SEMESTER III Paper 5: MACROECONOMICS

II B.A ECONOMICS HONS

NATIONAL INCOME

ESSAY QUESTIONS

1. What is Macro Economics? And explain its scope and importance.

Ans: The word macro is derived from the Greek word 'Makros'which means big or large. Macro Economics is the study of Aggregate units of whole economy. Eg. National Income, National Output, General price level, total employment, total investment, total consumption etc. This is also considered as "Income and Employment Theory". J.M. Keynes has given much more priority to Macro Economics.

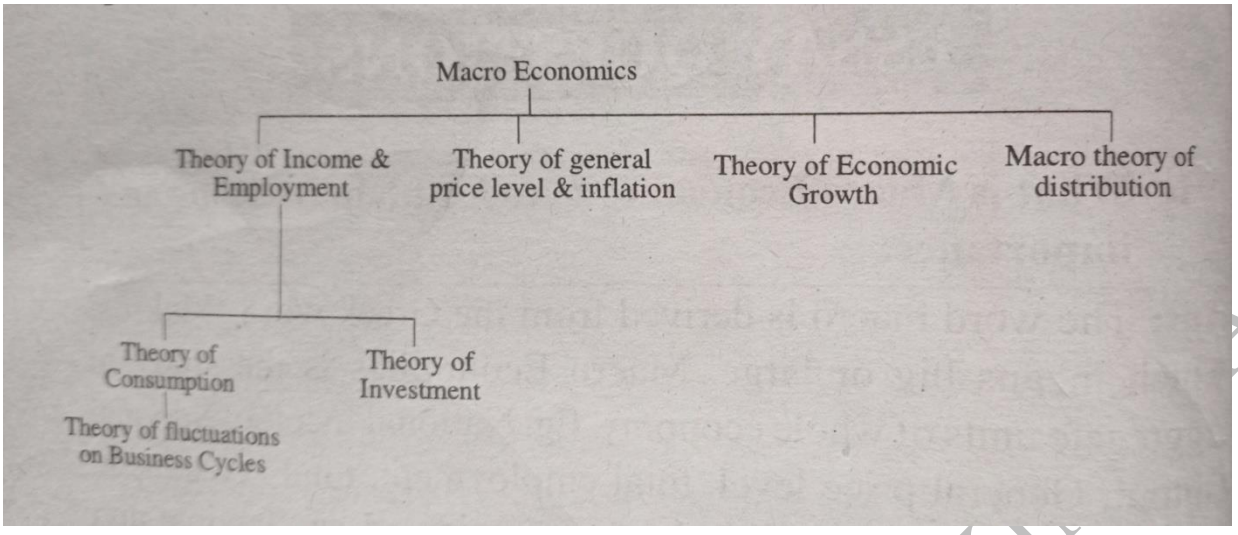
Definition: "Macro Economics deals with national income instead of individual income, general price level instead of individual price level, National output, instead of individual output". - **Prof. K.E.Boulding.**

"Macro Economics concern with such variables as the

aggregate volume of output, National Income, general price levelin an economy**".-Prof. Gardner Ackley.**

Scope of Macro Economics: The scope of Macro Economics is wide. It discusses working nature of entire economy. It analysesthe issues like national income, national output, nationalconsumption, aggregate demand, aggregate supply, nationalinvestments, general price level business cycles etc. It studies alsodifferent type of plans for the development of economy. The role of Macro Economics analysis is more in different government policies like monetary policy, tax policy, international trade policy etc.

In simple we can say that Micro Economics is the study of one tree in forest, but Macro Economics is the study of all trees in the forest. The Scope of Macro Economics can be shown with the help of following chart.



Importance of Macro Economics: The following given points show the importance of Macro Economics.

1.It analyses the causes of problems in the economy and suggests remedies to those problems. Eg: Unemployment, poverty, inflation etc.

2. Macro Economics is useful to estimate and analyze the economic variable like total income, total output, per capitaincome, general price level etc.

3. It discusses growth, stability, and trade cycles of the economy.

4. Macro Economics helps to understand and formulate different policies in the economy. Eg: Tax policy, International trade policy, Fiscal Policy, Monetary policy etc.

5. It analyses the changes in economics variable like aggregate demand, supply, investment, savings, and consumption etc from time to time

The above importance proved that the importance of Macro Economics popularized after 1930 economic depression.

(2) Distinguish the differences between Micro and Macro Economics.

Ans: The Micro Economics is the study of an economic behavior of a particular individual, firm, or household, i.e. it studies a particular unit. On the other hand, Macro Economics is the study of the economy as a whole i.e., not a single unit but the combination of all, firms, households, nation, etc.

Definition of Micro Economics:

Microeconomics is the branch of economics that concentrates on the behaviour and performance of the individual units, i.e. consumers, family, industry, firms. Here, the demand plays a key role in determining the quantity and the price of a product along with the price and quantity of related goods (complementary goods) and substitute products, so as to make a judicious decision regarding the allocation of scarce resources, concerning their alternative uses. Examples: Individual Demand, Price of a product, etc.

Definition of Macro Economics:

Macroeconomics is the branch of economics that concentrates on the behaviour and performance of aggregate variables and those issues which affect the whole economy. It includes regional, national and international economies and covers the major areas of the economy like unemployment, poverty, general price level, GDP (Gross Domestic Product), imports and exports, economic growth, globalisation, monetary/ fiscal policy, etc. It helps in resolving the various problems of the economy, thereby enabling it to function efficiently. Examples: Aggregate Demand, National Income, etc.

Differences between Micro and Macro Economics

Micro Economics

(1) It is the study of individual economic units of an economy.

2. It deals with Individual Income, Individual prices, Individual output, etc.

3. Its central problem is price determination and allocation of resources.

4. Its main tools are demand and supply of a particular commodity/ factor.

5. It helps to solve the central problem of 'what, how and for whom' to produce.

6. It discusses how equili- brium of a consumer, a producer or an Industry is attained.

7. Price is the main determi- nant of micro-economic problems.

8.Examples are: Individual Income, Individual savings, price determi- nation of a commodity,individual firm's output, consumer's equilibrium.

Macro Economics

1. It is the study of economy as a whole and its aggregates.

2. It deals with aggregates like national income, general price level, national output, etc.

3. Its central problem is determination of level of Income and employment.

4. Its main tools are aggregate demand and aggregate supply of the economy as a whole.

5. It helps to solve the central problem of full employment of resources in the economy.

6. It is concerned with the determination of equili- brium level of Income and employment of the economy.

7. Income is the major determinant of macro- economic problems.

8. Examples are: National Income, national savings, general price level, aggre- gate demand, aggregate supply, poverty, unemploy- ment, etc.

(3)Write about the different concepts of National Income.

Ans: In general national income means the total value of all goods and services produced annually in a country.

Definition: The Marshal definition. According to Marshall. "The labour and capital of a country acting on its natural resources produce annually a certain net aggregate of commodities, material and immaterials including services of all kinds this is the true net annual income of a country or national dividend".

Concepts of National Income: The definition of national income given above are of theoretical importance. For measurement purpose we have to explain the basic concepts used in national income accounting. They are:

(1)Gross National Product - GNP: It is the total value of all final goods and services produced in the economy in one year.

GNP or GNIC+I+G+(X-M)

(2)Gross Domestic Product-GDP: The market value of the total goods and services produced in a country in one particular period usually in a year is the Gross Domestic Product or GDP.

GDP C+I+G

(3)Net National Product - NNP : Firms use continuously machines and tools for the production of goods and services. This results in a loss of value due to wear and tear of fixed capital. This loss suffered by fixed capital is called depreciation. When we c subtract depreciation from GNP we obtain NNP.

NNP = GNP - Depreciation

If we subtract depreciation from GDP, we obtain Net Domestic Product (NDP).

NDP = GDP-Depreciation

National Income at Factor Cost or National Income: National Income at Factor cost is the net output evaluated at factor prices. It includes income earned by factors of production through er participation in the production process such as wages and salaries, rents, profits etc. It is also called National Income.

Personal Income: It is the total of incomes received by persons from all sources in a specific time period. Personal income is not equal to national income.

Personal Income = National income at factor cost - (Undistributed Profits etc., + Corporate taxes + Social security payments.)++ Transfer payments.

Disposable Income: Personal income totally is not available for spending. Income tax is a payment which must be deducted to obtain disposable income.

Disposable Income = Personal Income - Personal Taxes.

Per capita Income: National Income when divided by nation's population, per capita income is obtained.

Per capita income = national income

Total population

The average standard of living of a country is indicated by per capita income.

Real Income: Real income is national income expressed in terms of general prices of a particular year taken as base. National income is the current money value of goods and services produced in a year. This will not indicate the real state of the economy. The production of goods and services of this year might have been less than that of the last year.

(4).Methods of Measuring National Income.

