MACRO ECONOMICS

CHAPTER 1

INTRODUCTION

I Choose the correct answer

1. The individuals or institutions which take economic decisions are:
   a) Economic variables c) Economists
   b) Economic Agents d) none of the above.
   Ans: b) Economic Agents.
2. In 1936 British economist J.M.Keynes published his celebrated book
   a) Wealth of Nations c) General theory of employment, interest and Money.
   b) Theory of interest d) Theory of employment
   Ans: (c) General theory of employment, interest and Money.
3. All the labourers who are ready to work will find employment and all the factories will be working at their full capacity, this school of thought is known as
   a) Modern thought c) Contemporary thought
   b) Classical thought d) none of these
   Ans: (c) Classical thought
4. The year of Great Depression
   a) 1920 b) 1889 c) 1929 d) 2018
   Ans: (c) 1929
5. In a capitalist country production activities are mainly carried out by
   a) Private enterprises c) Government authority
   b) Planning authority d) None of the above
   Ans: (a) Private enterprises.

II Fill in the blanks:

1. Macro economics tries to address situation facing the economy………
   Ans: **as a whole**
2. A part of the revenue is paid out as …………for the service rendered by land.
   Ans: **Rent**
3. The domestic country may sell goods to the rest of the world. These are called…….
   Ans: **Exports**
4. …………….will be called as firms.
   Ans: **Production units**
5. …………Policies are pursued by the state itself or statutory bodies like RBI, SEBI etc.
   Ans: **Macroeconomic**

III Answer the following questions in a sentence or word.

1. **Who are economic agents?**
   Ans: Economic agents are those individuals or institutions which take economic decisions. They can be consumers, producers, Government, Corporation, Banks etc.
2. **What does classical school of thought say?**
   Ans: The classical school of thought says that all the labourers who are ready to work will find employment and all the factories will be working at their full capacity.
3. **Give the meaning of imports.**
   Ans: When the economy buys goods from the rest of the world, they are called imports.
4. **Name the well known work of Adam Smith.**
   Ans: An Enquiry into the Nature and Cause of the Wealth of Nations.
5. **What do you mean by wage rate?**
   Ans: The price paid for purchase of labour services is called wage rate.

IV Answer the following questions in 4 sentences.

1. What are the features of capitalistic economy?
   Ans: The important features of a capitalist of economy are as follows:
   - There is private ownership of means of productions.
   - Production takes place for selling the output in the market.
   - There is sale and purchase of labour services at a price which is called wage rate.
   - A typical capitalist enterprise has one or several entrepreneurs and exercise control over major decisions.
   - The entrepreneurs may themselves supply the capital needed or they may borrow the capital.
2. **Name and write the meaning of two kinds of trade in external sector.**
   Ans: The two kinds of Trade in external sector are exports and imports.
   - A country may sell goods to the rest of the world – Exports**.**
   - A country may buy goods from other countries – Imports.
3. **Who are the macroeconomic decision makers?**
   Ans: The macroeconomic decisions makers are State itself or statutory bodies like the Reserve Bank of India, Securities and Exchange Board of India and similar institutions. Each such statutory body will have one or more public goals to pursue as defined by law or the constitution of India itself.

V Answer the following questions in 12 sentences.

1. **Briefly explain in what way Macro Economics is different from Micro Economics.**
   Ans: The micro and macro economics are distinguished on the following grounds:

Scope:

- Micro Economics study in individual units so its scope is narrow.
- Macro Economics study in aggregates, so its scope is wider.

Method of study:

- The Micro Economics follows slicing method as it studies individual unit.
- The Macro Economics follows lumping method as it studies in aggregates.

Economic Agents:

- In Micro Economics, each individual economic agent thinks about its own interest and welfare.
- In Macro Economics, economic agents are different among individual economic agents and their goal is to get maximum welfare of a country.

Equilibrium:

- Micro economics studies the partial equilibrium in the country.
- Macro Economics studies the general equilibrium in the economy.

Domain:

- Micro economics consists of theories like consumer's behaviour, production and cost, Rent, Wages, Interest, etc.
- Macro economics comprises of theory of income, output and employment, Consumption Function, Investment function, Inflation, etc.

2. Explain the working of the economy of a capitalist country.

Ans: Capitalist economy can be defined as an economy in which most of the economic activities have the following characteristics:

a) There is private ownership of means of production.

b) Production takes place for selling the output.

c) There is sale and purchase of labour service at a price called wage rate.

In a capitalist country production activities are mainly carried out by capitalist enterprises. A typical capitalist enterprise has one or several entrepreneurs. Entrepreneurs are those who exercise control over major decisions and bear a large part of the risk associated with the firm. They may themselves supply the capital needed to run the enterprise or they may borrow the capital.

To carry out the production they also need natural resources. They need the most important element of human labour to carry out production. This is called as labour. After producing output with the help of land, labour and capital, the entrepreneur sells the product in the market to earn money called revenue. Part of the revenue is paid out as rent for land, interest for capital and wage for labour and keeps the rest of the revenue as profit.

Profits are often used by the producers in the next period to buy new machinery or to build new factories, so that production can be expanded. These expenses which raise productive capacity are examples of investment expenditure.

3. **Explain the role of the Government (State) and household sector in both developed and developing countries.**
   Ans:
   Role of Government: In both the developed and developing countries, apart from capitalist sector, there is the institution of State. The role of the state includes framing laws, enforcing them and delivering justice. The State here refers to the Government which performs various developmental functions for the society as whole. It undertakes production, apart from imposing taxes and spending money on building public infrastructure, running schools, providing health services etc. These economic functions of the state have to be taken into account when we want to describe the economy of the country.
   Role of Household sector: By household we mean a single individual who takes decisions relating to her own consumption or a group of individuals for whom the decisions relating to consumption are jointly determined. Households consist of people. These people work in firms as workers and earn wages. They are the ones who work in government departments and earn salaries or they are the owners of firms and earn profits. Therefore, the market in which the firms sell their products could not have been functioning without the demand coming from the households. Further, they also earn rent by leasing land or earn interest by lending capital.

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CHAPTER 2

NATIONAL INCOME ACCOUNTING

I Choose the correct answer

1. The study of National income is related to
   a) Micro economics c) Both Micro & Macro
   b) Macro Economics d) None of the above
   Ans: (b) Macro Economics.
2. **NNP = GNP –**
   a) Deduction c) Investment
   b) Depreciation d) None of the above
   Ans: (b) Depreciation
3. The value of GDP at the current prevailing prices is
   a) Real GDP c) Nominal GDP
   b) GDP at factor cost d) NDP
   Ans: (c) Nominal GDP
4. By deducting undistributed profit from national income, we get
   a) Personal Disposable income c) Private income
   b) Personal income d) Subsidies.
   Ans: (b) Personal Income
5. Measuring the sum total of all factor payments will be called
   a) Product method c) Income method
   b) Expenditure method d) None of the above
   Ans: (c) Income Method

II Fill in the blanks

1. **…………..**are defined at a particular point of time
   Ans: Stocks
2. ………….. goods will not pass through any more stages of production.
   Ans: Final Good
3. **…………..**is an annual allowance for wear and tear of a capital good.
   Ans: Depreciation
4. **……………**is a stock variable.
   Ans: Inventory
5. Pollution is an example for …………..externalities
   Ans: Negative

6. The net contribution made by a firm is called its………
   Ans: value added.

III Match the following:

A	B
1. Labour	**a) Non-monetary exchange**
2. GDP	**b) Personal disposable income**
3. Inventory	**c) Gross domestic product**
4. PDI	**d) Stock variable**
5. Domestic service	**e) Wages**

Ans: 1 – e; 2 – c; 3 – d; 4 – b; 5 – a;

IV Answer the following questions in a sentence or word.

1. **What do you mean by final goods?**
   Ans: These are the goods which are meant for final use and will not pass through any more stages of production or transformations.
2. **Expand CPI.**
   Ans: Consumer Price Index.
3. **Expand GNP_{MP}**
   Ans: Gross National Product at Market Prices.
4. **How do you get net value added?**
   Ans: We obtain net value added by deducting the value of depreciation from Gross value added.
5. **Give the meaning of GDP.**
   Ans: GDP (Gross Domestic Product) is the market value of all final goods and services produced within a domestic territory of a country measured in a year.
6. **Give the meaning of intermediate goods.**
   Ans: These are the goods used by other producers as material inputs. These are used as raw material for production of other commodities. These are not final goods.
7. **What is depreciation?**
   Ans: It is a deduction made from the value of gross investment in order to accommodate regular wear and tear of capital goods.
8. **How do we get personal disposable income?**
   Ans: The personal Disposable Income is obtained by deducting personal tax paymens and non tax payments from Personal Income.
9. **Write the equation of GVA at market prices.**
   Ans: GVA at Market prices = GVA at basic prices + Net product taxes.
10. **What is GDP deflator?**

Ans: It is the ratio of nominal GDP to real GDP i.e., GDP deflator = GDP/gdp; where GDP is nominal Gross Domestic Product and 'gdp' stands for real Gross Domestic Product.

V Answer the following questions in 4 sentences.

1. **What are the four factors of production? Mention their rewards.**
   Ans: The four factors of production are Land, Labour, Capital and Organisation. The rewards of these factors of production are as follows:
   - Land gets Rent
   - Labour gets wages
   - Capital gets Interest.
   - Organisation gets profit.
2. **Distinguish between stock and flow. Give example.**
   Ans:

Stock	Flow
➢ It is that quantity of economic variable which is measured at a particular point of time. ➢ Example capital, inventory, wealth, foreign exchange reserves etc.	➢ It refers to that quantity of economic variable measured over a period of time. ➢ Example net investment, salary, National Income etc.

3. **What is the difference between consumer goods and capital goods?**
   Ans:

Consumer Goods	Capital Goods
• These are the goods which are purchased for consumption by ultimate consumers. • Example food, clothes, services like recreation.	• These are the durable goods which are used in the production process. • Examples are machinery, tools, implements etc.

4. **Mention 3 methods of measuring GDP (national income).**
   Ans:
   The three methods of measuring GDP are
   a) Product or Value Added Method
   b) Expenditure Method and
   c) Income Method.
5. **What do you mean by externalities? Mention its two types.**
   Ans: Externalities refer to the benefits or harms a firm or an individual causes to another for which they are not paid or penalized. They do not have any market in which they can be bought and sold.

The two types of externalities are Positive Externalities and Negative Externalities.

6. **Write the equation of GDP_{MP} and GDP_{FC}**

Ans: The equations of GDP and Market prices (GDP_{MP}) and GDP at Factor cost (GDP_{FC}) are as follows:

GDP_{MP} = C + I + G + X – M. where, C-Consumption Expenditure, I-Investment Expenditure; G – Government's Consumption and Investment Expenditure; X – Exports and M- Imports.

GDP_{FC} = GDP_{MP} – NIT. (NIT is Net Indirect Taxes).

7. **Write the difference between nominal and real GDP.**

Ans:

Nominal GDP	Real GDP
➢ It is the value of GDP at current prevailing prices. ➢ It is not reliable ➢ It does not give real picture of economic development of a country.	➢ It is evaluated at constant set of prices i.e., by keeping base year's price index. ➢ It is reliable. ➢ It gives real picture of economic development of a country.

VI Answer the following questions in 12 sentences.

1. **Write a short note on the concept of final good.**

Ans: The final goods are those goods which are meant for final use and will not pass through any more stages of production or transformations. They are called final goods because, once they have been sold they pass out of the active economic flow. However, they may undergo transformation by the action of the ultimate purchaser.

In fact, many final goods are transformed during their consumption. For instance, Tea leaves purchased by the consumer are not consumed in that form – they are used to make drinkable tea, which is consumed. Similarly most of the items that enter our kitchen are transformed through the process of cooking. But cooking at home is not an economic activity, even though the product involved undergoes transformation. Home cooked food is not sold to the market. However, if the same cooking or tea was done in hotel where the cooked product would be sold to customers, then the same items are not considered as final goods and would be counted as inputs to which economic value addition can take place.

Thus, it is not in the nature of the good but in the economic nature of its usage that a good becomes a final good.

