23. Differentiate tax and fee.

Ans. (i) Tax is a compulsory payment by the citizens to the government to meet the public expenditure.

(ii) A fee is charged by public authorities for rendering a service to the citizens.

24. Write a short note on zero based budget.

Ans. (i) Zero base - budgeting involves fresh evaluation of expenditure in the government budget

(ii) Assuming it as a new item.

(iii) To provide justification or otherwise for the project as a whole in the light of the socio-economic objectives.

25. Give two examples for direct tax.

Ans. Examples for Direct tax are,

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

26. What are the components of GST?

Ans. The component of GST are of 3 types. They are,

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

27. What do you mean by public debt?

Ans. Public debt deals with the methods of raising loans from internal and external sources.

PART - C

ANSWER THE FOLLOWING QUESTIONS IN ONE PARAGRAPH **3 MARKS**

28. Describe Canons of Taxation.

Ans. According to Adam Smith, there are four canons or maxims of taxation. They are,

(i) **Canon of Ability**

According to their ability rich person should pay more tax compared to a middle class person or a poor person.

(ii) **Canon of Certainty**

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

(iii) **Canon of Convenience**

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

(iv) **Canon of Economy**

The Government has to spend money for collecting taxes, for example, salaries are given to the persons who are responsible for collecting taxes.

29. Mention any three similarities between public finance and private finance.

Ans. (i) **Rationality** : Both public finance and private finance are based on rationality.

(ii) **Limit to borrowing** : Both have to apply restraint with regard to borrowing.

(iii) **Resource utilisation** : Both the private and public sector have limited resources at their disposal.

30. What are the functions of a modern state?

Ans. 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) Defence.
- (5) Judiciary.
- (6) Enterprises.
- (7) Social welfare.
- (8) Infrastructure.
- (9) Macro - economic policy
- (10) Social justice.
- (11) Control monopoly.

31. State any three characteristics of taxation.

Ans. (i) A tax is a compulsory payment made to the government.

(ii) The tax payer cannot claim any specific benefit against the payment of a tax.

(iii) A tax is not levied as a fine or penalty for breaking law.

32. Point out any three differences between direct tax and indirect tax.

Ans.

| Sl. No. | Direct Tax | Indirect Tax |
|---------|--|--|
| 1. | The burden of such tax cannot be shifted. | The burden of tax can be easily shifted to the another person. |
| 2. | It is levied according to the paying capacity of the person. | The burden of tax can be easily shifted to the another person. |
| 3. | The tax is collected more from the rich and less from the poor people. | It is levied on all persons equally whether rich or poor. |

33. What is primary deficit?

Ans. (i) Primary deficit is equal to fiscal deficit minus interest payments.

(ii) It shows the real burden of the government.

- (iii) It doesn't include the burden on loan taken in the past.
- (iv) Primary deficit reflects borrowing requirements of the government exclusive of interest payments.

$$\text{Primary Deficit PD} = \text{Fiscal deficit (PD)} - \text{Interest payment (IP)}$$

34. Mention any three methods of redemption of public debt.

Ans. (i) Sinking Fund : The government establishes a separate fund known as "Sinking Fund".

The government credits every year a fixed amount of money to this fund by the time the debt matures, the fund accumulates enough amount to pay off the principal along with interest.

- (ii) **Budgetary Surplus:** When the government presents surplus budget, it can be utilised for repaying the debt.
- (iii) **Terminal Annuity:** The government pays off the public debt on the basis of terminal annuity in equal annual installments. This is the easiest way of paying off the public debt.

PART - D

ANSWER THE FOLLOWING QUESTIONS IN ONE PAGE 5 MARKS

35. Explain the scope of public finance.

Ans. 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. The various objectives and steps in preparing a public budget, passing or sanctioning, allocation evaluation and auditing fall within financial administration.

5. Fiscal Policy

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

36. Bring out the merits of indirect taxes over direct taxes.

Ans. (1) Wider Coverage :

- (i) Indirect taxes can cover more people than direct taxes.
- (ii) For (e.g.) In India everybody pays in direct tax as against just 2% paying income tax.

(2) Convenient :

- (i) Indirect taxes are levied on commodities and services whenever consumers purchase, they pay tax along with the price.
- (ii) They do not feel the pinch of paying tax.

(3) Checks harmful consumption :

- (i) The government imposes indirect taxes on those commodities which are harmful to health.
- (ii) (e.g.) tobacco, liquor etc.

(4) Equitable :

- (i) The indirect tax satisfies the canon of equity.
- (ii) Higher tax is imposed on luxuries used by rich people.

(5) Economical :

- (i) Cost of collection is less as producers and retailers collect tax and pay to the government.
- (ii) The traders act as honorary tax collectors.

37. Explain the methods of debt redemption.

Ans. Methods of redemption of Public Debt.

(1) **Sinking Fund :**

The government credits every year a fixed amount of money to this fund. By the time the debt matures, the fund accumulates enough amount to pay off the principal along with interest.

(2) **Conversion :**

(i) It means that an old loan is converted into a new loan.

(ii) High interest public debt is converted into a low interest public debt.

(3) **Repudiation :**

(i) The government does not recognize its obligation to repay the loan.

(ii) It is certainly not paying off a loan but destroying it.

(4) **Capital Levy :**

The government imposes levy on the capital assets owned by an individual or any institution, it is called capital levy.

38. State and explain instruments of fiscal policy.

Ans. The instrument of fiscal policies are

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

(1) **Taxation :**

(i) Taxes transfer income from the people to the Government.

(ii) Taxes are either direct or indirect.

(iii) An increase in tax reduces disposable income.

(iv) So taxation should be raised to control inflation.

(2) **Public debt :**

Public debt deals with the methods of raising loans from internal and external sources.

(3) **Public expenditure :**

(i) Public expenditure raises wages and salaries of the employees and there by the aggregated demand.

(ii) Public expenditure is raised to fight recession and reduced to control inflation.

(4) **Taxation :**

(i) Taxes transfer income from the people to the Government.

(ii) Taxes are either direct or indirect.

(iii) Taxation should be raised to control inflation.

(iv) During depression, taxes are to be reduced.

39. Explain the principles of Federal Finance.

Ans. Principles of federal finance :

(i) Under the system of federal finance, a Government should be autonomous and free about the internal financial matters concerned.

(ii) Government should have separate sources of revenue, authority to levy taxes, to borrow money and to meet the expenditure.

(iii) 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.

(iv) In a federal system, each state should contribute equal tax payments for federal finance.

(v) 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.

(vi) 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.

(vii) The financial system as a whole should be well integrated. There should be perfect coordination among different layers of the financial system of the country.

(viii) The financial system should be well organized and efficiently administered. There should be no scope for evasion and fraud.

40. Describe the various types of deficit in budget.

Ans. Budget deficit is a situation where budget receipts are less than budget expenditures. This situation is also known as government deficit.

The Indian Government budget refers. The Budget deficit is of four major types.

- (1) Revenue Deficit
- (2) Budget Deficit
- (3) Fiscal Deficit and
- (4) Primary Deficit

(1) **Revenue Deficit :**

- (i) It refers to the excess of the government revenue, expenditure over revenue receipt.
- (ii) It doesn't consider capital receipts and capital expenditure.

Revenue Deficit (RD) = Total Revenue Expenditure (RE) - Total Revenue Receipts

(2) **Budget Deficit :**

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

Budget deficit = Total Expenditure - Total Revenue

(3) **Fiscal Deficit :**

Fiscal Deficit (FD) = Budget deficit + Government's market borrowings and liabilities.

(4) **Primary Deficit :**

- (i) It is equal to fiscal deficit minus interest payments.
- (ii) It reflects the borrowing requirement of the government exclusive of interest payments.

Primary Deficit (PD) = Fiscal Deficit (FD) - Interest Payments (IP)

41. What are the reasons for the recent growth in public expenditure?

- Ans.** (i) The modern state is a welfare state.
(ii) The Government has to perform several function viz social, economic and political.
(iii) These activities are the cause for increasing public expenditure.