A) National income refers to the money of the flow of goods a services available annually in an economy. There are three different ways of defining national income. First, it has been defined as the value of output of period which is available for direct utilisation by individual consumers. Secondly, national income has been defined as the sum of the incomes earned during the period from supplying factor units for the use of production. Thirdly, it has been defined as equal to the total consumption and savings of all persons and institutions during given period. and

Marshall defines national income "The labour and capital resources of country acting on its natural resources produce annually certain net aggregate of commodities, material and immaterial, including services of all kinds. This is the true income or revenue of the country or national dividend". According to Marshall's definition, we add together the net outputs of all productive activities and arrive at the total net output of the nation. In the definition the word 'net is important to signify and make provision for using up of raw and half finished commodities and wearing out and depreciation of plant which is involved in production. (Pigou defined national income as "The national dividend is that part of the objective income of the community including of course income derived from abroad, which can be measured in money",

Both Marshall and Pigou defined national income from the production end. But Irving Fisher approached the concept from the consumption end. According to Fisher's concept the national income of the country is determined not by its annual production, but by its annual consumptions. Supposing the value of piano manufactured 1975 is Rs. 1000. According to Marshall's approach, the entire Rs 1000 would be taken in the national income of 1975. But according to Fisher, only actual value of consumption of piano in 1975 would be included in the national income of that year. If the life of the piano is 20 years, then the money value of consumption of the piano in 1975 would be Rs. 50. So the national income of 1975 would increase only by Rs. 50, not by Rs. 1000 with the production of piano. Though Fisher's approach is scientific and reasonable, it will be very difficult to calculate the money value of the consumption of goods and services.

National Income Committee of India defines in a simple manner "A national income estimate measures the volume of commodities and services turned out during a given period counted without duplication".

An analysis of various definitions shows that the national income refers to the country; its measurement refers to a specific period of time, say a year. It includes all types of goods and services

which have no exchange value, counting each one of them only once. Methods of measuring or computing National Income:

There are three methods of computation of national income. They are: (i) Census method or product method. (ii) Income method (iii) Expenditure method.

(1. Census method (or) production method: By this method, the total products produced in the economy are calculated for the year and the value of this flow is equated to the market price avoiding double counting. The economy is classified into convenient sectors, viz. agricultural, industrial, direct services and foreign transactions etc. In each sector we make inventory of goods produced and find out the end product making an addition to the value of goods. Here, care should be taken to avoid double couting. For instance, the value of 'Shoes' produced in the economy may enter in the form of leather first and then finished shoes. So, to avoid this double counting, only end product alone should be calculated. Similarly in the production of books in the economy, the value of paper may enter under paper production first and then book production. In the direct services sector, the value of services of such profession like doctors, dramatists, soldiers, shoe-shiners, professors and politicans etc., is taken by equating their salaries to the services. In the internal transactions, the value of goods imported is subtracted from that of the goods exported the claim of foreigners is deducted from the balances created abroad by nationals to arrive a the net addition

The results of these sector, when combined get net national product of national income. This census or product approach expressed through the formula OC+l. Where O stands for output, C stands for consumption goods and I stands for investment goods. can be factor earnings of the economy are calculated and the net national product is the sum total of factor earnings of the economies and products. It is customary to refer to factor earnings as consisting of wages, interest and profit. Incomes are earned either from property or through work. To arrive at the totality of income of a nation the following procedure

2. Income method: According to this method, the income or factor earnings of the economy are calculated and net national product is the sum total of factor earnings of the economies and products. It is customary to refer to factor earnings as consisting of wages interest and profit.

Incomes are earned either from property or through work to arrive at totality of income of anation the following procedure will be adopted.

(a) First, about net rents including the rental value of owner occupied houses. This formation is processed in the income tax department.

(b) Next about wages, salaries and all such earnings of persons employed. This is a straight and simple issue. Pensions, however are excluded. (c) Earnings by way of interest occur next. (d) The incomes of joint stock companies. (e) Incomes of unregistered business units and (g) Finally we have incomes from overseas investments.

This is the national income at factor cost. In Keynesian language, the formula here is; Y = C+S. Y stands for total income, C stands for consumption and S for savings.

3. Expenditure Method: One man's income is another man’S expenditure. Hence, in order to find out the total income we can find out the total expenditure or outlay. Using the Keynesian formula = C+ I, some choose to call it consumption and investment metho The American economist Samuelson names it flow of produc approach. In English countries it is known as outlay method.

It is the expenditure on finished product that is reckoned in this connection. Expenditure or outlay on final products takes place in three ways

(a) Expenditure by consumers on goods and services (b)Expenditure by private manufacturer on capital or investment goods. (c) Expenditure by government on consumption as well capital goods. To this one should add (d) Moneys received from export of goods and services and incomes received on foreign investments.

(4). Write about the Classical Theory of Income and Employment.

Ans: The term 'classical economists' was firstly used by Karl Marx to describe economic thoughts of Ricardo and his predecessors including Adam Smith. However, by 'classical economists', Keynes meant the followers of David Ricardo including John Stuart Mill, Alfred Marshal and Pigou. According to Keynes, the term classical economics' refers to the traditional or orthodox principles of economics, which had come to be accepted, by and large, by the well known economists by then. Being the follower of Marshal, Keynes had himself accepted and taught these classical principles. But he repudiated the doctrine of laissez-faire. The two broad features of classical theory of employment were:

1. The assumption of full employment of labour and other productive resources, and

2. The flexibility of prices and wages to bring about the full employment.

1. Full employment: According to classical economists, the labour and the other resources are always fully employed. Moreover, the general over-production and general unemployment are assumed to be impossible. If there is any unemployment in the country, it is assumed to be temporary or abnormal. According to classical views of employment, the unemployment cannot be persisted for a long time, and there is always a tendency of full employment in the country. According to classical economists, the reasons for unemployment are:

> Intervention by the government or private monopoly

> Wrong calculation by entrepreneurs and inaccurate decisions,and

>Artificial resistance. The economy is assumed to be self-adjusting and perfectly competitive economy. It is the economy in which the relative values of goods and services are determined by the general relations of demand and supply. The pricing system serves as the planning mechanism.

2. Flexibility of prices and wages: The second assumption of full employment theory is the flexibility of prices and wages. It is the flexibility of prices and wages which automatically brings about full employment. If there is general over-production resulting in depression and unemployment, prices would fall as a result of which demand would increase, prices would rise and productive activity will be stimulated and unemployment would tend to disappear. Similarly, the unemployment could be cured by cutting down wages which would increase the demand for labour and would stimulate activity. Thus, if the prices and wages are allowed to move freely, unemployment would disappear and full employment level would be restored. Further, the

classical economists treated money as mere exchange medium. They ignored its role in affecting income, output and employment.

Say's Law:

1. Say's Law is the foundation of classical economics. Aumption of full employment as a normal condition of a free market economy is justified by classical economists by a law known as 'Say's Law of Markets'.

2. It was the theory on the basis of which classical economists thought that general over-production and general unemployment are not possible.

3. According to the French economist J. B. Say, supply creates its own demand. According to him, it is production which creates market for goods. More of production, more of creating demand for other goods. There can be no problem of over-production.

4. Say denies the possibility of the deficiency of aggregate demand.

5. The conceived Say's Law describes an important fact about the working of free-exchange of economy that the main source of demand is the sum of incomes earned by the various productive factors from the process of production itself. A new productive process, by paying out income to its employed factors, generates demand at the same time that it adds to supply. It is thus production which creates market for goods, or supply creates its own demand not only at the same time but also to an equal extent.

6. According to Say, the aggregate supply of commodities in the economy would be exactly equal to aggregate demand. If there is any deficiency in the demand, it would be temporary and it would be ultimately equal to aggregate supply. Therefore, the employment of more resources will always be profitable and will take to the point of full employment.

7. According to Say's Law, there will always be a sufficient rate of total spending so as to keep all resources fully employed. Most of the income and a part of it is saved. spent on consumer goods

8. The classical economists are of the view that all the savings are spent automatically on investment goods. Savings and investments are interchangeable words and are equal to each other.

9. Since saving is another form of spending, according to classical theory, all income is spent partly for consumption and partly for investment.

10. If there is any gap between saving and investment, the rate of interest brings about equality between the two.

Basic Assumptions of Say's Law:

> Perfectly competitive market and free exchange economy.

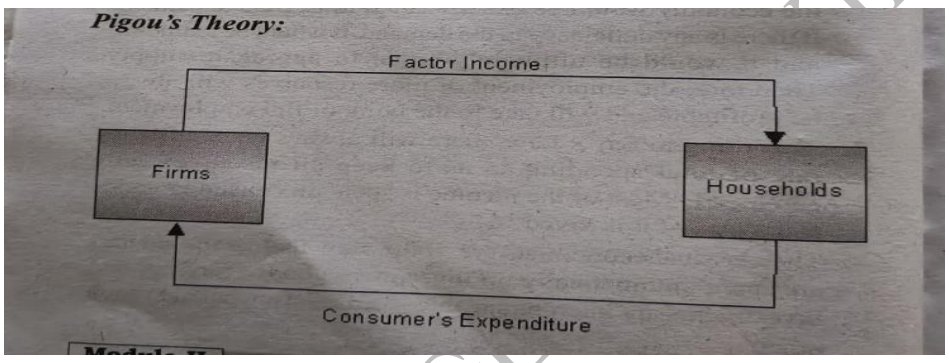
> Free flow of money incomes. All the savings must be immediately invested and all the income must be immediately spent.