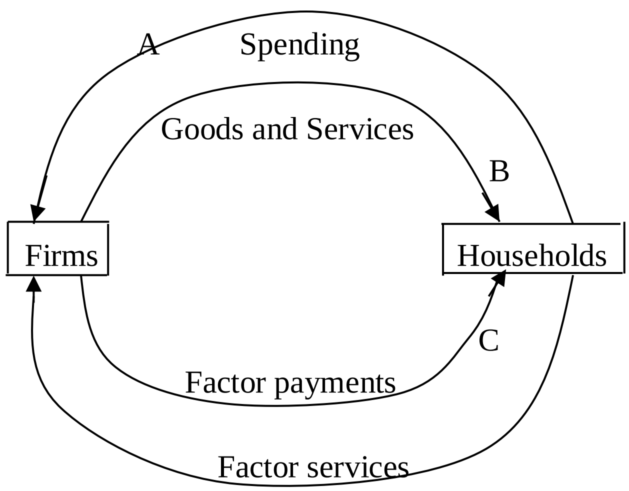
2. **Explain the circular flow of income of an economy.**

Ans: The circular flow of income of an economy can be explained with the help of following assumptions:

a) Existence of two sectors viz., household sector and producers.
b) Households are the owners of the factors of production.
c) Households receive income by selling the factor services.
d) There are no savings.

e) The firms produce goods to the households.
f) The economy is a closed economic system(where no Government or external trade or savings)

The circular flow of income in a simple economy can be illustrated with the help of following chart.



In the above chart, the uppermost arrow, going from the households to the firms, represents the spending by the households to buy goods and services produced by the firms. The second arrow going from the firms to the households is the counterpart of the arrow above. It stands for the goods and services which are flowing from the firms to the households. Thus the two arrows on the top represent the goods and services market – the arrow above represents the flow of payments for the goods and services, the arrow below represents the flow of goods and services.

The two arrows at the bottom of the diagram similarly represent the factors of the production market. The lower most arrow going from the households to the firms symbolizes the services that the households re rendering to the firms. Using these services the firms are producing the output. The arrow above this, going from the firms to the households, represents the payments made by the firms to the households for the services provided by the households.

Thus, When the income is spent on the goods and services produced by the firms, it takes the form of aggregate expenditure received by the firms. Since the value of expenditure must be equal to the value of goods and services, we can measure the aggregate income by calculating the aggregate value of goods and services produced by the firms. This is clearly shown above in the form of circular flow of income.

3. Write a note on externalities.

Ans: An externality is a cost or benefit conferred upon second or third parties as a result of acts of individual production and consumption. But the cost or benefit of an externality cannot be measured in money terms because it is not included in market activities.

In other words, Externalities refer to the benefits or harms a firm or an individual causes to another for which they are not paid or penalized. They do not have any market in which they can be bought and sold.

There are two types of externalities viz.,

- Positive Externalities and
- Negative Externalities.

For example, let us imagine that there is chemical fertilizer industry. It produces the chemical fertilizers required for agriculture. The output of the industry is taken for counting GDP of an economy. This is positive externality.

While carrying out the production the chemical fertilizer industry may also be polluting the nearby river. This may cause harm to the people who use the water of the river. Hence their health will be affected. Pollution also may kill fish and other organisms of the river. As a result, the fishermen of the river may lose their livelihood. Such harmful effects that the industry is inflicting on others, for which it will not bear any cost are called negative externalities.

4. Illustrate unplanned accumulation and decumulation with an example

Ans: Change in inventories may be planned or unplanned. In case of unexpected fall in sales, the firm will have unsold stock of goods which it had not anticipated. Hence there will be unplanned accumulation of inventories. If there is unexpected increase in the sales there will be unplanned decumulation of inventories.

This can be explained with the help of following illustration:

Suppose a firm produces T Shirts. It starts the production year with an inventory of 200 T Shirts. During the coming year it expects to sell 2000 T shirts. Hence, it produces 2000 T shirts, expecting to keep an inventory of 200 T Shirts at the end of the year. However, during the year, the sales of T Shirts became low unexpectedly. The firm is able to sell only 1200 T Shirts. This means that the firm is left with 800 unsold T Shirts. The firm ends the production year with 800 + 200=1000 T shirts. The unexpected increase of inventories by 800 T shirts is an example for unplanned accumulation of inventories.

On the other hand, if the sales had been more than 2000 we would have unplanned decumulation of inventories. For instance, if the sales had been 2100, then not only the production of 2000 T shirts will be sold, the firm will have to sell 100 T shirts out of the inventory. This 100 (T shirts) unexpected reduction in inventories is an example of unexpected decumulation of inventories.

5. Explain the examples of planned accumulation and decumulation of inventories.

Ans: Inventories are the unsold goods, unused raw materials or semi-finished goods which a firm a firm carries from a year to the next year. Change in inventories may be planned or unplanned. A planned change in inventories is the change in the stock of inventories which has occurred in a planned way. The planned accumulation and decumulation of inventories are explained with example as follows:

Suppose a firm wants to increase the inventories from 200 T shirts to 400 T shirts during the year. Expecting sales of 2000 T shirts during the year, the firm produces 2000 + 200 = 2200 T shirts. If the sales are actually 2000 T shirts, the firm ends up with a rise of inventories. The new stock of inventories is 400 T shirts, which was planned by the firm. This is planned accumulation of inventories.

On the other hand, if the firm had wanted to reduce the inventories from 200 to 50, the it would produce 2000 – 150 = 1850 T shirts. This is because it plans to sell 150 T shirts out of the inventory of 200 T shirts it started with. Then the inventory at the end of the year becomes 200 – 150 = 50 T shirts, which the firm wants. If the sales turn out to be 2000 T shirts as expected by the firm, the firm will be left with the planned reduced inventory (decumulation) of 50 T Shirts.

These are the two instances of planned accumulation and planned decumulation of inventories.

VII Answer the following questions in 20 sentences.

1. **Explain the macro economic identities.**

Ans: The macroeconomic identities are as follows:

a) **Gross Domestic Product (GDP):** Gross Domestic Product measures the aggregate production of final goods and services taking place within the domestic economy during a year. But the whole of it may not accrue to the citizens of the country. It includes GDP at Market prices and GDP at Factor cost.

   GDP at market price is the market value of all final goods and services produced within a domestic territory of a country measured in a year. Here everything is valued at market prices. It is obtained as follows:

   $GDP_{MP} = C + I + G + X – M$

   GDP at factor cost is gross domestic product at market prices minus net indirect taxes. It measures money value of output produced by the firms within the domestic boundaries of a country in a year.

   $GDP_{FC} = GDP_{MP} – NIT$.

b) **Gross National Product:** It refers to all the economic output produced by a nation's normal residents, whether they are located within the national boundary or abroad. It is defined as GDP plus factor income earned by the domestic factors of production employed in the rest of the world minus factor income earned by the factors of production of the rest of the world employed in the domestic economy. Therefore,

   GNP = GDP + Net factor income from abroad

c) **Net National Product (NNP):** A part of the capital gets consumed during the year due to wear and tear. This wear and tear is called depreciation. If we deduct depreciation from GNP the measure of aggregate income that we obtain is called Net National Product. We get the value of NNP evaluated at market prices. So,

   NNP = GNP – Depreciation

d) **Net National Product (NNP) at factor cost:** The NNP at factor is the sum of income earned by all factors in the production in the form of wages, profits, rent and interest etc., belong to a country during a year. It is also known as National income. We need to add subsidies to NNP and deduct indirect taxes from NNP to obtain NNP at factor cost.
NNP_{FC} = NNP at market prices – indirect taxes + subsidies.

e) **Personal Income (PI):** It refers to the part of National income (NI) which is received by households. It is obtained as follows:
PI = NI – Undistributed Profits – Net interest payments made by the households – Corporate tax + Transfer payments to the households from the Government and firms.

f) **Personal Disposable Income (PDI):** If we deduct the personal tax payments (income tax) and Non-tax payments (fines, fees) from Personal Income, we get PDI. Therefore,
PDI = PI – Personal tax payments – Non-tax payments.

2. **Briefly explain the expenditure method of measuring GDP.**

Ans: Expenditure method is the alternative way to calculate the GDP by looking at the demand side of the products. Here the aggregate value of the output in the economy by expenditure method will be calculated in the following way.

In this method we add the final expenditures that each firm makes. Final expenditure is that part of expenditure which is undertaken not for intermediate purposes. If the baker buys Rs.50 worth of wheat from the farmers is considered as intermediate good and the final expenditure received by the baker is 200. Then the aggregate value of output of the economy is Rs.200 + Rs.50 = Rs.250.

Let us assume that firm *i* makes the final expenditure on the following accounts:

- Final consumption expenditures on the goods and services by households, denoted as C_i
- Final investment expenditure incurred by the firms on capital goods, denoted as I_i
- The expenditure that the Government makes on the final goods and services produced by the firm, denoted as G_i
- The export revenues that firm *i* earns by selling its goods and services abroad, denoted as X_i.

Now the total final consumption, investment, government and export expenditures received by the firm ***i*.** Now GDP according to the expenditure method is expressed as follows:

GDP = $\sum^{N}_{i-1} RV_i$ = C + I + G + X – M

$\sum^{N}_{i-1} RV_i$ is the sum of final consumption -C, investment -I, government - G and exports -X expenditures (M-imports) received by all the firms in the economy.

3. **Explain a numerical example to show that all the three methods of estimating GDP gives us the same answer.**

Ans: The three methods of calculating GDP viz., Product or Value Added Method, Expenditure method and Income Method, give us the same answer. This can be explained with the help of numerical example as follows:

Let us imagine, there are two firms X and Y. Suppose X use no raw material and produces cotton worth Rs.50. X sell its cotton to firm Y, who uses it to produce cloth. Y sells the cloth produced to consumers for Rs.200.

- **GDP in the phase of product or the value added method**: Here the value added = Sales – Intermediate goods.
  Thus $VA_X = 50 - 0$
  $VA_Y = 200 - 50 = 150$.
  Thus $GDP = VA_X + VA_Y = 50 + 150 = 200$.
  GDP distribution for firms X and Y

Particulars	**Firm X**	**Firm Y**
Sales	50	200
Intermediate consumption	0	50
Value added	50	150

- **GDP in the phase of Expenditure Method:** Under this method, GDP is the sum of final expenditure/s on goods and services for end use. In the above case, final expenditure is expenditure by consumers on cloth. Therefore, GDP = 200.
- **GDP in the phase of Income Method:** Under this method, GDP is obtained by adding factor payments. Let us imagine firm X, from Rs.50 received gives Rs.30 as wages and keeps the remaining Rs.20 as its profits. Similarly, firm Y gives Rs.100 as wages and keeps Rs.50 as profits. It can be stated in the following table:

Particulars	**Firm X**	**Firm Y**	**Total**
Wages	30	100	130
profits	20	50	70

Now the GDP by income method = total of factor payments (incomes) which is equal to total wages received (workers of Firms X and Y) and total profits earned (by Firms X and Y). Thus GDP = Wages + Profits i.e., GDP = 130 + 70 = 200.
Thus all the three methods of estimating GDP give us the same answer.

4. **Write down some of the limitations of using GDP as an index of welfare of a country.**

Ans: Gross Domestic Product (GDP) is the sum total of value of goods and services created within the geographical boundary of a country in a particular year. It gets distributed among the people as incomes except retained earnings. So we consider that higher level of GDP of a country is an index of greater well being of the people of that country. Welfare of a country means well being of entire population of the country. But there are certain limitations of suing GDP as an index of welfare of a country. They are as follows:

a) **Distribution of Gross Domestic Product (GDP):** Generally, the rise in GDP will not represent increase in the welfare of the country. If the GDP of the country is rising, the welfare may not rise as a consequence. This is because the rise in Gross Domestic Product may be concentrated in the hands of very few individuals or firms. For the remaining, the income may in fact might have decreased. In such a situation the welfare of the entire country cannot be said to have improved.

b) **Non-monetary exchanges:** Some of the activities in a country are not evaluated in terms of money. For instance, the domestic services of housewife are not paid for. The exchanges which take place in the informal sector without the help of money are called barter exchanges. In barter exchanges goods are directly exchanged against each other. As money is not used here, these exchanges are not registered as part of economic activity. In India, because of many remote areas, these kinds of exchanges still take place and they are generally not counted in the GDP. Therefore, Gross Domestic Product calculated in the standard manner may not give us a clear indication of welfare of a country.

c) **Externalities:** An externality is a cost or benefit conferred upon second or third parties as a result of acts of individual production and consumption. In other words, externalities refer to the benefits or harms, a firm or an individual causes to another for which they are not paid or penalized. These do not have any market in which they can be bought and sold. But the cost or benefit of an externality cannot be measured in money terms because it is not included in market activities. For example, the pleasure one gets from his neighbour's garden is an external benefit and external cost is environmental pollution caused by industries. Both are excluded from national income estimates.

d) **Leisure and work:** One of the important things that affect the welfare of a society is leisure. But is not included in GDP. For example, longer working hours may make people unhappy because their leisure is reduced. On the contrary, shorter working hours per week may increase leisure and make people happy.

e) **Manner of production:** The economic welfare also depends on the manner of production of goods and services. If goods are produced by child labour or by exploitation of workers, then the economic welfare cannot increase.