Population Growth :

During the past 67 years of planning the population of India has increased from 36.1 crore in 1951, to 121 crore in 2011.

- (i) The growth of population requires massive investment in health, education, law and order etc.
- (ii) Aging population requires transfer payments like old age pension, social security health facilities.

Defence Expenditure :

- (i) The defence expenditure has been increasing tremendously due to modernisation of defence equipment.
- (ii) The defence expenditure of the government was increased significantly to ₹2,95,511 crores in 2018 - 2019.

Government Subsidies :

- (i) The Government of India has been providing subsidies on a number of items such as food, fertilizers, interest on priority sector, lending, exports, education etc.
- (ii) Because of the massive amount of subsidies the public expenditure has increased manifold.

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 debt servicing.

Development Project : Such as irrigation, iron and steel, heavy machinery, power, telecommunications etc., involves huge amount.

Urbanisation :

It requires heavy expenditure on law and order, education and civic amenities.

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 disaster.

PART - A

MULTIPLE CHOICE QUESTIONS 1 MARK

1. The term environment has been derived from a French word _____.
 (a) Environ (b) Environs
 (c) Environia (d) Envir
 [Ans. (c) Environia]
2. The word biotic means environment
 (a) living
 (b) non-living
 (c) physical
 (d) None of the above [Ans. (a) living]
3. Ecosystem is smallest unit of
 (a) Ionosphere (b) Lithosphere
 (c) Biosphere (d) Mesosphere
 [Ans. (c) Biosphere]
4. Who developed Material Balance Models?
 (a) Thomas and Picardy
 (b) AlenKneese and R.V. Ayres
 (c) Joan Robinson and J.M. Keynes
 (d) Joseph Stiglitz and Edward Chamberlin
 [Ans. (d) Joseph Stiglitz and Edward Chamberlin]
5. Environmental goods are _____.
 (a) Market goods
 (b) Non-market goods
 (c) Both
 (d) None of the above
 [Ans. (b) Non-market goods]
6. In a pure public good, consumption is _____.
 (a) Rival
 (b) Non-rival
 (c) Both
 (d) None of the above [Ans. (a) Rival]
7. One of the most important market failures is caused by _____.
 (a) Positive externalities
 (b) Negative externalities
 (c) Both
 (d) None of the above
 [Ans. (b) Negative externalities]
8. The common source of outdoor air pollution is caused by combustion processes from the following _____.
 (a) Heating and cooking
 (b) Traditional stoves
 (c) Motor vehicles
 (d) All the above [Ans. (b) Traditional stoves]
9. The major contributor of Carbon monoxide is
 (a) Automobiles
 (b) Industrial process
 (c) Stationary fuel combustion
 (d) None of the above [Ans. (a) Automobiles]
10. Which one of the following causes of global warming?
 (a) Earth gravitation force
 (b) Oxygen
 (c) Centripetal force
 (d) Increasing temperature
 [Ans. (d) Increasing temperature]
11. Which of the following is responsible for protecting humans from harmful ultraviolet rays?
 (a) UV-A
 (b) UV-C
 (c) Ozone layer
 (d) None of the above [Ans. (c) Ozone layer]
12. Global warming also refers to as
 (a) Ecological change
 (b) Climate Change
 (c) Atmosphere change
 (d) None of the above
 [Ans. (d) None of the above]
13. Which of the following is the anticipated effect of Global warming?
 (a) Rising sea levels
 (b) Changing precipitation
 (c) Expansion of deserts
 (d) All of the above
 [Ans. (b) Changing precipitation]

14. The process of nutrient enrichment is termed as

- (a) Eutrophication
- (b) Limiting nutrients
- (c) Enrichment
- (d) Schistosomiasis

[Ans. (b) Limiting nutrients]

15. Primary cause of Soil pollution is _____.

- (a) Pest control measures
- (b) Land reclamation
- (c) Agricultural runoff
- (d) Chemical fertilizer

[Ans. (d) Chemical fertilizer]

16. Which of the following is main cause for deforestation?

- (a) Timber harvesting industry
- (b) Natural afforestation
- (c) Soil stabilization
- (d) Climate stabilization

[Ans. (a) Timber harvesting industry]

17. Electronic waste is commonly referred as _____

- (a) solid waste
- (b) composite waste
- (c) e-waste
- (d) hospital waste

[Ans. (c) e-waste]

18. Acid rain is one of the consequences of _____ Air pollution

- (a) Water Pollution
- (b) Land Pollution
- (c) Noise Pollution
- (d) Noise Pollution

[Ans. (a) Water Pollution]

19. Sustainable Development Goals and targets are to be achieved by _____.

- (a) 2020
- (b) 2025
- (c) 2030
- (d) 2050

[Ans. (c) 2030]

20. Alkali soils are predominantly located in the _____ plains?

- (a) Indus-Ganga
- (b) North-Indian
- (c) Gangetic plains
- (d) All the above

[Ans. (d) All the above]

PART - B

ANSWER THE FOLLOWING QUESTIONS IN ONE OR TWO SENTENCES **2 MARKS**

21. State the meaning of environment.

Ans. (i) The term environment has been derived from a French word "Environia" means to surround.

(ii) Environment means "all the conditions, circumstances, and influences surrounding and affecting the development of an organism or group of organism."

22. What do you mean by ecosystem?

Ans. 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).

23. Mention the countries where per capita carbon dioxide emission is the highest in the world.

Ans.

| | Countries | Per capita CO ₂ emission |
|----|---------------|-------------------------------------|
| 1. | Saudi Arabia | 16.85 |
| 2. | Australia | 15.83 |
| 3. | United states | 15.53 |
| 4. | Canada | 15.32 |
| 5. | South Korea | 11.58 |

24. What are environmental goods? Give examples.

Ans. (i) Environmental goods are typically non-market goods, including clear air, clean water, landscape, green transport infrastructure, greenways etc, public parks, urban parks, rivers, mountains, forest and beaches.

25. What are the remedial measures to control noise pollution?

Ans. (i) Use of noise barriers.

(ii) Newer roadways for surface transport.

(iii) Traffic control

(iv) Regulating times for heavy vehicles.

26. Define Global warming.

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

27. Specify the meaning of seed ball.

Ans. (i) 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.

(ii) Seed balls are an easy and sustainable way to cultivate plants that provide a larger window of time when the sowing can occur.

PART - C

ANSWER THE FOLLOWING QUESTIONS IN ONE PARAGRAPH 3 MARKS

28. Brief the linkage between economy and environment.

Ans. (i) Human's life depends on social, political, ethical, philosophical and other aspects of economic system.

(ii) The life of human beings is shaped by his living environment

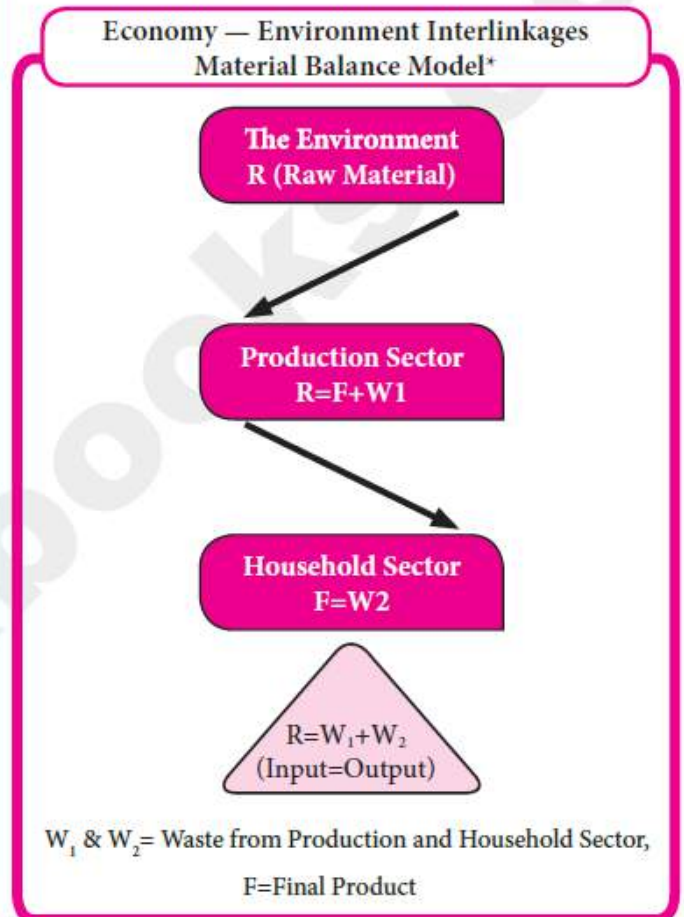
(iii) The relationship between the economy and the environment is generally Explained in the form of a "Material Balance Model" developed by Alen Kneese and Ayres.