> Savings are equal to investment and equality must bring about by flexible interest rate.

> No intervention of government in market operations, i.e., a laissez faire economy, and there is no government expenditure, taxation and subsidies.

>Market size is limited by the volume of production and aggregate demand is equal to aggregate supply.

➤ It is a closed economy.



1. According to Professor Pigou, the unemployment which exists at any time is because of the fact that changes in demand conditions are continually taking place and that frictional resistances prevent the appropriate wage adjustment from being made instantaneously.

2. Thus, according to classical theory, there could be small amounts of frictional unemployment' attendant on changing from one job to another but there could not be 'involuntary unemployment' for a long period.

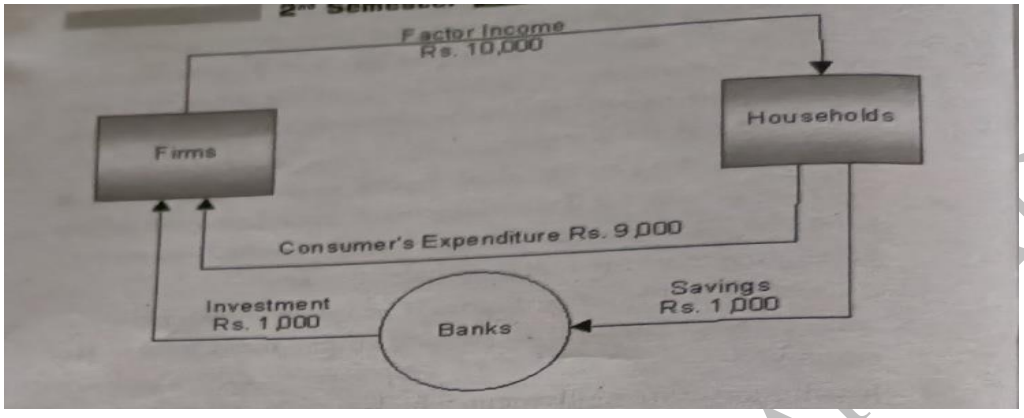
3. According to Professor Pigou, if people were unemployed, wages would fall until all seeking employment were in fact employed.

4. Involuntary unemployment which was found at times of depression was because of the fact that wages were kept too high by the actions of labour unions and governments. Therefore, Professor Pigou advocated that a general cut in money wages at a time of depression would increase employment.

5. According to Pigou, perfectly elastic wage policy would abolish fluctuations of employment and would ensure full employment.

6. The unemployment of the economy as described by the classical theory is depicted as follows:

Suppose the consumer saves 10% of his income. The result will be firm's receipts fall by the same proportion. Profit will fall and the firm will tend to react by reducing the output and hence reducing the employment and income. Therefore, to avoid this problem the savings are channelled to firms through banking.



Criticism of Classical Theory:

1. Supply may not create its own demand when a part of the income is saved. Aggregate demand is not always equal to aggregate supply.

2. Employment in a country cannot be increased by cutting

3. There is no direct relationship between wages and

4. Interest rate adjustments cannot solve savings-investment

5. Classical economists have made the economy completely self-adjusting and self-reliant. An economy is not so self adjusting and government intervention is unobvious.

6. Classical economists have made the wages and prices so much flexible. In practical, wages and prices are not so flexible. It will create chaos in the economy.

7. Money is not a mere medium of exchange. It has an essential

(5) **What do you know about Keynesian Psychological Law of Consumption?**

Ans: Keynes put forward a psychological law of consumption, which forms the basis of the consumption function. Keynesian law states that Men are disposed as a rule and on the average, to increase their consumption, as their income increases, but not as much as the increase in their income. Therefore, marginal propensity to consume is less than one and greater than zero i.e. 0 < MPC <1.

Assumptions of the Law:

This law is based on the following assumptions:

1. It assumes a constant psychological and institutional complex such as income distribution, tastes, habits, social customs, price movements, population growth etc.

2. It assumes the existence of normal conditions in the economy. In the case of abnormal circumstances like war, revolution, a hyper inflation, the law will not operate.

3. It assumes the existence of laissez-faire capitalist economy. This law is inoperative in socialist or State controlled and regulated economies.

Proportions of the Law:

This law has three related propositions. They are:

1. When income increases, consumption expenditure also increases but by a smaller amount.

2. The increased income will be divided in some proportion between consumption expenditure and saving as it is due to the fact that when the whole of increased income is not spent on consumption, the remaining is saved. Therefore, it can be said that both consumption and saving move together.

3. Increase in income always leads to an increase in both consumption and saving.

Significance

The Keynesian consumption function helps to invalidate say's law of markets that is supply creates its own demand. No doubt, every supply creates income equal to the output produced. But since all income is not consumed and there is no guarantee that investment will be equal to the saving. When investment is less than the saving gap corresponding to full employment level of income, the aggregate demand is not sufficient to provide full employment to the people and resources. As a result, general unemployment and overproduction arises in a free enterprise capitalist economy invalidating Say's law.

(6)What are the Theories 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.

a) Fisher's Quantity Theory of Money: The quantity theory of money is a very old theory. It was first propounded in 1588 by an Italian Economist, Davanzatti. But, the credit for popularizing this theory in recent years rightly belongs to the well-known American Economist, Irving Fisher who published his book, 'The Purchasing Power of Money" in 1911. He gave it a quantitative form in terms of his famous "Equation of Exchange". The general form of equation given by Fisher is

B MV = PT

Where M = Money Supply/Quantity of Money

V = Velocity of Money P = Price level

T= Volume of Transaction.

Fisher points out that in a country during any given period of time, the total quantity of money (MV) will be equal to the total value of all goods and services bought and sold (PT).

MV=PT

Supply of Money = Demand for Money

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

The above equation considers only currency money. But, in a modern economy, bank's demand deposits or credit money and its velocity play a vital part in business. Therefore, Fisher extended his original equation of exchange to include bank deposits M1 and its velocity V1. The revised equation was:

PT MV + M^1y^1 P=[MV+M^1V^1]/T

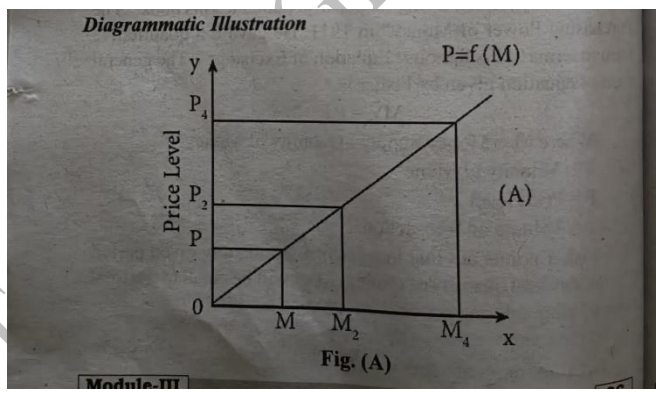
From the revised equation, it is evident, that the price level is determined by

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)



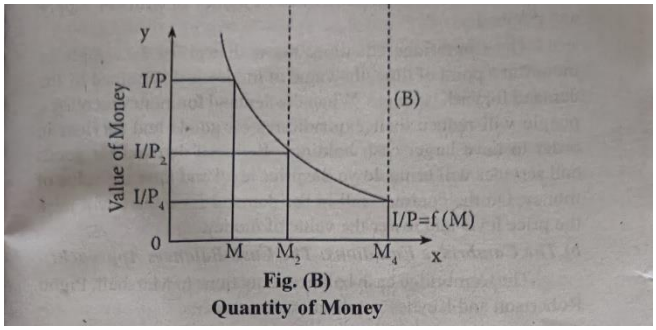


Figure (A) shows the effect of changes in the quantity of money on the price level. When the quantity of money is OM, the price level is OP. When the quantity of money is doubled to O*M_{2} the price level is also doubled to overline O*P_{2} Further, when the quantity of money is increased four-fold to O*M_{4} , the price level also increases by four times to overline O*P_{A} . This relationship is expressed by the curve OP = f(M) from the origin at 450.