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CHAPTER – 3

MONEY AND BANKING

I Choose the correct answer

1. The main function of money is
   a) Saving c) Expenditure
   b) Medium of exchange d) Investment
   Ans: (c) Medium of Exchange
2. The bank which acts as monetary authority of India
   a) RBI c) RRB
   b) NABARD d) IDBI
   Ans: (a) RBI
3. The banks which are a part of the money creating system of the economy are
   a) Bankers c) RBI
   b) Commercial banks d) None of the above.
   Ans: ((b) Commercial Banks
4. The rate at which the RBI lends money to commercial banks against securities
   a) Bank rate c) Reverse Repo rate
   b) Repo rate d) None of the above
   Ans: (a) Bank Rate
5. The important tool by which RBI influences money supply is
   a) Open market operations c) Closed market operation
   b) Money operation d) None of the above
   Ans: (a) Open market operation

II Fill in the blanks

1. Economic exchanges without the use of money are referred to as ……….
   Ans: Barter system
2. …………….is the only institution which can issue currency in India.
   Ans: RBI
3. …………issues coins in India
   Ans: Government of India
4. The principal motive for holding money is to carry out ………….
   Ans: Transactions
5. M_1 and M_2 are known as ……………
   Ans: Narrow money.

III Match the following:

A	B
1. SLR	**a) Government of India**
2. Circulation of coin	**b) Statutory Liquidity Ratio**
3. Money	**c) Broad Money**
4. M_3 and M_4	**d) Repo**
5. Repurchase agreement	**e) Medium of Exchange**

Ans: 1 – b; 2 – a; 3 – e; 4 – c; 5 – d;

IV Answer the following questions in a sentence/word.

1. **What do you mean by barter system?**
   Ans: The economic exchanges without the mediation of money, is called Barter system.
2. **Give the meaning of money.**
   Ans: Money is the commonly accepted medium of exchange. According to F.A.walker 'Money is what money does'.
3. **What is time deposit?**
   Ans: These are the deposits in which money deposited is fixed for a period of time and cannot be withdrawn before stipulated time. High rate of interest is paid. Interest rate depends on the duration of money deposited.
4. **What is Fiat money?**
   Ans: Fiat Money is the money which does not have any intrinsic value. Intrinsic value is the value of metal or paper which is equal to face value of coin or currency note.
5. **Write the meaning of high powered money.**
   Ans: The total liability of the monetary authority of the country – RBI, is called high powered money. It consists of currency (coins and notes in circulation with the public and vault cash of commercial banks) and deposits held by the Government of India and commercial banks with RBI.
6. **Expand CRR.**
   Ans: Cash Reserve Ratio.
7. **What is bank rate?**
   Ans: Bank Rate is the rate at which the RBI gives loans to the commercial banks.

V Answer the following questions in 4 sentences.

1. **Mention any two functions of money**
   Ans: The two functions of Money are
   - Medium of exchange
   - Measure of value
2. **Give the meaning of CRR and SLR.**
   Ans: The Cash Reserve Ratio (CRR) is a certain percentage of bank deposits which a commercial bank is required to keep as cash reserves with itself.

The Statutory Liquidity Ratio (SLR) refers to the ratio of deposits which the commercial banks have to maintain a certain percentage of their total deposits and time deposits with themselves in the form of liquid assets, as per the directions of RBI.

3. **State the credit control instruments of RBI.**
   Ans: There are two instruments of RBI to control credit viz., Quantitative techniques and Qualitative techniques.
   The quantitative techniques include Bank rate, Open market operations, CRR and SLR. The qualitative techniques include Credit rationing, margin requirements, moral suasion, publicity, direct action and issue of directives.
4. **Mention the two motives of demand for money.**
   Ans: The two motives of demand for money are as follows:
   - The transaction Motive
   - The Speculative Motive.
5. **How does bank rate influence money supply?**
   Ans: The RBI can influence money supply by changing the rate at which it gives loans to the commercial banks. This rate is called as Bank Rate. By increasing the bank rate, loans taken by commercial banks become more expensive which reduces the reserves held by the commercial bank and hence decreases money supply. A fall in the bank rate can increase the money supply.
6. **What role of RBI is known as 'Lender of Last Resort'?**
   Ans: When commercial banks need more funds in order to be able to create more credit, they may go to market for raising such funds or go to the RBI. The RBI provides them funds through various instruments. This role of RBI, that of being ready to lend to banks at all times is said to be the lender of last resort.

VI Answer the following questions in 12 sentences.

1. **Briefly explain the functions of money.**
   Ans: The functions of money are as follows:
   a) Medium of Exchange: Money plays an important role as a medium of exchange. It facilitates exchange of goods for money. It has solved the problems of barter system. Money has widened the scope of market transactions. Money has become a circulating material between buyers and sellers.
   b) Measure of Value/Unit of account: The money acts as a common measure of value. The values of all goods and services can be expressed in terms of money.
   c) Store of value: People can save part of their present income and hold the same for future. Money can be stored for precautionary motives needed to overcome financial stringencies. Money solves one of the deficiencies of barter system i.e., difficulty to carry forward one's wealth under the barter system.
   d) Transfer of value: Money acts as a transfer of value from person to person and from place to place. As a transfer of value, money helps us to buy goods, properties or anything from any part of the country or the world. Further, money earned in different places can be brought or transferred to anywhere in the world.

2. **Briefly explain the functions of RBI.**

   Ans: The main functions of RBI are as follows:

   a) **Printing and issuing currency notes**-It has complete authority of printing and issuing currency notes in the country. RBI issue all denominations of currency notes (Rs.2, Rs.10, Rs.20, Rs.50, Rs.100, Rs.500 and Rs.2000) except one rupee note, which is issued by finance ministry, Government of India. The minimum reserve system of note issue was followed by RBI after 1956.
   b) **Lender of last resort**: RBI provides financial assistance to commercial banks like giving credit, discounting bills, giving advances, etc during their financial crisis and helps the banks as a lender of last resort.
   c) **Controls credit creation activities of commercial banks**-The credit provided by all commercial banks is controlled by RBI. RBI implements both Quantitative and qualitative techniques to control the credit generated by commercial banks. The quantitative measures to control credit are Bank rate policy, Open market operations, Repo and Reverse Repo rates, Cash reserve ratio and Statutory liquidity ratio.
   d) **Controls money market**- RBI is the leader of money market. All the activities and components of money market like commercial banks and financial institutions are controlled and directed by RBI.

3. **Write a note on legal definitions of money.**

   Ans: The total stock of money in circulation among the public at a particular point of time is called money supply. The legal definitions of money are defined as follows:

   - M1 = CU + DD (CU currency notes held by the public; DD is net demand of the public held by the banks.
   - M2 = M1 + Savings deposits with Post office savings banks
   - M3 = M1 + Net time deposits of commercial Banks
   - M4 = M3 + Total deposits with post office savings organizations.

   M1 and M3 are narrow money. M3 and M4 are broad money.

4. **Write the meaning of transaction motive and speculative motive of demand for money and liquidity trap.**

   Ans:

   - **Transaction Motive:** Transaction motive demand for money refers to holding money to carry out transactions. If we receive our income weekly and make payments on the first day of every week, we need not hold any cash balance throughout the rest of the week. But our expenditure patterns do not normally match our receipts. People earn incomes at discrete points in time and spend it continuously throughout the interval.

     The Transaction demand for money is represented as follows:

     $$\mathbf{M^d_T = k.\ T}$$

     Where, T is the total value of transactions in the economy ovr unit period and k is a position fraction.

- **Speculative Motive:** Some people hold cash to invest on shares, debentures, gold, immovable properties etc. The speculative demand for money refers to the demand for money that people hold as idle cash to speculate with the aim of earning capital gains and profits. The speculative demand for money can be written as follows:

$$M^d_s = \frac{r_{max} - r}{r - r_{min}}$$

Where, r is the market rate of interest and r_{max} and r_{min} are the upper and lower limits of r, both positive constants. It clearly states that as r decreases from r_{max} to r_{min}, the value of speculative demand for money decreases from zero to infinity.

VII Answer the following questions in 20 sentences

1. **Explain the functions of money?. How does money overcome the short comings of a barter system?**

Ans: The functions of Money are broadly classified as follows:

- Primary Functions
- Secondary Functions
- Contingent Functions

I Primary Functions:

The primary functions of money are as follows:

e) **Medium of Exchange**: Money plays an important role as a medium of exchange. It facilitates exchange of goods for money. It has solved the problems of barter system. Barter exchanges become extremely difficult in a large economy because of the high costs people would have to incur looking for suitable persons to exchange their surpluses. It helps the people to sell in one place and buy in another place. Money has widened the scope of market transactions. Money has become a circulating material between buyers and sellers.

f) **Measure of Value/Unit of account:** The money acts as a common measure of value. The values of all goods and services can be expressed in terms of money. As a measure of value, money performs following functions:
   - The value of all goods and services measured and expressed in terms of the money.
   - Rate of exchange of goods and services expressed in money.
   - Facilitates the maintenance of accounts.
   - It facilitates price mechanism.
   - It makes goods and services comparable in terms of price.

For instance, when we say that the value of a book is Rs.500 we mean that the book can be exchanged for 500 units of money where a unit of money is rupee in this case. If the price of a pencil is Rs.5 and that of a pen is Rs.10 we can calculate the relative price of a pen with respect to a pencil i.e., a pen is worth 10/5=2 pencils.

II Secondary Functions: The secondary functions of money are as follows:

a) **Store of value:** People can save part of their present income and hold the same for future. Money can be stored for precautionary motives needed to overcome financial stringencies. Money solves one of the deficiencies of barter system i.e., difficulty to carry forward one's wealth under the barter system.

For instance, we have an endowment of wheat which we do not wish to consume today entirely. We may regard this stock of surplus wheat as an asset which we may wish to consume or even sell off, for acquiring other commodities at some future date. But wheat is a perishable item and cannot be stored beyond a certain period. Also, holding the stock of rice required a lot of space. We may have to spend considerable time and resources looking for people with a demand for wheat when we wish to exchange our stock for buying other commodities. This problem can be solved if we sell our wheat for money. Money is not perishable land its storage costs are also less.

b) **Standard of deferred payments:** All the credit transactions are expressed in terms of money. The payment can be delayed or postponed. So, money can be used for delayed settlement of dues or financial commitments.

c) **Transfer of value:** Money acts as a transfer of value from person to person and from place to place. As a transfer of value, money helps us to buy goods, properties or anything from any part of the country or the world. Further, money earned in different places can be brought or transferred to anywhere in the world.

III Contingent Functions of Money: Other than Primary and Secondary functions, money also performs other functions which are as follows:

a) **Basis of Credit:** Money serves as a basis of the credit. The modern credit system exists only because of existence of money.
b) **Distribution of National Income:** Money helps in distribution of national income. The reward paid to factors of production in the form of rent, wages, interest and profit are nothing but the distribution of National Income at factor prices.
c) **Provides Liquidity and Uniformity:** Money provides liquidity to all kinds of assets both moveable and immovable. Money can be converted into any type of asset and all assets can be converted into money.
d) **Helps in consumers' and producers' equilibrium:** All goods and services are expressed in terms of money. The consumer attains equilibrium when the price of a product is equal to his marginal utility. Similarly, the producers reach equilibrium if they get maximum satisfaction. Both consumers and producers try to achieve equilibrium with the help of money.

2. **Write the story of gold smith Lala on the process of deposit and loan (credit) creation by commercial banks.**

Ans: Once there was a goldsmith named Lala in a village. In this village, people used gold and other precious metals in order to buy goods and services. These metals were acting as money. People in the village started keeping their gold with Lala for safe keeping. In return for keeping their gold, Lala issued paper receipts to people of the village and charged a small fee from them. Slowly, over time, the paper receipts issued by Lala began to circulate as money. This means that instead of giving gold for purchasing wheat, some would pay for wheat or shoes or any other good by giving the paper receipts issued by Lala. Thus, the paper receipts started acting as money since everyone in the village accepted these as a medium of exchange.

Let us imagine that Lala had 100 kgs of gold, deposited by different people and he had issued receipts corresponding to 100 kgs of gold. At this time Ramu comes to Lala and asks for a loan of 25 kgs of gold. Now Lala can decide that everyone with gold deposits will not come to withdraw their deposits at the same time and so he may as well give the loan to Mr.Ramu and charge ;him for it. If Lala gives the loan of 25 kgs of gold, Ramu could also pay Mr.Ali with these 25 kgs of gold and Ali could keep the 25 kgs of gold with Lala in return for a paper receipt. In effect, the paper receipts, acting as money, would have increased to 125 kgs now. It seems that Lala has created money out of thin air. The modern banking system works precisely the way Lala behaves in this example.