29. Specify the meaning of material balance principle.

Ans. (i) The material flow diagram implies that mass inputs must equal mass outputs for every process.

(ii) All the resources extracted from the environment eventually become unwanted waste and pollutant.

(e.g) Material and energy are drawn from environment used for production and consumption activities and returned back to the environment as wastes. In its simple form the Material Balance Approach can be put in form equation.



$$M = G - R_c - R_p + R_p^r + R_c^r = R_c^d + R_c^d$$

| | | | | |
|---|---|--|---|---|
| Material and Energy Inflow from Natural World (M) | = | Economic Activities of Goods and Service Production (G) - Consumption and Production Residual Discharges from Consumption and Production activities ($R_c + R_p$) + Recycles from Production and Consumption ($R_p^r + R_c^r$) | = | Final Residual Discharge from Production and Consumption into Natural World ($R_c^d + R_c^d$) |
|---|---|--|---|---|

30. Explain different types of air pollution.

Ans. Types of Air pollution :

- (i) **Indoor Air Pollution** : It refers to toxic contaminants that we encounter in our daily lives in our homes, schools and workplaces.
- (ii) **Outdoor Air Pollution** : It refers to ambient air. The common sources of outdoor air pollution are caused by combustion processes from motor vehicles, solid fuel burning and industry.

31. What are the causes of water pollution?

Ans. Causes of Water Pollution :

Water pollution is caused due to several reasons. Here are the few major causes of water pollution:

1. **Discharge of sewage and waste water :**
Sewage, garbage and liquid waste of households, agricultural runoff and effluents from factories are discharged into lakes and rivers.
2. **Dumping of solid wastes :** The dumping of solid wastes and litters in water bodies cause huge problems.
3. **Discharge of industrial wastes :**
Industrial waste contains pollutants like asbestos, lead, mercury, grease oil and petrochemicals, which are extremely harmful to both people and environment.
4. **Oil Spill :** Sea water gets polluted due to oil spilled from ships and tankers while travelling.
5. **Acid rain :** Acid rain is pollution of water caused by air pollution.
6. **Global warming :** Due to global warming, there is an increase in water temperature as a result aquatic plants and animals are affected.
7. **Eutrophication :** Eutrophication is an increased level of nutrients in water bodies. This results in bloom of algae in water.

32. State the meaning of e-waste.

Ans. (i) Electronic waste which is commonly referred as "e-Waste" is the new by product of the Info Tech Society.

- (ii) It is a physical waste in the form of old discarded end of life electronics.
- (iii) It includes a broad and growing range of electronics devices from large house hold appliances such as refrigerators, air conditioner, cellular phones, computers and other electronic goods.
- (iv) e-Waste can be defined as the result when consumer, business and house hold devices are disposed or sent for re-cycling.
- (v) For example. Television, Computers, Audio - equipments, VCR, DVD, Telephone, Fax, Xerox Machine, Wireless devices, Video games other household electronic equipment.

33. What is land pollution? Mention the causes of land pollution.

Ans. The land pollution is defined as, "the degradation of land because of the disposal of waste on the land". Any substance (solid, liquid or gaseous) that is discharged, emitted or deposited in the environment in such a way that it alters the environment causes land pollution.

Causes of land pollution :

- (i) **Deforestation and soil erosion :**
Deforestation carried out to create dry lands is one of the major concerns.
- (ii) **Agricultural activities :** With growing human and pet animal population, demand for food has increased considerably. Farmers often use highly toxic fertilizers and pesticides to get rid off insects, fungi and bacteria from their crops. However the overuse of these chemicals, results in contamination and poisoning of land.
- (iii) **Mining activities :** During extraction and mining activities, several land spaces are created beneath the surface.
- (iv) **Landfills :** Each household produces tones of garbage each year due to changing economic lifestyle of the people. Garbage like plastic, paper, cloth, wood and hospital waste get accumulated.
- (v) **Industrialization :** Due to increasing consumerism more industries were developed which led to deforestation.

PART - D

ANSWER THE FOLLOWING QUESTIONS IN ONE PAGE

5 MARKS

(vi) **Construction activities** : Due to urbanization, large amount of construction activities are taking place. This has resulted in large waste articles like wood, metal, bricks, plastic. These are dumped at the outskirts of urban areas that lead to land pollution.

(vii) **Nuclear waste** : The leftover radioactive materials, harmful and toxic chemicals affect human health. They are dumped beneath the earth to avoid any casualty.

34. Write a note on a) Climate change and b) Acid rain

Ans. (i) **Climate Change** :

The climate change refers to seasonal changes over a long period with respect to the growing accumulation of greenhouse gases in the atmosphere. Human activities since the beginning of the industrial revolution have contributed to an increase in the concentration of carbon dioxide in the atmosphere by as much as 40%, from about 280 parts per million in the pre-industrial period, to 402 parts per million in 2016, which in turn has led to global warming.

Several parts of the world have already experienced the warming of coastal waters, high temperatures, a marked change in rainfall patterns, and an increased intensity and frequency of storms. Sea levels and temperatures are expected to be rising.

(ii) **Acid Rain** :

Acid rain is one of the consequences of air pollution. It occurs when emissions from factories, cars or heating boilers contact with the water in the atmosphere. These emissions contain nitrogen oxides, sulphur dioxide and sulphur trioxide which when mixed with water becomes sulfurous acid, nitric acid and sulfuric acid. This process also occurs by nature through volcanic eruptions. It can have harmful effects on plants, aquatic animals and infrastructure.

35. Briefly explain the relationship between GDP growth and the quality of environment.

Ans. (i) GDP is an indicator of a society's standard of living, but it is only a rough indicator because it does not directly account for leisure, environment quality, levels of health and education, activities conducted outside the market, changes in inequality of income, increase in variety, increase in technology etc.

(ii) The relationship between the economy and the environment is generally explained in the form of a "**Material Balance Model**" developed by Alen Kneese and R.V. Ayres. The model considers the total economic process as a physically balanced flow between inputs and outputs. Inputs are bestowed with physical property of energy which is received from the environment. The interdependence of economics and environment is given in the figure A and flow diagram.