Figure (B), shows the inverse relation between the quantity of money and the value of money, where the value of money is taken on the vertical axis. When the quantity of money is OM, the value of money is OI/P. But with the doubling of the quantity of money to O*M_{2} the value of money becomes one-half of what it was before, (OI / P * 2) . But, with the quantity of money increasing by four-fold to O*M_{4} the value of money is reduced by Ol / 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)

As an alternative to Fisher's quantity theory of money, Cambridge Economists Marshall, Pigou, Robertson and Keynes formulated the cash balances approach. Like value theory, they regarded the determination of value of money in terms of supply and demand. The Cambridge equations show that given the supply of money at a point of time, the value of money is determined by the demand for cash balances. When the demand for money increases, people will reduce their expenditures on goods and services in order to have larger cash holdings. Reduced demand for goods and services will bring down the price level and raise the value of money. On the contrary, fall in the demand for money will raise the price level and lower the value of money.

b) The Cambridge Equations: The Cash Balances Approach:

The Cambridge cash balances equations of Marshall, Pigou, Robertson and Keynes are discussed as under:

1. Marshall's Equation: Marshall did not put his theory in equation form and it was for his followers to explain it algebraically. Friedman has explained Marshall's views thus: "As a first approximation, we may suppose that the amount one wants to hold bears some relation to one's income, since that determines the volume of purchases and sales in which one is engaged. We then add up the cash balances held by all holders of money in the community and express the total as a fraction of their total income." Thus we can write:

M=kPY

Where M stands for the exogenously determined supply of money, k is the fraction of the real money income (PY) which people wish to hold in cash and demand deposits, P is the price level, and Y is the aggregate real income of the community. Thus, the price level P = M/KY or the value of money (the reciprocal of price level) is

1/P=kY/M

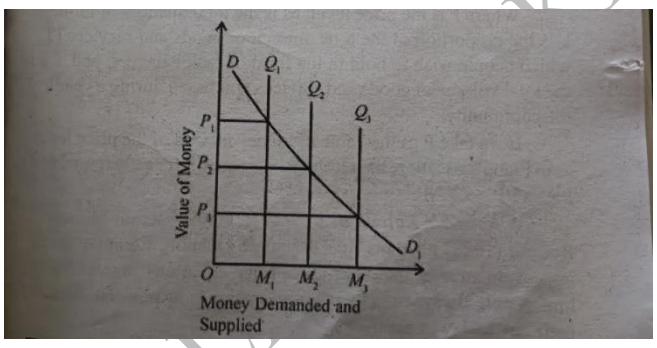
2. Pigou's Equation: Pigou was the first Cambridge Economist to express the cash balances approach in the form of an equation:. P KR/M

where P is the purchasing power of money or the value of money (the reciprocal of the price level), k is the proportion of total real resources or income (R) which people wish to hold in the form of titles to legal tender, R is the total resources (expressed in terms of wheat), or real income, and M refers to the number of actual units of legal tender money.

The demand for money, according to Pigou, consists not only of legal money or cash but also bank notes and bank balances. In order to include bank notes and bank balances in the demand for money, Pigou modifies his equation as

$$P = kR / M * \{c + h(1 - c)\}$$

where c is the proportion of total real income actually held by people in legal tender including token coins, (1 - c) is the proportion kept in bank notes and bank balances, and h is the proportion of actual legal tender that bankers keep against the notes and balances held by their customers. Pigou points out that when k and R in the equation P = kR / M and k, R, c and h are taken as constants then the two equations give the demand curve for legal tender as a rectangular hyperbola. This implies that the demand curve for money has a uniform unitary elasticity.



This is shown in Figure where DD, is the demand curve for money and Q,M,, Q,M,, and Q,M, are the supply drawn on the assumption that the supply of money point of time. The value of money or Pigou's purchasing power of money P is taken on the vertical axis. curves of money is fixed at a

The figure shows that when the supply of money increases from OM, to OM, the value of money is reduced from OP, to OP,. The fall in the value of money by P,P, exactly equals the increase in the supply of money by M, M2. If the supply of money increases three times from OM, to OM, the value of money is reduced by exactly one-third from OP, to OP3. Thus, the demand curve for money DD, is a rectangular hyperbola because it shows changes in the value of money exactly in reverse proportion to the supply of money.

3. Robertson's Equation: To determine the value of money or its reciprocal the price level, Robertson formulated an equation similar to that of Pigou. The only difference between the two being that instead of Pigou's total real resources R, Robertson gave the volume of total transactions T. The Robertsonian equation is

$$M=PkT \text{ or } P=M/KT$$

Where P is the price level, M is the total quantity of money, k is the proportion of the total amount of goods and services (T) which people wish to hold in the form of cash balances, and T is the total volume of goods and services purchased during a year by the community . If we take P as the value

of money instead of the price level as in Pigou's equation, then Robertson's equation exactly resembles Pigou's P=kT/M.

4. Keynes's Equation: Keynes in his A Tract on Monetary Reform (1923) gave his Real Balances Quantity Equation as an improvement over the other Cambridge equations. According to him, people always want to have some purchasing power to finance their day to day transactions.

The amount of purchasing power (or demand for money) depends partly on their tastes and habits, and partly on their wealth. Given the tastes, habits, and wealth of the people, their desire to hold money is given. This demand for money is measured by consumption units. A consumption unit is expressed as a basket of standard articles of consumption or other objects of expenditure.

If k is the number of consumption units in the form of cash, n is the total currency in circulation, and p is the price for consumption unit, then the equation is

n= pk

If k is constant, a proportionate increase in n (quantity of money) will lead to a proportionate increase in p (price level). This equation can be expanded by taking into account bank deposits. Let k' be the number of consumption units in the form of bank deposits, and r the cash reserve ratio of banks, then the expanded equation is

n=p (k+rk')

Again, if k, k' and r are constant, p will change in exact proportion to the change in n.

Keynes regards his equation superior to other cash balances equations. The other equations fail to point how the price level (p) can be regulated. Since the cash balances (k) held by the people are outside the control of the monetary authority, p can be regulated by controlling n and r. It is also possible to regulate bank deposits k' by appropriate changes in the bank rate. So p can be controlled by making appropriate changes in n, r and k' so as to offset changes in k.

7. What are the functions of Central Bank?

Ans: The main function of a central bank is to act as governor of the machinery of credit in order to secure stability of prices. It regulates the volume of credit and currency, pumping in more money when market is dry of cash and pumping out money when there is excess of credit.

In India RBI have two departments, namely. Issue department and Banking department.

Main functions

1. **Issue of Currency:** The central bank is given the sole monopoly of issuing currency in order to secure control over volume of currency and credit. These notes circulate throughout the country as legal tender money. It has to keep a reserve in the form of gold and foreign securities as per statutory rules against the notes issued by it.

2. **Banker to Government:** Central bank functions as a banker to the government both central and state governments. It carries out all banking business of the government. Government keeps their

cash balances in the current account with the central bank. Similarly, central bank accepts receipts and makes payment on behalf of the governments.

3. **Bankers Bank and Supervisor:** There are usually hundreds of banks in a country. There should be some agency to regulate and supervise their proper functioning. This duty is discharged by the central bank.

Central bank acts as banker's bank in three capacities:

i) It is the custodian of their cash reserves. Banks of the country are required to keep a certain percentage of their deposits with the central bank, and in this way the central bank is the ultimate holder of the cash reserves of commercial banks.

ii) Central bank is lender of last resort. Whenever banks are short of funds, they can take loans from the central bank and get of their trade bills discounted. The central bank is a source great strength to the banking system.

(iiiIt acts as a bank of central clearance, settlements and transfers. Its moral persuasion is usually very effective so far as commercial banks are concerned.

4. **Controller of Credit and Money Supply:** Central bank controls credit and money supply through its monetary policy which consists of two parts currency and credit. Central bank has monopoly of issuing notes except one-rupee notes, one-rupee coins and the small coins issued by the government and thereby can control the volume of currency.

5. Exchange Control: Another duty of a central bank is to see that the external value of currency is maintained. For instance, in India, the Reserve Bank of India takes steps to ensure external value of a rupee. It adopts suitable measures to attain this object. The exchange control system is one such measure. Under exchange control system, every citizen of India has to deposit with the Reserve Bank of India all foreign currency or exchange that he receives. And whatever foreign exchange he might need has to be secured from the Reserve Bank by making an application in the prescribed form.

6. Lender of Last Resort: When commercial banks have exhausted all resources to supplement their funds at times of liquidity crisis, they approach central bank as a last resort. As lender of last resort, central bank guarantees solvency and provides financial accommodation to commercial banks.

i) By rediscounting their eligible securities and bills of exchange and

ii) By providing loans against their securities. This saves banks from possible failure and banking system from a possible breakdown. On the other hand, central bank, by providing temporary financial accommodation, saves the financial structure of the country from collapse.

7. Custodian of Foreign Exchange or Balances: It has been mentioned above that a central bank is the custodian of foreign exchange reserves and nations gold. It keeps a close external value of its currency and undertakes exchange management on control. All the foreign currency received by the citizens has to be deposited with the central bank andif citizens want to make payment in foreign

currency, they have to apply to the central bank. Central bank also keeps gold and bullion reserves. watch

8. **Clearing House Function:** Banks receive cheques drawn on the other banks from their customers which they have to realise from drawee banks. Similarly, cheques on a particular bank are drawn and passed into the hands of other banks which have to realise them from the drawee banks. Independent and separate realisation to each cheque would take a lot of time and, therefore, central bank provides clearing facilities, i.e., facilities for banks to come together every day and set off their chequing claims.

9. **Collection and Publication of Data:** It has also been entrusted with the task of collection and compilation of statistical information relating to banking and other financial sectors of the economy.

(8)What are the different types of Inflation?