3. Explain the open market operation.

Ans: The open market operations as one of the tools of RBI to control money supply, refers to buying and selling of bonds issued by the Government in the open market. This purchase and sale is entrusted to the RBI on behalf of the Government.

When RBI buys a Government bond in the open market, it pays for it by giving a cheque. This cheque increases the total amount of reserves in the economy and thus increases the money supply. Similarly, selling of a bond by RBI to private individuals or institutions leads to reduction in quantity of reserves and money supply.

There are two types of open market operations. They are as follows:

a) **Outright:** Outright open market operations are permanent in nature. When the RBI buys the securities, it is without any promise to sell them later. Similarly, when the RBI sells these securities, it is without any promise to buy them later. As a result, the injection/absorption of the money is of permanent nature.

b) **Repo:** This is another type of operation in which the RBI buys the security with agreement of purchase on particular date and price. This is called repo. The interest rate at which the money is lent in this way is called repo rate.

Similarly, instead of outright sale of securities the RBI may sell the securities through an agreement which as a specification about the date and price at which it will be repurchased. This type of agreement is called reverse repo. The rate at which the money is withdrawn in this manner is called the reverse repo rate.

The RBI conducts repo and reverse repo operations at various maturities like overnight, 7 days, 14 days etc. These types of operations have now become the main tool of monetary policy of the RBI.

4. Requirement of reserves acts as a limit to money (credit) creation. Explain.

Ans: The RBI decides a certain percentage of deposits which every bank must keep as reserves. This is done to ensure that no bank is over lending. This is a legal requirement and is binding on the banks. This is called the CRR (Cash Reserve Ratio).

Apart from the CRR, banks are also required to keep some reserves in liquid form in the short term. This ratio is called SLR (Statutory Liquidity Ratio). The statutory requirement of the reserve ratio acts as a limit to the amount of credit that banks can create.

For example, let us assume that Canara Bank starts with a deposit of Rs.1000 made by Mr.X. The reserve ratio is 20%. Thus Canara Bank has Rs.800 (1000 –

200=800.i.e.,20% of 1000 is deducted) to lend and the bank lends out of Rs.800 to Mr.Y, which is shown in the bank's deposits in the next round as liabilities, making a total of Rs.1800 as deposits. Now Canara bank is required to keep 20% of 1800 i.e., 360 as cash reserves. The bank had started with Rs.1000 as cash. Since it is required to keep only Rs.360 as reserves it lends Rs.640 (1000-360=640). The bank lends out Rs.640 to Mr.Z. This in turn shows up in the bank, as deposits. The process keeps repeating itself till all the required reserves become Rs.1000. The required reserves will be Rs.1000 only when the total deposits become Rs.5000. This is because, for deposits of Rs.5000, cash reserves would have to be Rs.1000 (20% of 5000 = 1000)

The process is illustrated in the following table:

Round	Deposit in Bank	Required Reserve	Loan made by Bank
1	1000	200	800
2	1800	360	640
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
Last	5000	1000	4000

In the above table, the first column lists each round. The second column depicts the total deposits with the bank at the beginning of each round. 20% of these deposits need to be deposited with the RBI as required reserves (3rd column). What the bank lends in each round gets added to the deposits with the bank in the 2nd round. 4th column indicates the loans made by the banks.

VII Assignment and project oriented questions

1. **Write a note on Demonetisation.**

   Ans: Demonetisation was a new step taken by the Government of India on 8th November, 2016. It was introduced to tackle the problem of corruption, black money, terrorism and circulation of fake currency in the economy. Old currency notes of Rs.500 and Rs.1000 were no longer legal tender. New currency notes in denomination of Rs.500 and Rs.2000 were introduced. The public were advised to deposit old currency notes in their bank account till 31st of March 2016 without any declaration and upto 31st March 2017 with the RBI with declaration.

In order to avoid a complete breakdown and scarcity of cash, Government allowed exchange of Rs.4000 old currency notes with new currency restricting to a person per day. Further till 12th December 2016, old currency notes were acceptable as legal tender at petrol pumps, Government hospitals and for payment of Government dues like taxes, power bills etc.

This initiative had both appreciation and criticism. There were long queues outside banks and ATM centres. There was acute shortage of currency notes and had adverse effect on economic activities. But now, normalcy has returned.

The demonetization also has positive effects. It improved tax compliance as a large number of people were bought in the tax ambit. The savings of individual were channelized into the formal financial system. As a result, banks have more resources at their disposal which can be used to provide more loans at low rate of interest.

Demonetisation helps in curbing black money, reducing tax evasion and corruption will decrease. It also help in tax administration in another way, by shifting transaction out of the cash economy into the formal payment system. Now a days, households and firms have started to shift from cash payment to electronic payments.

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CHAPTER – 4

DETERMINATION OF INCOME AND EMPLOYMENT

I Choose the correct answer

1. Consumption which is independent of income is called
   a) Induced consumption b) Autonomous consumption
   b) Wasteful consumption c) Past consumption
   Ans: (b) Autonomous consumption
2. Value of MPC lies between
   a) 1 and 2 b) 0 and 1 c) 2 and 4 d) 0 and 0.5
   Ans: (b) 0 and 1
3. The point where ex-ante aggregate demand is equal to ex-ante aggregate supply will be
   a) Equilibrium b) disequilibrium c) Excess demand d) Excess supply
   Ans: (a) Equilibrium
4. Easy availability of credit encourages
   a) Savings b) Investment c) Rate of interest d) None of the above
   Ans: (b) Investment
5. In the situation of excess demand
   a) Demand is less than the level of output (c) Supply is less than the level of output
   b) Demand is more than the level of output (d) Supply is more than the level of output
   Ans: (b) Demand is more than the level of output.

II Fill in the blanks

1. cY shows the dependence of consumption on ………
   Ans: Income.
2. Savings is that part of income that is ………..
   Ans: Not consumed.
3. Average propensity to consume (APC) is the consumption per unit of ………..
   Ans: Income
4. **………**is defined as addition to the stock of physical capital.
   Ans: Investment
5. Size of the multiplier depends on the value of ……………
   Ans: marginal propensity to consume (c)
6. I is a positive constant which represents the ……..investment in the economy.
   Ans: Autonomous

III Match the following

A	B
1. Savings	**a) APC (Average propensity to consume**
2. Raw material	**b) C + I + cY**
3. Consumption per unit of income	**c) Intermediate good**
4. Aggregate demand for final goods	**d) Leads to rise in the prices in the long run**
5. Excess demand	**e) Y – C**

Ans: 1 – (e); 2 – (c); 3 – (a); 4 – (b); 5 – (d);

IV Answer the following questions in a sentence/word

1. **Write the meaning of autonomous consumption.**
   Ans: The consumption which is independent of income is called as autonomous consumption.
2. **Give the meaning of Marginal Propensity to Save (MPS)**
   Ans: It is the change in savings per unit change in income. It is denoted by 'S' and is equal to 1-c.
3. **Define Average Propensity to Save.**
   Ans: It is the consumption per unit of income. It is obtained by dividing consumption by income i.e., c/y. where c is consumption and y is income.
4. **Write the meaning of full employment level of income.**
   Ans: Full employment level of income is that level of income where all the factors of production are fully employed in the production process.
5. **Mention two fiscal variables which influence aggregate demand.**
   Ans: The two fiscal variables which influence aggregate demand are as follows:
   a) Tax. b) Government Expenditure.
6. **Write the formula of MPC.**
   Ans: It is the change in consumption per unit change in income. Its formula is
   MPC = $\Delta C/\Delta Y$ = c

V Answer the following questions in 4 sentences

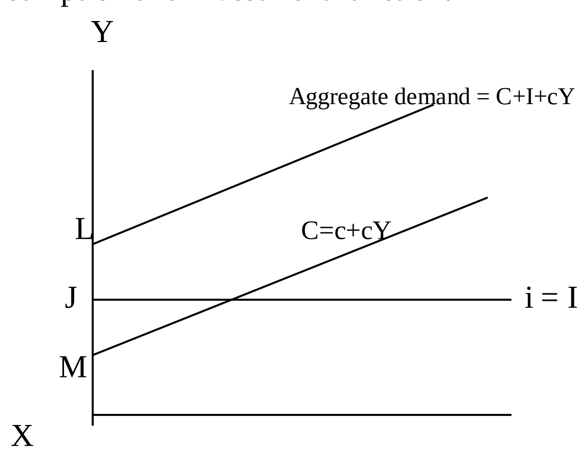
1. **Write the meaning of excess demand and deficient demand.**
   Ans: If the equilibrium level of output is more than the full employment level, it is due to the fact that the demand is more than the level of output produced at full employment level. This situation is called excess demand.
   If the equilibrium level of output is less than the full employment of output, it is due to fact that demand is not enough to employ all factors of production. This situation is called deficient demand.
2. **Give the meaning of investment multiplier. Write its formula.**
   Ans: Investment multiplier is the ratio of the total increment in equilibrium value of final goods output to the initial increment in autonomous expenditure. Its formula is

Investment Multiplier = $\Delta Y/\Delta A = 1/1\text{-}c$.
Where ΔY is the total increment in final goods output, ΔA is initial increment in autonomous expenditure; c is size of the multiplier

3. **Give the meaning of paradox of thrift.**
Ans: As people become more thrifty, they end up saving less or same as before in aggregate, known as Paradox of thrift.
In other words, If all the people of the economy increase the proportion of income they save, total value of savings in the economy will not increase – it will either decrease or remain unchanged. This result is known as the Paradox of Thrift.
4. **What are the factors which cause change in aggregate demand?**
Ans: The factors which cause change in aggregate demand are as follows:
    - Change in consumption
    - Change in investment

VI Answer the following questions in 12 sentences.

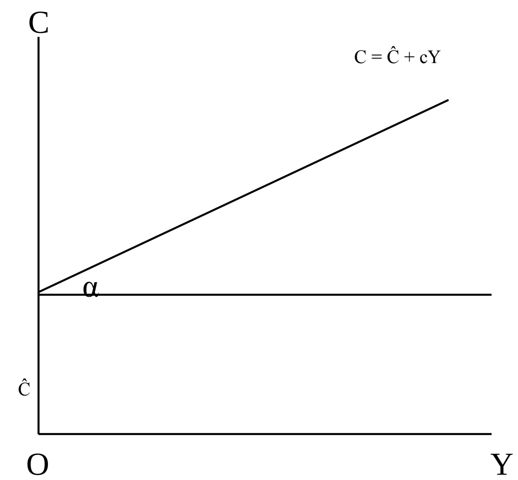
1. **Give the meaning of Aggregate demand function. How can it be obtained graphically?**
Ans: The aggregate demand function shows the total demand at each level of income. Graphically it means the aggregate demand function can be obtained by vertically adding the consumption and investment function.



Here, OM = C, OJ = I, OL = C + I

The aggregate demand is obtained by vertically adding the consumption and investment functions. The aggregate demand function is parallel to the consumption i.e., they have the same slope of ‘c’

2. **Briefly explain consumption function.**
Ans: The consumers demand can be expressed by the equation $C = \hat{C} + cY$, where $\hat{C}$ is autonomous expenditure and c is the marginal propensity to consume. The consumption function can be shown as follows:
The consumption function can be graphically expressed as follows:

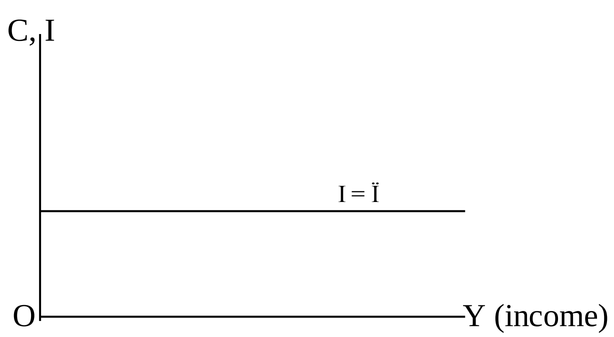


In the above diagram Ĉ is the intercept of the consumption. ‘c’ is slope of consumption function equals α.

3. **Explain the consumption and investment function with the help of graphs.**

Ans: In a two sector model, there are two sources of final demand. The first is consumption and the second is investment. The investment function was shown as I = Ï.

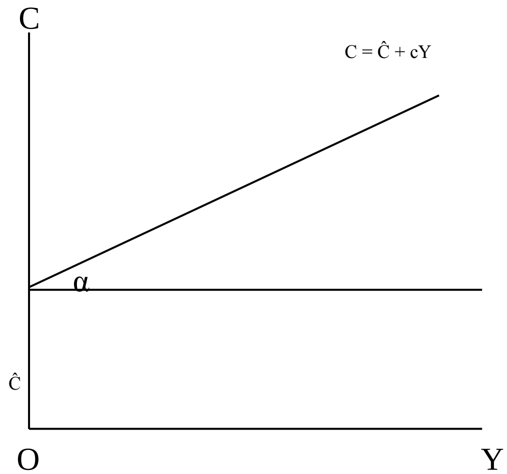
Graphically, this is shown as a horizontal line at a height equal to Ï above the horizontal axis.