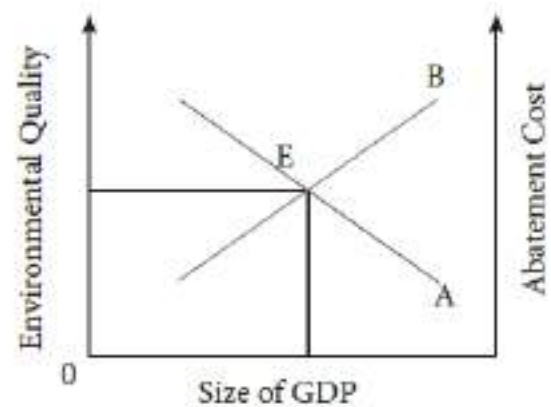
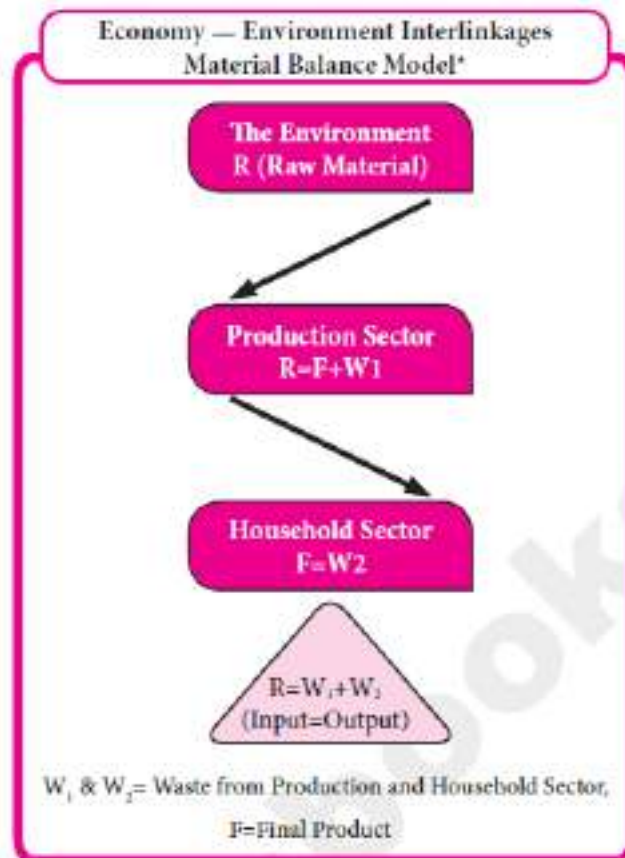
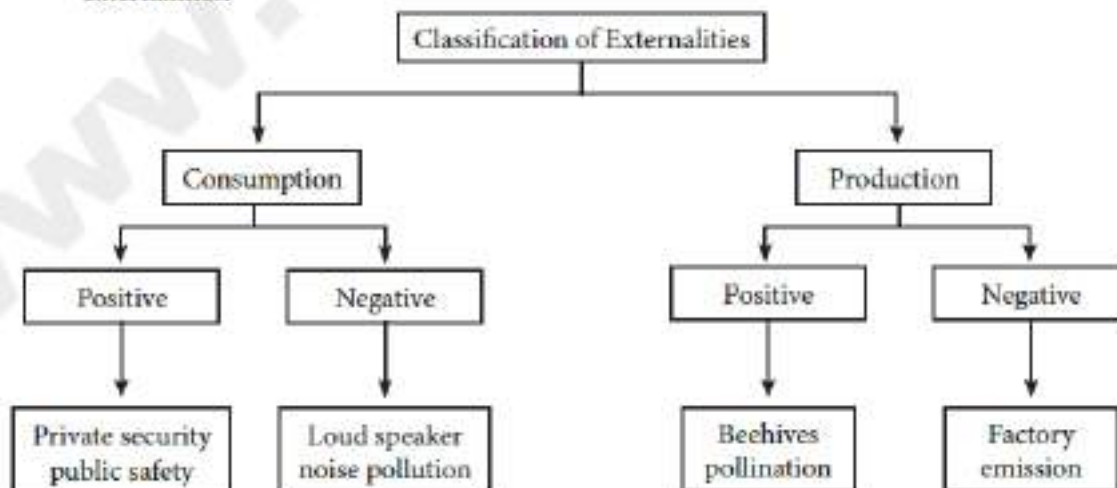


Figure A



36. Explain the concepts of externality and its classification

- Ans.** (i) Externalities refer to external effects or spillover effects resulting from the act of production or consumption.
- (ii) Externalities arise due to interdependence between economic units.
- (iii) The externalities arise from both production and consumption activities and their impact could be beneficial or adverse.
- (iv) Beneficial externalities are called “positive externalities” and adverse ones are called negative externalities.



37. Explain the importance of sustainable development and its goals.

Ans. (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 decent 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 combat 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.

PART - A

MULTIPLE CHOICE QUESTIONS 1 MARK

1. "Redistribution with Growth" became popular slogan under which approach?
 (a) Traditional approach
 (b) New welfare oriented approach
 (c) Industrial approach
 (d) None of the above
 [Ans. (b) New welfare oriented approach]
2. Which is not the feature of economic growth?
 (a) Concerned with developed nations
 (b) Gradual change
 (c) Concerned with quantitative aspect
 (d) Wider concept
 [Ans. (d) Wider concept]
3. Which among the following is a characteristic of underdevelopment?
 (a) Vicious circle of poverty
 (b) Rising mass consumption
 (c) Growth of Industries
 (d) High rate of urbanization
 [Ans. (a) Vicious circle of poverty]
4. The non-economic determinant of economic development
 (a) Natural resources (b) Human resource
 (c) Capital formation (d) Foreign trade
 [Ans. (b) Human resource]
5. Economic growth measures the _____.
 (a) Growth of productivity
 (b) Increase in nominal income
 (c) Increase in output
 (d) None of the above
 [Ans. (c) Increase in output]
6. The supply side vicious circle of poverty suggests that poor nations remain poor because
 (a) Saving remains low
 (b) Investment remains low
 (c) There is a lack of effective government
 (d) a and b above [Ans. (d) a and b above]
7. Which of the following plan has focused on the agriculture and rural economy?
 (a) People's Plan
 (b) Bombay Plan
 (c) Gandhian Plan
 (d) Vishveshwarya Plan
 [Ans. (c) Gandhian Plan]
8. Arrange following plans in correct chronological order
 (i) People's Plan
 (ii) Bombay Plan
 (iii) Jawaharlal Nehru Plan
 (iv) Vishveshwarya Plan
 Answer choices
 (a) (i) (ii) (iii) (iv) (b) (iv) (iii) (ii) (i)
 (c) (i) (ii) (iv) (iii) (d) (ii) (i) (iv) (iii)
 [Ans. (b) (iv) (iii) (ii) (i)]
9. M.N. Roy was associated with _____.
 (a) Congress Plan
 (b) People's Plan
 (c) Bombay Plan
 (d) None of the above [Ans. (b) People's Plan]
10. Which of the following country adopts indicative planning?
 (a) France (b) Germany
 (c) Italy (d) Russia
 [Ans. (b) Germany]
11. Short-term plan is also known as _____.
 (a) Controlling Plans
 (b) De-controlling Plans
 (c) Rolling Plans
 (d) De-rolling Plans
 [Ans. (a) Controlling Plans]
12. Long-term plan is also known as _____.
 (a) Progressive Plans
 (b) Non-progressive Plans
 (c) Perspective Plans
 (d) Non-perspective Plans
 [Ans. (c) Perspective Plans]

PART - B

ANSWER THE FOLLOWING QUESTIONS IN ONE OR TWO SENTENCES 2 MARKS

13. The basic philosophy behind long-term planning is to bring _____ changes in the economy?

- (a) Financial (b) Agricultural
(c) Industrial (d) Structural

[Ans. (c) Industrial]

14. Sarvodaya Plan was advocated by _____.

- (a) Mahatma Gandhi (b) J.P. Narayan
(c) S. N Agarwal (d) M.N. Roy

[Ans. (b) J.P. Narayan]

15. Planning Commission was set up in the year _____.

- (a) 1950 (b) 1951
(c) 1947 (d) 1948

(e) Gandhian Plan [Ans. (a) 1950]

16. Who wrote the book "The Road to Serfdom"?

- (a) Friedrich Hayek
(b) H.R. Hicks
(c) David Ricardo
(d) Thomas Robert Malthus

[Ans. (a) Friedrich Hayek]

17. Perspective plan is also known as _____.

- (a) Short-term plan
(b) Medium-term plan
(c) Long-term plan
(d) None of the above

[Ans. (c) Long-term plan]

18. NITI Aayog is formed through _____.

- (a) Presidential Ordinance
(b) Allocation of business rules by President of India
(c) Cabinet resolution
(d) None of the above

[Ans. (c) Cabinet resolution]

19. Expansion of NITI Aayog

- (a) National Institute to Transform India
(b) National Institute for Transforming India
(c) National Institution to Transform India
(d) National Institution for Transforming India

[Ans. (d) National Institution for Transforming India]

20. The Chair Person of NITI Aayog is

- (a) Prime Minister
(b) President
(c) Vice - President
(d) Finance Minister [Ans. (a) Prime Minister]

21. Define economic development

Ans. According to Michal P.Todaro "Development must, therefore, be conceived as 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".