Ans: There are different types of inflation in an economy can be explained as follows:

1. Demand-pull Inflation: The inflation represents a situation whereby "The pressure of aggregate demand for goods and services exceeds the available supply of output." In such situation, the rise in price level is the natural consequence.

Now, this excess of aggregate demand over supply may be the result of more than one force at work. As we know, aggregate demand is the sum of consumer's spending on current goods and services and net investment being contemplated by the entrepreneurs.

At times, however, the the entrepreneurs or the households attempt to secure a larger part of output than would thus accrue to them. Inflation is thus caused when aggregate demand for all purposes-consumption, investment and government expenditure exceeds the supply of goods at current prices. This is called demand-pull inflation.

2. Cost-Push Inflation: Even though there is no increase in aggregate demand, prices may still rise. This may happen if costs, particularly the wage costs, go on rising. Now as the level of employment rises, the demand for workers also rises, so that the bargaining position of the workers becomes stronger.

To exploit this situation, they may ask for an increase in wage rates which are not justifiable on grounds either of a prior rise of productivity or of cost of living. The employers in a situation of high demand and employment are more agreeable to concede these wage claims, because they hope to pass on this rise in cost to the consumers in the shape of rise in prices. If this happens, we have another inflationary factor at work and the inflation thus caused is called the wage-induced or cost-push inflation.

3**. Inflationary Gap:** If aggregate demand exceeds the aggregate value of output at the full employment level, there will exist an inflationary gap in the economy. Aggregate demand or aggregate expenditure is composed of consumption expenditure (C), investment expenditure (I), government expenditure (G) and the trade balance or the value of exports minus the value of imports (X-M).

Inflationary gap is thus the result of excess demand. It may be defined as the excess of planned levels of expenditure over the available output at base prices.

4. **Deflationary Gap**: If the equilibrium level of income is estimated to be below the full employment level of income then emerges deflationary gap. If in the economy there arises insufficient aggregate demand, equilibrium in the economy will occur to the left of the full employment income (Yf).

In other words, a deflationary gap shows the amount by which aggregate demand must be increased so that equilibrium level of income is increased to the full employment level.

10.. What are the causes and consequences of Inflation?

Ans: The main causes of inflation in India are as follows:

1. I**ncrease in Money Supply:** Inflation is caused by an increase in the supply of money which leads to increase in aggregate demand. The higher the growth rate of the nominal money supply, the higher is the rate of inflation.

2. **Increase in Disposable Income**: When the disposable income of the people increases, it raises their demand for goods and services. Disposable income may increase with the rise in national income or reduction in taxes or reduction in the saving of the people.

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 are given credit to buy goods on hire-purchase and installment basis.

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

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. This raises aggregate demand in relation to aggregate supply, thereby leading to inflationary rise in prices.

7. **Black Assests, Activities and Money**: The existence of black money and black assests due to corruption, tax evasion etc., increase the aggregate demand. People spend such money, lavishly. Black marketing and hoarding reduces the supply of goods. These trends tend to raise the price level further.

8. **Repayment of Public Debt**: Whenever the government repays its past internal debt to the public, it leads to increase in the money supply with 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 rise.

Effects of Inflation: The effects of inflation can be classified into two heads:

1.Effects on Production:

When the inflation is very moderate, it acts as an incentive to traders and producers. This is particularly prior to full employment when resources are not fully utilized. The profit due to rising prices encourages and induces business class to increase their investments in production, leading to generation of employment and income.

a) However, hyper-inflation results in a serious depreciation of the value of money and it discourages savings on the part of the public.

b) When the value of money undergoes considerable depreciation, this may even drain out the foreign capital already invested in the country.

c) 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.

d) 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.

e) 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. The reason is that the debtors had borrowed when the purchasing power of money was high and now repay the loans when the purchasing power of money is low due to rising prices.

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. They experience windfall gains as the prices of their inventories (stocks) suddenly go up.

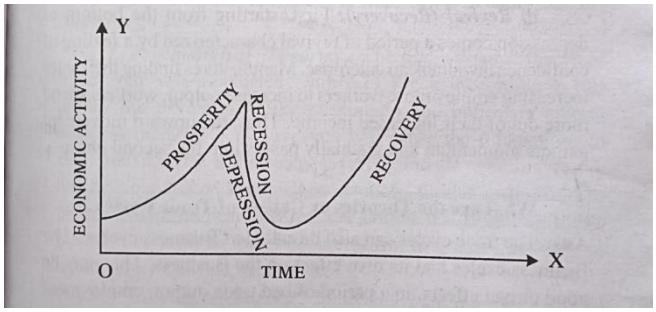
iv) Investors: The investors, who generally invest in fixed interest yielding bonds and securities have much to lose during inflation. On the contrary those who invest in shares stand to gain by rich dividends and appreciation in value of shares.

11. W**hat is Trade Cycle? Discuss about Phases of Trade Cycles.**

Ans: The trade cycles are also called as Business cycles. The Business cycles had its own effect on the Business. This may be good or bad effects. In a period of bad trade output, employment and prices are low. In the period of good trade the output, employment and prices are high. Such rhythmic cyclical fluctuations in the level of economic activity during short periods are called trade or business cycles.

Phases of Business Cycles: Business cycles pass through certain well defined phases. Mitchel identifies four phases. They are revival, expression, recession and contraction. The peak and trough represent two critical points in the cycle. The expansion phase extends from trough. Near to peak

and trough, there are upper and lower tuning points called revival and recession. These four stages are shown in the below diagram.



Phases of a Business Cycles

a) Prosperity: As output increases, prices began to rise. In order to increase output, manufacturers demand more raw materials. Since the supply of raw materials is inelastic their prices go up.

Thus bottlenecks began to develop. This would rise prices and costs. Producers are likely to overestimate profits and venture goes into risky enterprises. Thus a boom sets in.

b) Recession: After a brief spell of hectic activity, business houses begin to totter. Businessmen expand by borrowing from banks. Capital projects may reach a temporary satiety. There may not be possibilities for further investment. Whatever may be the reason, a crisis brings reversing the whole upward movement. Enterprise is checked and output curtailed. Employment is reduced and prices fall. Thus a vicious circle of depression sets in. money

c**) Depression:** The recession degenerates into depression. The forces that cause contraction finally win over the forces that cause expansion. The depression may last for a very long time unless steps are taken to limit it. Unemployment increases, incomes fall and output decreases. Prices also fall discouraging enterprise. Slowly and gradually forces come into operation to bring about a recovery.

d) **Revival (Recovery):** First, starting from the bottom of depression comes a period of revival characterized by a feeling of confidence favourable to enterprise. Manufactures finding their sales increasing employ more workers to increase output, workers spend more out of their increased income. Thus, the upward movement gathers momentum and gradually passes into the second phase.

Measures to control Business Cycles:

1)Monetary policy: Some economists advocated the monetary measure to control business cycles.The central bank can practice the monetary measures to control trade cycles.

2.Fiscal measures: Keynes advocates fiscal measure to control trade cycles.Budgetary measures taxation,public expenditure and public debt should be used to control trade cycles.

3.Price Control: To control inflation or rising prices, price control measures should be introduced. that means prices must be kept undercheck.

4.Price support: During period of depression prices begin to fall.So it is the harmful.To avoid this price support policy shold be adopted.

5.Socialistic measures: Socialists recommended replacement of capitalist economy by a specilistic system of production and distribution.

6.Reduction of economic inequalities: Inequalities of incomes should be reduced.This can be done by raising the wage levels and ensuring a more equitable distribution of national income by incresed taxation.

7.State control over investment: The government should control private investment in order to prevent over investment and thereby boom.

12.Explain about Financial Markets

. Ans: Financial Market is a marketplace, where creation and trading of financial assets, such as shares, debentures, bonds, derivatives, currencies, etc. take place. It plays a crucial role in allocating limited resources, in the country's economy. It acts as an intermediary between the savers and investors by mobilising funds between them.

The financial market provides a platform to the buyers and sellers, to meet, for trading assets at a price determined by the demand and supply forces.

Functions of Financial Market:

The functions of the financial market are explained with the help of points below:

1. It facilitates mobilisation of savings and puts it to the most productive uses.

2. It helps in determining the price of the securities. The frequent interaction between investors helps in fixing the price of securities, on the basis of their demand and supply in the market.

3. It provides liquidity to tradable assets, by facilitating the exchange, as the investors can readily sell their securities and convert assets into cash.

4. It saves the time, money and efforts of the parties, as they don't have to waste resources to find probable buyers or sellers of securities. Further, it reduces cost by providing valuable information, regarding the securities traded in the financial market.

Classification of Financial Market:

1. By Nature of Claim:

a) Debt Market: The market where fixed claims or debt instruments, such as debentures or bonds are bought and sold between investors..

b) Equity Market: Equity market is a market wherein the deal in equity instruments. It is the market for residual claims.