In this model, I is autonomous which means, it is the sasme no matter whatever is the level of income.

The consumers demand can be expressed by the equation C = Ĉ + cY, where Ĉ is autonomous expenditure and c is the marginal propensity to consume. The consumption function can be shown as follows:

The consumption function can be graphically expressed as follows:



In the above diagram Ĉ is the intercept of the consumption. ‘c’ is slope of consumption function equals α.

VII Answer the following questions in 20 sentences

1. **Explain the effect of an autonomous change in aggregate demand on income and output**

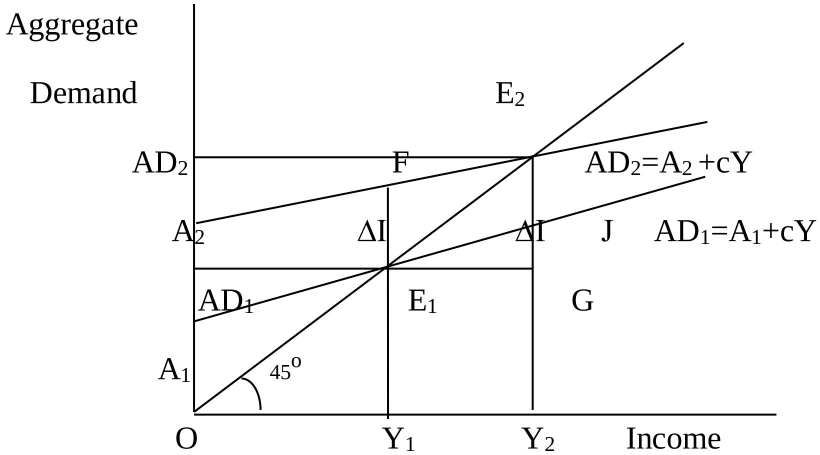
   Ans: The equilibrium level of income depends on aggregate demand. If aggregate demand changes, the equilibrium level of income also changes. This happens in any one or combination of the following situations.

   a) Change in consumption: The change in consumption can happen due to Change in autonomous consumption (Ĉ) and marginal propensity to consume (c).

   b) Change in investment: It is assumed that investment is autonomous. That means it does not depend on income. There are other variables which can affect investment, they are

      - **Availability of credit**; easy availability of credit encourages investment.
      - **Interest rate**: Rate of interest is the cost of investible funds and at higher interest rates, firms tend to lower investment.

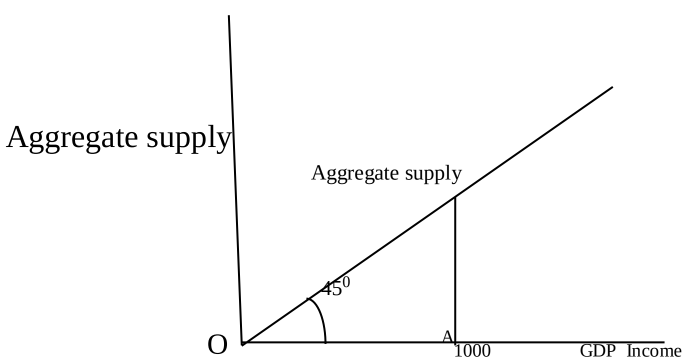
   The effect of an autonomous change in Aggregate demand on Income and output can be explained with the help of following diagram.



In the above diagram, Income is measured in X axis and Aggregate demand is measured in Y axis. When autonomous investment increases, the AD_1 line shifts in parallel upwards and assumed the position AD_2. The value of aggregate demand at output Y_1 is Y_1F, which is greater than the value of output Y_1E_1 by an amount of E_1F. E_1F measures the amount of excess demand that emerges in the economy as a result of the increase in autonomous expenditure. Thus, E_1 is not longer represents the equilibrium. In order to find out new equilibrium in the final goods market we have to see the point where the new aggregate demand line AD_2 intersects the 45^0 line. It occurs at point E_2 which is, therefore, the new equilibrium point. The new equilibrium values of output aggregate demand are Y_2 and AD_2 respectively.

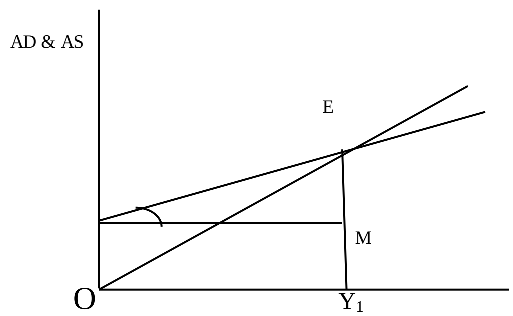
At E_2 , output and aggregate demand have increased by an amount $E_1G=E_2J$, which is greater than the initial increment in autonomous expenditure. So $\Delta I = E_1G=E_2J$. That means, an initial increment in the autonomous expenditure seems to have a multiplier on the equilibrium values of aggregate demand and output.

2. **Explain the supply side of macroeconomic equilibrium.**
   Ans: Under macroeconomics, we consider the price level as fixed. Here, the aggregate supply or the GDP is assumed to smoothly move up or down since they are unused resources of all types available. Whatever is the level of GDP, that much will be supplied and price level has not role to play. This kind of supply situation is shown by a 45^0 line.



In the above diagram Income is measured in horizontal axis and Aggregate supply is measured in vertical axis. If GDP is Rs.1000 at point A, the goods worth of Rs.1000 is supplied.

Equilibrium: Equilibrium is shown graphically by putting ex ante aggregate demand and supply together in the following diagram.



The point where ex ante aggregate demand (AD) is equal to ax ante aggregate supply (AS) will be equilibrium. Thus equilibrium point is E and equilibrium level of income is $OY_{1.}$

3. **Explain the multiplier mechanism.**
Ans: The production of final goods employs factors like labour, capital, land and entrepreneurship. In the absence of indirect taxes or subsidies, the total value of the final goods output is distributed among different factors of production – wages to labour, interest to capital, rent to land etc. The remaining part is profit to entrepreneur. Thus the sum of aggregate factor payments i.e., National Income, is equal to the aggregate value of the output of final goods.

Example, if the value of the extra output 10 is distributed among various factors of production, the income of the economy also goes by 10. When income increases by 10, consumption expenditures goes up by 10, since people spend 0.9 (marginal propensity to consume) fraction of their additional income on consumption. Hence, in the next round, aggregate demand in the economy goes up by 0.9(10) and there again emerges an excess demand equal to 10 and so on. This can be represented in the following table.

Rounds	Consumption	Aggregate Demand	Output/Income
Round 1	0	10 (Autonomous Increment)	10
Round 2	$(0.9)10$	$(0.9)10$	$(0.9)10$
Round 3	$(0.9)^2 10$	$(0.9)^2 10$	$(0.9)^2 10$
Round 4	$(0.9)^3 10$	$(0.9)^3 10$	$(0.9)^3 10$
.	.	.	.
.	.	.	.

According to the above table, the increment in equilibrium value of total output exceeds the initial increment in autonomous expenditure. The ratio of the total increment in equilibrium value of final goods output to the initial increment in autonomous expenditure is called investment multiplier of the economy. The investment multiplier can be expressed as follows:

$\Delta Y/\Delta A = 1/1\text{-}c = 1/S$ where ΔY is the total increment in final goods output and c = mpc (marginal propensity to consume). Here, the size of the multiplier depends on the value of c. As and when c increases, the multiplier also increases.

4. **Discuss the paradox of thrift.**

Ans: The paradox of Thrift is a situation where, if all the people of the economy increase their savings, the total value of savings in the economy will not increase but it either decreases or remains constant. That means, the people become more thrifty and they end up saving less or same as before.

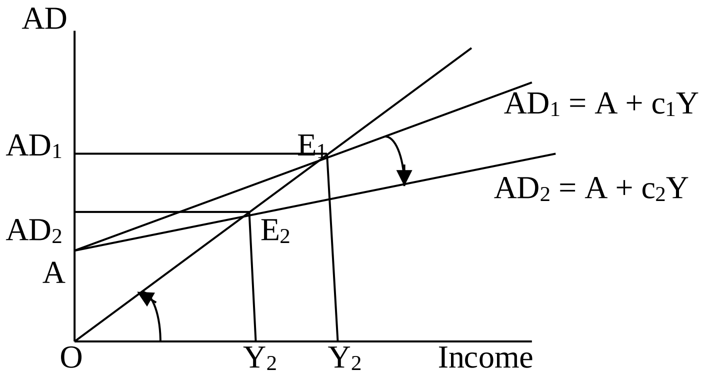
Suppose, at the initial equilibrium of Y=250, there is an autonomous shift in people's expenditure pattern- they suddenly become more thrifty. This may happen due to a new information regarding an imminent war or some other disaster, which makes people more conservative about their expenditures. Hence the MPS (marginal propensity to save) of the economy increases or the MPC (marginal propensity to consume) from 0.9 to 0.6. At the initial income of $Ad_1=Y_1=250$, this sudden decline in MPC will imply a decrease in aggregate consumption spending and aggregate demand by an amount equal to (0.9-0.6) x 250 = 75. This can be regarded as an autonomous reduction in consumption expenditure to the extent that the change in marginal propensity consume is occurring from some exogenous cause and is not a consequence of changes in the variables of the model.

As Aggregate demand decreases by 75, it falls short of the output $Y_1=250$ and there will be excess supply equal to 75 in the economy. Stocks will pile up in warehouses and producers decide to cut the value of production by 75 in the next round to restore equilibrium in the market which further leads to reduction in factor payments in the next round and hence reduction in income by 75. As income decreases people reduce consumption proportionately and aggregate demand goes down again by $(0.6)^2$ 75. The process goes on as follows:

$75 + (0.6)75 + (0.6)^2 75 + \ldots\ldots\ldots\infty$. The total reduction in output turns out to be:

75/1-0.6

The paradox of thrift can be explained in the following diagram.



As per the above diagram, when A changes the line shifts upwards or downwards in parallel. When c changes, however, the line swings up or down. An increase in marginal propensity to save or a decline in marginal propensity to consume reduces the slope of the AD (Aggregate Demand) line and it swings downwards. The above diagram depicts the paradox of thrift – downwards swing of AD line.

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CHAPTER 5

GOVERNMENT BUDGET AND THE ECONOMY

I Choose the correct answer

1. The taxes on individual and firms are
   a) Direct taxes b) Indirect taxes c) Fixed taxes d) Non tax revenues
   Ans: (a) Direct taxes.
2. Duties levied on goods produced within the country
   a) Service tax b) Estate duties c) Excise duties d) customs duties
   Ans: (c) Excise duties
3. The tax which acts as an automatic stabilizer
   a) Qualitative income tax c) Quantitative tax
   b) Income tax d) Proportional income tax
   Ans: (d) Proportional income tax
4. Which of the following is an example for 'paper tax'?
   a) Income tax b) Excise taxes c) Wealth tax d) Customs taxes
   Ans: (c) Wealth Tax
5. When demand exceeds the available output under conditions of high level of employment, this may give rise to
   a) Inflation b) Deflation c) Stabilisation d) None of the above.
   Ans: (a) Inflation

II Fill in the blanks:

1. Non paying users of public goods are known as ………….
   Ans: Free riders.
2. Financial year runs from ………….to………….in India.
   Ans: 1st April to 31st March.
3. Taxes imposed on goods imported into and exported out of India re called……….
   Ans: Customs duties
4. The Government may spend an amount equal to the revenue it collects. This is known as…………
   Ans: Balanced budget
5. Revenue deficit = Revenue expenditure minus ………….
   Ans: Revenue Receipts.

III Answer the following questions in a sentence/word.