(or)

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

22. Mention the indicators of development.

Ans. Common indicators of development or

- (i) Gross Domestic product(GDP)
(ii) Gross National product(GNP)
(iii) GNP per capita
(iv) The Human Development Index (HDI)

23. Distinguish between economic growth and development

Ans.

| Economic Growth | Economic Development |
|--|---|
| Deals with the problems of developed countries | Deals with the problems of UDCs (Under Developed Countries) |
| Change is gradual and steady | Change is discontinuous and spontaneous |
| Means more output | Means not only more output but also its composition. |
| Concerns Quantitative aspects i.e. increase in per capita income | Quantitative as well as Qualitative |
| Narrow Concept | Wider Concept Development = Growth + Change |

24. What is GNP?

Ans. Gross National Product (GNP) :

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 (including income of those located abroad) minus income of non residents located in that country.

$$\begin{array}{l} \text{GNP at Market Prices} \\ = \text{GDP at Market Prices} \\ + \\ \text{Net factor income from abroad} \end{array}$$

25. Define economic planning.

Ans. (i) According to Robbins, economic planning is collective control or suppression of private activities of production and exchange.

(ii) According to Dalton, economic planning in the widest sense is the deliberate direction by persons in-charge of large resources of economic activity towards chosen ends.

26. What are the social indicators of economic development?

Ans. Social indicators economic development are health, education, food, water, sanitation and housing facilities.

27. Write a short note on NITI Aayog.

Ans. (i) NITI Aayog (National Institution for Transforming India) was formed on 1st January, 2015 through a union cabinet resolution.

(ii) NITI Aayog is a policy think tank of the government of India.

(iii) It replaced the Planning Commission from 13th August, 2014.

PART - C

ANSWER THE FOLLOWING QUESTIONS IN ONE PARAGRAPH **3 MARKS**

28. Elucidate major causes of vicious circle of poverty with diagram.

Ans. (i) 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).

(ii) Nurkse explains the idea in these words : "It implies a circular constellation of forces tending to act and react on upon one another in such a way as to keep a poor country in a state of poverty.

(iii) For example, A poor man may not have enough to eat, being underfed etc.

The Vicious Circle of Poverty.



29. What are the non-economic factors determining development?

Non economic factors are :

- (i) Human Resources
- (ii) Technical know-how
- (iii) Political freedom
- (iv) Social Organisation
- (v) Corruption free administration
- (vi) Desire for development
- (vii) Moral, Ethical and Social values
- (viii) Casino Capitalism
- (ix) Patrimonial Capitalism

30. How would you break the vicious circle of poverty?

Ans. (i) The vicious circle of poverty is associated with low rate of saving and investment on the supply side.

(ii) In UDCs the rate of investment and capital formation can be stepped up without reduction in consumption.

(iii) To break the vicious circle on the demand side, Nurkse suggested the strategy of balanced growth.

(iv) If investment is made in several industries simultaneously the workers employed in various industries will become consumers of each other's product and will create demand for one another.

31. Trace the evolution of economic planning in India.

Ans. The evolution of planning in India is given below :

- (i) **Sir M.Vishves warya (1934):**
A prominent engineer and politician made his first attempt in laying foundation for economic planning in India in 1934 through his book, "planned economy of India. It was a 10 year plan.
- (ii) **Jawaharlal Nehru (1938)**
Set-up "National planning commission" by a committee but due to the changes in the political era and second world war, it did not materialize
- (iii) **Bombay Plan (1940)**
The 8 leading industrialist of Bombay presented "Bombay Plan". It was a 15 year Investment plan
- (iv) **S.N.Agarwal**
Gave the "Gandhian plan" focussing on the agricultural and rural economy.
- (v) **M.N.Roy (1945)**
Drafted "People's plan " It was aiming at mechanization of agricultural production.
- (vi) **J.P.Narayan (1950)**
Advocated "Sarvodaya plan" which was inspired by Gandhian plan and with the idea of Vinoba Bhave.

32. Describe the case for planning

Ans. The economic planning is justified on the following grounds.

- (1) To accelerate and strengthen works imperfectly in underdeveloped countries because of the ignorance and unfamiliarity with it.
- (2) **To remove unemployment :**
Capital being scarce and labour being abundant, the problem of providing gainful employment opportunities to an ever-increasing labour force is difficult task.
- (3) **To achieve balanced development :**
In the absence of sufficient enterprise and initiative, the planning authority is the only institution for planning the balanced development of the economy.

33. Distinguish between functional and structural planning.

Ans.

| Functional Planning | Structural Planning |
|---|--|
| 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 |
| 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. |

34. What are the functions NITI Aayog?

Ans. The function of NITI Aayog are

- (i) Co-operative and competitive Federalism
- (ii) Shared National Agenda
- (iii) Decentralized planning
- (iv) Vision and scenario planning
- (v) Network of Expertise
- (vi) Harmonization
- (vii) Conflict Resolution
- (viii) Co-ordinating Interface with the world
- (ix) Internal Consultancy
- (x) Capacity building
- (xi) Monitoring and Evaluation

PART - D

ANSWER THE FOLLOWING QUESTIONS IN ONE PAGE 5 MARKS

35. Discuss the economic determinants of economic development.

Ans. Economic determinants of economic development are as follows

- (i) **Natural Resources :**
The principle factor affecting the development of an economy is the availability of natural resources.
- (ii) **Capital Formation :**
 - (a) Capital formation the main key to economic growth.
 - (b) Capital formation refers to net addition to the existing stock of capital goods like plants and machinery.
 - (c) Thus the result in better utilization of natural resources, industrialization and expansion of market which are essential for economic progress.

(iii) Size of the market :

- (a) Large size of the market would stimulate production.
- (b) Increase production results in increase employment and raise the National per capita income.

(iv) Structure Change :

- (a) It refers to change in the occupational structure of the economy.
- (b) Any economy of the country generally divided into three basic sectors (i) primary sectors (ii) secondary sector (iii) Tertiary sector

(v) Financial system :

- (a) Financial system implies the existence of an efficient organized banking system in the country.
- (b) This facilitate easy availability of capital.

(vi) Foreign Trade :

The country which enjoys favourable balance of trade and terms of trade is always developed.

(vii) Economic system:

The countries which adopt free market mechanism enjoy better growth rate compared to controlled economics.

36. Describe different types of Planning.

Ans. Democratic Planning :

- (i) Democratic planning implies planning within democracy. People are associated at every step in the formulation and implementation of the plan.
- (ii) 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 pre-determined 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 :

- (i) 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.
- (ii) The private sector is expected to fulfill the targets and priorities. The state does not force the private sector but just indicate the areas of operation and targets to be fulfilled. In short, the planning procedure is soft and flexible.

Imperative Planning :

- (i) 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.
- (ii) The Government policies and procedures are rigid. China and Russia follow imperative planning.

Short, Medium and Long term Planning :

- (i) Short-term plans are also known as 'controlling plans'. They encompass the period of one year, therefore, they are also known as 'annual plans'.
- (ii) 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. The medium-term planning is not only related to allocation of financial resources but also physical resources.

(iii) 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.