2. By Maturity of Claim:

a) Money Market: The market where monetary assets such as commercial paper, certificate of deposits, treasury bills, etc. which mature within a year, are traded is called money market. It is the

market for short-term funds. No such market exist physically; the transactions are performed over a virtual network, i.e. fax, internet or phone

. **b) Capital Market:** The market where medium and long term financial assets are traded in the capital market. It is divided into two types:

i) Primary Market: A financial market, wherein the company listed on an exchange, for the first time, issues new security or already listed company brings the fresh issue.

i**i) Secondary Market:** Alternately known as the Stock market, a secondary market is an organised marketplace, wherein already issued securities are traded between investors, such as individuals, merchant bankers, stockbrokers and mutual funds.

3. By Timing of Delivery:

a) Cash Market: The market where the transaction between buyers and sellers are settled in real-time.

b) Futures Market: Futures market is one where the delivery or settlement of commodities takes place at a future specified date.

4. By Organizational Structure:

a) Exchange-Traded Market: A financial market, which has a centralized organisation with the standardised procedure.

b) Over-the-Counter Market: An OTC is characterised by a decentralized organisation, having customised procedures.

13.. What is the importance of Insurance at various levels?

Ans: Insurance is a protection against risk. Insurance provides backup or security to anything you want to get. There are many companies that provide insurance on almost everything. Companies charge some amount in order to provide insurances and customers pay it to get security.

Importance of Insurance to Businessmen:

The importance of insurance to a businessman can be understood from the following points.

1. Security and Safety: It gives a sense of security and safety to the businessman. It enables him to receive compensation against actual loss. He can concentrate on his business with a secure feeling that in case of losses arising from insurable risk, his losses will be compensated.

2. Distribution of risk: Risk in insurance is spread over a number of people rather being concentrated on a single individual.

3. Normal expected profit: An insured trader can enjoy normal margin of profit all the time. He is protected from unexpected losses because of insurance

. 4. Easy to get loans: A trader can get bank loans easily if his stock or property is insured, as insurance provides a sense of security to the lenders

. 5. Advantages of Specialization: Businessmen can concentrate on their business activities without spending more time on safeguarding their property. The insurance companies, on the other hand, can provide specialized insurance services.

6. Development of Social Sectors: Insurance funds are available for economic development particularly for the development of social sectors. Especially for a developing country like India, insurance funds are an important source for investing in infrastructure projects (roads, power, water supply, telecom etc).

7. Social cooperation: The burden of loss is shouldered by so many persons. Thus, insurance provides a form of social

cooperation.

Importance of Insurance to Society:

Insurance is a part and parcel of society today. It offers various advantages to the society as given below:

1. Protects society's wealth: Through various types of insurance schemes, the insurer protects the wealth of the society. Life insurance offers protection against loss of human wealth. General insurance policies protect the property against losses due to fire, theft, accident, earthquake, etc. As such, both general and life insurances offer protection to stabilize business condition and financial position.

2. Removes social evils: All forms of insurance tend to reduce the extent of social evils that are meant to alleviate. The most effective argument for reduction of fire losses is that smaller losses will make smaller premiums possible.

3. Maintains standard of living: Insurance rescues many people in the society who are rendered destitute through misfortune. They are able to maintain the standard of living due to high returns. They reduce the destitution and misery. These could lower the ideals and standards of conduct of entire communities.

4. Social security benefits: Insurance plays a pivotal role in fulfilling certain needs for which state might have to provide. The provision for old age, sickness and disability of persons in general. Those who have their insurance do not become a burden on state insurance plan.

In case of fire, explosions and other calamities that would tend to impoverish (render poor) families would have been relieved of the financial loss if adequate insurance had been maintained

. 5. Equitable distribution of loss: Insurance distributes the cost of accidental events in a equitable manner. In the absence of insurance, this would have been paid in a haphazard manner. For example, the cost of fire insurance is reflected in house rent. In the absence of insurance, some tenants would pay higher rents than others.

Importance of Insurance to Government:

1. Provides Safety and Security to Individuals and Businesses

Insurance provides financial support and reduces uncertainties that individuals and businesses face at every step of their lifecycles. It provides an ideal risk mitigation mechanism against events that can potentially cause financial distress to individuals and businesses. For instance, with medical inflation growing at approximately 15% per annum, even simple medical procedures cost enough to disturb a family's well-calculated budget, but a Health Insurance would ensure financial security for the family. In case of business insurance, financial compensation is provided against financial loss due to fire, theft, mishaps related to marine activities, other accidents etc.

2. Generates Long-term Financial Resources: The Insurance sector generates funds by way of premiums from millions of policyholders. Due to the long-term nature of these funds, these are invested in building long-term infrastructure assets (such as roads, ports, power plants, dams, etc.) that are significant to nation building. Employment opportunities are increased by big investments leading to capital formation in the economy.

3. Promotes Economic Growth: The Insurance sector makes a significant impact on the overall economy by mobilizing domestic savings. Insurance turn accumulated capital into productive investments. Insurance also enables mitigation of losses, financial stability and promotes trade and commerce activities those results into sustainable economic growth and development. Thus, insurance plays a crucial role in the sustainable growth of an economy.

Shot answer questions

(1)Write about the circular flow of income in double sector economy.

Ans: The circular flow model in the two-sector economy is a hypothetical concept which states that there are only two sectors in the economy, household sector and business sector (business firms).

The household sector is the source of factors of production who earn by providing factor services to the business sector. The business sector refers to the firms that produce goods and services, and receive income by supplying the produced goods to the household sector.

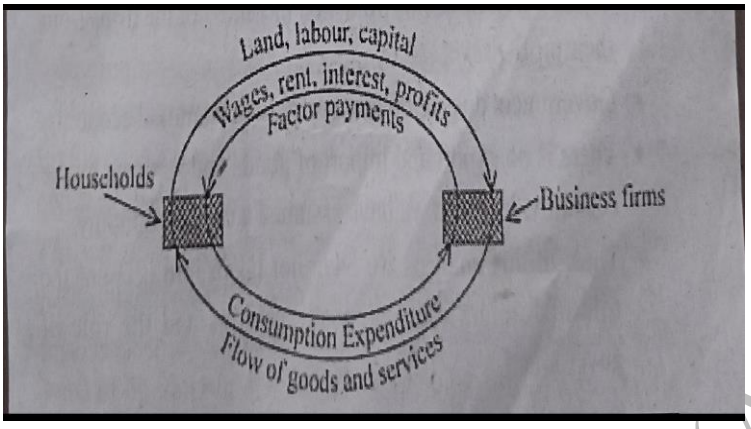
The state of equilibrium in the two-sector economy is defined as a situation in which no change occurs in the levels of income (Y), expenditure (E), and output (O). i.e. Y=E=0.

Modern economy is a money economy. Money is used in the process of exchange and it has removed the difficulties of barter system. As we know money acts as a medium of exchange. In an economy, households supply factors to the firms (producing units). Finns pay for the use of factors. So households

receive payments from firms for their services in terms of money. So in money economy there is a flow of productive resources or factors and there is a flow of money corresponding to the flow of economic resources (or factors) and flow of goods and services produced by economic resources.

Circular Flow of Income in a Two Sector Economy:

As we know resources like land, labour, capital and entrepreneurial ability flow from households to firms, the producing units. Money flows from firms to the households as factor payments in the form of wages, rent, interest, profits. Again income received by households in money terms from the firms again flow from households to firms as consumption expenditure made by the households. The circular process begins with the flow of economic resources from household to firms to produce and flow of money to households in the form of factor income and again money flows from households to firms as consumption expenditure made by the households.



From the above picture., it is clear that labour, land, capital and entrepreneurial ability flow from households to firms (as indicated by arrow mark). In opposite direction to this, money flows from firms to households as factor payments such as wages, rent, interest and profits.

In the lower part of the figure, money flows from households to firms as consumption expenditure made by the households on the goods and services produced by the firms while the flow of goods and services is in opposite direction from firms to households. We saw that money flows from firms to households as factor payments and then again it flows from households to firm.

So there is a circular flow of income in between two sectors - household sector and firm sector. This circular flow of money will continue indefinitely. In this way the economy functions. But, it is a fact that this flow of money income will not always be same.

The volume of flow changes. During depression, this volume of flow of money will contract and less and in prosperity it will expand with changes in national income. This circular flow of money is a measure of national income. The flow of money changes with the change of national income. Assumptions of circular flow of income analysis:

(#)Neither the households from their incomes nor the firms from their profits save.

(#)Government does not play any part in the national economy.

(#) There is no export and import of goods and services by the economy. It means we have assumed a closed economy.

(#). Thus, in this analysis we have not taken into account the role of foreign trade, domestic savings and the role of government.

(2)What do you know about the concept of Green Accounting?

Ans: The Green accounting system is a type of accounting that attempts to factor environmental costs into the financial results of operations. It has been argued that gross domestic product ignores the environment and therefore policymakers need a revised model that incorporates green accounting. The term was first brought into common usage by economist and Professor Peter Wood in the 1980s. India's former Environment Minister Mr. Jairam Ramesh first time stressed the need and importance to bring Green Accounting practices to the forefront of accounting in India. Objectives of Green Accounting:

The objectives of green accounting are:

1. To identify that part of the gross domestic product that reflects the costs necessary to compensate for the negative impacts of economic growth, that is, the defensive expenditures.

