CA. NARENDRA BHAMBWANI CA-INTER ECONOMICS ICAI –REVISION LECTURE

1- NATIONAL INCOME

Q1. Explain the following

1. Gross Domestic Product (GDP)
2. Gross National Product (GNP)
3. Net National Product (NNP)

(1) **Gross domestic Product**:-

- refers to **money value** of all types of goods and services produced with the country.
- Gross domestic product refers to the total domestic output.
- It excludes goods produced in foreign country,
- While calculating Gross domestic Product, only the money value of final goods and services. For example the value of cloth will be taken in GDP but the value of raw cotton which was used for making cloth will not be taken so as to avoid double counting. In other words what ever is produced in the country is only included in Gross Domestic Product.

Gross domestic product is calculated as under

Total value of final goods available in the country	xxxx
Add:- Goods exported	xxxx
	xxxxx
Less:- value of goods imported	xxxxx
Gross domestic product	xxxxx

There are two methods of valuing gross domestic product

Gross Domestic Product at Market Price :
In this method The goods and services Produced in a country are valued at Market Price. For example if 100 Bags of cement is produced the market Price of 100 cement of bags will be included in Gross domestic product. The Market price of a commodity includes the following
Market Price = Income to factors of Production (Wages + Interest + Rent + Profits) + Taxes - Subsidies

Gross Domestic Product at Factor Cost : In this method the goods and services Produced in a country are valued at factor cost. For example if 100 bags of cement are produced we will not value 100 bags at the market price but we will include only income received by factors of production

Thus Gross domestic product at factor cost = GDP at Market Price - taxes
+ subsidies.

In other words while calculating the value of goods and services produced we only include cost paid to factors of Production.

Thus GROSS DOMESTIC PRODUCT INCLUDES THE FOLLOWING

1. **Consumption goods** : It includes market value of all the consumer goods and services Produced in the country . It covers Perishable goods such as
milk , vegetables electricity etc. It also covers market value of durable goods such as television set, VCR, Car furniture etc and market value of consumer services such as services of a doctor , advocate teacher etc.

2. **Investment** : GDP also includes Capital goods Produced in the country and used as Private sector. It includes new factory Building constructed
New Machines made during the current period.

3. **Government Expenditure** : It also includes amount spent by the Government on consumer as well as capital goods and services.

Thus GDP = C + I + G + EXPORTS – IMPORTS

(2) **Gross National Product (GNP)**:-
Gross National means Market values of goods and services produced in the country and Net income from abroad (foreign country).

While calculating Gross National Product only value of final goods and services is included to avoid double counting.

- **GNP = GDP + Net factor Income from abroad.**

GNP = C + I +G + EXPORTS - IMPORTS + Income earned by Indian national working in foreign countries - income earned by foreign nationals in India.

While calculating GDP we include only value of goods and services produced in the country but for calculating GNP we include Net income from
abroad. Net Income from abroad means Income earned by Indian national working in foreign countries - income earned by foreign nationals in India.

In other word GROSS NATIONAL PRODUCT refers Income received by People of the country.
Thus Gross national product includes value of goods and services produced by the Indian Nationals and excludes the contribution of Foreign nationals in the Production of goods and services.

Gross National Product may be valued at Market Price or at factor cost
Gross National product at market price : In this method the goods and services produced in a country are valued at market price. For example if 100 bags of cement is produced the market price of 100 cement of bags will be included in gross National product. The market price of a commodity includes the following

Market price = income to factors of production (wages + interest + rent + profits) + taxes - subsidies

Gross National product at factor cost : In this method the goods and services produced in a country are valued at factor cost. For example if 100 bags of cement are produced we will not value 100 bags at the market price but we will include only income received by factors of production

Thus gross domestic product at factor cost = market price - taxes + subsidies. In other words while calculating the value of goods and services produced we only include cost paid to factors of production.

(3) **Net National Product** :- Before discussing the meaning of Net national Product let us first under stand the meaning of depreciation. Production of goods and services involve use of capital assets such as machines, factory building etc. Production process involves wear and tear of fixed assets.

Wear and tear or exhaustion of fixed asset during Production process is called depreciation IN other words Production leads to creation of new goods but some part of the capital goods such as machinery etc is consumed during the production process. Net National Product refers to Gross National Product - Depreciation.

THUS NNP = GNP - D

Q2 Distinguish between

a) Gross National Product and Net National Product
b) Gross domestic Product and Gross National Product
c) Gross domestic Product at Market Price and Gross Domestic Product at
d) Gross National Product at Market Price and Gross National Product at Factor cost.

a)	**Gross National Product**	**Net National Product**
1.	by the people of country It includes net income from abroad.	Produced by the people of a The country less depreciation
2.	GNP = GDP + Net Income from abroad	NNP = GNP - Depreciation
3.	GNP is always higher than NNP	NNP is lower than GNP

b)	**Gross domestic Product**	**Gross National Product**
1.	Gross domestic product refers to Money value of goods and services Produced **with in country**. It does not include net income from abroad	Gross National Product refers money value of goods and services Produced by the people of the of the country . It includes Net Income from abroad.

2.	GDP = Market value of final of goods and services available in the country + Exports - Imports	GNP = GDP + Income of Indian citizens from abroad - Income of foreign nationals working in India
3.	GDP = GNP - net income from from abroad	GNP = GDP + Net income abroad

c)	**Gross domestic Product at Market Price**	**Gross Domestic Product at Factor Cost**
1.	It refers to market value of goods and services Produced in a country	It refers to value of goods and services at Cost paid to factors of Production
2.	GDP at Market Price = GDP at Factor cost + Taxes - Subsidies.	GDP at Factor cost = GDP at market Price - Taxes + subsidies

d)	**Gross National Product at Market Price**	**Gross National Product at Factor Cost**
1.	It refers to market value of goods and services Produced by the citizens	It refers to valuing goods and services produced by thecitizens of a country at cost paid to factors of Production
2.	GNP at Market Price = GNP at Factor cost + Taxes - Subsidies.	GNP at Factor cost = GNP at market Price - Taxes + subsidies

Q3. What do you understand by the term " National Income " ? What are the various methods of estimating national Income.

MEANING OF NATIONAL INCOME :

National Income refers to the money value of final goods and services produced in a country during a year. National income also refers t to aggregate factor income or aggregate expenditure.

According to the National committee of India " A National Income estimated measured the volume of commodities and services turned out during a given period, counted without duplication.

The various methods of counting national Income are

1) Income Method
2) Product Method
3) Final expenditure method

1. **Out Put Method:**- Under This method, National Income is calculated by adding the value of final goods and services in a country during a year. The quantity of output Provided by different sectors is determined and their market value is worked out. While calculating National income by this method only value of final goods and services is included So as to avoid double counting.

There are two ways in which value of output is computed

(a) **The final goods method**. In this method only value of final goods and services is taken in to account to estimate GNP. The value of intermediate goods and services and raw materials is not considered as it would result in double counting. For eg.the4 value of cloth includes the value of raw cotton.

(b) **Value added method**. Under this method the value added by each and every producing unit is added to arrive at the value of goods and serviced produced in the country.

Value added by each production unit is calculated as under
Value added = Value of out put produced - Value of input .In this method value added by all the producing units is added whether such units are producing intermediate goods or final goods.

National Income is calculated as under:

Value of final goods and services available in the country	xxx
Add : Value of exports	xxxx
Less : value of Imports	xxx
Gross Domestic Product at Market Price	xxx
Add Income of Indian citizens working abroad	xxx
Less Income of foreign Nationals working In India	xxxx
GROSS NATIONAL PRODUCT AT MARKET PRICE	XXXX
Less Depreciation	xxxxx
NET NATIONAL PRODUCT AT MARKET PRICE	xxxx
Less Taxes	xxxx
Add Subsidies	xxxx
NET NATIONAL PRODUCT AT FACTOR COST = NATIONAL INCOME	XXX

Income Method.

This Method is also known as factor cost method. Under this method National Income is obtained by adding the Income of factors of Production

In the form of rent, wages ,Interest and Profits. In this method we add the income s of all persons and organisations including public bodies from all sources in the country during the year.
National Income is the total of income distributed by way of factor payment and includes net factor income from abroad.
So National Income is obtained by adding together all the factor Incomes that is rent, wages interest Profits etc.

We Add the following to find National income at factor cost

1. **Wages:**- This Include amounts received by all the employees for the work performed. It includes salaries and wages including bonus commission etc. and also includes free services such as educational services, Medical service etc. provided by the employer.
2. **Rent:**- It includes rent received by a person from Property letout to others.
3. **Interest:**- It includes Interest received on loan provided by individuals.
4. **Corporation Profits**:- It includes Profits made by companies whether distributed amount shareholders or not.
5. **Mixed Income of Self employed personal**:- It includes mixed incomes of self employed person such as tailors, goldsmiths etc. Such persons usually supply more than one factor of Production to a business.
6. **Net Income from abroad.**
7. **Net profits made by government enterprises** :- It includes net Profits made by enterprises owned by the Government.

When we add all the above items we Get NATIONAL INCOME AT FACTOR COST.

Following points should be taken care of while calculating national income by income method.

1. Transfer incomes such as pension of retired workers will be excluded from national income. The other examples of transfer incomes are unemployment allowance, dowry, students allowance etc. These incomes are excluded because these incomes are received without any contribution to production.

2. All unpaid services like services of housewives should not be included.

3. Dividend received by shareholders should be included.

4. Illegal incomes, windfall gains, gifts, sale proceeds of secondhand goods should not be included.

3. **Expenditure method** :- In this method we add to calculate the national income as under.
National income = Expenditure on consumption goods + Expenditure investment goods + Expenditure by govt. -Depreciation -Expenditure in transfer payments + Exports - Imports.

Q5 USEFULNESS AND SIGNIFICANCE OF NATIONAL INCOME ESTIMATES

National income accounts are fundamental aggregate statistics in macroeconomic analysis and are extremely useful, especially for the emerging and transition economies.

1. National income accounts provide framework for analysing and evaluating the short-run performance ofaneconomy.Thelevelofnationalincomeindicatesthelevelofeconomicactivityand economic development as well as aggregate demand for goods and services of a country.
2. The distribution pattern of national income determines the pattern of demand for goods and services. A study of distribution pattern of National income enables businesses to forecast the future demand for theirproducts.
3. Economic welfare depends to a considerable degree on the magnitude and distribution of national income, size of per capita income and the growth of these overtime.
4. The estimates of national income show the composition and structure of national income. It shows contribution of different sectors OF the economy in the national income. Analyzing the composition of National Income, the governments can fix various sector-specific development targets for different sectors of the economy and formulate suitable development plans and policies to increase growthrates.
5. National income estimates throw light on income distribution and the possible inequality in the distribution among different categories of income earners. This helps government to frame or revise its economic policies
6. International comparisons in respect of incomes and living standards assist in determining eligibility for loans, and or other funds or conditions on which such loans, and/ or funds are made available. The national income data are also useful to determine the share of nation's contributions to various internationalbodies.
7. Combined with financial and monetary data, national income data provide a guide to make policies for growth and inflation.

Q6. GDP at current prices and GDP at constant price (real GDP)

While computing Gross Domestic product we value goods and services at market price.

GDP = quantity of goods and services X market price

Therefore rise in GDP may be due to Rise in quantity of goods and services and Rise in market price.

Computing GDP at market price is called GDP at current prices

GDP at market price does not show real rise in Quantity of goods and services since market price also pushes up GDP.

Since we measure the value of output in terms of market prices, GDP, which is essentially a quantity measure, is sensitive to changes in the average price level.

The same physical output will correspond to a different GDP level if the average level of market prices changes. That is, if prices rise, GDP measured at market prices will also rise without any real increase in physical output. This is misleading because it does not reflect the changes in the actual volume of output. For example if 100 bags of cement are produced and the market price of cement each bag is Rs 200, GDP will be Rs 20,000. If in the next period 100 bags are produced and market price is Rs 220, GDP will be Rs 22,000. Though GDP has gone up from Rs 20,000 to RS 20,000, there is no corresponding increase in actual output.

To correct this i.e. to eliminate the effect of prices, in addition to computing GDP in terms of current market prices, termed 'nominal GDP' or 'GDP at current prices',

The national income accountants also calculate 'real GDP 'or 'GDP at constant prices' which is the value of domestic product in terms of constant prices of a chosen base year. Real GDP

Q7. Explain the Concept of Gross National Product at market price (GNPmp)

(a) Gross National Product (GNP) is a measure of the market value of all final economic goods and services, gross of depreciation, produced within the domestic territory of a country by normal residents during an accounting year plus net factor incomes from abroad. Thus, GNP includes earnings of Indian corporations overseas and Indian residents working overseas.

GNPMP = GDPMP + Net Factor Income from Abroad

Net factor income from abroad is the difference between the income received from abroad for rendering factor services by the normal residents of the country to the rest of the world and income paid for the factor services rendered by non- residents in the domestic territory of a country.

Q8. Define National Income. Draw the basis of distinction between GDP at current and constant prices.

1. (a) National Income is defined as the net value of all economic goods and services produced within the domestic territory of a country in an

accounting year plus the net factor income from abroad. According to the Central Statistical Organization (CSO) 'National income is the sum total of factor incomes generated by the normal residents of a country in the form of wages, rent, interest and profit in an accounting year'.

National income may be measured at current prices or at constant prices. If goods and services produced in a year are valued at current prices, i.e., market prices

prevailing in the year in which goods and services are produced, we get national income at current prices or nominal national income. If goods and services produced in a year are valued at 'fixed' prices, i.e., prices that prevailed during a previous year chosen as base year, we get national income at constant prices or real national income.

Thus GDP at constant prices is the value of domestic product in terms of constant prices of a chosen base year. A base year is a carefully chosen year which is a normal year free from price fluctuations.

Q9. Calculate (a) GDPMP and (b) GNPMP from the following data:

Particulars	**(Rs.) In Crore**
Net indirect tax	208
Consumption of fixed capital	42
Net factor income from abroad	-40
Rent	311
Profits	892
Interest	81
Royalty	6
Wages and salary	489
Employer's contribution to Social Security Scheme	50

(ii) NDPFC = Compensation of Employees + Operating Surplus + Mixed Income

= 489 + 50+ 311 + 892 + 81 + 6 = 1829 Crores

GDPMP = NDPFC + Depreciation + Net Indirect Tax

= NDPFC + (ii) + (i) = 1829 + 42 + 208 = 2079 Crores

GNPMP = GDPMP + Net Factor Income from Abroad

= 2079+ (-40) = 2039 Crores

Q10. From the following data, compute the Gross National Product at Market Price (GNPMP) using value added method:

	(Rs. in Crores)
Value of output in Secondary Sector	1000
Intermediate consumption in Primary Sector	300

Value of output in Tertiary Sector	3000
Intermediate consumption in Secondary Sector	400
Net factor Income from abroad	(-)100
Value of output in Primary Sector	800
Intermediate consumption in Tertiary Sector	900

(ii) Computation of Gross National Product at Market Price (GNPMP)

GNPMP = (Value of output in primary sector – Intermediate consumption of primary sector) + (Value of output in secondary sector – Intermediate consumption of secondary sector) + (Value of output in tertiary sector – Intermediate consumption of tertiary sector) + Net Factor Income from Abroad

GNPMP = [(800- 300) + (1000 – 400) + (3000 – 900)] + (-100)

= 500+ 600+ 2100 - 100

= 3200 -100 = ` 3100 Crores

Q11. Distinguish between Personal Income and Disposable Income

1. (a) Personal income is a measure of actual current income receipts of persons from all sources which may or may not be earned from productive activities during a given period of time. It is the income 'actually paid out' to the household sector, but not necessarily earned. Some people obtain income for which no goods and services are provided in return. Examples of this include transfer payments such as social security benefits, unemployment compensation, welfare payments etc. Individuals also earn income which they do not actually receive; for example, undistributed corporate profits and the contribution of employers to social security. Personal income forms the basis for consumption expenditures and is derived from national income as follows:

PI = NI + income received but not earned - income earned but not received.

Disposable personal income is a measure of amount of the money in the hands of the individuals that is available for their consumption or savings. Disposable personal income is derived from personal income by subtracting the direct taxes paid by individuals and other compulsory payments made to the government.

DI = PI - Personal Income Taxes

Q12. Distinguish between Nominal and Real GDP.

GDP is essentially a quantity measure and therefore when value of output is measured in terms of market prices, it is sensitive to changes in the average price level. The same physical output will correspond to a different GDP level if the average level of market prices changes. That is, if prices rise, GDP measured at market prices will also rise without any real increase in physical output. This is misleading because it does not reflect the changes in the actual volume of output. To correct this i.e. to eliminate the effect of prices, in addition to computing GDP in terms of current market prices, termed 'nominal GDP' or 'GDP at current prices', the national income accountants also calculate 'real GDP 'or 'GDP at constant prices' which is the value of domestic product in terms of constant prices of a chosen base year. Real GDP changes only when production changes. As a rule, when prices are changing drastically, nominal GDP and real GDP diverge substantially. The converse is true when prices are more or less constant.

Q13 Discuss the problems /limitations of National Income Accounting

1. Inequalities of Income.

GDP is a complete inadequate measure of welfare. Economic welfare depends not only upon increase in GDP but also upon the manner in which income is distributed. Two countries may have same per capita income but may have difference income inequalities.

2. Non reporting of activities. GDP is based on production activity reported to the government. In a country like India a large part of the population is engaged in unorganised sector. Government does not have adequate data of these sectors. Either data about these sectors is not taken in to account or improper data of these sectors is included to compute GDP.

3 Non monetary indicators

GDP and per capita income are only monetary indicators about the welfare of the people. Many economic bads such as crime, pollution, congestion which directly affect welfare of the people are not taken in to account.

4. Qualitative factors ignored

quality improvements in systems and processes due to change in technology as well as managerial innovation reflect true growth. However these factors are not reflected in GDP computations.

5. **Conceptual difficulties.** There are conceptual difficulties in computing National income. such as

   a) lack of an agreed definition of National income

   b) accurate distinction between final goods and intermediate goods.

6. **Voluntary work not taken in to account**

Volunteer work and services with out remuneration are not taken in to account even though such work can contributed to social well-being as much as paid work.

Q14 Explain few important points which one needs to bear in mind while calculating National Income.(RTP NOV-19)

ANS: Few important points which one needs to bear in mind while calculating National Income are -

(i) The value of only final goods and services or only the value added by the production process would be included in GDP. By 'value added' we mean the difference between value of output and purchase of intermediate goods.

(ii) Intermediate consumption consists of the value of the goods and services consumed as inputs by a process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital. Intermediate goods used to produce other goods rather than being sold to final purchasers are not counted as it would involve double counting.

(iii) Gross Domestic Product (GDP) is a measure of production activity which covers all production activities recognized by SNA called the 'production boundary'.

(iv) Economic activities include all human activities which create goods and services that are exchanged in a market and valued at market price. On the other hand, Non-economic activities are those which produce goods and services, but since these are not exchanged in a market transaction they do not command any market value; for e.g. hobbies, housekeeping and child rearing services of home makers and services of family members that are done out of love and affection.

(v) National income is a 'flow' measure of output per time period—for example, per year—and includes only those goods and services produced in the current period i.e. produced during the time interval under consideration. The value of market transactions such as exchange of goods which already exist or are previously produced, do not enter into the calculation of national income. Therefore, the value of assets such as stocks and bonds which are exchanged during the pertinent period are not included in national income as these do not directly involve current production of goods and services.

(vi) Two types of goods used in the production process are counted in GDP namely, capital goods (business plant and equipment purchases) and inventory investment—the net change in inventories of final goods awaiting sale or of

materials used in the production which may be positive or negative.

Q15 Calculate Net Domestic Product at Factor Cost from the following data: (RTP NOV-19)

Particulars	In Crore
Wages	7142
Mixed income	450
Rent	541
Salaries	8912
Interest	1013
Profit	714

ANS: Net Domestic Product at Factor Cost = Compensation of Employees (wages and salaries) + operating surplus (rent, interest and profit) + mixed income

= 7142+8912+541+1013+714+450

= 18772 crores.

Q16 Calculate Personal Income from the following data: (RTP NOV-19)

Particulars	In Crore
Undistributed profits of corporation	50
Net domestic product accruing to private sector	700
Corporation tax	65
Net factor income from abroad	10
Net current transfer from rest of the world	20
Net current transfer from the government	25
Interest on national debt	40

ANS: Personal Income = Net domestic product accruing to private sector + Net factor income from abroad + Net current transfers from government + Net current transfers from rest of the world + interest on National debt – Corporation tax – Undistributed profits of corporations

= 700+10+25+20+40-65-50

= 680 Crores

Q17 Explain the concept of circular flow in two sector economy model? (RTP NOV-19)

ANS: The two sector economy model assumes that there are only two sectors in the economy viz., households and firms, with only consumption and investment outlays. Households own all factors of production and they sell their factor services to earn factor incomes which are entirely spent to consume all final goods and services produced by business firms. The business firms are assumed to hire factors of production from the households; they produce and sell goods and services to the households and they do not save. There are no corporations, corporate savings or retained earnings. The total income produced, Y, accrues to the households and equals their disposable personal income Yd i.e., Y = Yd. All prices (including factor prices), supply of capital and technology remain constant. The government sector does not exist and therefore, there are no taxes, government expenditure or transfer payments. The economy is a closed economy, i.e., foreign trade does not exist; there are no exports and imports and external inflows and outflows. All investment outlay is autonomous (not determined either by the level of income or the rate of interest); all investment is net and, therefore, national income equals the net national product. The circular flow of income and expenditure which presents the working of the two-sector economy should be illustrated diagrammatically. There are no injections into or leakages from the system. Since the whole of household income is spent on goods and services produced by firms, household expenditures equal the total receipts of firms which equal value of output.

Q18 Calculate National Income by Value Added Method with the help of following data- Particulars Rs. (in crore)

Sales	700
Opening stock	500
Intermediate Consumption	350
Closing Stock	400
Net Factor Income from Abroad	30
Depreciation	150
Excise Tax	110
Subsidies	50

(OCT-19 MTP) (3)

ANS: NI = GDP (MP) –Depreciation +NFIA- Net Indirect Tax

Where GDP (MP) = Value of output- intermediate consumption Value of Output = Sales+ change in stock

= 700+ (400-500)

= 600

GDP (MP) = 600-350 = 250

Therefore NI= 250-150 +30-(110-50)

= 70 Crore

Q.19 Is country like India unable to estimate their National Income wholly by one method? Give comments(OCT-19 MTP) (2)

ANS: Yes, Countries like India are unable to estimate their national income wholly by one method. There are various sectors in an economy and national income generated by these sectors is estimated by using different methods. For example, in agricultural sector, net value added is estimated by the production method, in small scale sector net value added is estimated by the income method and in the construction sector net value added is estimated by the expenditure method.

Q.20 Define 'Net Factor Income from Abroad' (OCT-19 MTP) (3)

ANS: The difference between the aggregate amount that a country's citizens and companies earn abroad, and the aggregate amount that foreign citizens and overseas companies earn in that country.