37. Bring out the arguments against planning.

Ans. Argument 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 :**

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

(ii) **Elimination of Initiative :**

- Under centralized planning there will be no incentives and innovations.
- The absence of private ownership and profit motive discourage entrepreneurs from taking bold decisions and risk taking.
- As all enjoy equal reward under planned economy irrespective of their effort efficiency and productivity.
- 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 :**

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

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

- Price mechanism provides for the automatic adjustments among price demand and supply in Laissez Faire economy.
- Excess supply and excess demand can also happen in the market oriented economy.
- The arguments against planning are mostly concerned with centralized and totalitarian planning
- The democratic planning, Planning by inducement and decentralized planning especially under mixed economics give equal role for private sector and public sector.

CHAPTER 12

INTRODUCTION TO STATISTICAL METHODS AND ECONOMETRICS

PART - A

MULTIPLE CHOICE QUESTIONS 1 MARK

(i) Choose the Correct Option.

- The word 'statistics' is used as _____.
(a) Singular. (b) Plural
(c) Singular and Plural. (d) None of above.
[Ans. (c) Singular and Plural.]
- Who stated that statistics as a science of estimates and probabilities.
(a) Horace Secrist. (b) R.A Fisher.
(c) Ya-Lun-Chou (d) Boddington
[Ans. (d) Boddington]
- Sources of secondary data are _____.
(a) Published sources.
(b) Unpublished sources.
(c) Neither published nor unpublished sources.
(d) Both (a) and (b)
[Ans. (d) Both (a) and (b)]
- The data collected by questionnaires are _____.
(a) Primary data. (b) Secondary data.
(c) Published data. (d) Grouped data.
[Ans. (a) Primary data.]
- A measure of the strength of the linear relationship that exists between two variables is called:
(a) Slope
(b) Intercept
(c) Correlation coefficient
(d) Regression equation
[Ans. (c) Correlation coefficient]
- If both variables X and Y increase or decrease simultaneously, then the coefficient of correlation will be:
(a) Positive (b) Negative
(c) Zero (d) One
[Ans. (a) Positive]
- If the points on the scatter diagram indicate that as one variable increases the other variable tends to decrease the value of r will be:
(a) Perfect positive (b) Perfect negative
(c) Negative (d) Zero
[Ans. (c) Negative]
- The value of the coefficient of correlation r lies between:
(a) 0 and 1 (b) -1 and 0
(c) -1 and +1 (d) -0.5 and +0.5
[Ans. (c) -1 and +1]
- The term regression was used by:
(a) Newton (b) Pearson
(c) Spearman (d) Galton
[Ans. (d) Galton]
- The purpose of simple linear regression analysis is to:
(a) Predict one variable from another variable
(b) Replace points on a scatter diagram by a straight-line
(c) Measure the degree to which two variables are linearly associated
(d) Obtain the expected value of the independent random variable for a given value of the dependent variable
[Ans. (a) Predict one variable from another variable]
- A process by which we estimate the value of dependent variable on the basis of one or more independent variables is called:
(a) Correlation (b) Regression
(c) Residual (d) Slope
[Ans. (b) Regression]
- If $Y = 2 - 0.2X$, then the value of Y intercept is equal to
(a) -0.2 (b) 2
(c) 0.2X (d) All of the above
[Ans. (b) 2]

13. In the regression equation $Y = \beta_0 + \beta_1 X$, the Y is called:

- (a) Independent variable
- (b) Dependent variable
- (c) Continuous variable
- (d) None of the above

[Ans. (b) Dependent variable]

14. In the regression equation $X = \beta_0 + \beta_1 Y$, the X is called:

- (a) Independent variable
- (b) Dependent variable
- (c) Continuous variable
- (d) None of the above

[Ans. (a) Independent variable]

15. Econometrics is the integration of

- (a) Economics and Statistics
- (b) Economics and Mathematics
- (c) Economics, Mathematics and Statistics
- (d) None of the above

[Ans. (c) Economics, Mathematics and Statistics]

16. Econometric is the word coined by

- (a) Francis Galton
- (b) Ragnar Frish
- (c) Karl Person
- (d) Spearsman

[Ans. (b) Ragnar Frish]

17. The raw materials of Econometrics are:

- (a) Data
- (b) Goods
- (c) Statistics
- (d) Mathematics

[Ans. (a) Data]

18. The term Uin regression equation is

- (a) Residuals
- (b) Standard error
- (c) Stochastic error term
- (d) None

[Ans. (c) Stochastic error term]

19. The term Uis introduced for the representation of

- (a) Omitted Variable
- (b) Standard error
- (c) Bias
- (d) Discrete Variable

[Ans. (a) Omitted Variable]

20. Econometrics is the amalgamation of

- (a) 3 subjects
- (b) 4 subjects
- (c) 2 subjects
- (d) 5 subjects

[Ans. (a) 3 subjects]

PART - B

ANSWER THE FOLLOWING QUESTIONS IN ONE OR TWO SENTENCES **2 MARKS**

21. What is Statistics?

Ans. (i) Statistics as a science of estimates and probabilities.

(ii) Statistics may be defined as the collection, organisations, presentation, analysis and interpretation of numerical data.

22. What are the kinds of Statistics?

Ans. There are two major types of statistics.

- (i) Descriptive statistics
- (ii) Inferential statistics.

23. What do you mean by Inferential Statistics?

Ans. The branch of statistics concerned with using sample data to make an inference about a population of data is called inferential statistics.

24. What are the kinds of data?

Ans. In statistics, data are classified into two broad categories. They are, (i) Quantitative data (ii) Qualitative data.

25. Define Correlation.

Ans. Correlation is a statistical device that helps to analyse the covariation of two more variables, Sir Francis Galton is responsible for the calculation of correlation coefficient.

26. Define Regression.

Ans. The literal meaning of the word "regression" is "stepping back towards the average".

27. What is Econometrics?

Ans. (i) Econometrics may be considered as the integration of economics, statistics and mathematics.

(ii) Econometrics means economics measurement econometrics deals with the measurement of economic relationships.

PART - C

ANSWER THE FOLLOWING QUESTIONS IN ONE PARAGRAPH 3 MARKS

28. What are the functions of Statistics?

- Ans.** (i) Statistics presents facts in a definite form.
 (ii) It simplifies mass of figures.
 (iii) It facilitates comparison.
 (iv) It helps in formulating and testing.
 (v) It helps in prediction.
 (vi) It helps in the formulation of suitable policies.

29. Find the Standard Deviation of the following data :

14, 22, 9, 15, 20, 17, 12, 11

Ans.

| Sl. No. | 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 |

| Sl. No. | X | X- \bar{X} | (X- \bar{X}) ² |
|---------|----------------------------|--------------|--|
| 5 | 20 | (20-15) 5 | 25 |
| 6 | 17 | (17-15) 2 | 4 |
| 7 | 12 | (12-15) -3 | 9 |
| 8 | $\sum X = \frac{111}{120}$ | (11-15) -4 | $\sum(X - \bar{X})^2 = \frac{16}{140}$ |