2. To established the linkage of Physical Resource Accounts with Monetary Environmental Accounts.

3. To assessment of Environmental Costs and Benefits.

4. To accounting for the Maintenance of Tangible resources. 5. To elaborate and Measurement of Indicators of Environ mentally Adjusted Product and Income..

Importance of Green Accounting for Business

: 1. Poor environmental behavior can give an adverse effect on an organizations image, which may lead to loss of sales as customers boycott the organizations product.

2. Many governments may impose heavy fines on companies which harm the environment. Companies may also have to pay large amounts to clean up any pollution for which they are responsible.

3. Increasing government regulations on environmental issues such as pollution has increased the cost of compliance of the business.

4. Improving environmental behavior can reduce cost. 5. Business as corporate citizens has a moral duty to play their part in helping to reduce the harm they do to the environment.

Advantages of green accounting:

1. Environmental- Centered Management system.

2. Sustainable development in Economy.

3. Pollution Control is possible through Green Accounting.

4. Assessing, testing and reporting performance of environ mental activities become easy with the help of Green

5. Product circulation, administration form environmental Accounting. prospective

6. Hence, the above advantages are reasons for need of Green Accounting.

(3). Explain about the Relative Income Hypothesis.

Ans: In 1949, James Duesenberry presented the relative income hypothesis. According to this hypothesis, saving (consumption) depends on relative income. The saving function is expressed as St-f(Yt/ Yp), where Yt/Yp is the ratio of current income to some previous peak income. This is called relative income. Thus, current consumption or saving is not a function-of current income but relative income.

Duensenberry pointed out that during depression when falls consumption does not fall much. People try to protect their living standards either by reducing their past savings (or accumulated wealth) or by borrowing.

However as the economy gradually moves initially into the recovery and then in to the prosperity phase of the business cycle consumption does not rise even if income increases. People use a portion of their income either to restore the old saving rate or to repay their old debt.

Thus we see that there is a lack of symmetry in people's consumption behaviour. People find it more difficult to reduce their consumption level than to raise it. This asymmetrical behaviour of consumers is known as the ratchet effect.

Thus if we observe a consumer's short-run behaviour we find a non-proportional relation between income and consumption Thus MPC is less than APC in the short run, as Keynes's absolute income hypothesis has postulated. But if we study a consumer's behaviour in the long run, i.e., over the entire business cycle we find a proportional relation between income and consumption. This means that in the long run MPC = APC.

(4)Explain the concept of "Super-Multiplier".

Ans: Hicks has combined the multiplier and accelerator mathematically in order measure the total effect of initial investment on income, and had given it the name ofthe "super-multiplier". The combined effect of the multiplier and the accelerator is also called the "leverage effect" which may lead the economy to very high or low level of income propagation.

The super-multiplier is worked out by combining both induced consumption i.e. MPC =AC/AY and induced investment i.e. MPIAI/Ay. Hicks divides the investment component into autonomous investment and induced investment so that investment 1=1+e, where I is the autonomous investment de, is the induced investment.

(5) Explain about Gresham's Law of the Monetary Systems.

Ans: Gresham's law states that if two coins are in circulation whose relative face values differ from their relative bullion content, the 'dearer' coin will be extracted from circulation for melting down.

The law is named after Sir Thomas Gresham (1519-79), a leading English business pay on and financial adviser to Queen Elizabeth I.

In short, the principle suggests that "bad money tends to drive good money out of circulation when both are full legal tender". This principle is known as Gresham's Law, although it was noted by other writers earlier.

The term "bad money" does not mean counterfeit coins. It means worn out, clipped or underweight coins. Marshall put the law in a general form as:

"Gresham's Law is that an inferior currency, if not limited in amount, will drive out the superior currency."

Good money disappears from circulation through the following ways

1.Hoarding: People hoard the good money and pass out the bad. There is a natural tendency to retain good coins. When payments are being made the comparatively less valuable money will be issued out first. Hence, good coins tend to remain out of circulation.

2. Melting: If the good money is a coin, the good coins will be melted down and sold as bullion. The melting of good money is highly profitable under bimetallism. Let us suppose that the Government ratio between gold and silver is 1: 16, while the market ratio is 1: 17. In this case, gold coins will be officially undervalued and silver coins overvalued. Gold coins will be good money and silver coins bad money.

3. Export to foreign countries: The coin of one country is not legal tender in a foreign country. Hence, foreigners will not accept it as coin but only as bullion. Thus, the bad coins circulate as legal tender in the home country and the good coins if they are standard money are exported as bullion to foreign countries. This is especially the case under bimetallism, because the metal which is undervalued in the home country has necessarily a higher value in a foreign country.

L**imitations of Gresham's Law:** Gresham's Law cannot operate in the following circumstances:

1. When the total volume of currency (good money together with bad money) is less than what is needed by the community for exchange purposes. In such a situation both good money and bad money will circulate.deball

2. When the "bad money" is so bad that it is not accepted by the people of a country. So bad money will not circulate and cannot drive good money out.

(6) State about RBI's Classification of Money.

Ans: The supply of money means the total stock of money (paper notes, coins and demand deposits of bank) in circulation which is held by the public at any particular point of time. Briefly money supply is the stock of money in circulation a specific day. Thus, two components of money supply are

i) Currency (Paper notes and coins

ii) Demand deposits of commercial banks.

Again it needs to be noted that (like difference between stock and supply of a commodity) total stock of money is different from total supply of money.

In India Reserve Bank of India uses four alternative measures of money supply called M,, M,, M, and M,. Among these measures M, is the most commonly used measure of money supply because its components are regarded most liquid assets. Each measure is briefly explained below.

1. M, C+DD+OD. Here C denotes currency (paper notes and coins) held by public, DD stands for demand deposits in banks and OD stands for other deposits in RBI. Demand deposits are deposits which can be withdrawn at any time by the account holders. Current account deposits are included in demand deposits.

But savings account deposits are not included in DD because certain conditions are imposed on the amount of withdrawals and number of withdrawals. OD stands for other deposits with the RBI which includes demand deposits of public financial institutions, demand deposits of foreign central banks and international financial institutions like IMF, World Bank, etc.

2. M_2 =M, (detailed above) + saving deposits with Post Office Saving Banks

3. M, M, +Net Time-deposits of Banks 4. M, M, Total deposits with Post Office Saving =

Organisation (excluding NSC)

In fact, a great deal of debate is still going on as to what constitutes money supply. Savings deposits of post offices are not a part of money supply because they do not serve as medium of exchange due to lack of cheque facility. Similarly, fixed deposits in commercial banks are not counted as money. Therefore, M, and M_2 may be treated as measures of narrow money whereas M, and M, as measures of broad money.

In practice, M, is widely used as measure of money supply which is also called aggregate monetary resources of the society. All the above four measures represent different degrees of liquidity, with M4 being the most liquid and M, is being the least liquid. It may be noted that liquidity means ability to convert an asset into money quickly and without loss of value.

(7)State about Phillips Curve.

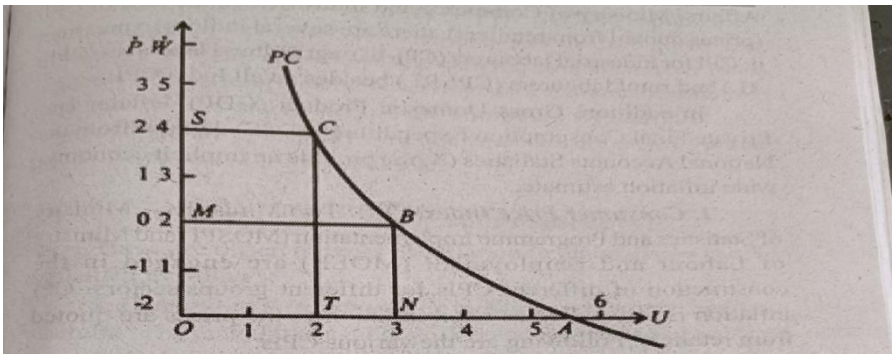
Ans: The Phillips curve was stated by A. W. Phillips shows that there exist an inverse relationship between the rate of unemployment and the rate of increase in nominal wages.

A lower rate of unemployment is associated with higher wage rate or inflation, and vice versa. In other words, there is a tradeoff wage inflation and unemployment.

The Phillips curve examines the relationship between the rate of unemployment and the rate of money wage changes. Known after the British economist A. W. Phillips who first identified it, it expresses an inverse relationship between the rate of unemployment and the rate of increase in money wages. Basing his analysis on data for the Kingdom, Phillips derived the empirical relationship that when unemployment is high, the rate of increase in money wage rates is low.

This is because "workers are reluctant to offer their services at less than the prevailing rates when the demand for labour is low and unemployment is high so that wage rates fall very slowly." On the other hand, when unemployment is low, the rate of increase in money wage rates is high. This is

because, "when the demand for labour is high and there are very few unemployed we should expect employer to bid wage rates up quite rapidly."