Q.21 Compute the amount of subsidies from the following data: NOV. 2019 (3)

GDP at market price (Rs. in crores)	7,79,567
Indirect Taxes (Rs. in crores)	4,54,367
GDP at factor cost (Rs. in cross)	3,60,815

Q.22 Explain the circular flow of income in an economy.NOV. 2019 (3)

Q.23 Compute NNP at factor cost or national income from the following data using income method : NOV. 2019 (3)

	(Rs. in crores)
Compensation of employees	3,000
Mixed income of self-employed	1,050
Indirect taxes	480
Subsidies	630
Depreciation	428
Rent	1,020
Interest	2,010
Profit	980
Net factor income from abroad	370

2 -KEYNES

Q1 Explain circular flow of National Income under two sector Model

The simple two sector model assumes that there are only two sectors in the economy

a) Households b) firms

All the factors of production are owned by households. i.e Households are providers of factors of production such as Land, labour , capital and enterprise

Households sells their factors of production to firms for earning factor incomes in the form of Rent, wages, interest and profits.

The business firms hires factors of production from households

The factors of production hired by firms are used for production and sale of goods and services required by the society.

The Factor incomes earned by households is spent on consumption of goods and services produced by firms

The households do not save and their entire income is spent on consumption of goods and services.

The amount spent by households becomes the income of the firm.

This circular flow consists of two types of flows

a) Real flow b) Money flows

Real Flow

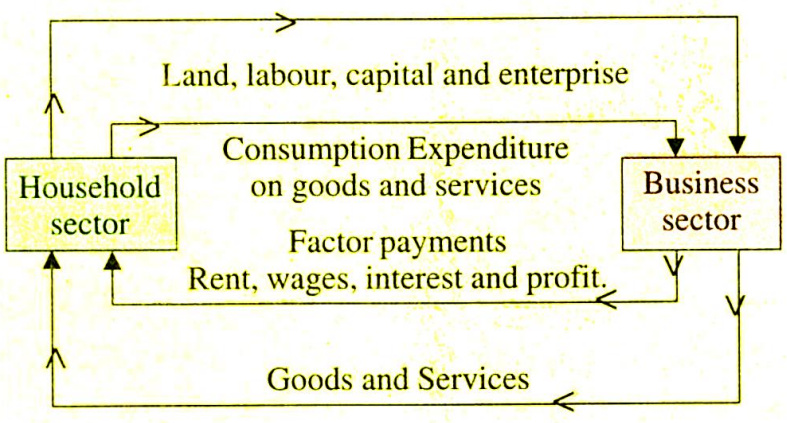
Real flow consists of flow of factors of production from house holds to firms

And Flow of goods and services from firms to households

Money Flow

Money flow consists of flow of money from firms to households in the form of factor prices And flow of money from households to firms in the form of prices for goods and services

The circular flow of National income is shown by means of Diagram given below.



The outer circle of diagram shows the real flow i.e. flow of factor services from household sector to business sector and also flow of goods and services, from business sector to household sector.

The inner circle shows the money flow, that is, flow of factor payments from business sector to household sector and also flow of consumption expenditure from household sector to business sector.

It must be noted that entire amount of money, which is paid by business sector as factor payments, is paid back by the factor owners to the business sector. So, here is a circular and continuous flow of money income.

In the circular flow of income, production generates factor income, which is converted into expenditure.

As human wants are unlimited, production is a continuous activity, so the above flow continues again and again.

To sum up

Factor payments = household expenditure = house hold expenditure = Total receipts of the firm = value of Output.

Assumption of two sector model

1. All prices (including factor prices), supply of capital and technology remains constant
2. The Government sector does not exists
3. There are not taxes, No government expenditure and no transfer payments
4. The economy is a closed economy with no foreign trade
5. Households spent their entire income on consumption and do not save

Q2. Write a note on consumption function

A2. Consumption function shows relationship between Income and consumption.

In general there is a positive relationship between disposable income and consumption expenditure

As Income (Y) increases, the consumption expenditure also increases. This relationship between Income and consumption expenditure is called consumption function.

The concept of consumption function was given by Lord J.M. Keynes

Aggregate demand in an economy consists of

Aggregate demand for consumer goods

Aggregate demand for Investment goods.

Demand for goods and services accounts for the largest proportion of demand in an economy and this demand plays a crucial role in determination of national income.

The level of consumption expenditure depends upon

1. Income of the households and
2. proportion of income spend on consumer goods and services.

This specific form of income consumption relationship is called as consumption function.

According to Keynes, as income increases consumption also increases but the proportionate rise in consumption expenditure is less than the proportionate rise in Income.

In other words if income has doubled the consumption expenditure will be less than double. In other words if income increases the additional income will be partly saved and partly spent on consumption. So according to Keynes when income increases the consumption expenditure also increases but increase in consumption expenditure is at a diminishing rate.

This relationship between Income and consumption expenditure can be seen in the schedule given below.

INCOME(Y)	*CONSUMPTION EXPENDITURE (C)*	*Saving(S)*
0 20	-20	
100	70	30
200	130	70
300	180	120
400	220	180

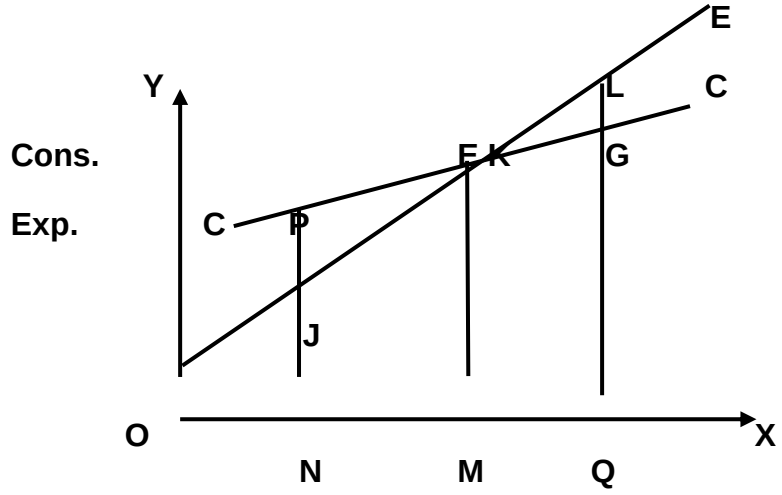
The above schedule shows different levels of Income and corresponding level of consumption expenditure.

When income is zero, the consumption expenditure is 20. This is called as autonomous consumption. Even if there is no income people will spend some amount on consumer goods for living. This money will be spent from Sale of assets such as gold, and other valuable things or borrowings.

This schedule shows that as income increases the consumption expenditure increases but at a slower rate. For example when Income expenditure increases by 100 from 100 to 200 the consumption expenditure increases 70 to 130 ie 60. When the Income increases further by 100 from 200 to 300 consumption expenditure increases from 130 to 180 ie 50. When the Income increases further by 100 from 300 to 400 consumption expenditure increases from 180 to 220 ie 40.

Thus when National income increases, the consumption expenditure increases at a diminishing rate and the saving increases at an increasing rate.

In other word as income increases, the proportion of the additional income used for consumption goes on decreasing and the proportion of income saved goes on increasing.
This is known as Keynes Psychological Law of consumption and also as Propensity to consume which states that when aggregate income increases, consumption expenditure shall increase but by a somewhat smaller amount.
This relationship between Income and consumption expenditure can be shown by means of a diagram. **This relationship between Income and consumption expenditure can be shown by means of a diagram.**



NATIONAL INCOME

In the above diagram the X axis shows the total Income and Y Shows the Consumption expenditure. The above diagram shows two curves, The CC curve shows the relationship between actual consumption and actual income.

It can be seen that as National income rises the consumption expenditure also rises but it rises at a slower rate. The OE curve is a hypothetical curve (Imaginary curve) which shows how the curve will appear if the entire income is spent on consumption. At any point on OE curve income is equal to consumption expenditure.

When the national income is ON the Consumption Expenditure is PN, Which means that consumption is more than income.

Income = ON = NJ consumption = NP. NP > NJ

When national income is OM the Consumption Expenditure is EM, the, Which means that consumption is equal to income)

Income = OM= MK consumption = ME. ME = MK

When the national income is OQ the Consumption Expenditure is GQ, Which means that consumption is less than income.

Income = OQ = QL consumption = QG. QL >QG

Q3. WRITE SHORT NOTE ON AVERAGE PROPENSITY TO CONSUME.

A3. Average Propensity to consume shows relationship between total income and total consumption expenditure. It shows what proportion of total income is spent on Consumption. Average propensity to consume is the ratio of total consumption expenditure to total Income Average propensity to consume is calculated as under

$$APC = \frac{\text{TOTAL CONSUMPTION EXPENDITURE}}{\text{TOTAL INCOME}}$$

The average propensity to consume can be understood by means of the schedule given below.

INCOME(Y)	CONSUMPTION EXPENDITURE (C)	APC=C/Y
100	70	70/100= 0.70
200	130	130/200= 0.65
300	180	180/300= 0.60
400	220	220/400= 0.55

When the income is Rs 100 crores, Rs.70 crores is spent on consumption. In other word 70% of the income is spent on consumption.

Which indicates that APC is 0.70. When the Income is 200 Crores, the consumption is 130 Crores. In other words 65 % of the Income is spent on consumption. When the income is 300 crores, the consumption expenditure is 180 crores. In other words 60 % of the income is spent on consumption.

Thus as Income rises the APC goes on falling.

Q4. Write Short Note on MARGINAL PROPENSITY TO CONSUME

Marginal propensity to consume shows relationship between change in total consumption expenditure and change in total Income. It shows what proportion of additional income is spent on additional Consumption. It shows Proportion of additional income spent on additional consumption. Marginal propensity to consume is calculated as under

$$MPC = \frac{\text{CHANGE IN TOTAL CONSUMPTION EXPENDITURE}}{\text{CHANGE IN TOTAL INCOME}}$$

The MARGINAL propensity to consume can be understood by means of the schedule given below.

INCOME (Y)	CONSUMPTION EXPENDITURE (C)	MPC
100	70	70\100 = 0.70
200	130	60\100 = 0.60
300	180	50\100 = 0.50
400	220	40\400 = 0.40

When the income is Rs 100 crores, Rs.70 crores is spent on consumption. In other word 70% of the income is spent on consumption.

Which indicates that MPC is 0.70. When the Income rises by 100 crores, from 100 crores to 200 crores the consumption expenditure rises by 60 crores from 70 crores to 130 crores. In other words 60 % of the additional Income is spent on additional consumption. When the income rises further by Rs 100 crores from 200 crores to 300 crores the consumption expenditure rises by 50 crores from 130 crores to 180 crores. In other words 50 % of the income is spent on consumption.

Q5. DISTINGUISH BETWEEN

	AVERAGE PROPENSITY TO CONSUME	MARGINAL PROPENSITY TO CONSUME
1.	APC show what proportion of total Income is spent on consumption.	MPC shows what proportion of additional income is spent on consumption.

2.	$APC = \frac{\text{Total Cons Exp}}{\text{Total income}}$	$MPC = \frac{\text{Change in Total cons. exp}}{\text{Changes in Total Income}}$
3.	As total income increases APC falls but it does not fall as fast as MPC	As total income increases MPC falls and it falls faster than APC.
4.	APC can never be zero	MPC can be zero if the consumer decides to save the entire additional income.

	AVERAGE PROPENSITY TO CONSUME	AVERAGE PROPENSITY TO SAVE
1.	APC show what proportion of total Income is spent on consumption.	APS shows what proportion of total income is saved.
2.	$APC = \frac{\text{Total Cons Exp}}{\text{Total income}}$	$APS = \frac{\text{Total Saving}}{\text{Total Income}}$
3.	As total income increases APC falls.	As total income increases APS rises
4.	APC = 1 - APS	APS = 1 – APC

Q6 WRITE SHORT NOTE ON SAVING FUNCTION

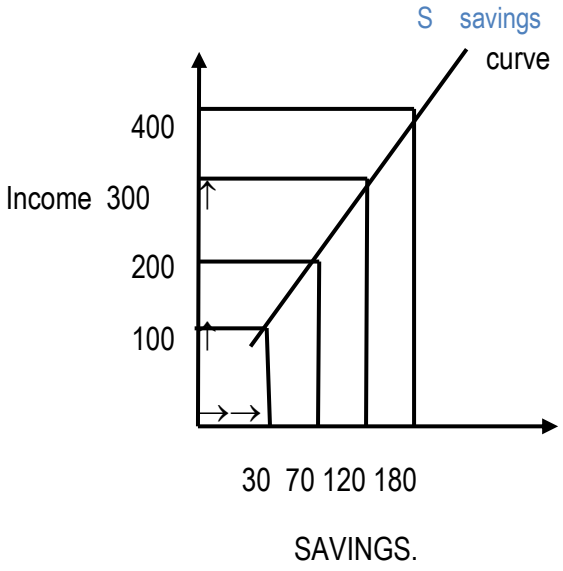
Saving function shows relationship between Income and saving. As the Income rises the saving also rises. The rise in saving is faster than the rise in Income This is because as Income increases, the consumption expenditure also increases but it increases at a slower rate.

As the income increases the proportion of additional income saved goes on increasing. This can be understood by means of a schedule given below.

INCOME(Y)	CONSUMPTION EXPENDITURE(C)	SAVINGS (S)
100	70	30
200	130	70
300	180	120
400	220	180

It can be seen that when Income is 100 crores the saving is 30 crores. when income rises by 100 crores from 100 crores to 200 crores the saving rise by 40 crores i.e. from 30 crores to 70 crores. It means that out of total income of 200 crores 70 crores is saved.

The above schedule can be plotted on the graph as shown below.



Q7. Write a short note on Aggreagate Demand.

A7. Aggregate demand means total demand for goods and services.

The concept of aggregate demand is useful to understand theories for determining National Income.

In a two sector Model Aggregate demand consists of

a) Demand for consumer goods and services

b) Demand for Investment goods.

Classical economist believed in the statement "Supply creates its own demand "

It means that when goods and services are produced it will generate factor income

When goods flow in the market, it will create supply in market which will be equal to value of goods.

Incomes received by factors of production will give purchasing power to factors of production.

When Factors of production spend their income on goods it will generate demand in the market.

However a part of the income received by factors of production (households) may be saved which may cause a short fall in demand as compared to supply.

However the classical economicts believed that the savings by household will be deposited in banks or financial institution, the financial institutions will lend this money to Business firms. This will create Investment demand. This investment demand will be equal to short fall in demand due to savings by households.

Savings = Investments.

Therefore aggregate demand = Consumption expenditure + demand for investment goods

AD = C + I

Q8 Explain the Determination of equilibrium National Income under two sector Model?

Ans. **J.M. Keynes** in his famous book, 'General theory', has used two ***methods for the determination of national income*** at a particular time:

(1) Saving Investment Method.

(2) Aggregate Demand and Aggregate Supply Method.

Both these approaches lead us to the determination of the same level of national income.

It may here be mentioned that ***Keynes model of income determination*** is relevant in the context of short run only.

Assumptions:
Keynes assumes that in the short run:

(i) The stock of capital, technique of production, forms of business organizations, do not change.

(ii) He also assumes a fair degree of competition in the market.

(iii) There is also absence of government role either as a taxer or as a spender.

(iv) Keynes further assumes that the economy under analysis is a closed one. There is no influence of exports and imports on the economy.

Since there is no role for the government to play and there is no foreign trade,
The only sectors operating in the economy are Firms and Households. Hence this model of income determination is called as two sector model.

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According to Keynesian theory , equilibrium level of national income is achieved when aggregate demand = Aggregate supply.

Aggregate demand is sum of consumption expenditure and Investments. i.e C + I

Aggregate supply is the minimum amount which producers expect to received from sale of goods . Obviously minimum amount which producers expect to receive from sale of goods will be amount paid to factors of production = Factor incomes = C+S (consumption expenditure + savings by factors owners)

Thus Aggregate supply = C + S

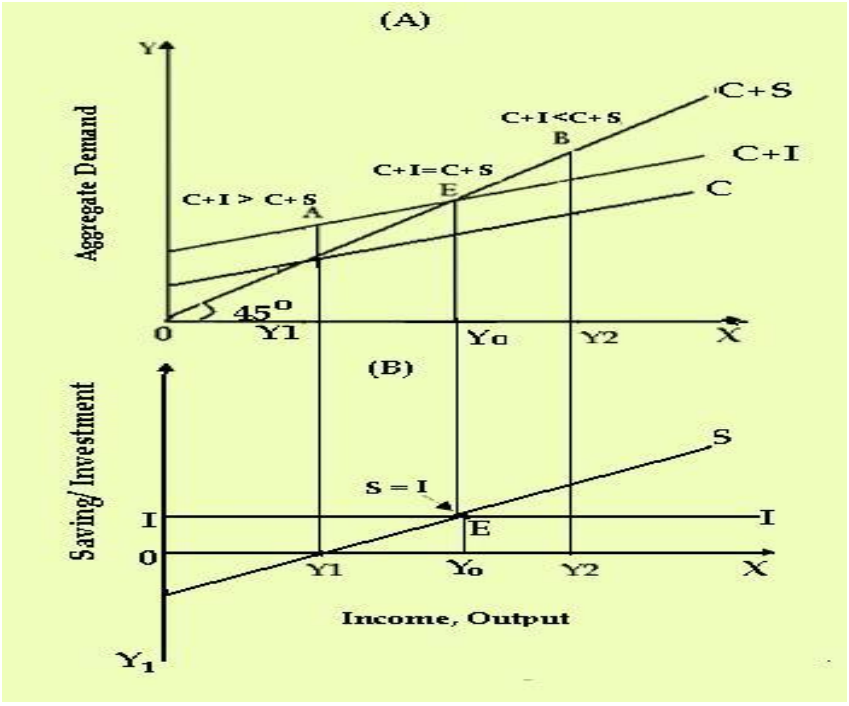
It means equilibrium will be achieved where C + I = C +S

In other words equilibrium will be achieved when S = I i..e Savings = Investments

In the short run Investment is assumed to be constant. It means investment is a fixed amount and does not depend upon level of Income

The level of income at which equilibrium is achieved is shown below.

Determination of Equilibrium Income: Two Sector Model



A

B

In the above diagram there are two sections Section A and section B.

In section A Income is shown on X axis where as Y axis shows consumption expenditure, and aggregate demand (C + I).

A line making an angle of 45degree (C+S) is a hypothetical line indicating points where consumption expenditure is equal to Income.

Line C shows relationship between consumption expenditure and Income.

As Income rises, consumption expenditure also rises. However when income is Nil there is some level of consumption which is known as autonomous consumption.

Line C+I shows relationship between Income and aggregate demand (C + I) . since I is constant, the vertical distance between C and C+I is same at all levels.

Section B shows Income on X axis and Y axis shows savings and investments. Investment is constant for all levels of income as shown by Line I.

Consider the following points

When income is Nil there is some consumption at this level savings are negative.

When income reaches Y1 as shown on x axis, consumption expenditure becomes equal to Income and therefore savings is Nil. However aggregate demand (C + I) is more than Income.

When income reaches Yo Aggregate demand is Equal to Income at this level savings = Investment. The income line (C +S) meets aggregate demand curve (C +I) at point E. Which is considered as equilibrium point.

C + S = C + I therefore S = I

Any other point will not be an equilibrium point

For example if Income is Y2 aggregate income (C +S) will be more than Aggregate demand (C +I). Which implies that the firms have produced more than what is demanded. This will create inventory as the firms wont be able to sell the entire quantity of goods. In other words there will be over production of goods. In the next period firms will curtail their output and dispose of inventory. This will reduce the level of income till income reaches Y0

If Income is Y1, aggregate demand is less than Income. (C+I) is more than (C+S). Demand outstrips production or supply. The firms will produce more to matchup with demand which will increase the income level to YO

Q9. Explain the concept of the "Multiplier".

Ans.: Multiplier is a very important tool developed and used by J.M.Keynes to present his analysis of income propagation.

In simple terms, the concept of the multiplier maintains that a given increase in investment brings about a multiple increase in income.

The ratio of total increase in income to initial increase in investment is called multiplier.

It is given by the equation:

$$K = \frac{\Delta Y}{\Delta I}$$

K is the multiplier

ΔY increase in income

Δ I increase in investment

How does multiplier work?

Multiplier works on two basic principles:

1. When Investment is made, it brings income to some persons
2. When people earn an income, they spend a part of it on consumption.
3. The amount spent by one group is earned by another group. This group again spends a part of it on consumption goods.

This is earned by a third group and so on.

The total income earned by all groups is a multiple of the initial increase in investment.

Table showing working of the multiplier.

Suppose the initial increase in investment is Rs. 10 crore. The marginal propensity to consume is 4/5 = 0.80

Rupees In crores

	Investment	**Income**	Savings	Expenditure
1.	1,000	1,000	200	800
2.		800	160	640
3.		640	128	512
		.	.	.

		.	.	.
		.	.	.
		.	.	.
Total		**5,000**	**1,000**	

The income propagation will take place in the following stages.

The table shows that consumption expenditure incurred at stage 1 becomes income at stage 2. The consumption expenditure incurred out of the income of stage 2, becomes the income at stage 3. Thus, when the marginal propensity to consume is 4/5 at every stage 4/5th of the income is spent on consumer goods and forms income in the next stage. The total income generated is a multiple of the initial investment of Rs. 1000

Relationship between MPC and the multiplierIf the MPC is given, the multiplier can be found out as follows:

$$\therefore \quad K = \frac{1}{1 - MPC}$$

$$\text{So if MPC} = \frac{4}{5}$$

$$K = \frac{1}{1 - \frac{4}{5}}$$

$$= 5$$

$$\text{If MPC} = 0, \quad K = \frac{1}{1 - 0} =$$

$$= \frac{1}{1}$$

$$= 1$$

It means that an initial increase in investment will give rise to income which is equal to the initial increase in investment.

$$\text{If MPC} = 1 \quad K = \frac{1}{1-1}$$

$$= \frac{1}{0}$$

$$= \infty$$

Any increase in investment will bring about an infinitely large increase in income.

Normally, MPC is neither O nor 1. It is between O and 1.

The working of the multiplier is like a flow in the form of investment

income consumption expenditure → income → consumption expenditure .....

The flow becomes weaker i.e. the size of the multiplier becomes smaller due to the following leakages:

1. Savings:

At every stage of income generation the savings go out of the flow. If the part of the income saved is larger, the leakage is larger and the size of the multiplier is lower.

The multiplier is inversely related to the marginal propensity to save.

$$K = \frac{1}{1 - MPC}$$

But $1 - MPC = MPS$

$$\therefore \quad K = \frac{1}{MPS}$$

2. Purchase of old assets:

If a part of the additional income is used for purchasing old assets like shares, debentures etc. that money goes out of circulation at that stage. It is an investment on the part of the buyer but disinvestment on the part of the seller.

3. Repayment of old debts:

A part of additional income is used for repayment of some old debts. The people who get that money may not spend it on purchasing consumer goods. So that part does not enter into the next round.

4. Net Imports:

Excess of imports over exports. Exports cause an inflow of income. Imports cause an outflow of income. Excess of imports over exports cause a net outflow of income.

That amount goes out of circulation of income. Suppose a community earns Rs.10 crore. Marginal propensity to consume is 4/5. The community spends Rs. 8 crore on consumer goods.

But out of that amount Rs. 8 crore are Rs. 1 crore go out of the country. That amount does not enter into the next round of income generation in the country. In the next round the income earned is Rs. 7 crore.