$$\bar{X} = \frac{\sum X}{n}$$

$$n = 8$$

$$\bar{X} = \frac{120^{3015}}{8} = 15$$

$$\sigma = \sqrt{\frac{\sum(X - \bar{X})^2}{n}}$$

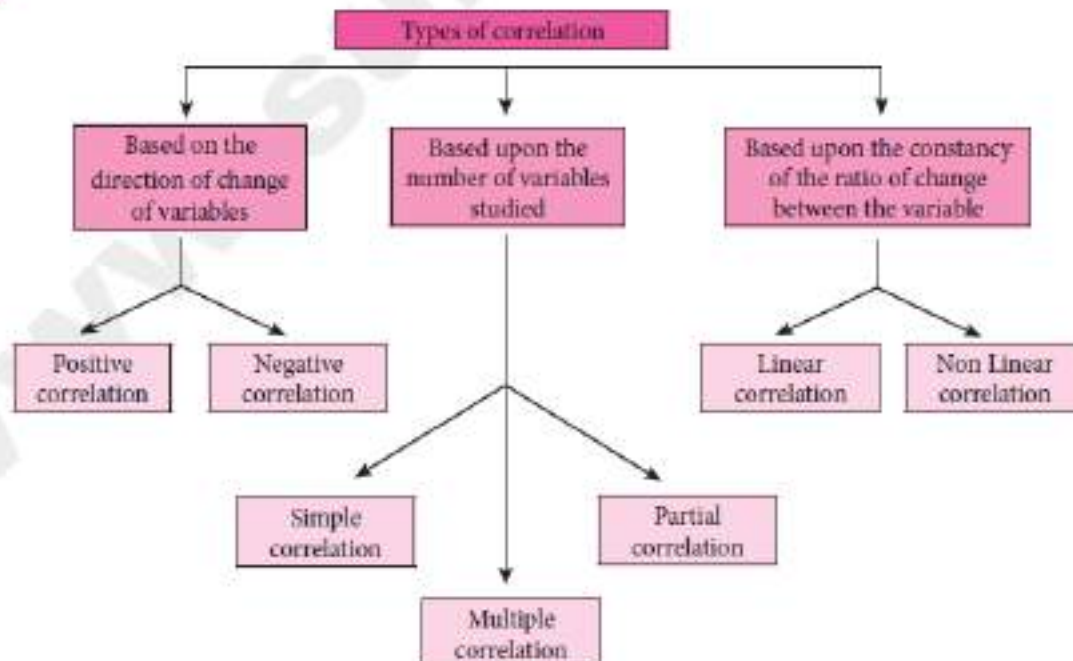
$$= \sqrt{\frac{140^{35}}{8}} = \sqrt{17.5}$$

$$\therefore \sigma = 4.18$$

Answer : The standard deviation of the given data is $\sigma = 4.18$

30. State and explain the different kinds of Correlation.

Ans.



Type - I : Based on the direction of change of variables :

- (i) **Positive Correlation :** The correlation is said to be positive if the values of two variable move in the same direction.
- (ii) **Negative Correlation :** the correlation is said to be negative when the value of variables move in the opposite directions.

Type - II : Based upon the number of variables studied :

- (i) **Simple correlation :** If only two variables are taken for study when it is said to be simple correlation. e.g. $Y = a + bx$.
- (ii) **Multiple Correlations :** If three or more than three variables are studied simultaneously then it is termed as multiple correlation.
- (iii) **Partial Correlation :** If there are more than two variables but only two variables are considered keeping the other variables constant.

Type - III : Based upon the constancy of the ratio of change between the variables.

- (i) **Linear Correlation :**
 - (1) Correlation is divided into two types of linear correlation and non-linear correlation based upon the constancy of the ratio of change between the variables.
 - (2) Correlation is said to be linear when the amount of change in one variable tends to bear a constant ratio to the amount of change in the other.
e.g. $Y = a + bx$
- (ii) **Non-Linear Correlation :**
The correlation would be non-linear if the amount of change in one variable does not bear a constant ratio to the amount of change in the other variables.
e.g. $Y = a + bx^2$

31. Mention the uses of Regression Analysis.

Ans. (i) The regression equation is used to estimate the value of Y corresponding to the known value of X.

- (ii) The line disturbing this tendency to regress or going back was called by Galton a "Regression line".
- (iii) Regression line is the line which gives the best estimate of one variable from the value of any other given variable.
- (iv) The line of regression is the line which gives the best estimate to the value of one variable for any specific value of the other variable.

32. Specify the objectives of econometrics.

- Ans. (i)** The specific objectives are as follows.
- (ii) It helps to explain the behaviour of a forthcoming period that is forecasting economic phenomena.
 - (iii) It helps to prove the old and established relationships among the variables.
 - (iv) It helps to establish new theories and new relationships.
 - (v) It helps to test the hypotheses and estimation of the parameter.

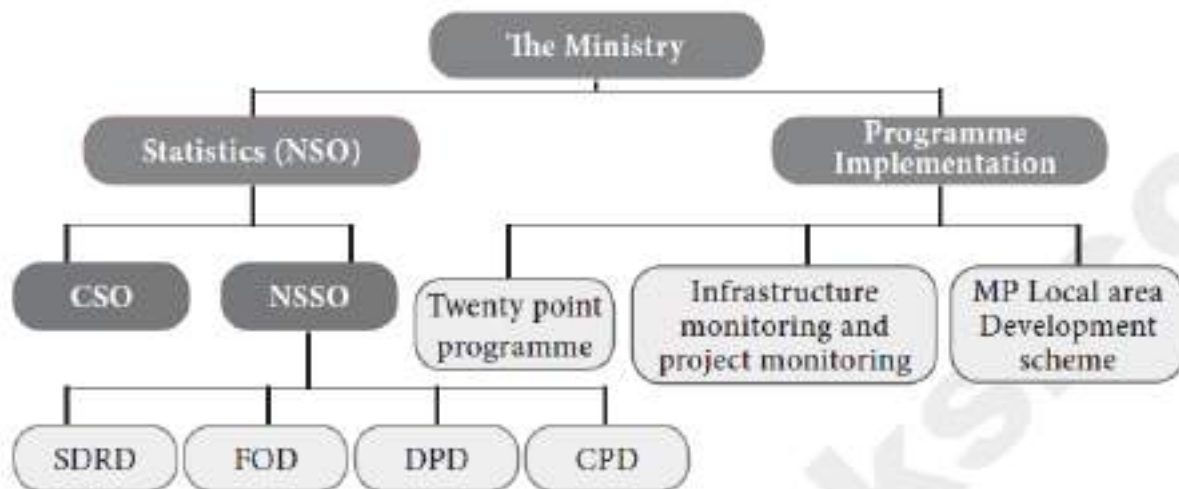
33. Differentiate the economic model with econometric model.

Ans.

| S. No. | Economic Model | Econometric Model |
|--------|--|--|
| 1. | An Economic Model is a local representation of knowledge. | An Econometric Model is an integration of 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 represents a set of hypotheses that permits statistical inference from the particular data under review. |
| 3. | This is based upon abstract economic theory. | It is appropriate to the particular situation based on common sense. |
| 4. | It is prepared after formulation of economic laws. | Construction of econometric model is the starting point of any econometric investigation. |

34. Discuss the important statistical organizations (offices) in India.

Ans. The Ministry Of Statistics and Programme Implementation (MOSPI) has two wings, statistics and programme implementation.



The statistics wing called the National Statistics Office (NSO) Consists of the Central Statistical Office (CSO), the Computer centre and the National Sample Survey Office (NSSO).

(i) **Central Statistical Office (CSO) :**

It is responsible for co-ordination of statistical activities in the country and for evolving and maintain statistical standards.

(ii) **National Sample Survey Organisation (NSSO) :**

The National Sample Survey Organisation now known as National Sample Survey Office, is an organization under the Ministry of Statistics of the Government of India. NSSO has four divisions.

1. Survey Design and Research Division (SDRD)
2. Field Operations Division (FOD)
3. Data Processing Division (DPD)
4. Co-ordination and publication Division (CPD)

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.

PART - D

ANSWER THE FOLLOWING QUESTIONS IN ONE PAGE **5 MARKS**

35. Elucidate the nature and scope of Statistics.

Ans. Ronald Fisher is known as the Father of Statistics. According to Goxton & Cowden.

"Statistics may be defined as the collection, organisation, presentation, analysis and interpretation of numerical data".

Characteristics and Functions of Statistics :

- (i) Statistics are an aggregate of facts.
- (ii) Statistics are numerically enumerated estimated and expressed.
- (iii) Statistical collection should be systematic with a predetermined purpose.
- (iv) Should be capable of being used as a technique for drawing comparison.