1. **What are public goods?**
   Ans: Public goods are the goods and services provided by the Government and which cannot be provided by the market mechanism. Example, Roads, defence, etc.
2. **Who are free riders?**
   Ans: If some users do not pay and it is difficult and impossible to collect fees for the public good, such non paying users are known as free riders.
3. **What do you mean by public provision?**
   Ans: Public provision means that they are financed through the budget and can be used without any direct payment.
4. **Give the meaning of progressive tax.**
   Ans: It is the taxation system in which higher the income, higher is the tax rate and lower the income, lower is the tax rate.
5. **What are revenue receipts?**
   Ans: Revenue receipts are those receipts that do not lead to a claim on the government. They consist of Tax and non-tax revenues.
6. **Write the meaning of capital receipts.**
   Ans: All those receipts of the Government which create liability or reduce financial assets are termed as capital receipts.
7. **Give the meaning of Revenue expenditure.**
   Ans: Revenue Expenditure is expenditure incurred for purposes other than the creation of physical or financial assets of the central government. This expenditure is related to maintain government departments and various services, interest payments, grants given to state governments etc.
8. **Give the meaning of capital expenditure.**
   Ans: The capital expenditures are the expenses of government which result in creation of physical or financial assets or reduction in financial liabilities. It includes expenditure on the acquisition of land, building, machinery, equipment, investment in shares, etc.
9. **Expand FRBMA**
   Ans: Fiscal Responsibility and Budget Management Act.
10. **What is primary deficit?**
    Ans: Primary deficit is the fiscal deficit minus the interest payments. Or Gross Primary deficit = Gross Fiscal deficit – Net interest liabilities.

IV Answer the following questions in 4 sentences.

1. **Write the difference between public provision and public production.**
   Ans: The difference between Public provision and public production are as follows:

Public Provision	Public production
• A set of facilities financed by the government through its budget.	• When the goods produced directly by the Government, it is called public

• These are used without any direct payment. Example Free education, mid day meals etc.	production. • These are used with direct payment. Example Electricity, water supply etc.

2. **Who are free riders? Why are they called so?**
   Ans: If some users do not pay and it is difficult and sometimes impossible to collect fees for the public good, such non paying users are known as free riders.
   They are called so because, consumers will not voluntarily pay for what they can get for free and for which there is no exclusive title (ownership) to the property being enjoyed.
3. **Distinguish between surplus budget and deficit budget.**
   Ans: The distinction between surplus budget and deficit budget is as follows:

Surplus Budget	**Deficit Budget**
• Here, the tax collection of Government exceeds its required expenditure. • It generally made by developed countries.	• Here, the Government's expenditure exceeds its revenue. • It is generally made by developing countries.

4. **Why public goods must be provided by the Government?**
   Ans: In order to understand why public goods need to be provided by the government, we must understand the difference between private goods and public goods. Viz.,
   - The benefits of public goods are available to all and are not restricted to one consumer. Example public goods like, park or measures of air pollution, the benefits will accrue to all whereas private goods, say, chocolates, will not be available to others.
   - In case of private goods anyone who does not pay for the goods can be excluded from enjoying its benefits. But, in pubic goods, there is no feasibility way of excluding anyone from enjoying the benefits of the good.

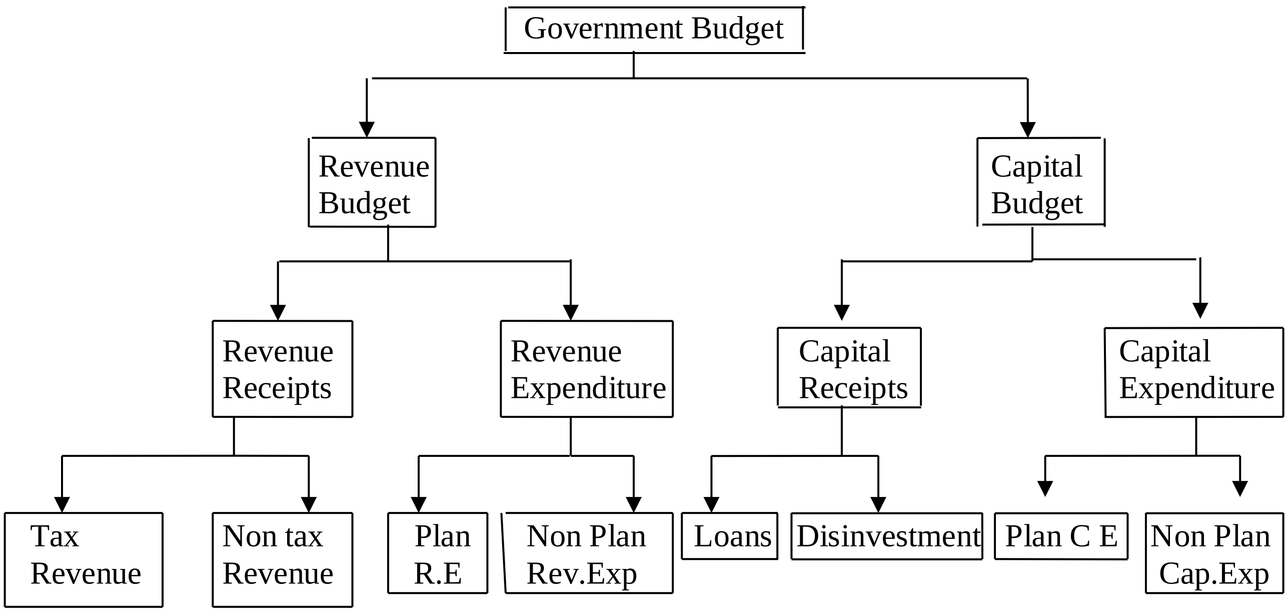
   Hence, public goods must be provided by the Government.
5. **Mention the non-tax revenues of the central government.**
   Ans: The non-tax revenues of the central government mainly consists of the following:
   - Interest receipts on account of loans by the central government.
   - Dividends and profits on investments made by the government.
   - Fees and other receipts for services rendered by the government.
   - Grants-in-aid from foreign countries and international organizations.
6. **Why the proportional income tax acts as automatic stabilizer.**
   Ans: The proportional income tax, acts as an automatic stabilizer because, it makes disposable income and consumer spending less sensitive to fluctuations in GDP. When GDP rises, disposable income also rises but by less than the rise in GDP because a part of it is siphoned off as taxes. This helps to limit the upward fluctuation in consumption spending.
   During a recession when GDP falls, disposable income falls less sharply and consumption does not drop as much as it otherwise would have fallen, had the tax

liability been fixed. This reduces the fall in aggregate demand and stabilizes the economy.

V Answer the following questions in 12 sentences.

1. **Write the chart of the Government budget.**

   Ans: The chart of Government Budget is represented as follows:



R E – Revenue Expenditure; C E – Capital Expenditure

2. **Distinguish between Revenue expenditure and capital expenditure.**

   Ans: The differences between Revenue Expenditure and Capital Expenditure are as follows:

Revenue Expenditure	Capital Expenditure
• Revenue Expenditure is expenditure incurred for purposes other than the creation of physical or financial assets of the central government.	• The capital expenditures are the expenses of government which result in creation of physical or financial assets or reduction in financial liabilities.
• This expenditure is related to maintain government departments and various services, interest payments, grants given to state governments etc.	• It includes expenditure on the acquisition of land, building, machinery, equipment, investment in shares, etc.
• It includes Plan Revenue expenditure and non-plan revenue expenditure.	• It includes plan capital expenditure and non-plan capital expenditure.
• Interest payments, external loans and from various reserve funds constitute largest component under non-plan revenue expenditure.	• Central plan and central assistance for state and union territory plans constitute largest component under non-plan capital expenditure.

3. **Briefly explain the revenue deficit and fiscal deficit.**

Ans: If the Government's expenditure exceeds its revenue, it is called Budget deficit. The budget deficit includes Revenue Deficit and Fiscal Deficit.

a) **Revenue Deficit:** The revenue deficit refers to the excess of Government's revenue expenditure over revenue receipts. That means-

Revenue Deficit = Revenue Expenditure – Revenue Receipts.

The revenue deficit includes only such transactions that affect the current income and expenditure of the government. When the government incurs a revenue deficit, it implies that the government is dis-saving and is using up the savings of the other sectors of the economy to finance a part of its consumption expenditure.

b) **Fiscal Deficit:** It is the difference between the government's total expenditure and its total receipts excluding borrowing. That is

Gross Fiscal Deficit = Total Expenditure – (Revenue receipts + non-debt creating capital receipts).

The non-debt creating capital receipts are those receipts which are not borrowings and, therefore, do not give rise to debt. Examples are recovery of loans and the proceeds from the sale of public sector undertakings.

The fiscal deficit has to be financed through borrowing. It indicates that the total borrowing requirements of the government from all sources. Therefore, from the financing side,

Gross fiscal deficit = net borrowing at home + borrowing from RBI + Borrowing from abroad.

The net borrowing at home includes the directly borrowed from the public through debt instruments and indirectly from commercial banks through Statutory Liquidity Ratio.

In fact, revenue deficit is a part of fiscal deficit. A large share of revenue deficit in fiscal deficit indicates that a large part of borrowing is being used to meet its consumption expenditure needs rather than investment.

4. **Does public debt impose a burden? Explain.**

Ans: There are two interlinked aspects of perspectives on the appropriate amount of Government Debt. One is whether government debt is a burden and the other is the issue of financing the debt.

The burden of debt can be discussed by keeping in mind that what is true for an individual debt may not be true for the government's debt. Unlike any one individual, the government can raise resources through taxation and other means.

The government, by borrowing, transfers the burden of reduced consumption on future generations. This is because it borrows by issuing indemnity bonds to the people living at present but may decide to pay off the bonds 10 years later by raising taxes. The tax may be levied on the young population that has just entered the work force, whose disposable income will go down and hence consumption. Thus, national savings would fall. Further, government borrowing from the people reduces the savings available to the private sector.

Therefore, to the extent of the reduction in capital formation and growth, debt acts as a burden on future generations.

Traditionally, it has been argued that when a government reduces taxation and runs a budget deficit, consumers respond to their after-tax income by spending more. It is possible that these people are short sighted and do not understand the implications of budget deficits. They may not realize that at some point in the future the government will have to raise taxes to pay off the debt and accumulated interest.

It has been often argued that debt does not matter because we owe it to ourselves. This is because although there is a transfer of resources between generations, purchasing power remains within the nation. However, any debt received from foreign sources involves burden since we need to export goods abroad to make interest payments.

5. Write a short note on the Recardian equivalence.

Ans: It has been argued that when a government reduces taxation and runs a budget deficit, consumers respond to their after-tax income by spending more. It is possible that these people are short sighted and do not understand the implications of budget deficits. They may not realize that at some point in the future the government will have to raise taxes to pay off the debt and accumulated interest.

A counter argument is that consumes are forward looking and will base their spending not only on their current income but also on their expected future income. They will understand that borrowing today means higher taxes in the future. Further, the consumer will be concerned about future generations. They would increase savings now, which will fully offset the increased government dis-saving so that national savings do not change. This view is called Ricardian equivalence.

David Ricardo said that in the face of high deficits, people save more. It is called equivalence because, the taxation and borrowing are equivalent means of financing expenditure. When the government increases spending by borrowing today, which will be repaid by taxes in the future, it will have the same impact on the economy as an increase in government expenditure that is financed by a tax increase today.

VI Answer the following questions in 20 sentences.

1. **Explain the classification of receipts.**

   Ans: The government budget consists of Revenue Budget and Capital Budget. Both the budgets have receipts viz., Revenue Receipts and Capital receipts.

Revenue Receipts: Revenue receipts are those receipts which do not lead to a claim on the government. They include the following:

- Tax Revenue
- Non Tax Revenue

Tax Revenues are the important component of revenue receipts. Tax revenue consists of Direct tax and indirect taxes. The direct tax includes income tax, corporate tax and indirect tax includes excise duty (tax on production of goods in the country), customs duties (tax on exports and imports) and service tax (GST-Goods and Services Tax has been introduced in place of indirect taxes from 1st july 2017). Other direct taxes like wealth tax and gift tax have never brought in large amount of revenue and thus they are called as paper taxes.

The non tax revenue of the central government consists of the following:

- Interest receipts on account of loans by the central government.
- Dividends and profits on investments made by the government.
- Fees and other receipts for services rendered by the government.
- Grants-in-aid from foreign countries and international organizations.

Capital Receipts: All those receipts of the government which create liability or reduce financial assets are termed as capital receipts. The government receives money by way of loan or from the sale of its assets. Loans have to be repaid to the agencies from whom the government has borrowed. Thus it creates liability. Sale of government assets like sale of shares in Public Sector Undertakings (disinvestment), reduces the total amount of financial assets of the government.

When government takes fresh loans it means that it has to be returned with interest. Similarly, when government sells an asset it means that in future its earnings from that asset will disappear. Thus, these receipts can be debt creating or non-debt creating.

2. **Explain the classification of expenditure.**

Ans: The public expenditure can be classified as follows:

- Revenue Expenditure
- Capital Expenditure

Revenue Expenditure: It is the expenditure of government spent on the purposes other than the creation of physical or financial assets. It is incurred for the normal functioning of the government departments and various services, interest payments, grants given to state governments and other parties. The revenue expenditure consists of the following:

- Plan Revenue expenditure; and
- Non-plan revenue expenditure.

The plan revenue expenditure is related to central plans and central assistance for state and union territory plans.