5. Buying goods from existing stock:

A part of additional income is used for purchasing goods from out of the old stock. That amount goes out of circulation of current income.

6. Inflation :

If prices rise, a particular additional money income can purchase a maller quantity of goods. The real demand will be lower in the next round.

7. Taxes:

If direct taxes are raised, disposable income falls. Consequently, in the next round there is a deficiency in demand for goods.

8. Undistributed Profits:
The corporations do not distribute a part of their profits. That part of additional income goes out of circulation of income in the next round.
The multiplier works within these limitations.

Q10 (A) Bring out the limitations of the concept of the multiplier.

(B) On what grounds the concept of the multiplier is criticised?

(C) Evaluate the concept of the multiplier

Ans.: (A) Multiplier works under the following limitations:

1. An industrial economy:

Multiplier works more effectively in an industrial economy because industrial production responds more quickly to rise in demand.

Agricultural production is not so quick to respond to a rise in demand.

2. Availability of idle resources:

Multiplier raises demand. The producers can respond to increase in demand by increasing production only if idle resources are available in the required proportion. Even if a single factor is unavailable, production cannot increase.

3. Existence of excess capacity in consumer goods industry:

Multiplier raises demand. Entrepreneurs like to increase production. But they can quickly increase production if there is excess capacity i.e. idle machinery and plant in the consumed goods industry.

They can increase employment if there is idle machinery and plant.

4. Elastic supply of working capital:

The entrepreneurs can increase employment and production if they can easily get working capital.

5. Constant MPC :

The MPC should remain constant when income is increasing through consecutive stages.

6. Stable price level:

The price level should remain stable when income is increasing through consecutive stages. If prices rise, additional money income will be spent on purchasing the same quantity of goods. Producers will have no incentive to produce additional goods.

7. No time lags:

The multiplier works only if the people spend money i.e. create a demand for goods immediately after they earn it.

(B) Evaluation of the concept of the multiplier:

Significance:

A revolutionary concept.

Brings out the importance of investment in national income generation.

Also brings out the implications of the break down of one industrial unit on the entire economy.

If one industrial unit is shut down, workers working in that unit lose jobs; lose income

They cut down their expenditure which is the income of some other persons.

When the income of other persons falls, they cut down their expenditure, which is the income of some other persons.

Prosperity in one sector of the economy brings about prosperity in all other sectors.

A set back to one sector spreads to all other sectors.

The concept of the Multiplier suffers from the following drawbacks

1. **Time lags ignored:**

Multiplier works on the assumption that people spend money immediately after earning it.

In practice there is often a time lag between earning the income and spending it; fully or partly.

2. **Over Simplification :**

The concept of multiplier is developed on the assumption that consumption depends only on income.

In practice consumption depends upon several factors other than income e.g. political conditions in the country, distribution of income, government policies, situations like war, revolutions and large scale disturbances, expectations about prices in future etc.

3. **MPC:**

The concept is based on the assumption that when income increases MPC is constant. People consume the same part of income at every stage.
In practice, as income increases, MPC decreases.

4. **Ignores Consumption ⟶ Investment relationship**

Multiplier treats investment as cause and income and consumption as the effect.

In practice a change in consumption can be the cause and change in investment can be the effect.

Conclusion: Multiplier provided an important tool in the hands of the economists to develop the theory of income generation.

Explain Flow of Income and determination of equilibrium Income under three Sector model.

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In a three sector economy There are three sectors

a) Firms b) Households c) Government

What do firms do

Hire factor services and pay to households

Produce and sell goods and receive prices for such goods and services

Pay taxes to Government and receive subsidies from Government

What households do

Supply factor services to firms and receive Factory payments (personal Income)

Spend on Goods and services (consumption expenditure)

Pay taxes to Government and receive transfer payments from government

Save a part of their Income

What Does Government do

Collects taxes from Firms as well as house holds

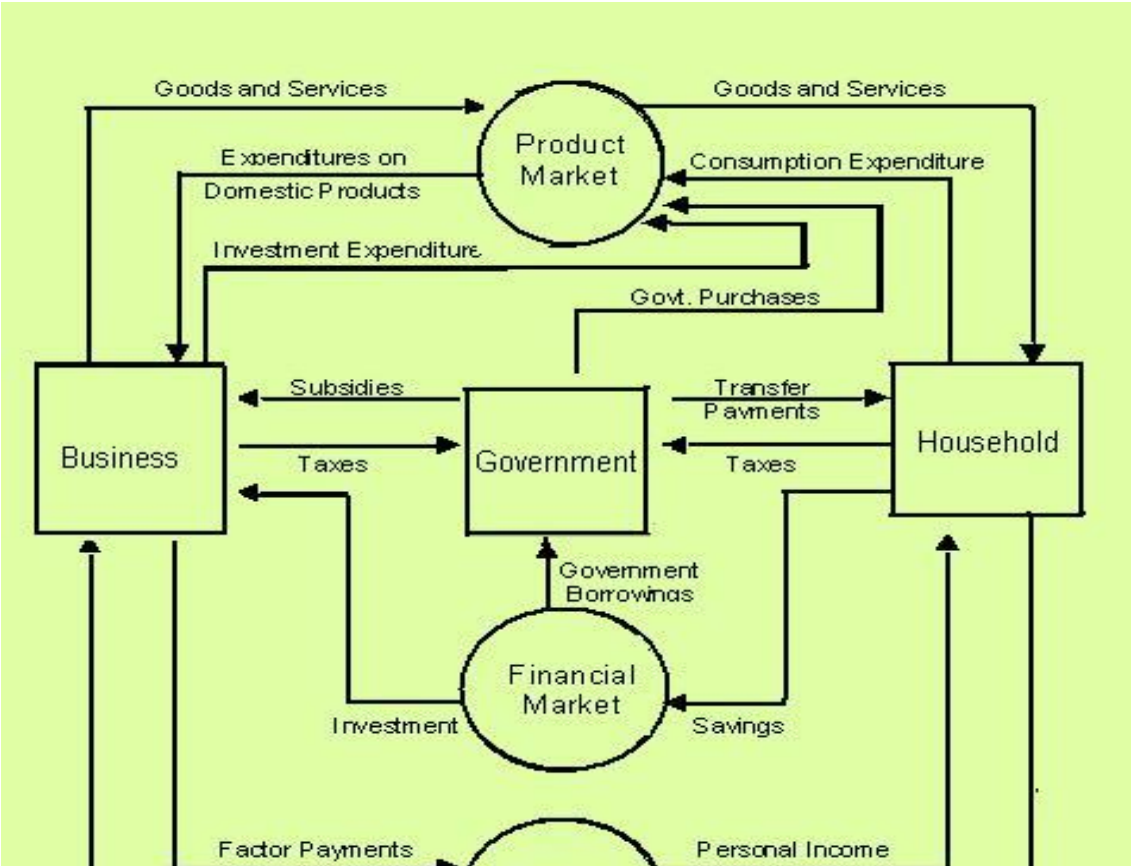
Borrows money from Financial markets

Provides subsidies to firms and transfer payments to households

Spends on purchase of goods (Government Demand)

The roles of three participants viz Households Firms and Government is shown by means of a Diagram given below.

Circular Flow in a Three Sector Economy



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The amount received by households in the form of factor Income is divided in to three parts

Consumption expenditure

Savings

Taxes paid to Government (net of Transfer payments)

Taxes reduce disposable income of households which may be considered as leakage leading to fall in demand for consumer goods

Savings flow to the financial market and will be converted in to Investment demand

Also taxes collected by Government may lead to Investment demand

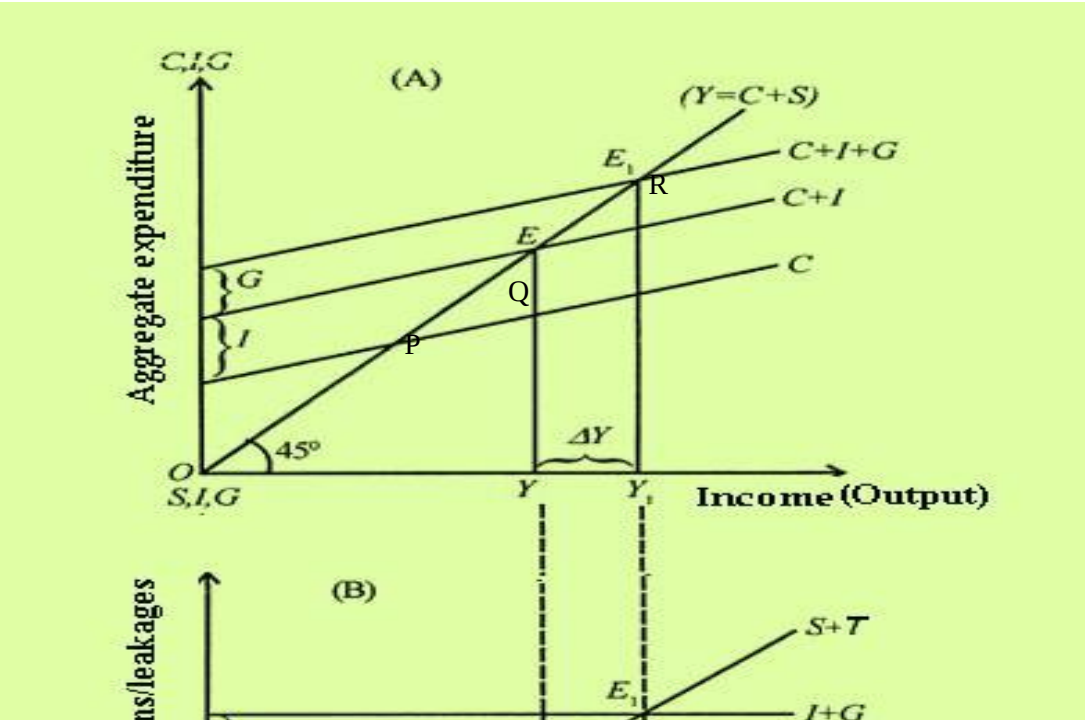
In a three sector model

Aggregate demand = consumption expenditure + Investment expenditure + Demand from Government ADF = C + I +G

Where as aggregate supply is C +S + T

Equilibrium under a two sector model is explained in the diagram given below.

Determination of Equilibrium Income: Three Sector Model



The above diagram consists of two sections i.e section A and section B

In section A

Income and output is shown on X axis

Y axis shows aggregate expenditure, consumption expenditure and Consumption and investment expenditure

In diagram B, X axis shows income and output

Y axis shows savings, investment and government Demand

In the above analysis, Investments and Government demand are considered as constant i.e Amount of investment and amount of Government expenditure is not affected by Level of Income as shows in Section B . Section B shows investment line and I +G as straight line parallel to X axis.

In section A

When income a line (Y = C +S) is income line which makes a angle of 45degreees to X axis. This line is a locus of points showing cases where level of income and level of expenditure is same.

Line C shows consumption expenditure by households

Line C+I shows aggregate of consumption expenditure and Investment expenditure

Line C + I+G shows aggregate of Consumption expenditure and investment expenditure and Government expenditure

When income is Nil, there is some consumption which is called as autonomous consumption.

When income is Y which is equal to C + I. Savings = Investments

When income is Y1 Income is equal to C+ I +G at this level savings = I + G as shown in part B

Equilibrium point is that point where C +S +T = C + I +G . At equilibrium point S+T = I +G.

If S +T is less than I +G it means there will be excess demand of aggregate demand which will encourage produces to Invest more than autonomous investment . this will increase income . The process will continue till **S +T = I +G**

Explain determination of National Income in four sector model

In a four sector economic model the participants are

a) Households b) Firms c)government d) Rest of the world (foreign countries)

In a four sector model there are three additional flows i.e Exports , imports and net capital inflow

Aggregate demand is represented by C+I +G + (X-M) , X-M represent net imports

Exports are added to Aggregate demand and Imports are deducted from aggregate demand.

The equilibrium is explained by means of diagram given below,

Line C +S +T indicates level of income as this line shows points where level of income = C +S +T i.e consumption expenditure + taxes + savings.

It shows factor income indicating aggregate supply

Line C + I G + (X- M) shows aggregate demand at various levels of Income.

Both these lines meet at point E where aggregate demand = Aggregate supply.

C + S +T = C + I + G + (X- M) . Thus at equilibrium level S+T = I +G +X – M

Or S+T + M = I +G +X

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Determination of Equilibrium Income: Four Sector Model

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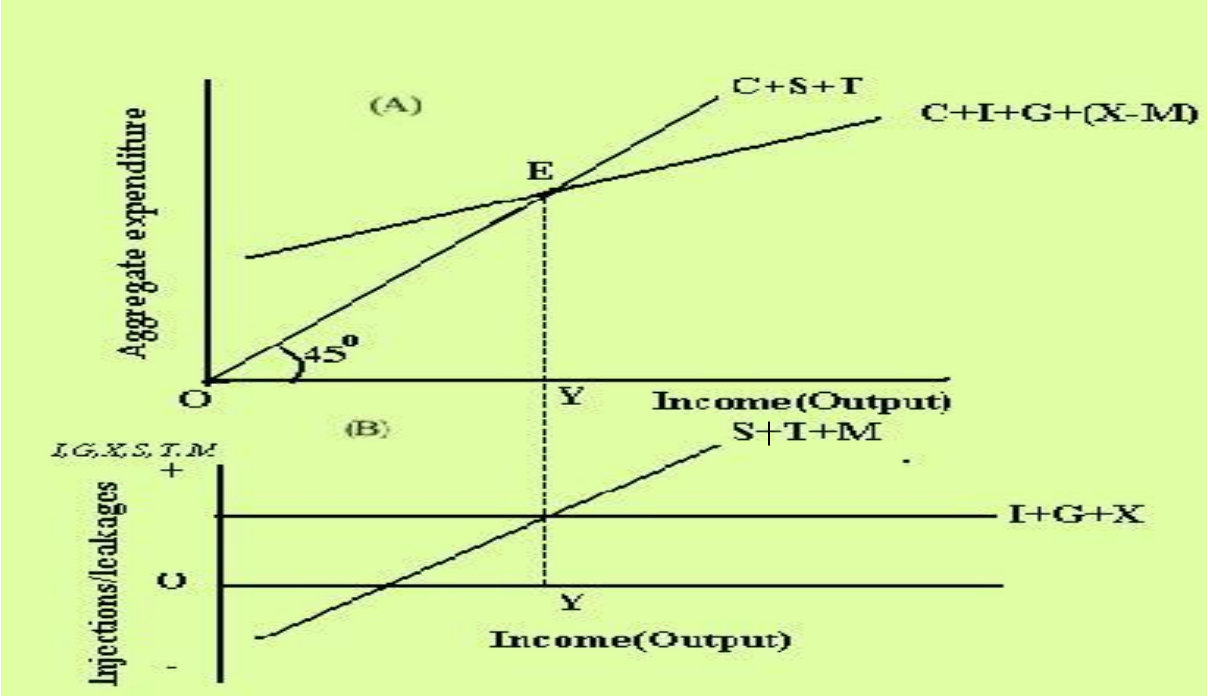

Explain the Importance of Keynes method of determination of National Income

According to Keynes theory of income and employment, National Income depends upon the aggregate effective demand.

If the aggregate effective demand falls show of output, it will result in unemployment

Consequently there will be a gap between the economy's actual and optimum potential output

On the contrary if the aggregate effective demand exceeds Aggregate supply, there will be shortage of goods and services. This will encourage producers or firms to invest more and National income will rise and catch up with demand.

However this is possible only when all the resources have been employed

If full employment is reached and still effective demand is more than Aggregate supply, an increase in investment will cause inflation and there will be no rise in real output

To overcome the deficiency and aggregate demand and reduce unemployment government should intervene and make appropriate changes in Fiscal policies.

In such a case government should spend more so as to reduce the deficiency

in aggregate demand.

Q.1 Find out the MPC, when in an economy total incomeincreases by ` 7500 crore due to increase in investment by ` 2500 crore?

ANS: Given,Increase in income= 7500 crore

Increase in investment= 2500 crore

Therefore,

Investment multiplier (k)= $\Delta Y/\Delta I$ or

$\Delta Y/\Delta I=1/1-mpc$

$7500/2500=1/1-$

mpc

mpc= 0.66

Q.2 Assume that the consumption function in an economy is specified by the equation C = 200 + 0.9Y

With the help of an example show that in this economy as income increases MPC remains constant. (RTP NOV-19)

ANS: Suppose assume that income is 1000, 2000 and 3000

Then consumption is C= 200+0.9(1000) =1100

C= 200+0.9(2000) = 2000

C= 200+0.9(3000) = 2900

Thus:

Y	C	MPC ($\Delta C/\Delta Y$)
1000	1100	-
2000	2000	900/1000=0.9
3000	2900	900/1000=0.9

So we see as income increases from ` 1000 to ` 2000 and from ` 2000 to ` 3000, marginal propensity to consume remains constant i.e., 0.9.

Q.3 Determine the government spending multiplier when there is an increase of Rs.100 crore in government spending and MPC is 0.75 ? And also find out the net effect of Rs. 100 crore spending? (OCT-19 MTP)

ANS:

$$\text{Government spending multiplier} = \frac{1}{1-MPC}$$

$$\frac{1}{1-0.75} = \frac{1}{0.25} = 4$$

Net effect of Rs 100 crore spending is Rs. 100 crore* 4 = Rs. 400 crore

Q.4 Suppose MPC is 0.8 and it is planned to increase National Income by Rs. 3000 Crore then how much increase in investment is required to fulfill this target? (OCT-19 MTP)
(2)

ANS:

Given, MPC = 0.8

Planned to increase National Income by= Rs. 3000 Crore

$$K = \frac{1}{1-MPC}$$

$$\frac{1}{1-0.8} = 5$$

We also know $K = \frac{\Delta Y}{\Delta I}$

So $5 = \frac{3000}{\Delta I}$

ΔI = 600 Crore.

Q.5 How the autonomous expenditure multiplier is stated in four sector model?(OCT-19 MTP)
(2)

ANS:

The autonomous expenditure multiplier in a four sector model includes the effects of foreign transactions and is stated as $\frac{1}{1-b+v}$ where v is the propensity to import which is greater than zero. The greater the value of v, the lower will be the autonomous expenditure multiplier.

Q.6 Explain the consumption function using a suitable table and diagram.
NOV2019 (3)

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CHAPTER – 3 (ROLE OF GOVERNMENT IN ECONOMIC SYSTEMS)

1 Explain the role of Government in an economic System

Ans No society has capacity to produce all Economic goods and services that its members desire to have.
There are qualitative and quantitative constraints of resources
Due to resource constraints
An economic system has to answer the following questions
What to produce
How much quantity to produce
For whom to produce
And how much of the resources should be kept aside to ensure growth of productive capacity.
The above decisions are called as decision about resource allocation
Modern society in general offers three alternate systems through which the decisions of resources allocation may be made. These three systems are

1) The market – Where decisions are based on demand and supply
2) The government- Where decisions regarding resource allocation are taken by government
3) A mixed system- Mixed economy where markets and Government controls both operate

Adam smith had advocated free markets and minimal Government intervention
However Adam smith underlined the role of Government in National defence, Maintenance of law and justice and establishment and maintenance of highly beneficial public institutions and public works which the market fail to provide.
However 1930 say Great depression and consequently the role of Government /state gained importance. The role of government in economic matters is called as Fiscal function of government.
There are varied opinions as to what should be the nature and extent of Role of government. However it is certain that Government cannot be a mute spectator in economic matters.
Richard Musgrave in his classical treatise "Theory of public Finance (1959) introduced three branch of taxonomy of the role of government in a market
Musgrave believed that function of Government are separated in to three

1) Resource allocation
2) Income redistribution
3) Stabilisation.

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Q2 Discuss the allocation function? Why does market fail to efficiently allocate resources. State the steps taken by Governments to allocate resources

1 Allocation function

Allocation function involves use of resources in the best possible manner i.e optimize the use of resources. It involves deciding about what to produce and how much to produce

In a market economy, allocation of resource is based on demand –supply and price which is know as price mechanism. Allocation of resources in a market economy is based on profit motive.

A market economy is subject to serious malfunctioning. In a market economy private goods may be easily available but the same may not be the case of public goods.

Efficient allocation of resources is assumed to take place only when markets are perfect. In reality markets are never perfect.

Markets typically fail to provide collective goods which are consumed in common for all the people. Goods such as Water, electricity, clean Air, law and order, Defence etc.

Market faiure to efficiently allocate resourcs occurs due to the following reasons

1 Imperfect competition and presence of monopoly power in different degrees. This leads to under production and higher prices as compared to production and prices which would have taken place had there been perfect competition.

2 Markets fail to provide collect goods which are consumed in common by all people. Example fresh Air, water, law and order, defence etc

3 Markets based allocation of resources does not consider externalities which arise due to production and consumption of a commodity. The sellers and buyers do not consider the externalities (cost paid by the society) incurred due to production and consumption of a commodity.

4 Factor immobility leads to imperfections in market

5 Lack of perfect information makes market Imperfect

6 In equal distribution of income and wealth may lead to production of luxuries at the same time there will be shortage of basic necessities

It is therefore necessary for the state to intervene to ensure that concerns of citizens are fulfilled. Government has to intervene in the market to bring about improvement in social welfare.

Government has to interfere and provide goods and services which market economy does to provide such as 1) establishing property rights, 2) establishing necessary arrangement for enforcing contracts through provision of law enforcement and courts 3) Providing merit goods.

These intervention does not mean that government action will replace market.

Government has to intervene to make corrections in the markets and complement the functioning of markets.

Government can intervene to achieve efficient allocation of resources. Government can intervene in the following ways :-

1) **Direct production by government**
Government may directly produce the economic goods (For example electricity, drinking water, public transportation services)
2) **Influencing production by private Individuals**
Government can influence the production done by private individuals by offering tax concession and subsidies for production of desirable goods and imposing taxes on goods which do not promote social welfare.
3) **Regulating production through licencing**
Government may frame regulations such as licencing to curb production of undesirable goods and promote production of socially desirable goods.

Redistribution functions.

In the past few decades we have seen that there has been a tremendous expansion in economic activities which has generated enormous increase in aggregate output and wealth.
However the increased wealth is not been evenly distributed across households.
If left to markets, the distribution of income and wealth among individuals will be skewed and therefore the government has to intervene to ensure a more desirable and just distribution.
Generating wealth is important but fair distribution of wealth is also important
A study of History from economic perspective will show that major political revolution such as Russian revolution, French revolution had root in economic inequalities.
The redistribution function of Government aims at
Redistribution of income to achieve equitable distribution of output
Advancing the well being of those sections of the society which are weak
Providing security for people who have hardships

Ensuring that everyone enjoys a minimal standard of living.
Growth of Income and wealth along with equitable distribution of Income is termed as Inclusive growth.
A few examples of the redistribution functions performed by governments are

1. **Progressive taxation**
People with high incomes are taxed at a higher rate of direct tax. In case of indirect taxation, luxuries are taxed at a higher rate
2. **Public services provided by Government**
Public services such as health, education, essential commodities are provided by government at a highly subsidised rates.
3. **Reservation in employment**
Jobs in government sector are reserved for weaker sections of the society.
4. **Development of backward regions.**
Government implements various schemes for development of backward regions so as to bring about reduced regional disparities

Stabilisation function

Keynes advocated that market economy does not automatically generate full employment and price stability therefore government should pursue deliberate stabilisation policies.
The market mechanism has an inherent capacity to create business cycles,
Market mechanism has limited capacity to prevent or overcome disruptions caused by fluctuations in economic activity.
Market economy creates instabilities such as recessions, inflation etc. To see that these instabilities are not prolonged and cause hardships to poor sections of the society, it is necessary that government should intervene and correct these instabilities.
It is also possible that situations of stagflation occurs under which there is inflation and it is accompanied by unemployment.
Government stabilisation may be through monetary policy as well as fiscal policy
Monetary policy is for regulating money supply in the economy and interest rates which affect consumption and investment functions
Fiscal policy is a policy for collection of revenue and spending by government
Destabilisations have a major impact on lives of humans especially weaker sections of the society. It is therefore essential for government to intervene and restore stability.
Due to increased Interdependence, stabilisation issue has become more complex.
A recession or boom in one country gets easily transmitted to another country.
Through stabilisation function ,Government is concerned with
Labour employment level and capital utilisation level
Overall output and income
General price levels
Balance of international payments
Rate of economic growth

Government tries to achieve stabilisation through monetary and fiscal policy.