Functions of Statistics :

- (i) It simplifies mass of figures.
- (ii) It facilitates comparison.
- (iii) It helps in formulating and testing.
- (iv) It helps in prediction.

(a) **Nature of Statistics :**

- (1) Different Statisticians and Economists differ in views about the nature of statistics.
- (2) Some call it a science and some say it as an art.

- (b) **Scope of Statistics :**
 Statistics is applied in every sphere of human activity - Social as well as physical like Biology, Commerce, Education, Planning, Business Management, Information Technology, etc.,
- (c) **Statistics and Economics :**
 Statistical data and techniques are immensely useful in solving many Economic problems such as fluctuation in wages, prices, etc.,
- (d) **Statistics and Firms :**
 Statistics is widely used in many firms to find whether the product is conforming to specifications or not.
- (e) **Statistics and Commerce :**
 Statistics are life blood of successful commerce.
- (f) **Statistics and Education :**
 Statistics is necessary for the formulation of policies to start new course, according to the changing environment.
- (g) **Statistics and Planning :**
 (1) Statistics is indispensable in planning. In the modern world, which can be termed as the "world of planning", almost all the organisations in the government

are seeking the help of planning for efficient working, for the formulation of policy decisions and execution of the same.

- (2) In order to achieve the above goals, various advanced statistical techniques are used for processing, analyzing and interpreting data.
- (3) In India, statistics play an important role in planning, both at the central and state government levels,
- (h) **Statistics and Medicine :**
 (1) In Medical sciences, statistical tools are widely used. In order to test the efficiency of a new drug or to compare the efficiency of two drugs or two medicines, t - test for the two samples is used.
- (2) More and more applications of statistics are at present used in clinical investigation.
- (i) **Statistics and modern applications :**
 Recent development in the fields of computer and information technology have enable statistics to integrate their models and thus make statistics a part of decision making produces of many organisations.

36. 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 |

Ans.

| S. No. | Demand of Product X | Sale of Product Y | dx (A = 31) X - A (X - 31) | dy (B = 26) Y - B (Y - 26) | dx ² | dy ² | dxdy |
|--------|---------------------|-------------------|----------------------------------|----------------------------------|---------------------|---------------------|---------------------|
| 1 | 23 | 18 | -8 | -8 | 64 | 64 | 64 |
| 2 | 27 | 22 | -4 | -4 | 16 | 16 | 16 |
| 3 | 28 | 23 | -3 | -3 | 9 | 9 | 9 |
| 4 | 29 | 24 | -2 | -2 | 4 | 4 | 4 |
| 5 | 30 | 25 | -1 | -1 | 1 | 1 | 1 |
| 6 | 31 | 26 | 0 | 0 | 0 | 0 | 0 |
| 7 | 33 | 28 | 2 | 2 | 4 | 4 | 4 |
| 8 | 35 | 29 | 4 | 3 | 16 | 9 | 12 |
| 9 | 36 | 30 | 5 | 4 | 25 | 16 | 20 |
| 10 | 39 | 32 | 8 | 6 | 64 | 36 | 48 |
| | $\Sigma X = 311$ | $\Sigma Y = 257$ | $\Sigma(X-A) = 1$ | $\Sigma(Y-B) = -3$ | $\Sigma dx^2 = 203$ | $\Sigma dy^2 = 159$ | $\Sigma dxdy = 178$ |

$$\bar{X} = \frac{\sum X}{N} = \frac{311}{10} = 31 \frac{1}{10} \quad \text{Take the assumed values}$$

$$\bar{Y} = \frac{\sum Y}{N} = \frac{257}{10} = 25 \frac{7}{10}$$

$$A = 31, \quad B = 26$$

$$X - A \Rightarrow 31, \quad Y - B \Rightarrow 26$$

$$N = 10, \quad \sum X = 311, \quad \sum Y = 257$$

$$\sum dx = (\sum X - A) = 1, \quad \sum dy = (\sum Y - B) = -3, \quad \sum dx^2 = 203$$

$$\sum dy^2 = 159, \quad \sum dxdy = 178$$

$$r = \frac{N \sum dxdy - (\sum dx)(\sum dy)}{\sqrt{N \sum dx^2 - (\sum dx)^2} \sqrt{N \sum dy^2 - (\sum dy)^2}}$$

$$= \frac{10 \times 178 - (1)(-3)}{\sqrt{10 \times 203 - (1)^2} \sqrt{10 \times 159 - (-3)^2}}$$

$$= \frac{1780 + 3}{\sqrt{2030 - 1} \sqrt{1590 - 9}}$$

$$= \frac{1783}{\sqrt{2029} \sqrt{1581}}$$

$$= \frac{1783}{(45.044)(39.761)} = \frac{1783}{1790.94}$$

$$\therefore r = 0.9955$$

37. Find the regression equation Y on X and X on Y for the following data:

| | | | | | | | | | | |
|---|----|----|----|----|----|----|----|----|----|----|
| Y | 45 | 48 | 50 | 55 | 65 | 70 | 75 | 72 | 80 | 85 |
| X | 25 | 30 | 35 | 30 | 40 | 50 | 45 | 55 | 60 | 65 |

(Answer: $Y = 0.787X + 7.26$, and $X = 0.87Y + 26.65$)

Ans.

| X | Y | $d_x = X - 45$ | $d_y = Y - 65$ | d_x^2 | d_y^2 | $d_x d_y$ |
|----|----|----------------|----------------|---------|---------|-----------|
| 25 | 45 | -20 | -20 | 400 | 400 | 400 |
| 30 | 48 | -15 | -17 | 225 | 289 | 225 |
| 35 | 50 | -10 | -15 | 100 | 225 | 150 |
| 30 | 55 | -15 | -10 | 225 | 100 | 150 |
| 40 | 65 | -5 | 0 | 25 | 0 | 0 |
| 50 | 70 | 5 | 5 | 25 | 25 | 25 |
| 45 | 75 | 0 | 10 | 0 | 100 | 0 |
| 55 | 72 | 10 | 7 | 100 | 49 | 70 |
| 60 | 80 | 15 | 15 | 225 | 225 | 225 |
| 65 | 85 | 20 | 20 | 400 | 400 | 400 |
| | | -15 | -5 | 1725 | 1813 | 1675 |

$$\begin{aligned}
 b_{xy} &= \frac{N \sum d_x d_y - (\sum d_x)(\sum d_y)}{N \sum d_y^2 - (\sum d_y)^2} \\
 &= \frac{(10)(1675) - (-15)(-5)}{(10)(1813) - (-5)^2} \\
 &= \frac{16750 - 75}{18130 - 25} \\
 &= \frac{16675}{18105} \\
 &= \frac{3335}{3621} = 0.92
 \end{aligned}$$

$$N = 10$$

$$\bar{X} = \frac{\sum X}{N} = \frac{435}{10} = 43.5$$

$$\bar{Y} = \frac{\sum Y}{N} = \frac{645}{10} = 64.5$$

$$\begin{aligned}
 b_{xy} &= \frac{N \sum d_x d_y - (\sum d_x)(\sum d_y)}{N \sum d_y^2 - (\sum d_y)^2} \\
 &= \frac{16675}{17250 - 225} \\
 &= \frac{16675}{17025} = 0.98
 \end{aligned}$$

X on Y

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

$$X - 43.5 = 0.92(Y - 64.5)$$

$$X - 43.5 = 0.92Y - 59.34$$

$$X = 0.92Y - 15.84$$

Y on X

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

$$Y - 64.5 = 0.98(X - 43.5)$$

$$Y = 0.98X - 42.63 + 64.5$$

$$Y = 0.98X + 21.87$$

38. Describe the application of Econometrics in Economics.

Ans. Forecasting macroeconomic indicators :

Some macroeconomics are concerned with the expected effects of monetary and fiscal policy on the aggregate performance of the economy. Time - series models can be used to make predictions about these economic indicators.

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 :

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