The non plan revenue expenditure is the more important component of revenue expenditure. It covers a vast range of general, economic and social services of the government. The main items of non-plan expenditure are interest payments, defence services, subsidies, salaries and pensions.

Capital Expenditure: The capital expenditure of the government includes the expenditures which result in creation of physical or financial assets or reduction in financial liabilities. This includes expenditure on the acquisition of land, building, machinery, equipment, investment in shares, and loans and advances by the central government to state and union territory governments, public sector undertakings (PSUs) and other parties.

The capital expenditure is categorized as follows:

- Plan capital expenditure and
- Non-plan capital expenditure

The plan capital expenditure is related to central plan and central assistance for state and union territory plans.

The non-plan capital expenditure covers various general, social and economic services provided by the government.

3. **'The fiscal deficit gives borrowing requirements of the government'. Elucidate.**

Ans: Fiscal deficit is the difference between the government's total expenditure and its total receipts excluding borrowing. It can be expressed as follows:

Gross fiscal deficit = Total expenditure – (Revenue receipts + non-debt creating capital receipts).

The non-debt creating capital receipts are those receipts which are not borrowings and do not give rise to debt. For example, recovery of loans and the proceeds from the sale of Public sector undertakings. The fiscal deficit will have to be financed through borrowing. Thus, it indicates the total borrowing requirements of the government from all sources. From the financing side the fiscal deficit can be expressed as follows:

Gross Fiscal Deficit = Net borrowing at home + borrowing from RBI + Borrowing from abroad.

The net borrowing at home includes that directly borrowed from the public through debt instruments (small savings schemes) and indirectly from commercial banks through statutory liquidity ratio.

The gross fiscal deficit is a very important variable in judging the financial health of the public sector and the stability of the economy. Further, revenue deficit is a part of fiscal deficit (i.e., Fiscal Deficit = Revenue Deficit + capital expenditure – non-debt creating capital receipts). A large share of revenue deficit in fiscal deficit indicates that a large part of borrowing is being used to meet its consumption expenditure needs rather than investment.

4. **Discuss the issue of deficit reduction.**
Ans: The deficit reduction has become the major issue in recent years. The government deficit can be reduced by an increase in taxes or reduction in expenditure.

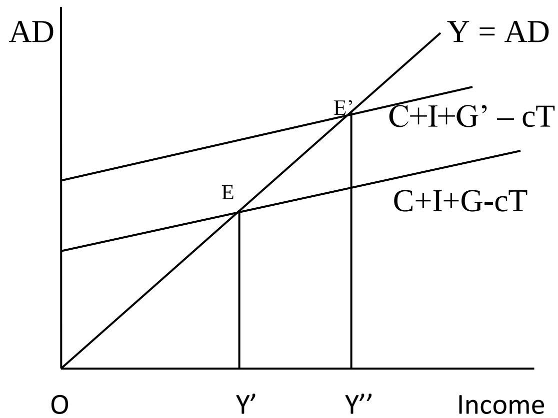
In India, the government has been trying to increase tax revenue with greater reliance on direct taxes as the indirect taxes are regressive in nature and have impact on all income groups equally. There is also an attempt made to raise receipts through disinvestment.

The major thrust is towards reduction in government expenditure. This could be achieved through making government activities more efficient through better planning of programmes and better administration. The recent study says that, to transfer Re.1 to the poor, the government spends Rs.3.65.

The other way of reducing government expenditure is to change the scope of the government by withdrawing from some of the areas where it operated before. Cutting back government programmes in vital areas like agriculture, education, health, poverty alleviation etc. would adversely affect the economy. Governments in many countries run huge deficits forcing them to eventually put in place self-imposed constraints of not increasing expenditure over pre-determined levels.

These will have to be examined keeping in view the above factors. We must note that larger deficits do not always signify a more expansionary fiscal policy. The same fiscal measures can give rise to a large or small deficit, depending on the state of the economy. For instance, if an economy is facing recession, the GDP falls. The fall in GDP leads to fall in tax collection because the firms and households pay lower taxes when they earn less.

5. **Explain the changes in taxes with the help of a diagram.**
Ans: We know that a decrease in tax leads to increase in disposable income at each level of income. This shifts the aggregate expenditure schedule upwards by a fraction c of the decrease in taxes. This can be shown in the following diagram:



In the above diagram, income is measured in X axis and Aggregate demand is measured in Y axis. When the tax is decreased, there will be increase in consumption and output and the tax multiplier is negative. The tax multiplier is given as

$\Delta Y/\Delta T$ = -c/1-c.

It shows that the tax multiplier is smaller in absolute value. This is because an increase in government spending directly affects total spending whereas taxes enter the multiplier process through their impact on disposable income, which influences household consumption. Thus, with decrease in taxes, consumption and total spending increases in the first instance by $c\Delta T$.

For example, assume that the marginal propensity to consume is 0.8. The government expenditure multiplier will then be

1/1-c = 1/1-0.8 = 1/0.2 = 5.

For an increase in government spending by 100, the equilibrium income will increase by 500 (5x100). The tax multiplier is given by –c/1-c = -0.8/1-0.8 = -0.8/0.2 = -4. Therefore, a tax cut of 100 will increase equilibrium income by 400.

If the different values of the marginal propensity to consume are taken to calculate the values of the two multipliers, we find that the tax multiplier is always one less in absolute value than the government expenditure multiplier. If an increase in government spending is matched by an equal an equal increase in taxes, so that the budget remains balanced, output will rise by the amount of the increase in government spending.

VII Assignment and project oriented questions

1. **Prepare a budget on monthly income and expenditure of your family.**
   Ans: The budget is a financial statement which includes anticipated income and anticipated expenditure. An imaginary monthly income and expenditure of a family is given below:

Budget for the month of January-2019

Income		Expenditure	
1. Father's salary	Rs.50,000	1. Food	Rs.10,000
2. Rent from house	Rs.20,000	2. Electricity	Rs. 1,500
3. Income from others	Rs.10,000	3. Water	Rs. 1,000
		4. Transportation	Rs. 6,000
		5. School fees	Rs. 8,000
		6. Newspaper	Rs. 300
		7. Mobile recharge	Rs. 500
		8. Milk	Rs. 1,000
		9. Medicines	Rs. 2,000
		10. Miscellaneous	Rs. 5,000
Total :	Rs.80,000	Total :	Rs.34,800

This family has surplus budget as its income is more than expenditure.

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CHAPTER – 6

OPEN ECONOMY

I Choose the correct answer

1. The consumers and producers can choose between domestic and foreign goods, this market linkage is called
   a) Financial Market linkage   c) Labour market linkage
   b) Output market linkage   d) None of the above
   Ans: (b) Output market linkage.
2. The exchange rate is determined by the market forces of demand and supply is called as
   a) Fixed exchange rate   c) Flexible exchange rate
   b) Dirty floating exchange rate   d) None of the above
   Ans: (c) Flexible exchange rate
3. The balance of payments (BOP) record these transactions between residents and with the rest of the world
   a) Goods   b) Services   c) Assets   d) All of the above
   Ans: (d) All of the above
4. The rate at which the price of one currency in terms of foreign currency is called
   a) Exchange control   c) Foreign exchange rate
   b) Interest rate   d) None of the above.
   Ans: (c) Foreign exchange rate
5. In this standard all currencies were defined in terms of gold
   a) Metal standard   b) silver standard   c) Gold standard   d) None of the above
   Ans: (c) Gold Standard

II Fill in the blanks:

1. …………is the record of trade in goods and services and transfer payments
   Ans: Current Account
2. **………**account records all international transactions of assets.
   Ans: Capital
3. The price of foreign currency in terms of domestic currency has increased and this is called …………of domestic currency.
   Ans: Depreciation
4. **…………**is a mixture of a flexible and fixed exchange rate system.
   Ans: Managed floating exchange rate
5. The Bretton Woods conference held in the year ………….
   Ans: 1944.

III Match the following:

A	B
1. SDR	a) Dirty floating
2. Balance of payment	b) Flexible exchange rate
3. Balance of trade	c) Paper gold
4. Floating exchange rate	d) Trade in goods
5. Managed floating	e) Trade in goods and services

Ans: 1 – c; 2 – e; 3 – d; 4 – b; 5 – a;

IV Answer the following questions in a sentence/word.

1. **What do you mean by open economy?**
   Ans: An open economy is one which interacts with rest of the world through various channels.
2. **What is balance of payment?**
   Ans: The balance of payments is the record of the transactions in goods, services and assets between residents of a country with the rest of the world for a specified period of time i.e., a year.
3. **What is balance of trade?**
   Ans: Balance of trade is the difference between the value of exports and value of imports of goods of a country in a given period of time.
4. **What do you mean by fixed exchange rate?**
   Ans: Fixed exchange rate is an exchange rate between the currencies of two or more countries that is fixed at some level. Under this system, the government fixes the exchange rate at a particular level.
5. **Give the meaning of official reserve sale.**
   Ans: When the Reserve Bank of India sells foreign exchange when there is deficit balance of payments, it is called official reserve sale.
6. **Give the meaning of managed floating.**
   Ans: The managed floating exchange rate system is the mixture of a flexible exchange rate system and a fixed exchange rate system.

   Here, the central banks intervene to buy and sell foreign currencies in an attempt to moderate exchange rate movements whenever they feel that such actions are appropriate.

V Answer the following questions in 4 sentences.

1. **Mention the three linkages of open economy.**
   Ans: The three linkages of open economy are as follows:
   - Output market linkage
   - Financial Market linkage
   - Labour market linkage.

2. **What is the difference between current account and capital account?**
   Ans: The difference between current account and capital account is as follows:

Current account	Capital account
• It is the record of trade in goods and services and transfer payments. • It consists of factor and non-factor incomes apart from gifts, remittances and grants.	• It is the record of all international transactions of assets. • It includes money, stocks, bonds, government debt etc.

3. **When do surplus and deficit arises in capital account?**
   Ans: Surplus in capital account arises when the capital inflows are greater than capital outflows.
   Deficit in capital account arises when capital inflows are lesser than capital outflows.
4. **Write the meaning of balanced, surplus and deficit BOT.**
   Ans: Balance of trade is said to be in balance when exports of goods are equal to the imports of goods i.e., balanced balance of trade.
   Surplus balance of trade arises if country's exports of goods are more than its imports.
   Deficit balance of trade arises if a country's imports of goods are more than its exports.
5. **Why do people demand foreign exchange?**
   Ans: People demand foreign exchange rate because of the following reasons:
   - To purchase goods and services from other countries.
   - To send gifts abroad
   - To purchase financial assets abroad.
6. **What is foreign exchange rate?**
   Ans: Foreign exchange rate is the price of one currency in terms of another currency. It links the currencies of different countries and enables comparison of international costs and prices.
   For example, if we need to pay Rs.68 for 1 dollar, then the exchange rate is Rs.68 per dollar.
7. **Differentiate between depreciation and devaluation.**
   Ans: The difference between Depreciation and Devaluation is as follows:

Depreciation	Devaluation
• Here the price of foreign currency in terms of domestic currency increases. • It happens because of market forces i.e., demand for foreign exchange and supply of foreign exchange.	• Here, the government deliberately makes the domestic currency cheaper by increasing exchange rate. • It is a deliberate action of government.

VI Answer the following questions in 12 sentences.

1. **Write a note on balance of trade.**

   Ans: Balance of trade is the difference between the value of exports and value of imports of goods of a country in a given period of time. Export of goods is entered as a credit item in balance of trade. Import of goods is entered as a debit item in balance of trade. It is also called as Trade balance.

   Balance of trade is said to be in balance when exports of goods are equal to the imports of goods i.e., balanced balance of trade.