During recession, government increases expenditure and reduce taxes so as to stimulate demand for goods and services. Increased demand for goods and services leads to more production and employment. Also Government may adopt policy of cheap money policy, under which interest rates are low so credit is easily available for productive activities.
During inflation Government may cut its expenditure and increase tax rates. Also government may reduce the availability of credit.

Q.3 How can the government influence the resource allocation in an economy?(RTP NOV-19)

ANS: A variety of allocation instruments are available by which governments can influence resource allocation in the economy. They are -

i. government may directly produce the economic good (for example, electricity and public transportation services)

ii. government may influence private allocation through incentives and disincentives (for example, tax concessions and subsidies may be given for the production of goods that promote social welfare and higher taxes may be imposed on goods such as cigarettes and alcohol)

iii. government may influence allocation through its competition policies, merger policies etc. which will affect the structure of industry and commerce (for example, the Competition Act in India promotes competition and prevents anti-competitive activities).

iv. governments' regulatory activities such as licensing, controls, minimum wages, and directives on location of industry influence resource allocation.

v. government sets legal and administrative frameworks, and

vi. any of a mixture of intermediate techniques may be adopted by governments.

Q.4 When price of certain essential goods rises excessively, how does the government intervene to control the price? Explain with the help of an example and with suitable diagram. (RTP NOV-19)

ANS: When prices of certain essential commodities rise excessively, government may resort to control in the form of price ceilings (also called maximum price) for making a resource or commodity available to all at reasonable prices. For example: maximum prices of food grains and essential items are set by government during times of scarcity. A price ceiling which is set below the prevailing market clearing price will generate excess demand over supply. (The students should draw the diagram in support of their answers) With the objective of ensuring stability in prices and distribution, governments often intervene in grain markets through building and maintenance of buffer stocks. It involves purchases from the market during good harvest and releasing stocks during periods when production is below average.

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CHAPTER 4 : MARKET FAILURE

1. Explain the concept of market failure

The advocates of laissez fair argued for least Government intervention in economic matters

There was a general belief that markets are compent of attaining optimum allocation of resources

Production of goods and services should be left to market forces and markets mechanism will ensure

that production is done as per the choice of the customers

However Many a times market fails to allocate resource efficiently and markets outcomes are less efficient. Market failure occurs when markets fail to allocate resources efficiently.

Market failure occurs in a situation where free market leads to misallocation of society's resources in a sense that there is either over production or under production of a particular goods and services.

There are two aspects of market failure.

1) demand side failure **2)** supply side failure.

Demand side failure occurs due to unwillingness of the consumer to pay. For example a consumer will not be willing to pay for a wayside Fountain or street light. Since consumer is unwilling to pay for it, market will fail to provide such goods even though such goods satisfy collective want.

On Supply side failure occurs because producers do not take into account cost incurred by society in production of goods and services. For example a thermal power plant that uses coal may not have to include or pay completely for the costs to the society caused by fumes it discharges into the atmosphere.

Markets can be efficient when markets are perfect. However the prerequisites of perfect markets are unlikely to be present in an economy.

Since market failure occurs, which brings out a case for government intervention

Q2 Why do markets fail ?

The reasons for market failure are summarised below

1. Market power
2. Externalities
3. Public goods
4. incomplete information.

1. Market power.

Often markets tend to create monopoly power may be to a limited extent

When monopoly power is created it gives ability to a firm to raise market price of goods over its marginal cost. Firms that have monopoly are price makers and therefore can charge a price that gives them Super profits.

Excessive market power gives a single producer or a small number of producers to produce and sell less output than would be produced in competitive market.
As we have seen that when monopoly situation is created, the equilibrium of a firm is on the falling part of average cost curve which implies that production is at a higher cost and output is less than equilibrium output
In some situation there is a problem for non existence of markets or missing markets resulting in failure to produce goods and services
For example if postal services are left only for markets, there will be no postal services in remote areas
Same may be the case with transport services or internet services

2. Externalities.

The costs and benefits of goods and services are reflected in price of goods
For a producer, pr*ices of goods represents cost of producing the goods and profits earned by producer*
For a consumer, price represents benefits derived from goods
However there are some costs and some benefits which are not reflected in the prices of goods.
These costs and benefits are called as externalities.
In other words costs and benefits which are not accounted for by the market prices are called as externalities because they are external to the markets.
For example if electricity is produced by using coals, the pollution caused in the atmosphere is a cost which is not considered by the producer while determining the cost of the produces
Such cost is considered as externalities
Markets prices do not take in to account negative production externalities and negative consumption externalities. Due to this actual cost of production or actual benefits of some goods is not reflected by the market price. This leads to market failure.

3 Public goods.

Public goods and services are such goods and services whose consumption is collective in nature.
No direct payment by the consumer is involved in case of a pure public goods
Public goods are non- rival in nature in a sense that use of public goods by one person does not diminish the availability of public goods to another person. For example take example of street light. Availability of street light to one person does not diminish the availability of street light to another persons
Public goods are non exclusive goods. It means a person cannot be excluded from using these goods.
For example Defence arrangement of a country is a service available to all people in the country. A person cannot be excluded from availability of defence services.
Due to non rival nature and non exclusive character of public

goods, such goods cannot be sold for a price
Hence no producer will produce and provide such goods and services. In other words markets fails to provide public goods. This leads to market failure

4 Incomplete information.

Perfect knowledge on the part of buyers and sellers is an important conditions for a perfect competitive market.
Perfect knowledge means buyers and sellers have complete information about every matter which influences their decision to buy and sell.
However in real life situation, this assumption is not fulfilled
Many a times, the nature of goods and service is complex. For example in case of cardiac surgery, specialised machines etc consumer may not be aware of the various complexities associated with the services and goods.
Also consumer may neither have capacity nor willingness to find complete information
In some cases information is asymmetric. This is knowledge of buyers may be more than that of sellers or knowledge of sellers may be more than that of buyers. For example in case of renting a property, property owner may have more knowledge about leasing matters than buyers. In case of lending services, lenders may have more knowledge than borrowers as regards capacity to pay.
There are situations where one party has materially more knowledge than others .Such situation is referred as " Lemons Problem " which is an important cause for market failure
In some case buyer may have more knowledge than the seller. For example when a person sells a second hand car to a car dealer dealing in second hand cars, obviously the buyers have more knowledge than the sellers.

Q3 Explain the concept of externalities and how do externalities lead to misallocation of resources

The costs and benefits of goods and services are reflected in price of goods
For a producer, price *of goods represents* p*rices cost of producing the goods and profits earned by producer*
For a consumer, price represents benefits derived from goods
However there are some costs and some benefits which are not represented by the prices of goods.
These costs and benefits are called as externalities.
In other words costs and benefits which are not accounted for by the market prices are called as externalities because they are external to the markets.
For example if electricity is produced by using coals, the pollution caused in the atmosphere is a cost which is not considered by the producer while determining the cost of the products
Thus some times actions of either consumers or producers result in costs or benefits that do not reflect as part of the market price. Such costs or benefits which are not accounted by the market

price are called as externalities
The unique feature of an externalities is that it is initiated and experience not through operation of price system but is experience outside the market

Since it occurs outside the price mechanisms it is not compensated for.
Externalities are also referred as slipover effects , neighbourhood effects third party effects
Or outside effects as the originator of the externality imposes costs or benefits on others who are not responsible for initiating the Act.
Externalities may be reciprocal or unidirectional.
For example if machines in a workshop make noise which disturbs a nearby baker
And smoke generated in the nearby baker causes discomfort to workers in workshop such externalities are reciprocal
If a singer is singing a song which disturbs students who are studying, this is a case of unidirectional externalities

Externalities may be of following types
Negative production externalities
Positive production externalities
Negative consumption externalities
Positive consumption externalities

Negative production externalities
As the name suggest it is an adverse effect due to production process.
An example of such externalities may be pollution caused by production process .
Pollution caused by production process may cause health hazards for people in the nearby area. Also people in nearby areas may be exposed to unknown risk. example Bhopal gas leak disaster
The firm does not account such costs while determining the prices to be charged for goods and services
There is no market in which such external costs are reflected in price of goods.

Positive production externalities.
An positive production externality confers external benefit on persons other than consumers. For example A doctor performing complicated orthopaedic operations may become an expert in complicated operations and the benefits of his experience may be used by other doctors to treat other patients.
Another example of positive production externality can be of a beekeeper who locates beehives in an orange growing areas enhancing the chances of greater production of oranges through increased pollination.

Negative Consumption externalities
Negative consumption externalities are extensively experienced by

us in our day to day life.
Such negative consumption externalities are initiated in consumption which produce external cost on others.

Example consumption of cigrattesin public places causes passive smoking exposing non smokers to the risk of causing cancer.
Excessive consumption of alcohol causing impairment in efficiency for work and production are instances of negative consumption externalities effecting production.

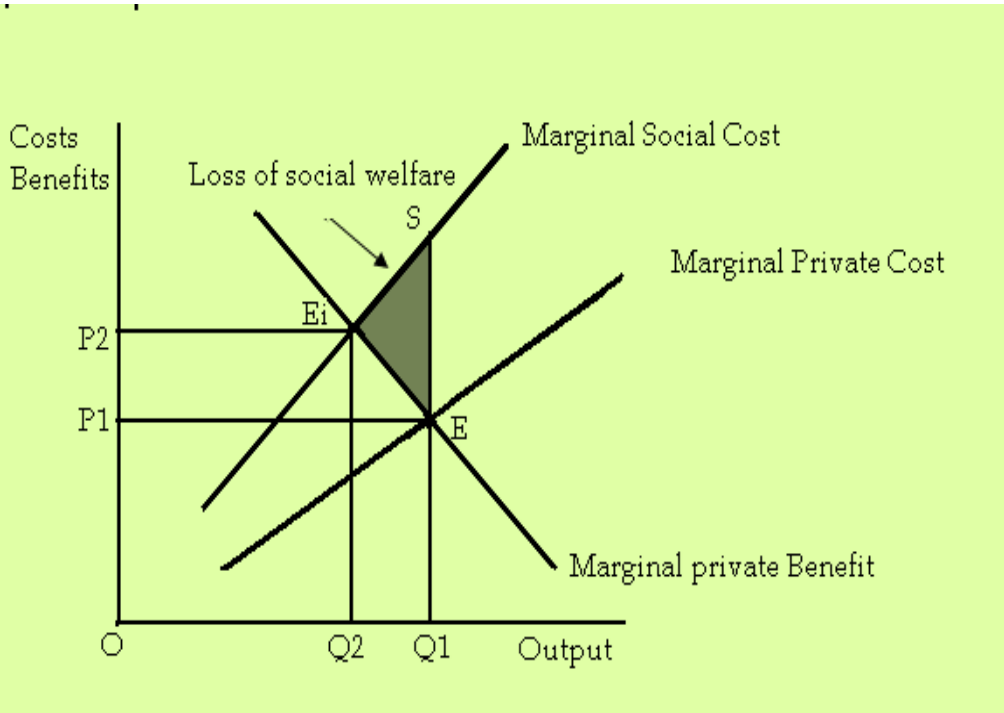
Positive consumption externalities
A positive consumption externality is inititiated by consumption and confers external benefits to others
If people get immunised against contagious disease, they would confer a social benefit to others as well by preventing others from getting infected.

Negative externalities impose a cost on society which is not reflected in the market pr*ice of goods.*
Once negative externalities are recognised we have two types of costs
1) private cost 2) social costs
Private costs is the cost incurred by producer for providing goods and services
Apart from private costs, there are negative externalities which are costs on society
Consider a production of an article. Private costs will consists of cost of material, labour , power etc consumed in production of goods. However pollution created by production process is a Externalities which is a cost to the society
Therefore Social costs = Private cost + External cost.
Thus when negative production externalities exists social cost is greater than private costs
Similarly when negative consumption externalities exists social benefits are less than private benefits.

Q4 How do externalities cause market inefficiencies
Negative externalities cause market inefficiencies because they hinder the ability of market prices to convey accurate information about how much to produce and how much to consume.
A market exchange assumes that the prices charged represent full cost or production plus profits
Producers who produce goods with extensive negative externalities do not account full cost of production from society's point of view which includes private cost and cost of externalities
Such producers consider only private costs and ignore cost associated with negative externalities
Government intervention is required to make such producers account for social cost associated with production.
When firms do not worry about negative externalities associated with their production, the result is excessive production as

compared to level of production which would have been achieved had cost of externalities being also considered.
This is explained in the diagram given below.

DIAGRAM



In the above diagram output is shown on X axis
Marginal Costs and marginal benefits are shown on Y axis

Curve with negative slope, sloping downwards from left to right shows marginal private benefit
Which goes on diminishing with increase in production (based on law of diminishing marginal utility)
There are two curve with positive slopes showing marginal private cost and Marginal Social costs
The marginal private cost curve shows that as output is increased marginal private cost goes on rising (based on marginal cost curve which is based on production function). Marginal private cost includes only costs incurred by producer.
The marginal Social cost curve has positive slope. This curve is similar to marginal private cost curve however it shows social costs which consists of Marginal private costs + marginal cost of externalities
If we consider marginal private cost curve for equilibrium purpose, the equilibrium level of output will be Q1. At this level of output marginal private cost is equal to marginal private benefit and beyond this level of output marginal private benefit is less than

marginal private costs
However if we consider social costs i/e marginal social cost curve, equilibrium output is Q2.At this level of output marginal private benefit is equal to marginal social costs.
Thus if externalities are not considered production will be Q1 instead of Q2. The difference will be overproduction from society 'point of view'.
Output level of Q1 is socially inefficient beyond Q2 Marginal social cost is greater than marginal private benefit.
Thus if social cost is considered production should stop at Q2
If only Private costs are considered production will be Q1
The shaded portion triangle between Q2 and Q1 indicates area of loss of social welfare due to over consumption/overproduction.

Q5 Discuss the characteristics of public goods and private Goods.

Paul A Samuelson introduced the concept of collective consumption good in his path breaking 1954 paper "The pure theory of public expenditure"
Paul A Samuelsonis recognised as the first economist to develop the theory of public good.

Characteristics of public goods

Public goods are products (goods or services) whose consumption is essentially collective in nature.

1 No direct payment

In case of pure public goods no direct payment is to be made by consumer. Example street lights, defence system of a country.

2 Non Rival

Public goods is non rival in consumption, It means consumption of a public good by one individual does not reduce the quality or quantity available for all other individuals
For example light house constructed by Government authorities , if used by one ship does not reduce its availability for other ships.

3 Non excludability

Public goods are not excludable, i.e consumers cannot be excluded from consumption benefits. If such goods are provided to one individual, it has to be provided to other individuals also. For example National defence once provided, it is impossible to exclude anyone within the country from consuming and benefiting from it.

4 Indivisibility

Public goods are characterised by indivisibility. For example one can buy chocolates or ice creams as separate units but a light house , a highway an airport cannot be consumed in separate units.

5 Inadequate property rights

Public goods are generally more vulnerable to externalities, inadequate property rights and free rider problems. It means that property rights of public goods which have extensive indivisibility and nonexclusive properties cannot be determined with certainty. For example we cannot determine our property right in a road.

6 No motivation to produce

Since producer's cannot charge a positive price for public goods, producers are not motivated to produce public goods

Producers are not motivated to produce public goods (required by the society) if they cannot charge a positive price for them or make profits from them.

As such though public goods are extremely valuable for the well being of the society, left to the market they will not be produced at all or will be grossly under produced.

Characteristics of private Goods.

Private goods refers to those goods which give utility to private individuals and not to public at large

1 Rivalrous

Rivalrous in Nature. Private Goods are rivalrous in nature which implies that consumption of private goods by one person prevents consumption of private good by another. For example use of car by one person prevents the use of same car by another person

2 Private goods are excludable

Private goods are excludable. Private goods are not available for all. Only those who own it can use it other are excluded from using private goods

3 No Free Rider problem

Private goods does not have a free rider problem . This means that private goods will be available to only those persons who are willing to pay for it.

4 Consumers may reject private goods

All private goods and services may be rejected by consumers if their need, preferences or budgets change

5 More resources for more public goods

Additional resource costs are involved for producing and supplying additional quantities of private goods.

Most of the goods produced and consumed in an economy are private goods examples , clothing movie tickets ,Televisions etc.

Q5 Explain the classification of public goods

Public goods can be classified on the basis of non rival and non excludable characteristics

Goods may be classified as

A) Rivalrous and excludable -- these are pure private goods
Rivalrous but non excludable - Such goods are common resources such as forest resources , fish reserves in sea

B) Non rivalrous but excludable - Example cable television, private parks

C) Non rivalrous and non excludable -- pure public goods such as defence

Public goods are also classified as
Pure public goods and impure public goods
Public goods possess the characteristics of non rivalrous and non excludable characteristics
Goods which satisfy both these characteristics in real sense are pure public goods.
The concept of pure public goods is criticised by many on the ground that such goods are not in fact observable in the real world
For example if government provides law and order or use of law courts. Use of these goods by some individuals may reduce the availability of these goods to others. Even in case of defence, if armies are mostly deployed in the northern borders, it may not result in same amount of protection to people in south.

Impure public goods are those that only partially satisfy the criteria of non rivalry and non excludability.
Such goods possess characteristics of public goods and private goods.
Some impure goods do not satisfy fully the criteria of non rivalry. In other words the criteria of rivalry is only partly satisfied
Example consider free Wi-fi network provided by government. Use of wi-fi by more person will reduce the aviability of Wi-fi to other persons.

Some impure public goods do not satisfy the criteria of non excludability.
Example Use of Road/bridges by paying toll. Though these goods satisfy the criteria of non rivalry it does not satisfy the criteria of non exclusion.
When criteria of non exclusiveness is eliminated it implies that free riding can be eliminated which means that impure public goods will be provided either by the market or the government at a price or fee.
Secondly the provider of impure public good may be able to control the degree of congestion either by regulating the number of people who use the goods

Q6 Explain the concept of

a) **Quasi Public goods (mixed goods)**
b) **Common access Resources**
c) **Global public goods**
d) **Free Rider problem in public goods**
e) **Adverse selection**
f) **Moral hazards**

a) Quasi public goods

Quasi public goods or services possess all the qualities of the private goods with some benefits of public goods. It is basically a private good not satisfying the criteria of non rivalry and non excludability. However the externalities associated with these goods satisfy the test of non rivalry and non excludability.

For example a person pays to the doctor and gets himself inoculated against measles.

Service provided by the doctor is a pure private good as it is does not satisfy the test of non rivalry and non excludability.

However the externalities of these goods (benefits/cost which are not reflected in

The price) are that it reduces the chances of other persons getting infected.

These externalities satisfy the criteria of non rivalry and non excludability.

Another example of quasi public goods is Education provided to students by

Private schools/colleges. These services are public goods. However these services

have externalities in the form of benefits to the society in form of increased

knowledge, disciplined society etc

These externalities have the characteristics of public goods i.e non rivalry and non excludability

Quasi goods are called a near public goods.

b) Common Access resources

This is a type of impure public good. Such goods does not satisfy the criteria of non rivalry but satisfy the criteria of non-excludability.

For example public gardens satisfy the criteria of non excludability, however use

of Garden by one person reduces the availability of Garden to another person.

Another example of such goods is Fishing stock in sea etc.

Since price mechanism does not apply to such common resources, consumers do

not pay for these resources and therefore they overuse them and cause their

depletion and degradation,

Economists use the term "Tragedy of the commons " to describe the problem

Which occurs when rivalrous but non excludable goods are overused.

C) Global Public goods.

These are public goods the benefit of which accrues to everyone in the world.

These goods have widespread impact on different countries and regions, population groups and generations. These goods whose impacts are indivisibly spread throughout the entire globe.

Example of global public goods is eradication of polio by WHO. Similarly the World bank

Identifies five areas of global public goods which it seeks to address namely the environmental commons communicable disease, International trade, international financial architecture and Global knowledge for development.

D) Free Rider Problem in case of public goods

Free riding is benefiting from the actions of others without paying. The incentive to let other people pay for a good or service, the benefits of which are enjoyed by an individual is know as the free rider problem.

A Free rider is a consumer who does not pay for a nonexclusive good in expectation that others will pay.

Public goods have the characteristic of non exclusion. It means such goods are provided to all whether they pay for it or not

The absence of excludability and tendency of the people to act in their own self interest will lead to the problem of free riding.

On account of free riding problem, there is no meaningful demand curve for public goods. Because of free rider problem.

No public good will be provided in private markets

Private market will seriously under produce public goods even though these goods proved valuable service to the society.

This free rider problem with public goods leads to market failure.

e) Adverse selection and Moral Hazard

1. Adverse selection is a situation in which asymmetric Information about quality eliminates high quality goods from a market.

2. Adverse selection is a term used in economics that refers to a process in which
undesired results occur when buyers and sellers have access to different/imperfect information.

3. The uneven knowledge causes the price and quantity of goods or services in a market to shift. This results in "bad" products or services being selected For example in case of second hand cars, a dealer has more knowledge than the buyer. The buyer will pay on the basis of average quality of cars. However dealer is likely to sell unusually poor cars to the buyers and good quality second hand cars may be kept by their owners or sold only to friends. Thus good

quality second hand cars are driven out of market. Another example of adverse selection, doctors may give high power tablets to provide immediate relief to the patients. However such high power tablets may be harmful to the patient in the long run. If there is no check on such practices, only high power tablets will flow in the market and desired tablets will be out of market. This is because only doctors knows the harmful effects of high powered tablets.

f) Moral hazards

moral hazards are also a result of asymmetric information. A moral hazard is a situation where a party will take risks because the cost that could incur will not be felt by the party taking the risk. For example insureced consumers are likely to take greer risks, knowing that a claim will be paid for by the insurance company.

Moral hazard is opportunism characterized by an Informed person`s taking advantage of a less –informed person through an unobserved action.

It arises from lack of information about someone`s future behaviour.

When an employee is selected for a job, the employer takes risk about the future behaviour of such employee.

Doctors prescribing unnecessary Test and medicines to patients is an example of moral hazard as patients lack information and actions of doctors are not observed

Moral hazard and adverse selections are due to asymmetric information which is one of the cause of market failure.