The second factor which influences this inverse relationship between money wage rate and unemployment is the nature of business activity. In a period of rising business activity when unemployment falls with increasing demand for labour, the employers will bid up wages. Conversely, in a period of falling business activity when demand for labour is decreasing and unemployment is rising, employers will be reluctant to grant wage increases.

Rather, they will reduce wages. But workers and unions will be reluctant to accept wage cuts during such periods. Consequently, employers are forced to dismiss workers, thereby leading to high rates of unemployment. Thus, when the labour market is depressed, a small reduction in wages would lead to large increase in unemployment.

Phillips concluded on the basis of the above arguments that the relation between rates of unemployment and a change of money wages would be highly non-linear when shown on a diagram. Such a curve is called the Phillips curve.

The PC curve in Figure is the Phillips curve which relates percentage change in money wage rate (W) on the vertical axis with the rate of unemployment (U) on the horizontal axis. The curve is convex to the origin which shows that the percentage change in money wages rises with decrease in the employment rate. In the figure, when the money wage rate is 2 per cent, the unemployment rate is 3 per cent.

But when the wage rate is high at 4 per cent, the unemploy ment rate low at 2 per cent. Thus, there is a trade-off between the rate of change in money wage and the rate of unemployment. This means that when the wage rate is high the unemployment rate is low and vice versa.

The original Phillips curve was an observed statistical relation which was explained theoretically by Lipsey as resulting from the behaviour of labour market in disequilibrium through excess demand.

Several economists have extended the Phillips analysis to the trade-off between the rate of unemployment and the rate of change in the level of prices or inflation rate by assuming that prices would change whenever wages rose more rapidly than labour productivity. If the rate of increase in money wage rates is higher than the growth rate of labour productivity, prices will rise and vice

versa. But prices do not rise if labour productivity increases at the same rate as money wage rates rise.

(8) Inflation

Ans: Inflation refers to the rise in the prices of most goods and services of daily or common use, such as food, clothing, housing, recreation, transport, consumer staples, etc. Inflation measures the average price change in a basket of commodities and services over time. The opposite and rare fall in the price index of this basket of items is called 'deflation'. Inflation is indicative of the decrease in the purchasing power of a unit of a country's currency. This is measured in percentage.

(9). Deflation.

Ans: When the overall price level decreases so that inflation rate becomes negative, it is called deflation. It is the opposite of the often-encountered inflation. A reduction in money supply or credit availability is the reason for deflation in most cases. Reduced investment spending by government or individuals may also lead to this situation. Deflation leads to a problem of increased unemployment due to slack in demand.. Central banks aim to keep the overall price level stable by avoiding situations of severe deflation/inflation. They may infuse a higher money supply into the economy to counter-balance the deflationary impact. In most cases, a depression occurs when the supply of goods is more than that of money.

(10)Reflation.

Ans: Reflation is a fiscal or monetary policy designed to expand output, stimulate spending, and curb the effects of deflation, which usually occurs after a period of economic uncertainty or a recession The term may also be used to describe the first phase of economic recovery after a period of contraction. Reflation Methods

Reflation policies typically include the following:

1. Reducing taxes: Paying lower taxes makes corporation and employees wealthier. It is hoped that extra earnings will b spent in the economy, lifting demand and prices for goods.

2. Lowering interest rates: Makes it cheaper to borro money and less rewarding to stow capital away in savings accoun encouraging people and businesses.to spend more freely.

3. Changing the money supply: When central banks boc the amount of currency and other liquid instruments in the bank

system the cost of money falls, generating more investment and putting more money in the hands of consumers.

4. Capital Projects: Large investment projects create jobs, boosting employment figures and the number of people with spending power.

(11)Stagflation.

Ans: Stagflation is a new term which has been added to economic literature in the 1970s. It is a paradoxical phenomenon where the economy expedience's stagnation as well as inflation. The word

stagflation is the combination of stag' plus 'flation' taking 'stag' from stagnation and 'flation' from inflation. Stagflation is a situation when recession is accompanied by a high rate of inflation. It is, therefore, also called inflationary recession. The principal cause of this phenomenon has been excessive demand in commodity markets, thereby causing prices to rise, and at the same time the demand for labour is deficient, thereby creating unemployment in the economy. Three factors have been responsible for the existence of stagflation in the advanced countries since 1972. First, rise in oil prices and other commodity prices along with adverse changes in the terms of trade, second, the steady and substantial growth of the labour force; and third, rigidities in the wage structure due to strong trade unions.

(11)Define 'SEBI'

Ans: The Securities and Exchange Board of India is the regulatory body which deals in matters related to the development and regulation of securities market in India. It was established on 12th of April in 1988 but it got statutory status in 1992.

Organizational Structure of SEBI:

SEBI is managed by the six members-one chairman (nominated by the chairman), two members from office of central ministries, one from RBI, and remaining to members are nominated by the central government.

Objectives of SEBI:

The primary objective of SEBI is to ensure that the Indian stock market works systematically. Also, it safeguards the interest of traders and investors by giving them healthy in securities. SEBI even works on the development of equity markets and ensures that people adhere to the guidelines.

1. Monitors important acquisition of shares and takeover of companies

2. Protect the interest of investors

3. Promoting the development of securities market and regulating the business

4. It is also involved in research & development so that the stock market is efficient and updated with the advanced techniques.

5. It offers a platform for sub-brokers, registrars, stockbrokers, portfolio managers, investment advisers, bankers, merchant bankers, share transfer agents, trustees of trust deeds, underwriters, and other associated people to register and regulate work.

6. They also check that the investors are educated about the intermediaries of the securities market.

7. They also keep a close check that no fraudulent or unfair practices are done related to the securities market.

8. It also controls the operations of participants, credit rating agencies, and custodians of securities, depositories and foreign portfolio investors.

12. Explain about NIFTY.

Ans: NIFTY is a market index introduced by the National Stock Exchange. It is a blended word - National Stock Exchange and Fifty coined by NSE on 21st April 1996. NIFTY 50 is a benchmark based index and also the flagship of NSE, which showcases the top 50 equity stocks traded in the stock exchange out of a total of 1600 stocks.

These stocks span across 12 sectors of the Indian economy which include - information technology, financial services, consumer goods, entertainment and media, financial services, metals, pharmaceuticals, telecommunications, cement and its products, automobiles, pesticides and fertilizers, energy, and other services.

Eligibility Criteria for NIFTY Index Listing

The eligibility criteria for getting listed on the NIFTY Index are mentioned below:

(1). The company must be a domicile of India and registered with the National Stock Exchange.

(2.) Stocks must possess high liquidity, which is measured by their average impact cost. It is the cost of security transaction execution in relation to the index weight as reckoned through market capitalisation. It should be 0.50% or lower than that for a period of 6 months while 90% of the observations are made on a portfolio of Rs. 10 Crore.

(3)The company should have a trading frequency of 100% during the previous six months.

(4) It should have an average free-floating market capitalisation, which is 1.5 times higher than the smallest constituent in the index.

(5)Shares which have . Differential Voting Rights or DVR are also eligible for the index.

The NIFTY Index is reconstituted every six months and considers the performance of a stock over such period. Depending on this performance, and given that a company and its stock fulfils all the eligibility criteria mentioned above, the list might include or eliminate new/old stocks respectively. In case any new additions and eliminations are done, the companies in question are informed through a notice four weeks before reconstitution. ..Apart from a periodical routine, reconstitution can also be undertaken in case a company goes through a scheme of arrangements for events involving suspension, spin-off, merger and compulsory delisting.

13.. State about SENSEX.

Ans: A stock market analyst Mr Deepak Mohoni introduced the term Sensex. The term Sensex is a portmanteau of Sensitive and Index. The Sensex is an index that reflects the Bombay Stock Exchange (BSE). The Sensex Index comprises 30 stocks on BSE. These stocks are the largest and most actively traded stocks on the BSE. The criteria for selecting stocks is as follows: Listed on BSE. It should be a large to mega-cap stock.

(#)Relatively liquid stocks.

(#)Revenue generated from core activities.

(#)A diversified and balanced sector involvement in line with the Indian equity market.

Sensex is the portmanteau between sensitive and index and is the market index of the Bombay Stock Exchange (BSE). It is also known as S&P BSE Sensex.

Furthermore, Sensex is the older of these two indexes. The Bombay Stock Exchange introduced it in 1986 when this index followed a weighted market capitalisation method. Later in 2003, Sensex migrated to the free-float market capitalisation method. The base value for calculating Sensex is 100 - another critical difference between Sensex and Nifty - and 1978-79 is the base year considered for its calculation.

The Sensex reflects the movements in the Indian stock market. If the Sensex increases, it means the prices of the underlying 30 stocks have increased. If the Sensex has decreased, it means the prices of the underlying 30 stocks have decreased

The Sensex is the oldest index in India, and people consider it to be a reflection of the Indian economy. Market research analysts refer to the Sensex to understand the overall growth, development in industry, country's stock market trend.