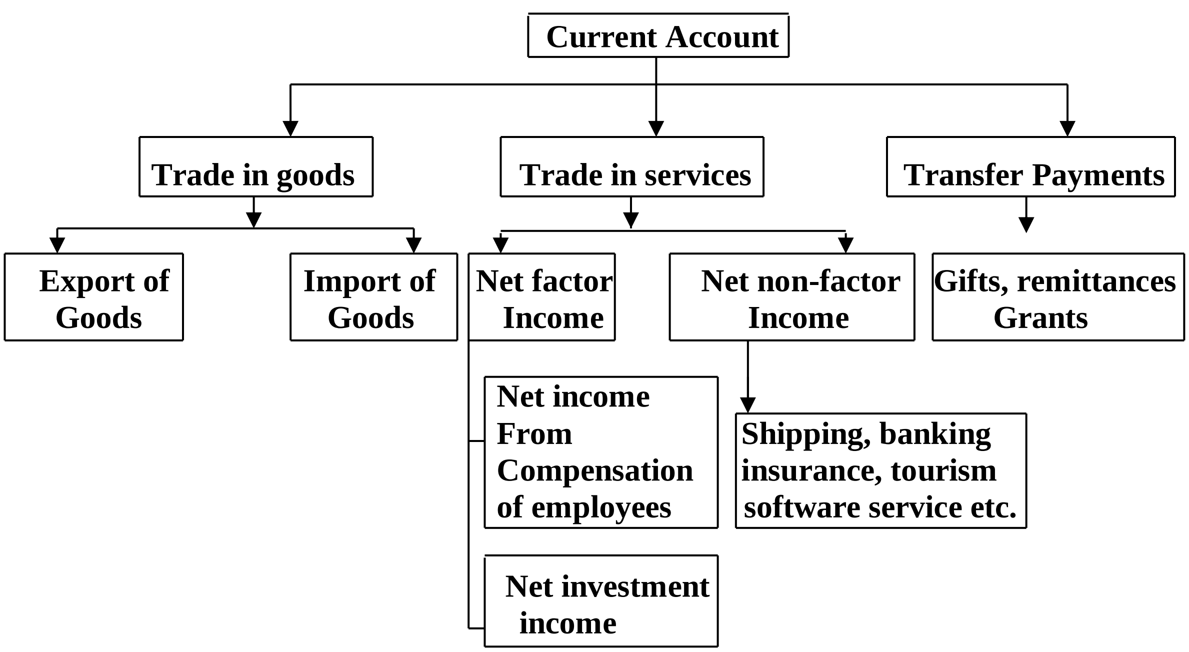
   Surplus balance of trade arises if country's exports of goods are more than its imports.

   Deficit balance of trade arises if a country's imports of goods are more than its exports.

   Balance of trade is narrow concept and it may not show the international economic position of an economy. It gives partial picture of international transactions and it is less reliable. It does not include net invisibles i.e., the difference between the value of exports and value of imports of invisibles (services) of a country in a given period of time.

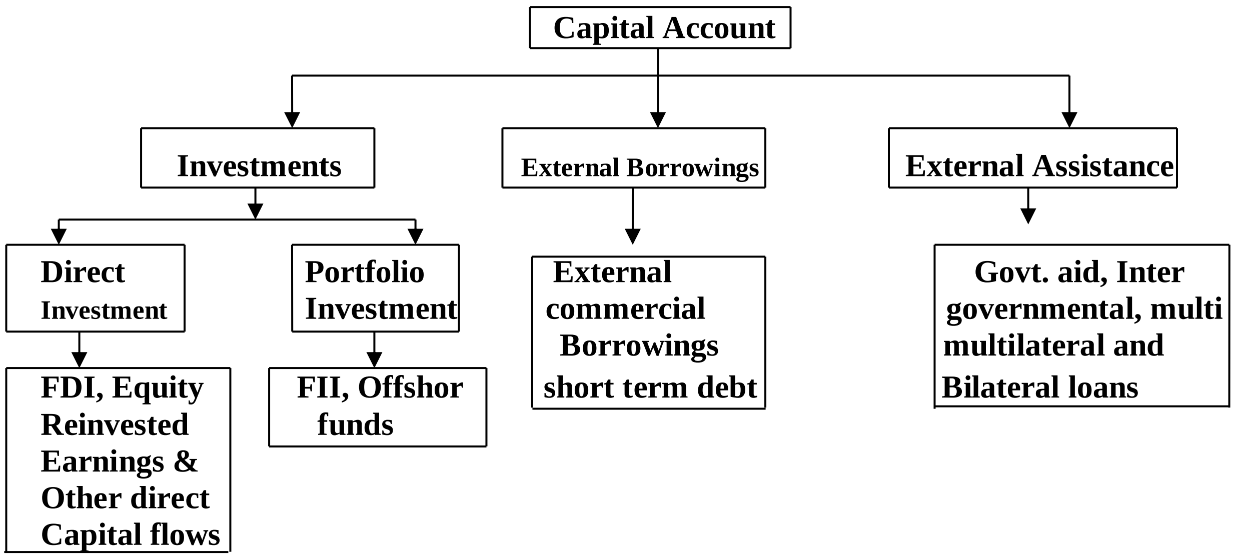
2. **Write the chart of components of current account.**

   Ans: The chart which consists of different components of current account can be drawn as follows:



3. **Write the chart of components of capital account.**

   Ans: The chart which consists of different components of capital account can be drawn as follows:



FDI – Foreign Direct Investment; FII – Foreign Institutional Investments

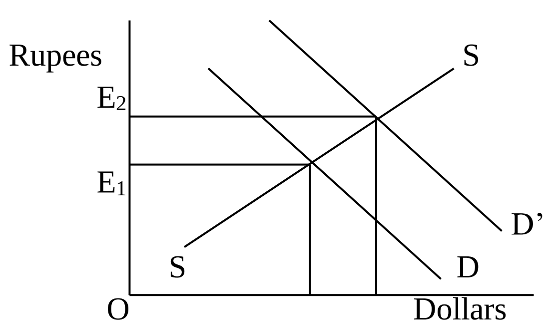
4. **Briefly explain the effect of an increase in demand for imports in the foreign exchange market with the help of a diagram.**

Ans: Foreign exchange market is the market in which national currencies are traded for one another. The major participants in the foreign exchange market are commercial banks, foreign exchange brokers and other authorized dealers and monetary authorities.

Foreign exchange rate is the price of one currency in terms of another currency. Different countries have different methods of determining their currency's exchange rate. It can be determined through flexible exchange rate, fixed exchange rate or managed floating exchange rate.

The flexible exchange rate is determined by the market forces of demand and supply. Here, the exchange rate is determined at that point where the demand curve intersects with the supply curve.

If the demand for foreign goods and services increases, the demand curve shifts upward and right to the original demand curve. This can be graphically represented as follows:



The increase in demand for imports, results in a change in the exchange rate. The initial exchange rate is E_1 = 60, which means that we need to exchange Rs.60 for one dollar. At the new equilibrium, the exchange rate becomes E_2=70, which means that we need to pay more rupees for a dollar.

The increase in the price of dollars due to rise in demand for imports indicates that the value of rupees in terms of dollars has fallen and the value of dollar in terms of rupees has increased.

5. **Explain the merits and demerits of flexible and fixed exchange rate system.**

Ans:

Flexible exchange rate: The flexible exchange rate is determined by the market forces of demand and supply. Here, the exchange rate is determined at that point where the demand curve intersects with the supply curve.

Merits of Flexible exchange rate:

- The flexible exchange rate system gives the government more flexibility and they do not need to maintain large stocks of foreign exchange reserves.
- The movements in the exchange rate automatically take care of the surpluses and deficits in the Balance of payments.

Demerits of Flexible Exchange rate:

- It is subject to international market fluctuations as the rate of exchange is determined by market forces demand and supply.
- It may lead to uncertainties in foreign exchange market due speculations.

Fixed exchange rate: Under this exchange rate system, the Government fixes the exchange rate at a particular level. Here, the central monetary authority or the Government decides the exchange rate in accordance with the international market requirements.

Merits of Fixed Exchange rate:

- There is more credibility that the government will be able to maintain the exchange rate at the level specified.
- In case of deficit balance of payments, the governments will interfere to take care of the gap by use of its official reserves.

Demerits of Fixed exchange rate:

- If the foreign exchange reserves are inadequate, people would begin to doubt the ability of the government.
- There may be aggressive buying of one currency forcing the government to devalue, so there may be speculative attack on a currency.

VII Answer the following questions in 20 sentences

1. **Write a note on balance of payment.**
   Ans: The balance of payments is the record of the transactions in goods, services and assets between residents of a country with the rest of the world for a specified time period i.e., a year. The balance of payments consists of two accounts viz.,
   - Current Account
   - Capital Account.

   Current Account: It is the record of trade in goods and services and transfer payments. The main components of current account are trade in goods i.e., exports and imports of goods. The Trade in services includes the factor income and non-factor income transactions. Transfer payments are the receipts which the residents of a country get for free without having to provide any goods or services in return. They consists of gifts, remittances and grants. They could be given by the government or by private citizens living abroad.

   Current account is in balance when receipts on current account are equal to the payments on the current account. A surplus current account means that the nation is a lender to other countries and a deficit current account means that the nation is a borrower from other countries.

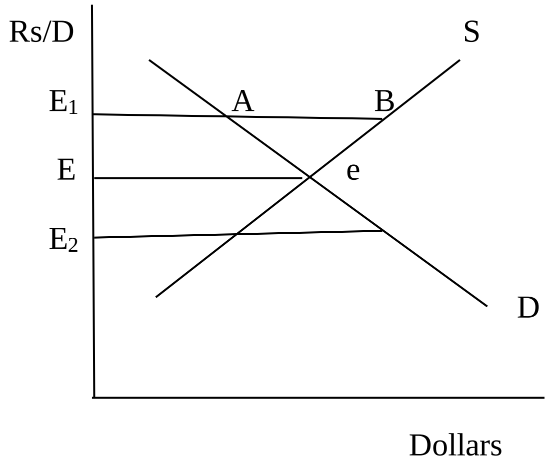
   Capital Account: It is the record of all international transactions of assets. An asset is any one of the forms in which wealth can be held.

   For example, stocks, bonds, government debt etc. Purchase of assets is a debit item on the capital account. If an Indian buys a UK car company it inters capital account transactions as a debit item. On the other hand, sale of assets like sale of share of an Indian company to a USA customer is a credit item on the capital account.

   The capital account mainly consists of foreign direct investment, foreign institutional investments, external borrowings and assistance.

   The capital account will in balance when capital inflows are equal to capital outflows. Surplus in capital account arises when capital flows are greater than capital outflows and deficit in capital account arises when capital inflows are lesser than capital outflows.
   (Capital inflows: Loans from abroad, sale of assets or shares in foreign companies)
   (Capital outflows: Repayment of loans, purchase of assets or shares in foreign countries)

2. **Briefly explain the foreign exchange market with fixed exchange rates with the help of a diagram.**
   Ans: Under fixed exchange rate system, the government decides the exchange rate at a particular level. The foreign exchange market with fixed exchange rates can be explained with the help of following diagram:



In the above diagram, the market determined exchange rate is e where demand and supply intersect. However, if the government wants to encourage exports for which it needs to make rupee cheaper for foreigners it would do so by fixing a higher exchange rate say, Rs.70 per dollar from the current exchange rate of Rs.65 per dollar. Thus, the new exchange rate set by the government is E_1 where E_1 is greater E. At this exchange rate, supply of dollars exceeds the demand for dollars. The RBI intervenes to purchase the dollars for rupees in the foreign exchange market in order to absorb this excess supply which has been marked as AB in the diagram.

Thus, by interfering, the government can maintain any exchange rate in the economy. If the government wants to set an exchange rate at a level E_2 there would be an excess demand for dollars, the government would have to withdraw dollars from its past holds of dollar. If the government fails to do so, it will encourage black market transactions.

3. **Write a short note on the gold standard.**

Ans: The gold standard was prevailing from 1870 to 1914. All currencies were defined in terms of gold; indeed some were actually made of gold. Each participant country committed to guarantee the free convertibility of its currency into gold lat a fixed price. That means a domestic currency which was free convertible at fixed price into another asset acceptable in international payments. This also made it possible for each currency to be convertible into all others at a fixed price.

Exchange rates were determined by its worth in terms of gold. For example, if one unit currency A was worth one gram of gold, one unit of currency B was worth two grams of gold, currency B would be worth twice as much as currency A. Economic agents could directly convert one unit of currency B into two units of currency A, without having to first buy gold and then sell it. The rates would fluctuate between an upper and a lower limit, these limits being set by the costs of melting, shipping and recoining between the two currencies. To maintain the official parity each country needed an adequate stock of gold reserves. All countries on the gold standard had stable exchange rates.

Many problems caused the gold standard to break down periodically. Moreover, world price levels were at the mercy of gold discoveries. This can be explained by looking at the crude quantity theory of money, M=kPY, according to which, if output (GNP) increased at the rate of 4 percent per year, the gold supply would have to increase by 4 percent per year to keep prices stable. With mines not producing this much gold, price levels were falling all over the world in the late 19th century, giving rise to social unrest. For a period, silver supplemented gold introducing 'bi-metallism'. Also, fractional reserve banking helped to economize on gold. Paper currency was not entirely backed by gold; typically countries held one-fourth gold against its paper currency.

VIII Assignment and project oriented questions

1. Name the currencies of any five countries of the following
USA, UK, Germany, Japan, China, Argentina, UAE, Bangladesh, Russia

Ans:

Countries	Currency
USA	US dollars
UK	British Pound
Germany	Euro
Japan	Japanese Yen
China	Chinese yuan
Argentina	Argentine peso
UAE	UAE dirham
Bangladesh	Bangladeshi taka
Russia	Russian Ruble

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