Q.7 Define Social Good? What is the similarity and dissimilarity between Social Goods and Common Pool Resources? (OCT-19 MTP) (2)

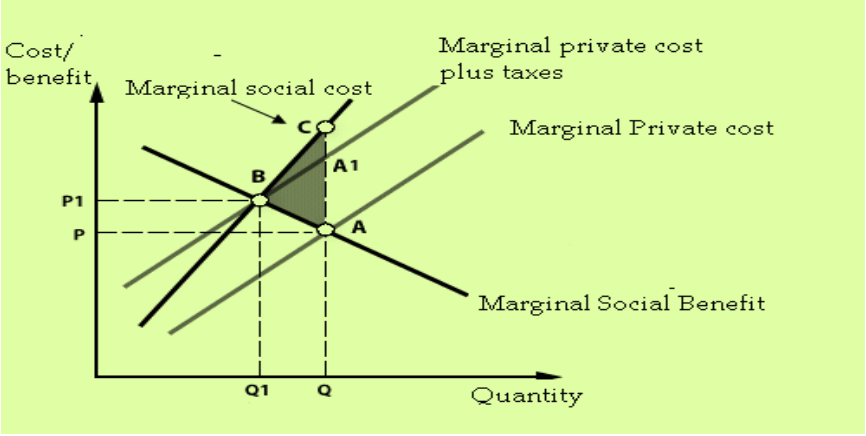
ANS: A Social Good is defined as one which all enjoy in common in the sense that each individual's consumption of such a good leads to no subtraction from any other individuals consumption of that good. Similarity between Social Goods and Common Pool Resources is that both are non- excludable whereas dissimilarity is seen in their nature that is Social Goods are non-rival which means that the use of these goods does not reduce the availability for others, while Common Pool Resources are rival in nature which means that the use of these resources reduce the availability for others.

Q.8 Distinguish between positive and negative externalities. NOV. 2019 (2)

5 - GOVERNMENT INTERVENTION IN CORRECTING MARKET FAILURE

Q1.	**Explain how does government intervene to minimise market power**
	Market power is one of the reasons for market failure.
	Market power tends to create monopoly which results in restriction of output at a level below optimum level and charging prices which are above marginal costs.
	Government tries to reduce the impact of Market power thorough following measures
	LEGISLATIONS
	Government makes rules and regulations which promote competition and prohibit actions that are likely to restrain competition.
	These rules and regulations (legislations) differ from country to country
	For example in India we have competition Act 2002
	In USA there are Anti trust laws and In U.K there is competition Act 1998
	Such legislations aim at prohibiting making of combinations and collusions among producers or traders. Such legislations also prohibit predatory pricing (charging very low price to eliminate competition example as done by JIO)
	PRICE REGULATIONS
	Government regulates prices of many goods by setting up maximum prices that firms can charge. For examples in case of pharma Industry prices of many Drugs(medicines) are regulated by government. In some cases Government regulatory agency determines an acceptable price so as to ensure a competitive or fair rate of return. Example prices charged by power producing firms are fixed on the basis of fair returns to producers
	CREATING SOCIAL MONOPOLIES
	Government creates social monopolies to ensure supply of essential goods at a lower price. Examples of such monopolies are Railways, electricity companies etc.
	In some cases such monopolies are given liberty to serve the entire market rather than have competition. If they serve the entire market, large scale

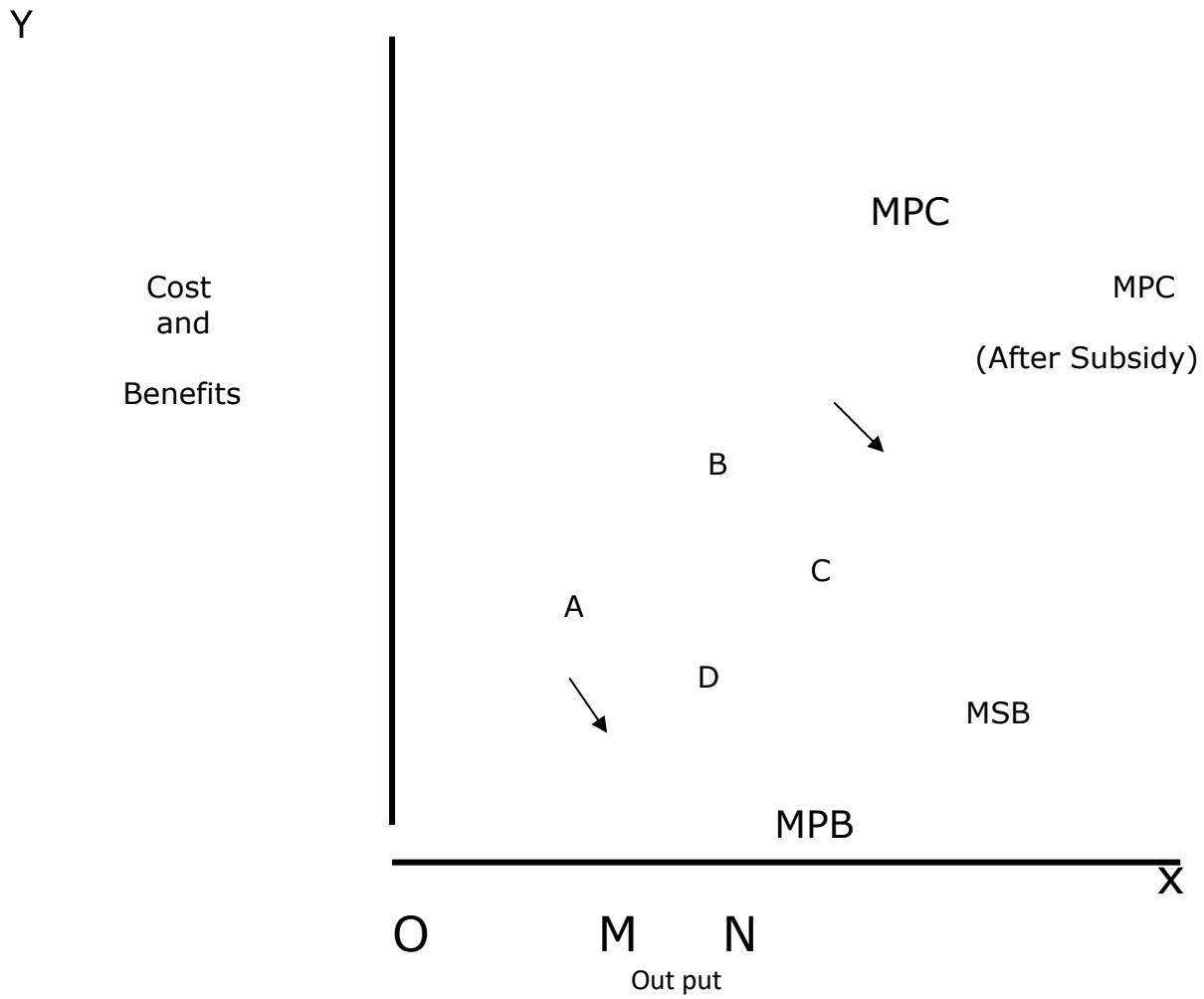
	operations lead to reduction in average cost which would not have been achieved had there been competition.
Q2	**How does Government intervene to correct negative Externalities.**
	Producers tend to consider only private costs while deciding what to produce and how much to produce
	Consumers tend to consider only private benefits while deciding what to consume and how much to consume.
	Externalities of socials costs and benefits which are not reflected in the market price.
	Non consideration of such externalities leads to over production or under production of such Goods. which leads to market failure
	Since negative externalities involve cost to the society, Government has to intervene
	GOVERNMENT INTERVENTION TOWARDS NEGATIVE EXTERNALITIES MAY BE DIVIDED IN TO TWO PARTS
1.	Direct controls that openly regulate the actions of those involved in generating negative externalities
2.	Market based policies that would provide economic incentives so that self interest of the market participants would achieve a socially optimal solution
	DIRECT CONTROLS
	Direct controls prohibit specific activities that explicitly create negative externalities
	Such controls prohibit or limit activities that create externalities
	For example production of vehicles not confirming to new emission norms is prohibited
	Smoking is completely banned in many public places
	Advertisement of tobaccos is banned.
	Government has made laws to protect environment example Environmental (protection) Act 1986.
	Such restriction aim to curb the activities creating negative externalities.

	MARKET BASED POLICIES
	This approach is based on the principle that those who create externalities pays for them and includes additional costs while making decisions.
	One such approach to ensure internalisation of externalities is to impose t costs on producers
	There are two approaches to impose costs on produces
	1. Imposing taxes
	2. Establishment of cap and trade permits
	IMPOSING TAXES
	The size of tax depends upon the extent of negative externality. These taxes are named as pigouvian taxes after A..C. Pigou
	For example pollution caused by an Industry/firm is an externality
	Therefore Government may impose tax on manufacturing units which are causing these negative externalities.
	Pollution tax may be based on the extent of pollution created by such units
	Taxes increase private cost of production or consumption
	Some economist argue that proceeds of such taxes should be used specifically to remore the effects of such externalities. For example amount collected by way of pollution taxes should be spend to make air and water pollution free.
	Imposition of taxes adds to the private costs which increases the marginal private costs i.e it leads to reduction in supply as shown in the diagram given below.
	

	In the above diagram Quantity produced is shown in X axis
	Cost and prices are shown on Y Axis
	A curve showing marginal social benefit is downward sloping,
	There are three curves which have a positive slope
	Marginal private cost curve
	Marginal private cost curve with taxes
	Marginal social cost curve. The vertical between marginal private cost curve and marginal social cost curve Indicates cost of externalities which are borne by the society.
	Ideally from society's point of view equilibrium should be attained at point B where marginal social benefit is equal to marginal social costs At this point out put is Q1.
	However since producers do not consider social cost of externalities, the producers will decide the output considering only marginal private costs
	Accordingly the produces will produce Q where marginal social benefit is equal to marginal private cost. Which implies that there will be overproduction of goods from the desirable level. The over production is the extent of Q1 to Q
	When government impose taxes on produces, their marginal private cost curve shits upwards (showing decrease in supply). And the new marginal private costs plus taxes curve intersects marginal social benefit curve at point B.
	Where the equilibrium output is Q1 which was the ideal output had marginal social cost been considered. i.e optimum level of output based on society's point of view.
	If Government does not imposes tax, production of such goods will be Q units, the loss of welfare to the society will be as indicated by the shaded region.
	However there are some problems in administering tax imposed for countering negative externalities
	Such taxes are difficult to determine and administer because it is difficult to discover the right level of taxation that would ensure that private cost plus taxes will exactly equate with the social cost
	The method of taxing have problems of procedures and monitoring which involve additional cost on the government
	This method does not provide genuine solution to the problem. It only establishes

	a system where there is a strong disincentive for creating negative externalities
	In case where demand for produce is inelastic the producers will be able to easily shift the tax burden to the consumers in the form of higher product prices. This will have an inflationary effect and may reduce consumer welfare
	Such taxes may have negative consequences on employment and investments because producers may shift their production activities to places where such taxes are not imposed or are relatively less. For example recently the Government of Maharashtra has banned production and use of plastics. This causes problems for those employed in plastic Industry.
	CAP AND TRADE APPROACH
	The second approach is establishing tradable externalities permits. This approach is know as cap and trade approach
	For example if manufacturing units are creating a negative externality say pollution
	In such a case each firm creating pollution is given a permit specifying the number of units of emission that the firm is allowed to generate
	A firm that generates excessive emissions is penalised with substantial monetary sanctions
	The permits allowed to firms are transferable.
	The total number of permits issued should be computed on the basis of maximum tolerable level of Pollution (externality)
	The firms creating more than permissible emission will have to either buy these permits from others or they will have to simply reduce their output
	If firms buy permits at a price this will automatically ensure that externalities are internalised and are considered while determining the level of output.
	This method rewards those who create less pollution as people creating less than permissible pollution can sell permits and punishes those who create more pollution

	ADVANTAGE OF TRADABLE PERMITS ARE
	The system allows flexibility and rewards efficiency
	It is administratively cheap and simple to implement and ensures that effects of externalities are minimised
	It provides strong incentives for innovation to reduce the extent of externalities
	Extra profits earned by low polluting firm may be passed on by the firms to the consumers in the form of low prices.
	ARGUMENTS AGAINST THIS METHOD
	This method does not stop firms from polluting environment They only provide a disincentive to them if they create more than permissible pollution.
	If the demand for the product of the firm is relatively inelastic he firms will easily pass on these costs on consumers.
	Thus the above methods of government intervention i.e taxes and permits forces producers to take externalities in to account when planning their consumption and production.
Q3	**Explain the intervention of government in case of production of goods with positive externalities.**
	Positive externalities are social benefits associated with production of goods and services which are not reflected in the prices of goods
	Consider production of fertilisers. Production of fertilizers leads to increase in Agriculture production which makes country self sufficient .
	Government intervenes in such goods in two ways
	1. Providing subsidy for production of such goods
	2. Government directly entering in to production such goods
1.	**PROVIDING SUBSIDY.**
	Subsidy involve Government paying part of the cost to the firm in order to promote the production of goods.
	Subsidies to producers would lower the cost of production
	This causes shift in the supply curve towards right showing increase in supply.
	This is explained by means of diagram given below



	In the above Diagram output is shown in x Axis
	Costs and benefits are shown on Y axis
	The downwards negatively sloped curve is the marginal social benefit curve
	There are two marginal private cost curve. The upper one is without subsidy and the lower one is marginal private cost with subsidy. Both these curves are upwards sloping and have positive slopes.
	MPB curve is a marginal private benefit curve
	MSB curve is the Marginal social benefit curve
	Since the product has positive externalities , MSB is more th an MPB
	However the consumer will not take in to account the positive externalities of the product
	The consumer will follow MPB for deciding equilibrium level of output
	From consumer and producers point of view Equilibrium will be at point A and equilibrium output will be ON Units At point A , MPB = MPC

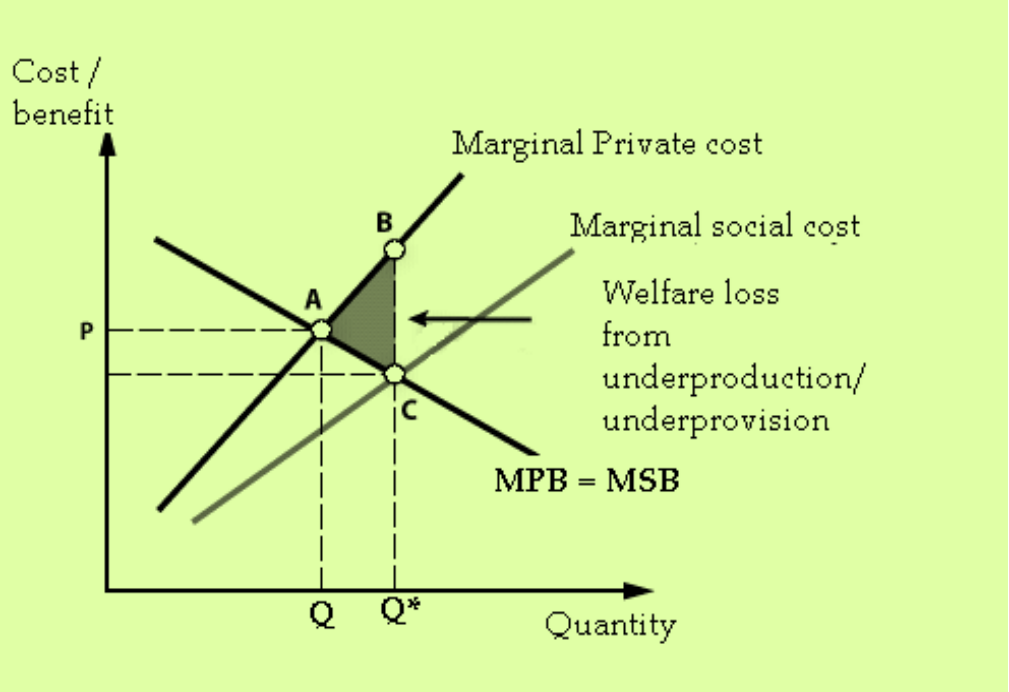
	However from society's point of view Equilibrium should be at point B and equilibrium output should be ON . At point B , MSB = MPC
	However the actual equilibrium output is OM units. ON is the desirable equilibrium output
	If subsidies are introduced, MPC curve will shift to the right and a new supply curve will be MPC after subsidies.
	The MPC curve after subsidies intersects MPB curve at point D. At this level equilibrium output is ON which is considered as desirable output
	Had the Government not intervened Equilibrium output would have been OM which is less then Equilibrium output from society's point of view.
	However with the Introduction of subsidy , Equilibrium output becomes ON units
2.	**GOVERNMENT DIRECTLY INTERVENING IN PRODUCTION OF GOODS**
	In the case of products and services whose externalities are vastly positive and pervasive, Government enters the market directly as an entrepreneur to produce and provide them.
	For example Fundamental research to protect the futuristic technology interest of the society is largely funded by government as it has a very vast positive externalities.
	Programmes such as a forestation, reforestation treatment of sewage etc are mostly done mostly done by government.

ROLE OF GOVERNMENT IN ECONOMIC SYSTEMS

Q4.	**What are merit goods. Explain Government intervention in case of merit goods**
	Merit goods are those goods which are socially desirable and therefore consumption of such goods should be encouraged
	Merit goods have substantial positive externalities
	Market price of goods reflect only private benefits and costs.
	Though merit goods have positive externalities, they do not possess the characteristic of non rivalry and non excludability.
	Merit goods are limited In supply therefore are available only for a price.
	However the market price does not reflect positive externalities generated by such goods

	Examples of merit Goods are Education, Health, housing, waste management, inoculation against diseases etc.
	If Government does not intervene, there will be under production of merit goods.
	Under production is said to have taken place when market based production is less than socially desirable production.

Diagram



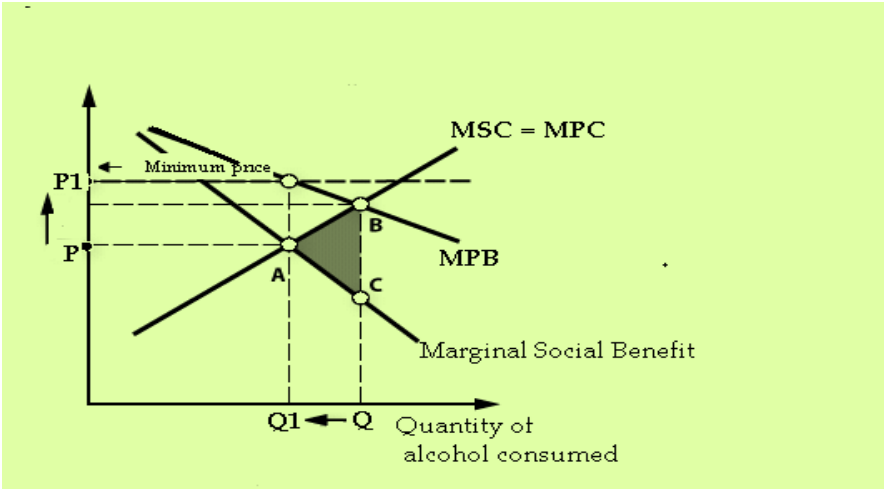
	In the above diagram, MPB and MSB are identical curves showing marginal private benefit and marginal social benefit.
	Two curves are upward sloping showing marginal private cost and marginal social cost.
	Marginal social cost is less than marginal private cost. i.e social cost of manufacturing such goods is less
	than marginal private costs.
	Left to the market, equilibrium output will be determined at a level at which marginal private cost is equal to marginal private benefit. i.e At point A where equilibrium output will be OQ.
	However from society's point of view, Equilibrium is achieved at point C where marginal private benefit is equal to marginal social cost. Therefore OQ1 is the desirable output.

	This means such goods are under produced by QQ1
	This creates a strong case for Government intervention
	WHY SHOULD GOVERNMENT PROVIDE MERIT GOODS
1.	Merit goods are socially desirable. However Individuals may not have perfect information about merit goods and therefore individuals may not act in their best interest. For example giving injections to children to increase their immunity against various diseases is socially desirable . However many individuals may not be aware about the same. Government should ensure provision of information on such goods and also provide such goods
2	Equity consideration. Equity deamdns that merit goods such as health, education and water should beprovided free on the basis of need rather than on the basis of Individual`s ability to pay
3	Market fails to provide merit goods. If provision of merit goods is left to market, market may not provided merit goods in adequate quantity. Market may provide such goods at a very high price or such goods may be not be provided.
	IN WHAT FORM CAN GOVERNMENT INTERVENE
a)	Government may make regulations for production of merit goods. For example Government regulates how education should be imparted in schools and colleges
b)	Government may provide subsidy to producers thus encouraging producers to produce merit goods
c)	Government may itself start providing such merit goods.
d)	Government may pass laws encouraging consumption of such goods example The Right of children to free and compulsory Education Act, 2009 which mandates free and compulsory education to every child of the age of 6 to 14 years.
e)	When Government provides merit goods it may give rise to large economics of scale and productive efficiency apart from overcoming the problems mentioned above.
	When merit goods are provided free of cost by the Government there will be substantial demand for the same. This is shown by means of a diagram given below

	When people have to pay market price the output will be OQ
	But when such goods are provided free of charge the demand will be OD.

Q5.	**Explain the role of Government in case of Demerit goods**
	Demerit goods are goods which are believed to be socially undesirable.
	Examples of demerit goods are cigarettes, alcohol, intoxicating drugs etc.
	Consumption of such goods imposes significant negative externalities on the society
	Therefore social costs of such goods is higher than private costs incurred by the Government
	The production of such demerit goods is likely to be more than optimal under free markets
	If such goods are left to market forces, there will be overproduction of such goods, causing misallocation of society's scarce resources.

	Outcomes of Minimum Price for a Demerit Good



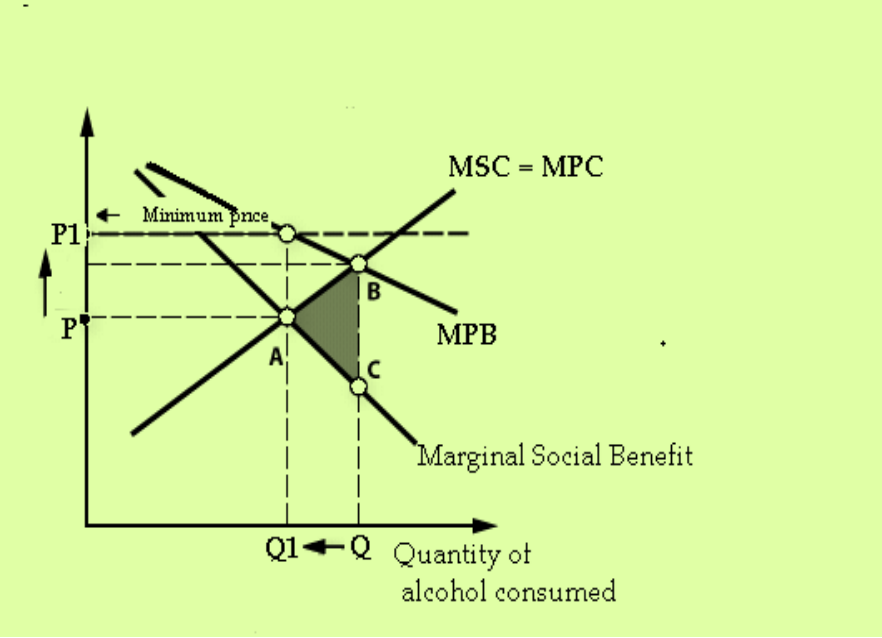
The above diagram is for demerit good.

	Marginal private benefit is more than marginal social benefit. If the consumer considers only marginal private benefit, the equilibrium point is point B where output is Q. Where marginal private benefit is equal to marginal social cost. . However if we consider marginal social benefit then equilibrium output is Q1 where marginal social benefit is equal to marginal social cost. If Government does not Intervene, out put will be Q which is higher than Q1. However the government will intervene and bring the consumption to Q1. This is done by taking the following measures.
	HOW DOES GOVERNMENT INTERVENE IN CASE OF DE- MERIT GOODS.
1	Ban on demerit goods. An extreme government may enforce complete ban on demerit goods. Intoxicating drugs,
2	Persuasion: The government may persuade consumers not to consume demerit goods. This may be done through advertisements. For example government gives advertisement showing harmful effects of cigarettes
3	Government may pass laws banning advertisement of such demerit goods
4	Imposing unusually high taxes on production or purchase of such goods making them very costly and unaffordable to many is the most commonly used method by all governments
5	Government may frame strict regulations for marketing and consumption of such goods which may put a limit on sale and consumption of goods. For example Government may make a regulation that wine can be purchased by a buyer only after obtaining permit to drink.
	HOWEVER THE ABOVE MEASURES THAT CAN BE TAKEN ARE HAVING THEIR OWN LIMITATIONS
	Example. When government impose taxes it is difficult to determine how much tax should be imposed so that taxes becomes equal to marginal external costs
	Also if demand is inelastic, the producers will pass on the taxes to consumers
	Totally banning such goods sounds very goods in theory, however when production of such goods is banned It leads to illicit production of such goods on which the government has no controls. For example when production of liquor is banned it leads to production of illicit liquor and sometimes many people die due to sub standard

	quality of liquor.
	Banning advertisement of such goods, leads to making of surrogate Advertisements
Q6.	**EXPLAIN INTERVENTION OF GOVERNMENT IN CASE OF PUBLIC GOODS.**
	Public goods possess the characteristics of non excludable. This creates a problem of free rider
	When goods are prone to free rider problem, such goods will not have markets as no producer will provide such goods
	Since such goods do not have a market the government has to provide such goods. In case of pure public goods, which have the characteristic of non rival nature and non exclusion, only Government can provide such goods by using general Government tax revenues.
	Government provides such goods in two ways
	1. Government provides such goods free of charge. The provision of such goods is funded from Taxes collected by the Government. For example free medical facility is provided by Government.
	2. Such goods may be provided by private producers on payment of fees.
	The fees charged by private producers will be fixed and regulated by the Government. The government will also make laws to ensure quality of such goods. For example fees for higher education is fixed by Government in case of private colleges. Private producers construct and maintain roads and toll charges are collected by such private producers.
Q7	**DISCUSS THE INTERVENTION OF GOVERNMENT BY WAY OF PRICE CONTROLS**
A	Price controls means Government fixing the prices for supply of goods and services
	Price controls means price will not be determined on the basis of demand and supply .
	In many areas , Government has to intervene to fix the prices of goods to ensure that such goods are available at a fair price

	For example in India prices of essentials Drugs are controlled and fixed by the Government
	In case of Agricultural production, Government allows Minimum support prices programme to ensure that farmers make a reasonable profits and have incentive to produce goods.
	In case Market price of agricultural produce falls below minimum support price, The farmers will sell their produce at Minimum support prices.
	In some cases, Government controls prices of essential commodities fixing price ceilings above which prices commodities cannot be sold.
	Government controls the prices by supplying goods and services. Government maintains buffer stocks of grains and supplies goods. When prices are high, supply by government brings the prices down.

Outcomes of Minimum Price for a Demerit Good



B	**GOVERNMENT INTERVENTION FOR CORRECTING INFORMATION FAILURE**
	One of the reasons of market failure is incomplete information.
	To overcome problem of market failure due to information problems the Government intervenes in the following ways
1	Government makes it mandatory to have accurate labelling and content disclosures by producers.

	For example when a company accepts deposits, Government regulation requires that the company accepting deposits should fully disclose all particulars about the company
2	Government regulates advertisement by setting advertisement standards to make advertisement more responsible. For example Mutual fund advertisements have to disclose the Mutual funds are subject to market risks
3	Governments makes system for dissemination of information to improve t he knowledge about the goods. For example Government gives advertisements such as Jago grahak Jago.
C	**GOVERNMENT INTERVENTION FOR EQUITABLE DISTRIBUTION**
	One of the most important function of the government is to ensure that income generated is equitably and fairly distributed amongst various sections of the society
	Some common methods employed by government to achieve this objectives are
	Progressive income tax. example income tax rates are higher for higher levels of income. Luxuries are taxed at a higher rate and necessities are taxed at a lower rate.
	Unemployment compensation.
	Employment guarantee schemes. example MNREGA which is an employment guarantee scheme has a provisions of Rs 40,000 crores from the budget.
	Job reservations for poor sections. Government jobs are reserved for schedule castes and schedule tribes and also for people who are economically poor
	Land reforms.
	Subsidized education to poor. Government is operating schools and Right to education Act has been introduced to provide education to the poorest
	Some of the measures for equitable distribution reduce the efficiency of market. It means equity comes at the cost of efficiency. However increasing equity is often justified because equity is greatly appreciated by society.

Q.8 Is cable television an example of impure public good? Verify your answer. (RTP NOV-19)

ANS: Yes, cable television is an example of impure public good. Impure public goods only partially satisfy two characteristics of public goods namely, non-rivalry in consumption and non-excludability.

Cable television is non-rivalrous because the use of cable television by other individuals will in no way reduce your enjoyment of it. The good is excludable since the cable TV service providers can refuse connection if you do not pay for set top box and recharge it regularly.

Q.9 Is production of steel a demerit good? Give reason. (RTP NOV-19)

ANS: Demerits goods are those goods which are believed to be socially undesirable. The consumption of these goods imposes significant negative externalities on the society as a whole.

No. The production of steel is not essentially a demerit good. Though it causes pollution and have negative externalities, it is not a socially undesirable good.

Q.10 How does the government intervene to minimize market power? (OCT-19 MTP)

(5)

ANS: Market power is an important factor that contributes to inefficiency because it results in higher prices than competitive prices. In addition, market power also tends to restrict output and leads to deadweight loss. Because of the social costs imposed by monopoly, governments intervene by establishing rules and regulations designed to promote competition and prohibit actions that are likely to restrain competition. These legislations differ from country to country. For example, in India, we have the Competition Act, 2002(as amended by the Competition (Amendment) Act, 2007) to promote and sustain competition in markets. Such legislations generally aim at prohibiting contracts, combinations and collusions among producers or traders which are in restraint of trade and other anticompetitive actions such as predatory pricing. On the contrary, some of the regulatory responses of government to incentive failure tend to create and protect monopoly positions of firms that have developed unique innovations. For example, patent and copyright laws grant exclusive rights of products or processes to provide incentives for invention and innovation. Policy options for limiting market power also include price regulation in the form of setting maximum prices that firms can charge. Price regulation is most often used for natural monopolies that c an produce the entire output of the market at a cost that is lower than what it would be if there were several firms. If a firm is a natural monopoly, it is more efficient to permit it serve the entire market rather than have several firms who compete each other. Examples of such natural monopoly are electricity, gas and water supplies. In some cases, the government‘s regulatory agency

determines an acceptable price, so as to ensure a competitive or fair rate of return. This practice is called rate-of- return regulation. Another approach to regulation is setting price-caps based on the firm's variable costs, past prices, and possible inflation and productivity growth.

Q.11 What do you mean by 'Global Public Goods'. Explain in brief. NOV. 2019 (2)

Q12 Describe the problems in administering an efficient pollution tax.NOV.2019(3)

Q13 Distinguish between 'pump priming' and 'compensatory spending'. NOV 2019 (2)

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6 -FISCAL POLICY

Q1.	**Define Fiscal policy and list out objectives of Fiscal policy**

Q1. What is fiscal policy? What are the objectives of fiscal policy?

Ans.: MEANING OF FISCAL POLICY:

Fiscal policy is a policy of Government for collection of Taxes and other revenue and expenditure so as to achieve desired objectives.
Fiscal policy involves use of taxation and public expenditure as a tool to achieve desired objects. Fiscal policy of Government is apparent in the budget presented in the parliament every year.

OBJECTIVES OF FISCAL POLICY:

The objectives of fiscal policy differ from country to country according to the level of economic advancement.
The role of fiscal policy developed economies is to maintain the level of full employment, and to stabilize the rate of growth.

In contrast, in a developing economy, fiscal policy is used to create an environment for rapid economic growth.
The major objective of fiscal policy in a developing economy can be summarised as follows:

1. MOBILISATION OF RESOURCES:

A developing economy is characterized by low levels of income and investment.
This situation form a type of vicious circle in which low investment generates low income, and low income inturn restricts the level of investment and so on.

This type of vicious circle can be successfully broken only when the level of investment in the economy is raised. Fiscal policy can play a big role in mobilisation of resource
The various fiscal tools like taxation and public borrowings can be employed for this purpose.

2. ACCELERATION OF ECONOMIC GROWTH:
Closely related to the first objective is the objective of accelerating the rate of economic growth. For this purpose, the government has not only to mobilize more resources for investment, but the government has to direct the resources to those channels where yields are higher. Similarly, the public expenditure programmes of the government may be so designed as to raise the production potential of the economy and generate larger incomes. To improve productive capacity of an economy, the government may invest in infrastructure which involves construction of roads, dams bridges etc.

3. TO MINIMIZE THE INEQUALITIES OF INCOME AND WEALTH:
Fiscal tools can also be used to bring about redistribution of income in favour of the poorer sections of the society. For instance, the government may collect larger revenue from the richer sections of the society, and revenue so raised should be spend money e on social welfare activities that largely benefit the poorer sections of the society.

4. TO INCREASE EMPLOYMENT OPPORTUNITIES:
Fiscal tools can also be used so as to generate employment opportunities in the economy. Fiscal incentives, in the form of tax-rebates and concessions, can be used to promote the growth of those industries that have high employment generation potential. Likewise, public expenditure can be incurred on employment-generating works. Likewise, public debt policy can be used to control the non-essential private consumption expenditure and to raise small savings for financing the development expenditure.

5. PRICE STABILITY :
Fiscal tools can be judiciously employed to contain inflationary and deflationary tendencies in the economy. A cut in public expenditure has an anti-inflationary effect, whereas an increase in public expenditure may give a boost to economic activity. Likewise, a raise in direct tax rate, as also higher borrowings by the government from the market, would help contain inflation. Deflationary tendencies can be contained by reducing tax rates and curtailing borrowing programmes.

6. PROVISION OF ECONOMIC AND SOCIAL OVERHEADS.
Supply of economic and social overheads such as development of transport and communication, water management, investment in health and education sector cannot be left to private sector. Fiscal policy aims at making investments in these sectors and ensure that adequate public goods are available to all including the poor sections of the society.

Q2	**Explain in brief " contra cyclic fiscal policy " and compare Automatic stabilisers versus Discretionary fiscal policy**
	A Market economy is characterised by Boom and recession. Both these phases have some negative effects which might affect the level of income and its distribution and price level..
	Although phases of boom and recession are unavoidable as such phases are part of business cycle. It is desirable that negative effects of such phases should be minimised.
	Contra cyclic fiscal policy as the name suggest is acting against the cycle so as to reduce the severity of the cycle.
	For example too much of Boom may lead to inflation and increase in inequalities of Income This is some times called as overheating of the economy. In such a situation Government should take measures to control boom cycle (also called as inflationary phase). This can be done by imposing taxes on income which reduces disposable incomes of the people leading to fall in demand. Also Government may impose a cut on its expenditure
	Period of recession leads to fall in level of employment. During this period government should spend more so as to generate more demand
	In short, contra cyclic fiscal policy is to act against the cycles. When economy is overheated government should cool it down. When economy suffers from recession, government should take measures to heat it up.
	As people use Air conditioners during summer season and heaters during winter seasons to reduce the severity of heat and cold. In the same manner government uses contra cyclic policy.
	In other words contra cyclic fiscal policy aims at stabilising the situation so that the jerks of boom and recession are minimised.
	The stabilizers in an contra cyclic fiscal policy are of two types
	a) Automatic stabilisers b) Discretionary fiscal policy
	Automatic stabilisers
	Automatic stabilisers are programmes that are automatically activated to achieve the result of contra cyclic fiscal policy.
	Automatic stabilizers are part of the structure of the economy and are built in mechanisms in a fiscal system that operate automatically to counter boom and recession.
	In times of recession there is unemployment, the government should spend more to generate aggregate demand. Unemployment insurance programme is one such automatic stabiliser. During the period of recession there will be higher unemployment which will require government to spend more on unemployment insurance . Increase in such spending will generate demand and to that extent recession will be neutralised.
	Similarly in a boom situation, progressive taxation acts as a automatic stabiliser. During the boom there is rise in demand due to higher income and high level of employment. Where the government has a policy of progressive taxation,

	people with higher income will be taxed more thus reducing their purchasing power. This will restrict the boom to some extent. During boom as incomes increase, progressive taxation ensures that people pay more taxes. This reduces the disposable income of the people and acts as a check on aggregate demand.
	Thus unemployment insurance and progressive taxation are example of Automatic stabilizers. These stabilizers are already built in fiscal system. The Government does not introduce these stabilisers to counter recession and boom. They are always a part of fiscal system. However they restrict the severity of business cycle. For example unemployment insurance and progression taxation both the tools continue in boom as well as recession. However during recession, unemployment insurance reduces the severity of recession and progressive taxation reduces the severity of boom.
	DISCRETIONARY FISCAL POLICY.
	DISCRETIONARY FISCAL POLICY IS A DELIBERATE ATTEMPT BY THE GOVERNMENT TO OVERCOME AN ECONOMIC PROBLEM OR OVER COME A RECESSION OR BOOM SITUATION. The government exercises discretionary fiscal policy when it identifies an unemployment or inflation problem, establishes a policy objective concerning that problem, and then deliberately adjusts taxes and/or spending accordingly. For example if the economy is facing the problem of unemployment, government may go for deficit budget and increase the Government expenditure. Such increase in government expenditure is likely to boost the aggregate demand. Similarly in the period of boom, government may cut expenditure and increase the rate of personal and corporate taxes .This will have a cool down effect on the economy.
	Through discretionary stabilizers, the Government may directly or indirectly influence the way resources are used in an economy.
	The equation of GDP is GDP = C + I +G + Nx(net exports)
	Government can change its level of expenditure and thus directly influence GDP or it may make policies which effect C, I and NX. C is consumer demand I is investment demand NX is net export

	G is Government expenditure.
Q3	***Explain the instrument/tools/components of Fiscal policy.***
	Fiscal policy aims at variety of objects. For achieving these objects a fiscal policy consists of various components. These components of fiscal policy are called as tools of fiscal policy
	These components/ tools/ instruments of fiscal policy are
	a) Government expenditure
	b) Taxation policies
	c) Public debt
	d) Budgets – surplus or deficit financing.
	These tools are discussed below
	a) Government Expenditure
	Government expenditure is an important instrument of fiscal policy
	Government expenditure forms a part of aggregate demand
	Government expenditure includes
	1. Current expenditure to meet day to day running of the government
	2. Capital expenditure which is in the form of investments made by government in capital equipments and infrastructure such a roads, dams , bridges etc
	3 Transfer payment. i. payments such as pension, etcs
	During recession Government may initiate fresh wave of public works , such as construction of roads, irrigation facilities , electrification of new areas. Government expenditure causes an increase in aggregate demand which causes a growth in GDP
	Apart from direct effect on demand, government expenditure has an indirect effect(ripple effect) on income generation through working of multiplier. The Keynesian schools of economics is of the opinion that government expenditure is necessary to fill the gap caused by shortfall in aggregate demand.
	PUBLIC SPENDING OF GOVERNMENT DURING THE PERIOD OF DEPRESSION IS OF TWO TYPES **1) PUMP PRIMING** **2) COMPENSATORY SPENDING.** Pump priming is spending by the Government to stimulate private investments. It refers to that Initial public expenditure which helps to initiate and revive economic activity in a depressed economy. The idea is to Increase private investment through public expenditure. Pump priming is not intended to replace private investments. **Its object is only to stimulate private investments and not to supplement.**

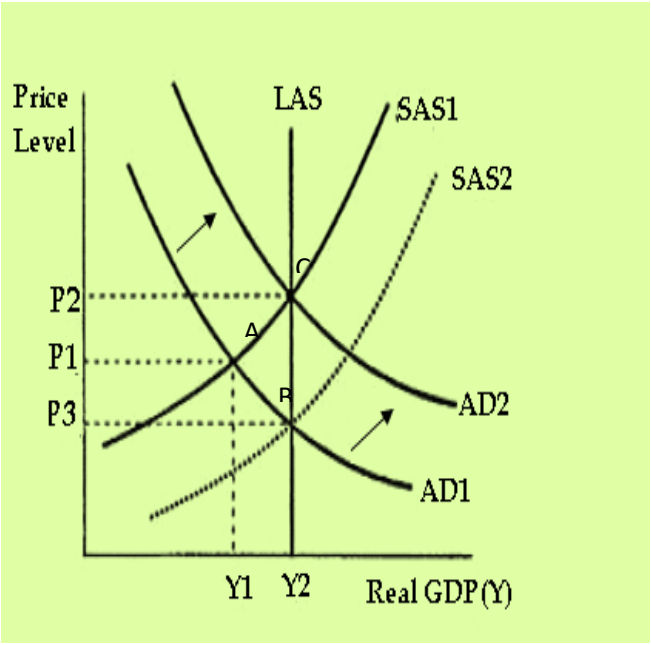
	Compensatory spending on the other hand refers to Government expenditure **which is undertaken with the idea of compensating decline in private investment.** During the period of depression, private investment declines due to low **marginal efficiency of capital (internal rate of return)** whose automatic revival is not possible. Public expenditure is also used as a policy instrument to reduce severity of inflation and bring down price. During the period of inflation, Government expenditure is reduced which reduces income and eliminates excessive demands. Reduction in demand helps in reducing inflation.
	During the period of boom (expansion) Government should spend less so as to reduce the demand. and during the period of recession , government should increase the expenditure so as to generate more demand.
	b) TAXATION AS AN INSTRUMENT OF FISCAL POLICY.
	Taxes form the most important source of revenue for governments.
	Taxes determine the size of disposable income in the hands of general public which in turn determines aggregate demand .
	Taxation policies may form a important part of discretionary fiscal policy
	For example during recession and depression, taxation policy should be framed so as to encourage private consumption and investment. During this period, a lower level of taxes will lead to higher disposable income with people inducing higher consumption.
	Also low corporate taxes leads to more surplus with corporate taxes which they may invest in new projects generating investment demand and employment
	During inflation , higher tax rates lead to reduction of disposable income which acts as a check against aggregate demand
	However excessive taxation curtails (reduces) new investments and therefore higher taxation policies should be used with caution.
	(C) PUBLIC DEBT.
	Public debt comprises of policy of public borrowings and debt repayment by the government.
	Public debt may be internal or external. **When government borrows from its own people in the country, it is called as internal debt**. On the other hand when government borrows from outside sources, , the debt is called as external debt.
	Borrowings from public curtails the aggregate demand in the economy.

	Repayment of debt by government increase the availability of money in the economy and increases aggregate demand.
	During the period of recession, government should resort to repayment of public debt especially internal debt so as to have more purchasing power in the hands of public, which will promote private consumption and private investments
	During the period of boom, government should resort to borrowings so as to reduce the purchasing power in the hands of public.
	Public debt takes two forms namely, market loans and small savings. In case of market loans, the government issues treasury bills and government securities of varying denominations and duration. These treasury bills are traded (sold and purchased) in debt market. Long term capital bonds are floated for financing capital projects and for meeting short term government expenditure , treasury bills are issued. Small savings represent public borrowings. Such saving certificates are not purchased or sold in debt market, Examples of such certificates are National saving certificates, National development certificate etc.
(C)	**Budgets.** A budget is a statement of revenues earned from taxes and other sources and expenditure made by Government during a particular period , usually a year. A surplus budget is a budget in which Government receipt are more than Government expenditure A defecit budget is a budget in which government expenditure is more than government receipts.. In times of recession, government resorts to deficit budget and spends heavily to generate demand. In times of boom the government resorts to surplus budget to reduce excessive demand in the economy.
	A surplus budget in which aggregate revenue of government is more than Aggregate expenditure of Government seems to be very attractive proposition, however such a budget has negative effect on aggregate demand since leakages on account of taxations are less than injections in the form of public expenditure. Such budget should be used only in a overheated economy.
	Budgetary surplus and deficit has an impact on price level, level of employment , rates of interest and rate of investments. Surplus budget or deficit budget may be used to achieve objectives of fiscal policy. The objectives are based on the problematic situation.

Q4.	**Explain how public debt is used as an Instrument of Fiscal Policy**
	Public borrowing means borrowings from public . Public borrowing may be internal or external.
	When Government borrows from its own people in the country, it

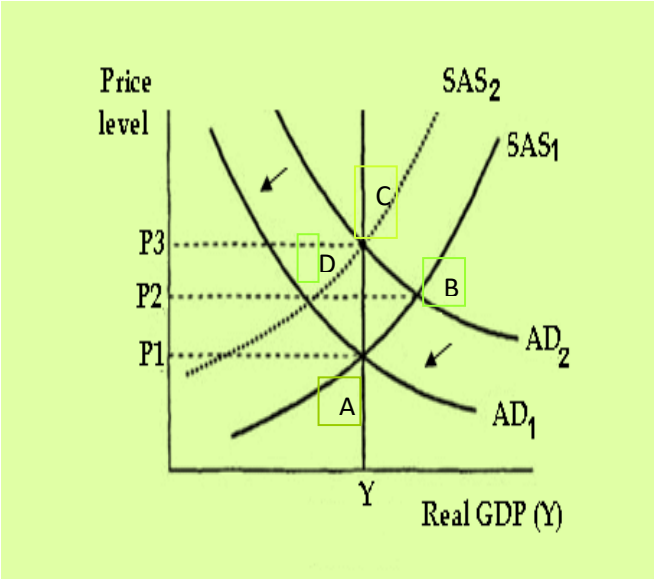
	is called internal debt
	On the other hand, when the Government borrows from outside sources, the debt is called external debt.
	Borrowings from public in various forms reduces purchasing power of the people which restricts the aggregate demand. Such borrowing and consequent reduction in aggregate demand is useful to reduce the severity of expansionary phase.
	Repayment of debt by government increases availability of money in the economy which causes increase in aggregate demand.
	Thus a rational policy of public borrowing and debt repayment can be used as a weapon to fight inflation and deflation.
Q5	**Budgets as an instrument of fiscal policy**
	Budget is a statement of revenues earned from taxes and other sources and of expenditure made by a government in a year. It shows receipts and payments by the Government.
	A government budget can either be a balance budget , surplus budget or defecit budget.
	A budget is said to be balanced when revenues in a year are equal to expenditure for the year
	A budget is said to be a deficit budget when expenditure exceeds revenue
	A budget is said to be surplus budget when revenue exceeds expenditure
	Budgetary surplus or deficit can be used as an instrument of fiscal policy
	A surplus budget transfer purchasing power from public to government. It causes a fall in aggregate demand. Taxes collected by government are in the form of leakages where as Expenditure incurred is in the form of injections. Surplus budgets may be used during expansionary phase so as to reduce the aggregate demand
	A defecit budget releases money in the economy and pushes up the aggregate demand.
	A defecit budget may be used during the period of recession.
Q6	**Discuss various types of fiscal policies**
	Fiscal policy measures are used to correct different problems created by business cycle instability. According to classical economists, fiscal Policy may be unnecessary because market mechanisms eventually cure instability without Government intervention. Classical economists argue that market forces are dynamic and help to keep the economy always at or near natural level of real GDP. However, the great depression period indicated that markets fail and Government has to intervene by adopting a suitable fiscal policy.
	At the outset we may state that basically there are two types of fiscal policy
	1. Expansionary fiscal policy

	2. Contractionary fiscal policy.
	Expansionary fiscal policy is useful to fight recession whereas during the period of boom, it is advisable to practice contractionary Fiscal policy
	A recession is a period during which over all economic activity declines or in other words the economy contracts.
	A recession period is characterized by declining real Income
	Rising unemployment
	Fall in aggregate demand due fall in income and due to unemployment
	Lower production of goods and services
	To combat such a slump in economic activity, the government can resort to expansionary fiscal Policy
	An expansionary fiscal policy is a policy to close "recessionary Gap ".A recessionary Gap is said to have exists **if the existing level of agggregate production is less than what would be produced with full employment of resources.**
	In such a situation actual national income is below potential income . In other words recessionary gap is the difference between demand at full level of employment and actual demand.
	In other words recessionary gap is a situation when the aggregate demand is not sufficient to create conditions of full employment.
	How does expansionary fiscal policy helps in overcoming recessionary gap ?
	In an expansionary fiscal policy the government responds by increasing government expenditure in adequate quantities so as to increase the aggregate demand curve.
	In doing so government may have to incur a budget deficit by spending more than its receipts.
	This is explained by means of Diagram given below



	In the above diagram, level of output is shown on X axis and price level is shown on Y axis
	AD1 is the aggregate demand curve and SAS1 is the Aggregate actual supply curve.
	AD1 meets SAS1 at point A, At point equilibrium output is at Y1 . However if full employment is to be achieved output should be Y2. The Gap between Y1 and Y2 is called as recessionary gap.
	Classical economist believed that there is no need for government intervention when the economy is operating at less than full employment level.
	They contended that when output is below the level of full employment, there is some unemployment in the economy. Due to unemployment wages will fall. This will cause increase in supply.
	This will cause shift in supply curve from SAS1 to SAS2. (increase in supply) AD1 intersects SAS2 at point B. At point B equilibrium output is Y2.
	However according to Keynes wages are not as flexible as what classical economist believed and wages are not likely to adjust rapidly to accommodate the unemployed.
	Keynes advocated that government should intervene so as to shift the aggregate demand curve to the right . When the government spends, aggregate demand will increase from AD1 to AD2. AD2 curve meets SAS1 at a point C . At point C aggregate output is Y2 which is full employment level
	A question arises how much should the government spend to fill in recessionary gap
	Of course government expenditure should not be difference between Y2 and Y1.
	The amount of expenditure to be incurred by the government depends upon the gap between Y2 and Y1 (recessionary gap) and multiplier.
	For example Y1 is Rs 10,000 crores and Y2 is 15,000 crore. If the multiplier is 5
	Then government should spend only 1000 crores as Initial expenditure of Rs 1000 crore by Government will generate an income of 5000 crores.
	Another question arises as to from where will the government find resources to increase its expenditure
	If the government resorts to increase in taxes to fund additional government expenditure,
	This may defeating as increase in taxes will reduce the demand in economy.
	In such a situation government has to go for a deficit budget which may be financed through borrowing or through monetization (creation of additional money to finance

	expenditure) Borrowings runs the risk of crowding out of private spending which may again be self defeating. Therefore only viable way to fund additional government expenditure is through creation of additional money. i.e Budget deficit.
	It should be noted that expansionary fiscal policy will be successful only if there is accommodative monetary policy. If supply of money does not increase and there is increase in demand for money, the rate of interest will go up. Higher interest rates will adversely affect private Investments. If interest rates remain unchanged in such a situation a rise in Government expenditure will have full effect on national income and employment.
	CONTRACTIONARY FISCAL POLICY.
	A contractionary fiscal policy is used during the period of inflation
	Inflationary pressure occurs when aggregate demand rises beyond what the economy can potentially produce by fully employing it resources. It means aggregate demand is more than potential supply at level of full employment. This gap is known as inflationary Gap
	The rise in aggregate demand may be due to increase in consumption expenditure by households, or investment expenditures by entrepreneurs or government expenditure
	Contractionary fiscal policy refers to the deliberate policy of government applied to curtail aggregate demand and consequently the level of economic activity.
	In other words its is fiscal policy aimed at eliminating inflationary gap.
	This is explained in the diagram given below.



	AD1 is the aggregate demand curve and SAS1 is the aggregate supply curve. These curve meet at point A. At point A output is Y which is full employment output

	If aggregate demand increases from AD1 to AD2 and supply curve remains same SAS1 the equilibrium output is more than Y. An output level beyond Y is not attainable. AD2 intersects SAS1 at point B. Such equilibrium is not possible as level of output cannot exceed Y as Y represent full level of employment.
	When demand has risen but supply cannot be adjusted as there is full employment, this will lead to rise in wages. Rise in factor cost which will shift the supply curve from SAS1 to SAS2. SAS2 meets AD2 at a point C where equilibrium output will be Y . however the price level has risen from P1 to P3. This is called as inflationary pressure
	At this stage Government has to intervene and reduce Government expenditure which will ensure that the AD2 curve shifts back to AD1.
	When demand curve is restored to AD1 and Due to rise in wage rates Supply is represented by SAS2. ADI and SAS2 intersect at point D. At point D , output will be less than fully employment level and price level will be P2. Due to unemployment, wage rates will fall and supply curve will also be restored to SAS1. Now SAS1 and AD1 intersect each other at point A where output is of full employment level.
	The government needs to reduce expenditure or raise taxes only by a small amount because of the multiplier effects that actions may have. If Government reduces expenditure by Rs 300 crores and multiplier is 5 the aggregate demand will fall by Rs 1500 crores.
Q7.	**What should be the fiscal policy for long run Growth**
	Fiscal policy acts as an effective tool for managing aggregate demand in the short run.
	It helps in maintaining price stability and employment levels
	Contractionary as well as expansionary fiscal policy is mostly designed to cause a change in demand.
	For growth, it is desirable to have expansionary fiscal policy
	However expansionary fiscal policies can achieve growth in long run only if amount is spend on removing bottle necks which does not allow supply to increase.
	In other words , for long run Government action should not only be to stimulate demand but also facilitate supply of goods.
	Spending by Government for building modern infrastructure, such as roads , dams etc will not only stimulate demand but also facilitate supply in long run.
	Such a policy will also encourage private investments.
Q8	**Discuss fiscal policy for reduction in inequalities of Income and wealth**
	Many developed countries and developing economies are facing the challenge of rising inequality of income and opportunities.
	Fiscal policy is a chief instrument available for Governments to influence income distribution and plays a significant role in

	reducing inequality of income . It can achieve equity and social justice
	It is desirable to have equitable distribution of income and wealth
	Equitable distribution of income is called as inclusive growth. i.e Growth of all sections of an economy.
	Some of the fiscal measures aimed at equitable distribution of income and wealth are discussed below.
a)	**PROGRESSIVE DIRECT TAX**
	A progressive direct tax system ensures that those who have greater ability to pay will contribute for towards government revenues. Those who have more capacity to pay will be taxed at a higher rate.
b)	**INDIRECT TAXES**
	Indirect taxes can be made progressive by taxing luxuries at a higher rate and necessities at a lower rate. Luxuries are consumed usually by rich persons so tax burden on rich will be higher . For Example GST is higher on luxury cars
c)	**PUBLIC EXPENDITURE**
	Government may incur expenditure on undertaking programmes for benefit of the poor
	Such as
	Poverty alleviation programme
	Free or subsidized medical care , education, housing etc
	Social security schemes such as old age pension, unemployment allowance,
	Providing essential goods at subsidized rates. Example cooking Gas
	Strengthening of Human capital for enhancing employability example skill India development programme.
	However it should be noted that very high tax rates may act as a deterrent to work save and invest.
Q9	**State the limitations of a fiscal policy**
	LIMITATIONS OF FISCAL POLICY
	Discretionary fiscal policy is an deliberate fiscal action by the government to influence the economy. However there are some significant limitations in respect of choice and implementation of fiscal policy.
1.	**PROBLEM OF TIME LAG**
	One of the biggest limitation of fiscal policy is time lag at each step.
	Fiscal policy first involves recognizing the need for a policy change.
	Macro economic variables are very complex and are not easily comprehensible.
	A need for change in fiscal policy is felt only after significant

	time lag involved in understanding macro economic variable
	Thereafter government has to evaluate various fiscal policies to arrive at a proper choice. This takes considerable time, Implementation of selected fiscal policies also takes a lot of time.
	Even if policies are implemented impact of policies is not visible for some time.
	Thus there are time lags at each stage right from recognizing the need for fiscal policy till achieving the impact of fiscal policy
2.	**TIMING OF IMPLEMENTATION**
	Some times it may happen that due to time lags at various stages a much needed fiscal policy may no longer be required since situation has changed due to passage of time. For example a situation may demand implementation of expansionary fiscal policy, however by the time such policy is implemented, the economy has to overcome its recession cycle and may be on the path of recovery.
3.	**DIFFICULTY IN REDUCING EXPENDITURE**
	In some cases it may be difficult for government to reduce spending on various items such as defence and social security as well as on huge capital projects which are already midway. In such a situation it becomes difficult to execute contractionary fiscal policy
4.	**CONFLICTS IN OBJECTIVES OF FISCAL POLICY.**
	For achieving growth , public expenditure must be increased. Increased public expenditure
	May increase money supply in the economy which is bound to cause at least some inflation.
	Inflation leads to increase in inequalities of income.
	Also higher public expenditure requires high level of taxation, which reduces the disposable income of individuals leading to fall in private demand
5.	**EFFECT OF PUBLIC BORROWINGS**
	Increase in government borrowing creates perpetual burden on even future generations.
	If borrowed money is not utilized to increase the productive capacity of the economy, the burden of borrowing will be too much. Also too much of external debt may put a country in the position of Debt trap. Debt trap is a situation where interest on borrowings is so high that government has to borrow more to pay interest
6	**BORROWING LEADS TO RISE IN INTEREST RATES**
	If government competes with private sector to borrow money , it is likely that rate of interest will go up. This will reduce willingness and ability of private firms to invest and the desired increase in aggregate demand may not be realized.

7.	**SUPPLY SIDE EFFECTS.**
	Fiscal measures may some time turn to be counter productive. For example increase in profits tax may adversely affect the incentive of firms to invest . Also increase in social security benefits may adversely affect incentives to work and save.
8	**DEFICIT FINANCING** . It increases the purchasing power of people. This leads to increase in aggregate demand. Production of goods and services may not match up with demand for goods. This results in rise in prices and creates a inflationary trend in the economy.
9	**GOVERNMENT DEBT.** Government resorts to borrowing to raise funds for expansionary fiscal policy. Increase in government borrowings creates perpetual burden on future generation as debts have to be repaid. If money borrowed by Government is not utilized productively, it becomes difficult to service debts. External debt burden has been a constant problem for India and many developing countries.
10	**RISE IN INTEREST RATES.** If Governments compete with the private sector to borrow money for spending it is likely that interest rates will go up. Higher interest rates may deter firms to invest more. Individuals too may be reluctant to borrow and spend and the desired increase in aggregate demand may not be realized.
Q10	**Write a short note on "Crowding out "**
	Government expenditure leads to increase in aggregate demand.
	The question arises from where does the Government brings money to finance its expenditure
	It may happen that government spending may be at the cost of private spending.
	For example government may charge high rate of taxes to generate money for Government expenditure Taxation will reduce disposable income of People which will reduce aggregate demand and Government expenditure will create more demand. In other words charging excessive tax to boost government expenditure implies that Government expenditure is at the cost of Private expenditure.
	Crowding out effect is the negative effect of fiscal policy,. When money spent by government is at the cost of money spent by private sector. In other words spending by government in an

	economy replaces private spending .
	For example government provides free computers to students, the demand from students for computers in private market will fall
	When government increases its spending by borrowing more. This may push up interest rates. Higher interest rates may discourage private investments.
	When crowding out takes place , fiscal policy becomes less effective or ineffective
	However during recessionary period, crowding out is less likely to happen. As private sector investment is already minimal and therefore therefore there is only insignificant private spending is to crowd out.

Q.11 What is non- discretionary fiscal polic y and how it occurs?(OCT-19 MTP) (3)

ANS: Non-discretionary fiscal policy or automatic stabilizers are part of the structure of the economy and are 'built-in' fiscal mechanisms that operate automatically to reduce the expansions and contractions of the business cycle. It occurs through automatic adjustments in government expenditures and taxes without any deliberate governmental action i.e. by limiting the increase in disposable income during an expansionary phase and limiting the decrease in disposable income during the contraction phase of the business cycle.

Q.12 How does a discretionary fiscal policy help in correcting instabilities in the economy ? NOV. 2019 (3)
Q.13 What is 'Recessionary Gap' ? NOV. 2019 (2)

7 – MONEY & DEMAND FOR MONEY

Q1. What is money? Discuss the functions of Money.

Ans. Money has been defined by economists in many ways. In ordinary sense we know what is money and importance of money. However we have to understand the term money from the point of view of an economist. Some key definitions of money by various economists are given below.

Walker ---- "Money is what money does"

DH. Robertson defines money as "Any thing which is widely accepted in payments for goods, or in discharge of other kinds of business obligations".

Seligman defines money as "One thing that possesses general acceptability"

From the above definitions it is clear that the most important characteristic of money is its general acceptability. All the functions of money crop up because of the characteristic of general acceptability.

Functions of Money.

In modern times money performs a number of functions. The functions of money can be classified in to three heads

1	**Primary function**	These are basic or fundamental functions	Medium of exchange, Measure of value
2	**Secondary function**	These functions are derived from primary functions	Standard of deferred payments Store of value Transfer value
3	**Contingent functions7**	These are functions of money which are incidental due uses of money in a modern economy.	Distribution of national income Basis of credit system Imparts liquidity

PRIMARY FUNCTION.

1. Medium of Exchange.

Money is a medium of exchange. Commodity can be bought and sold through the help of money. People sell their goods and services in exchange of money and the money acquired is utilised to purchase other goods and services.

Thus movement from one good to another goods is smooth due to money.

Before the introduction of money, barter system was prevalent in the society in which goods were exchange for goods. It was difficult to exchange goods and services under the barter system. However with the help of money a person having commodity A and wishing to exchange it for commodity B can sell commodity A and acquire money. The Money received can be utilized for acquiring commodity B. Thus money acts as a medium of exchange. This is a basic function of money and all other functions are secondary and are derived from it. Money eliminates double co-incidence of wants.

2. Measures of Value.

Money is used to measure values of various goods and services. The value of various commodities are expressed in terms of Money. Money is seen as a rod to measure the values of various commodities and services available in an economy.

The value of goods and services expressed in terms of money is known as "Price". When values of various commodities are expressed in terms of money, it becomes easy to compare the value of two goods. It can be seen that the second functions of money as a measure of value, flows from the first function. As money is a medium of exchange, the values of various commodities and services are expressed in terms of money.

SECONDARY FU NCTIONS.

1. Standard of Deferred Payments.

Deferred payments means payment to be made at a future date. Money not only facilitates current transactions but also facilitates credit transactions. Future payments are always expressed in terms of money. This functions of money has attainted great significance these days for there is extensive borrowing by Government and business houses and borrowings transactions

provided payment in future. In other words not only current payments are expressed in terms of money, even promises to pay in future are expressed in terms of money.

2. Store of Value.

Since money has the characteristic of general acceptability and can be used to purchase goods and commodities, a person who accumulates money is actually accumulating goods and services. Money, therefore serves as a store of value.
In the olden days the values were stored in the form of metals such gold and silver. However the need to store value led to introduction of Metallic money.

Metallic money ultimately led to introduction of paper currency.

Money acts as store of value is an important function of money. It is due to this function that a person can convert his present valuables in to money and after a period of time he can utilized to money or convert the money in to valuables.

Thus money acts as a store of values and links the present to the future.

Now a days bank money is used to store values.

Though there are other assets such as government bonds, Land, houses which also store value such assets also have advantage of potential income,. However such assets are subject to limitations such as storage costs, lack of liquidity, fall in value.

3. Transfer value.

Money helps to transfer values from one person to another and from one place to another. Money is readily accepted by all and is accepted in all places. Bank money can be easily transferred from one person to another and from one place to another.

Contingent functions of Money.

4. Distribution of National Income.

Money helps in distribution of national income. The prices of the goods and services and expressed in terms of money and the factor of productions

Such as Land , labour Capital and enterprise receive their share in the output

In terms of money. Wages, Rent, profits and Interest are all received and expressed in terms of money.

5. Basis of credit system

Modern economy is a credit economy. Credit implies promise to pay. Credit cards, cheques and drafts are different types of money which are used in today society. These instruments of money contain promises to pay in future. These promises are expressed in terms of money. Therefore money is a basis of modern system of credit.

There are some general characteristics that money should possess in order to make it serve its functions as money. Money should be

a) Generally acceptable

b) Durable or long lasting

c) Effortlessly recognizable

d) Difficult to counterfeit i.e not easily reproducible by people

e) Relatively scarce, but has elasticity of supply

f) Possessing uniformity

g) Divisible in to smaller parts in usable quantities or fractions without losing value

Q2	**Explain the meaning of demand for money**
	Demand for money means desire of the people to hold money.
	People demand money because they wish to have command over real goods and services with the use of money
	Demand for money is actually demand for liquidity and demand to store wealth
	Thus demand for money is because of two reasons
	To store wealth in liquid form
	To accomplish day to day transactions
	Demand for money depends upon what proportion of wealth should be held in the form of money which is more liquid though it does not give any return.
	Demand for money depends upon factors such as income, general level of prices, rate of interest, Real GDP and degree of financial innovations.
	Higher the income , higher will be the expenditure and richer people hold more money to finance this expenditure
	The quantity of money demanded is directly proportion to the prevailing price level, higher the prices , higher should be demand for money to accomplish day to day transactions.
	Demand for holding money also depends upon interest rates. Higher the rates of interest more will be opportunity cost of liquid cash and lower will be the demand for money.
	Innovations such as internet banking, teller machines, reduce the need for holding liquid money.

Q3.	**Explain Quantitative Theory of money**
	The quantitative theory of money is on of the oldest theories in Economics
	This theory of propounded by Irving Fisher of Yale University in his book " the purchasing power of money " published in 1911.
	According to the quantity theory, money supply and the general price level are directly related.
	In other words quantity of money is the main determinant of the price level or value of money and value of money
	Changes in quantity of money brings change in price level
	Change in price level brings change in value of money.
	In the words of Irving Fisher, **"Other things remaining unchanged, as the quantity of money in circulation increases, the price level also increases in direct proportion and the value of money decreases and vice versa." If the quantity of money is doubled, the price level will also double and the value of money will be one half. On the other hand, if the quantity of money is reduced by one half, the price level will also be reduced by one half and the value of money will be twice**.
	Fishers version is mathematically stated as follows **MV = PT**
	Where M = total amount of money in circulation in an economy
	V = Transaction velocity of circulation. (average number of times a unit of money is spent in purchasing goods and services)
	P = average price level
	T is total number of transactions
	When supply of money is increased, the money income in the hands of the people increases. People increase their expenditure. Demand for goods and services is determined by people's expenditure. When people increase expenditure, the demand for goods and services rises. A rise in demand unaccompanied by a rise in supply causes a rise in the price level. **Example:** Supply of Money – Rs. 10,000 (MxV) Supply of Goods – 1,000 Kgs of Rice People offer Rs. 10,000 for purchasing 1,000 Kgs of rice. Price of rice = Rs. 10,000 / 1,000 Kgs = Rs. 10. per Kg. Money supply increased to Rs. 15,000 (MXV) People offer to Rs. 15,000 for purchasing 1,000 Kgsrice Price of rice = Rs. 15,000 / 1,000 Kgs of rice = Rs. 15 per kg. Rise in price is proportional to increase in money supply.
	Later Fisher extended the equation of exchange to include demand (bank) deposits and their velocity (V) in the total supply of money. Thus the expanded equation became

	$$P = \frac{MV + M`V'}{T} \quad \text{or} \quad PT = MV + M`V'$$ Where P = Average price of the goods and services, M = The total quantity of the legal tender money. M = The total quantity of bank money V = Velocity of circulation of the legal tender money, V'= Velocity of circulation of the bank money, and T = Total transactions of goods and services during a given time. The above equation explains the direct proportion relationship between the quantity of money and the general price level. If the quantity of money is doubled, the price level also doubles, and vice versa.
	This equation is based on the assumption that T is fixed in short run since full employment prevails. Also M and M` and V and V` remains constant.
	Fisher did not mention anything specifically about demand for money. But the demand for money is PXT which is embedded in the equation. The more the number of transactions, greater will be the demand for money. Price level multiplied by total number of transaction represents demand for money.

Q4. Explain the Cash Balance Approach to the Quantity Theory of Money.

Ans. Also called the Cambridge Approach because it was propounded by some economists teaching in Cambridge University e.g. Alfred Marshall, D.H. Robertson, J.M. Keynes, A C Pigou. This theory tries to establish a relation between demand for money and the price level.

The price of any commodity depends upon the supply of the commodity and the demand for it. Similarly the value of money depends upon the supply of money and the demand for it. (Value of money is the inverse of the price level.)

Supply of Money

The supply of money consists of coins and paper notes and is controlled by the government and the Central Bank of the country. They are not profit motivated. They do not change supply of money for earning on income. So supply of money can be taken for granted.

Demand for money:

As supply of money can be taken for granted the value of money depends upon the demand for money.

If the demand for money rises, the value of money rises i.e., the price level falls and vice versa.

Determinants of Demand for Money:

People hold money for two purposes:

1. **Transactions Motive:**

People hold money for purchasing goods and services over a particular period. The people do not purchases the entire quantity required in one lot. They purchases a part of the quantity required during a year at one time.

The amount of money required for transaction purpose is determined by the quantity of goods which the people like to purchases with the help of money, and their prices.

2. **Precautionary Motive:**

People hold a part of the income for meeting unexpected expenditure in an emergency.

Supply and Demand:

Given the supply of money, if the demand for money rises the value of money rises i.e., the price level falls, and vice versa.

Explanation:

When people hold more cash balances (demand more cash), they spend less; spending generates demand. When people spend less they demand less goods, When demand for goods falls, the price level falls and vice versa.

It means more demand for holding cash balance ----→ less spending .....> less demand for goods .....> fall in price level.

Equations

D.H. Robertson's Equations

M = KPY

M is the quantity of money. It shows the supply of money which is assumed to be constant.

Y = is the volume of trade i.e., quantity of goods and services produced. It is called real national income.

P is the price level.

Y x P denotes money value of all goods and services.

K is the part of real income for purchasing which people hold as cash balances.

The equation can also be written as: P = M / KT

Example

Supply of money Rs. 1,00,000

Supply of goods – 10,000 kgs of rice.

Part of total supply for purchasing which people hold cash balances is 1/5.

Price of Rice is Rs 50

1,00,000 = 1/5 x 10,000 x 50

Suppose people decide to hold 1/4th of real income.

i.e proportion of cash holding is Increased from 20% to 25% (i.e from 1/5 th to ¼ th)

This will cause change in price level

1,00,000 = ¼ x 10,000 x 40

The demand for cash balanced has increased, the price level has declined i.e., the value of money has increased.

A.C. Pigou's Equation:

$$P = \frac{KR}{M}$$

R: Real income i.e. production of goods and services. This is expressed in terms of standard units of some single commodity.

K: Part of real income for purchasing which people want to hold as cash balances.

M: Supply of money.

P: Value of money in terms of standard units of the commodity. It is the inverse of the price level.

If People to hold cash necessary for purchasing a smaller part of total real income (i.e. small quantity of goods) .Demand for money has fallen which will cause rise in price level

Q5. Explain Keynes theory of demand for money

Or discuss theory of liquidity preference as propounded by J.M Keynes..

Keynes theory of demand for money is known as "Liquidity preference Theory". **"Liquidity preference"** a term that was coined by J.M.Keynes in his master piece **"The general theory of employment, interest and Money "1936.**

According to Keynes people hold money in cash for three motives

i) Transaction motive

ii) Precautionary Motive

iii) Speculative Motive.

A) Transaction Motive

The transaction motive for holding cash relates to need for cash for current transaction which may be personal or related to business. There is a time gap between receipts and expenditures so people have to hold cash for spending.

For example a person earns Rs 50,000 per month and decides to spend Rs 30,000 per month so he will keep Rs 30,000 with himself for spending on day to day transactions. Thus Demand for money is Rs 30,000 for transaction purpose.

Demand for money for transaction purpose is not affected by rates of interest.

Demand for money for transaction is directly proportional to level of income

$L = K \times Y$

L = demand of money for transaction

K = ratio of earnings which is to be kept for transactions purposes

Y = is the earnings.

Keynes considered that aggregate demand for money for transaction purpose as sum of individual demands. Therefore aggregate transaction demand for money is a function of national Income.

b) The precautionary Motive.

Precautionary Motive for holding implies demand for money to meet unanticipated expenditures.

The amount of money demanded under precautionary motive depends upon the size of income, prevailing economic as well as political conditions and personal characteristics of individual such as optimism/pessimism etc Keynes regarded demand for money for precautionary purpose as depended of income and not sensitive to rate of interest.

c) The speculative Demand for money.

The speculative motive reflects people desire to hold cash in order to be ready to exploit any attractive investment which requires cash expenditure

Keynes assumed that the expected return on money is zero where as expected return by investing in bonds are of two types.

1) Interest payment

2) Expected rate of capital gain.

Speculative demand of money is interest sensitive.

For understanding the relationship between Interest rates and demand for money let us first under stand what is

Current rate of interest

Expected rate of interest And bond prices.

Current rate of interest is current interest yield on bonds.

For example if bond price is Rs 150 and annual interest received on bonds is Rs 13.5% the bonds are yielding a interest of 9% P.A

Expected rate of interest is interest expected by investors. Suppose in the above example Investors expect a return of 10% on bonds.

Which implies that investment in bonds is giving returns which are lower than expectation. In such a situation people will start selling bonds and the price of bonds will decline . If the price of bonds declines to Rs 135 in such a case yield of Rs 13.5 on bonds amounts to 10% which is equal to expected rate of interest.

Bond was yielding a lower rate of interest, so people started selling bonds and converted bonds into money. Demand for money increased. Thus when rate of Current rate of interest is low (compared to expected rate of interest) bonds prices are likely to fall as people will sell bonds. In other words when current rate of interest is low people will have more demand for money.

Conversely if Bond price is Rs 150 and return on bonds is Rs 13.5 P.A which amounts to 9%. Now if investors expect a return of 8% .p.a it implies that return on bonds are higher than expected so people will start purchasing bonds , this will increase the demand for bonds and price of bonds. The price of bonds will be Rs168.75.When price reaches to Rs 168.75 a return of Rs 13.5 amounts to a return of 8%

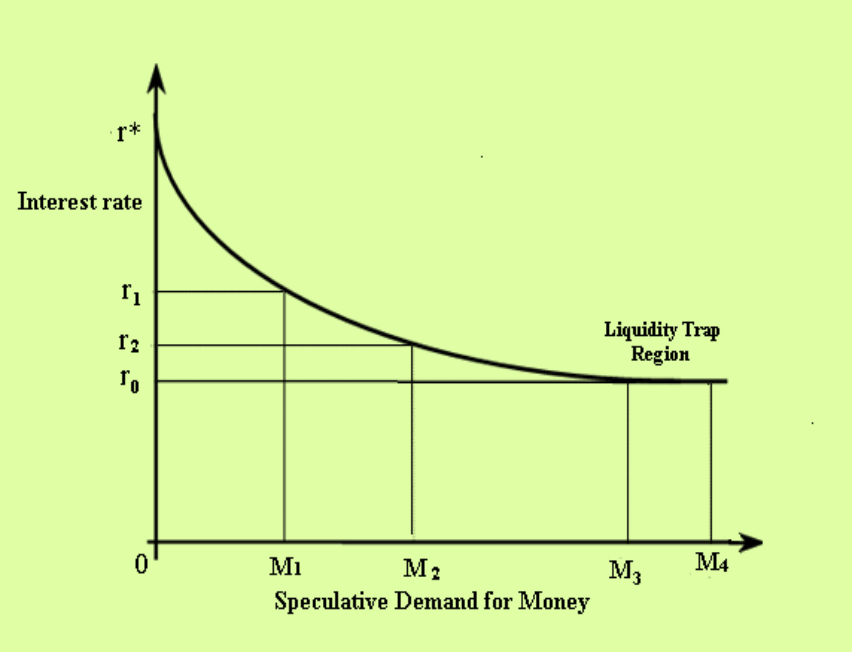
It means when current interest rate is high, people will purchase bonds and demand for money will fall as people will convert cash in to bonds.

Situation	
Current yield on bonds is lower than expected yield	Bonds prices are likely to fall. People will sell bonds and demand for money will increase
Current yield on bonds is higher than expected yield	Bonds prices are likely to go up. People will start purchasing bonds. Demand for money will decrease.

Thus speculative demand for money is inversely related to Current rate of interest.

This is shown by means of Diagram given below

Aggregate Speculative Demand for Money



The above diagram shows Interest rate on Y axis and X axis shows speculative demand for money.

According to this diagram higher the rate of interest, lower is the speculative demand for money and lower the rate of interest, higher will be the speculative demand for money.

Also as the rate of interest falls, demand for money keeps on increasing. If the rate of interest falls very low the demand for money will be infinite. This situation is known as Liquidity trap.

Q6. Explain Baumol and Tobin`s inventory approach for demand for Money

Ans : Inventory approach to transaction balance.

Baumal and tobin developed a deterministic theory of transaction demand for money which is known as Inventory Theoretic Approach.

In this theory money is viewed as an inventory which is to be held for transaction purpose. As we hold raw material for production purposes in the same way we hold money for transaction purpose.

The question arises how money should be held for transaction purposes.

There are two ways of storing wealth

1. Holding liquid cash
2. Investing in interest bearing financial asset.

Since holding of wealth by investing in bonds fetches interest and holding of cash in hand does not give any return, we can say that holding of cash has a cost . i.e opportunity cost in terms of interest lost.

If that be the case entire wealth should be stored in terms of interest bearing financial assets. However this is not feasible as some cash will be required to be held for transaction purposes.

Also conversion of cash in to bonds or bonds in to cash has some fixed cost say brokerage fee.

The question then arises how much cash should be held for transaction purposes.

Since holding of cash involves cost, we should minimise the total cost of holding cash

Cost of holding cash consists of

1) Interest cost(carrying cost)
2) Transaction cost . (cost of converting bonds into cash)

We should minimise the total of these two costs

The amount to be held by way of cash is determined by the following formula

Formula

Suppose a person requires Rs 3,60,000 in a year for transaction purposes. The rate of interest on bonds is 9% and the cost of converting bonds in to cash is Rs 50 per transaction.

In such a case he should hold a balance of Rs 20,000 for transaction purposes.

$$\frac{2 \times 3,60,000 \times 50}{0.09} = \text{Rs. } 20,000$$

The above formula shows that
Demand for money is dependent upon rate of interest.
If rate of interest is high, demand for money will be low as it will be more costly to hold money.

Friedman's Restatement of quantity Theory.

According to Milton Friedman demand for money is similar to demand for capital asset.
Money is similar to any other durable consumption good. So demand for money is reflected by the same factors as demand for any other capital asset which are

1) Permanent income as a factor affecting demand for money

2) Relative returns on assets(which incorporate risks)

According Friedman theory there are four determinants of Demand for money.

1) Permanent income.
Permanent income is the present value of all expected future incomes
Nominal demand for money is function of wealth
Total wealth = Permanent Income/discount rates
Discount rate is taken as the average return on five assets i.e Money, bonds, equity , physical capital assets and Human capital. Higher the permanent income, Higher will be total wealth and higher will be demand for money.

2) **Opportunity cost. Nominal demand for money is inversely related to the opportunity cost of money holdings**.

If the returns on bonds and stock declines, nominal demand for money rises and vice versa. If the rate of return on bonds is high, it means opportunity cost of holding money is high. This will lead to decline in demand for money.

3) Inflation. During inflation there is a fall in the real value of money as the purchasing power of money declines during the period of inflation. Thus during inflation there will be less demand for money as people will convert money into assets.

4) Price level. If price level rises there will be increase in demand of money for transaction purposes as more money will be needed to enter in to transactions.

Q7. Explain toblin`s theory for Demand for Money.

Toblin`s theory –Demand for money as behaviour towards risks.

	Toblns Article "Liquidty preference as behaviour towards risks" established the theory of risk avoiding behaviour of individuals.

	According this theory
	Individuals are averse to risk and try to avoid risks
	Holding money is less risky
	Holding money does not give any returns
	Investing money in bonds gives returns
	However investing in bonds has an element of risk as bonds are subject to price volatility where holding money does not possess any such risk.
	If only returns are considered, then individuals should not hold money and invest entire amount in bonds however unlike money investment in bonds is risk.
	Therefore individuals will store their wealth partly in money and partly in bonds.
	According to Tobin, rational behaviour of risk averse individuals induces him to hold an optimally structured wealth portfolio which comprises both bonds and money.
	The returns will be higher if entire wealth is stored in bonds, but since the individual is risk averse, he will be willing to exercise trade off and sacrifice to some extent the higher returns for reduction in risk.
	Tobin`s Theory implies that amount of money held as an asset depends on the level of interest rate. An increase in interest rate will improve the terms which will induce Individual to invest more in bonds. The higher returns are seen as rewards for accepting higher risks This will reduce demand for money.
	Thus demand for money declines when there is a rise in rate of interest Interest rates and demand for money are inversely related.
	This risk aversion theory is based on principles of portfolio management.

Q.8 Explain the classical version of quantity theory of demand for money. (RTP NOV-19)

ANS: According to Fisher, quantity theory of money demonstrate that there is strong relationship between money and price level and the quantity of money is the main determinant of the price level or the

value of money. In other words, changes in the general level of commodity prices or changes in the value or purchasing power of money are determined first and foremost by changes in the quantity of money in circulation. Fisher's version, also termed as 'equation of exchange' or 'transaction approach' is formally stated as follows:

$$MV = PT$$

Where, M= the total amount of money in circulation (on an average) in an economy V = transactions velocity of circulation i.e. the average number of times across all transactions a unit of money (say Rupee) is spent in purchasing goods and services P = average price level (P= MV/T) T = the total number of transactions.

Later, Fisher extended the equation of exchange to include demand (bank) deposits (M') and their velocity (V') in the total supply of money. Thus, the expanded form of the equation of exchange becomes:

$$MV + M'V' = PT$$

Where M' = the total quantity of credit money V' = velocity of circulation of credit money The total supply of money in the community consists of the quantity of actual money (M) and its velocity of circulation (V). Velocity of money in circulation (V) and the velocity of credit money (V') remain constant. T is a function of national income.

Since full employment prevails, the volume of transactions T is fixed in the short run. Briefly put, the total volume of transactions (T) multiplied by the price level (P) represents the demand for money. The demand for money (PT) is equal to the supply of money (MV + M'V)'. In any given period, the total value of transactions made is equal to PT and the value of money flow is equal to MV+ M'V'.

Fisher did not specifically mention anything about the demand for money; but the same is embedded in his theory as dependent on the total value of transactions undertaken in the economy. Thus, there is an aggregate demand for money for transactions purpose and more the number of transactions people want, greater will be the demand for money. The total volume of transactions multiplied by the price level (PT) represents the demand for money.

Q.9 Compare transaction demand for money according to Keynes and Baumol & Tobin? (OCT-19 MTP)

(2)

ANS: (ii) The transaction demand for money according to Keynes is interest-inelastic; whereas Baumol and Tobin show that money held for transaction purposes is interest elastic.

Q.10 Explain the concept of demand for money? (OCT-19 MTP)
(2)

ANS: The demand for money is a decision about how much of one's given stock of wealth should be held in the form of money rather than as other assets such as bonds. Demand for money is actually demand for liquidity and a demand to store value.

Q.11 Explain the neo-classical approach to demand for money. NOV. 2019 (3)

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8 – SUPPLY OF MONEY

Q1. Explain the concept of Money supply and factors on which supply of money depends .

Ans. Money Supply

1. **Meaning: "** Money Supply" denotes the Total Quantity of Money available to the People in an Economy. The Quantity of Money at any point of time is a measurable concept.
   Supply of Money depends upon the following factors
1. The decision of the central bank of the country (RBI in India) based on the authority conferred to Central Bank
2. The response of commercial banking system to changes in policy adopted by the central Bank of the country in relation to money supply.

The central bank of all the countries are empowered to issue currency and therefore the central bank is the primary source of money supply in all countries. This money is called as high powered money.

In effect high powered money issued by monetary authorities is the source of all forms of money.

The Currency issued by the Central Bank is 'Fiat Money' and is backed by supporting Reserves and its Value is guaranteed by the Government**.**

However In practice most countries have adopted a ` Minimum reserve system ` wherein the central bank is empowered to issue currency to any extent by keeping only a certain minimum reserve of gold and foreign securities.

The second major source of money supply is the banking system of the country.

The total supply of money in the economy is also influenced by the extent of credit created by commercial banks in the country. Banks create money supply in the process of borrowing and lending transaction with the public money.

Thus high powered money and the credit money broadly constitute the most common measure of money supply of the total money stock of a country.

Q2. State the importance of measuring money supply ?

Ans. Measuring money supply helps us in analysing monetory developments in the country. It provides a deeper understanding of the causes of growth of money

The central banks all over the world strive to achieve price stability and GDP growth. To achieve these objectives, the central bank has to determine the supply of money required. Therefore measurement of money supply becomes essential as to adjust the supply to the required level.

Q3 How is money supply measured ?

Ans.

- **There is virtually a profusion of different types of money supply especially credit money and this makes measurement of money supply a difficult task.**
- **The measurement of money supply vary from country to country and from time to time.**
- **A range of monetary and liquidity measures are compiled and published by the RBI .**
- **Till 1967-68 , the RBI used to publish only a single narrow monetary measure of money supply M1.**
- **From 1967-68, a broader measure of money supply called aggregate monetary resources was additionally published by RBI**
- **From April 1977 following the recommendationsof the second working group on money supply (SWG) , the RBI has been publishing date of four alternative measures of money supply denoted by M1 M2 M3 and M4 besides reserve money.**

M1:Currency held by the Public + Net Demand Deposits of Banks (CASA Deposits) + Other Deposits of RBI.
Note: Net Demand Deposits = Total Demand Deposits **Less** Inter – Bank Deposits.
M2 =M1 + Savings Deposits with Post Office (PO) Savings Banks.
M3=M1 + Net Time Deposits with the Banking System.
M4 = M3 + Total Deposits with PO Savings Banks (excluding National Savings Certificates)

The above classification by RBI is in the descending order of liquidity. M1 being the most liquid and M4 being the least liquid.
M1 indicates highest liquidity.

M1 consistes of paper currency as well as coins.
Demand deposits comprise current deposits and demand deposits portion of saving deposits held by the public.
These are called CASA deposits and are cheapest source of finance for a commercial bank.
It should be noted that we have to take net demand deposits of banks and not their total demand deposits that get included in the measure of money supply, The total deposits include both deposits from the public as wellas inter bank deposits. Money is deemed as something held by public . Since inter bank deposits are not held by public they are excluded out of the total deposits to arrive at net demand deposits.

Other deposits of The RBI are those deposits with RBI excluding deposits heldby by Central and State Government. And include demand deposits of qualsi Government institution , other financial institutions, balances in accounts of central banks.

Following the recommendations of the working group on money in 1998, the RBI has started publishing a set of four new monetary aggregates on the basis of balance sheet of the banking sector in conformity with the norms of progressive liquidity . The new monetary aggregates

	Currency with the Public (fiat money)	
Add: Demand Deposits with the Banking System		
Add: Other Deposits with the RBI		
	New Monetary Aggregate 1 (denoted as NM 1)	**NM!**
Add: Short Term Time Deposits of Residents (including and upto Contractual Maturity of 1 year)		
	New Monetary Aggregate 2 (Denoted as NM 2)	**NM2**
Add: Long Term Time Deposits of Residents		
Add: Call / Term Funding from Financial Institutions		
		NM3
	New Monetary Aggregate 3 (Denoted as NM3)	
Add: All Deposits with the Post office Savings Banks (excluding National Savings Certificates)		
	Liquidity Aggregate 1 (Denoted as L1)	
Add: Term Deposits with Term Lending Institutions and Re-Financing Institutions		
	Liquidity Aggregate 2 (Denoted as L2)	
Add: Public Deposits of Non – Banking Financial Companies		
Liquidity Aggregate 3 (Denoted as L3)		

Q4. State the different approaches for determining money supply.

The alternative approaches in respect of determination of Money Supply, are as under –

A. Central Bank Behaviour
As per this Approach, Money Supply is determined exogenously by the Central Bank.

B. People Behaviour
Money Supply is determined endogenously by changes in the economic activities which affect people's desire to hold Currency relative to Deposits, Rate of Interest, etc.

C. Combined Behaviour
Supply of Nominal Money in the Economy is determined by the Joint behaviour of the Central Bank, the Commercial Banks and Public. **(Money Multiplier Approach.)**

Q5 Explain in detail Money Multiplier approach..
According to this approach money supply is determined by the following equation
M = m x MB

M is money supply
m is money multiplier
MB is the monetary base.
According to this approach total money supply in the economy is determined by joint behaviousof Central Bank (Reserve bank), commercial Bank and public.

MB is determined by Central Bank
M is determined by combination of c and e
Where c indicates ratio of currency to deposits (Depends upon behaviour of people)

indicates ratio of reserves to deposits (depends upon behavior of commercial banks)

Let us under stand, behaviour of each of the above entities

a) Behaviour of Central Bank.

Central bank is responsible for issue of currency notes and coins.
These Notes and coins form High powered money. This high powered money is called as monetary based. Suppose high powered money issued by RBI is Rs 15,000 crores. Higher the monetary base higher will be the supply of Money.

b) Behaviour of Public/people.

The high powered money issued by the Central bank of a country is made available to the people. The people having cash decide how much of money should be held in cash and how much of money should be deposited in Bank.
The ratio of currency and deposit in bank is denoted by c. This ratio is determined by the behaviour of people.
If people decided to keep more money in pocked, less money will be deposited in bank and vice versa.
Suppose currency to bank deposit ratio is 0.35. It means 35% of cash available with the public will be kept in pocket and remaining 65% will be deposited in bank. Continuing with our example, we may say that out of 10000 crores issued by RBI , 6500 crores will be deposited in Bank and 3500 crores will be retained by public.

The currency deposit ratio depends upon factors such as

a) Banking Habits
b) Level of economic activities
c) GDP growth rate
d) Degree of financial sophistication in terms of ease and access to financial services
e) Financial innovations /facilities provided by banking system.

c) Behavior of commercial banks.

Banks money is an important component of money supply.
Banking system as a whole has power to create multiple expansion of credit.
The amount of credit created by banking system deposits upon amount of money deposited in bank and ratio of cash reserve to deposits kept by the bank ,also known as reserve ratio.
Suppose amount deposited in bank is Rs 5000. Bank keeps 20% of its deposits as reserve Say Rs 1000. The balance ofRs 4000 is given as loan by the bank. Assuming that loan of Rs4000 taken by borrower is

deposited in another bank or is used for paying some one, ultimately Rs 4000 reaches another bank.
The second bank treats this Rs 4000 as fresh deposit and keeps a reserve of Rs 800 i.e 20%. The second bank gives a loan of Rs 3200 which reaches third bank and the third bank keeps reserves of Rs 640 and gives a loan of Rs 2560.

Total purchasing power or supply of bank money available with people will
Be Rs 5000 + Rs 4000 +Rs 3200 +Rs 2560 ..... and so on.
The total of the above will be Rs 25,000.

If Cash reserve ratio is lowered from 20% to 10% the total credit money created will be Rs 50,000.
Thus cash reserve ratio which denotes behaviour of the bank determines total amount of banking money created.
Continuing with out example, RBI issues currency of Rs 10,000 crores. People deposit Rs 6500 in bank based of c = 0.35. cash reserve ratio maintained by bank is say 10%. Therefore total credit created by bank will be 65000 crores.

So total money supply will be
0,000 crores x 0.35 + 6500/10% =Rs 68,500 crores.
Monetary base =Rs 10,000 crores
m = 68,500 crores/10,000 crores = 6.85 times.

Q6. Explain the effect of Government expenditure on Money supply.

Government expenditure has a direct impact on money supply.
Higher the Government expenditure, higher will be the money supply.
When Government expenditure rises, it Government borrows money from Reserve bank of India . When Government falls short of bank balance with RBI it avails the facility of ways and Means advances also called as overdraft facility.
The excess money availed by Government is used to make payment .These payments gets deposited in banks by the recipient of money. This resuls in excess deposits with commercial banks. These excess deposits causes money supply to increase by multiple times.

Q7. Explain how to bank create credit

Creation of Credit is one of the most important functions of a modern commercial bank. Banks lend money not only out of the deposits received by them, but they also create deposits themselves. This is why the banks are in a position to lend money more than what is actually received by them by way of deposits. This additional money which the banks lend in excess of what they receive is referred to as 'created money'.
The process of credit creation by banks can be explained in the following manner.
Suppose, an individual deposits Rs.10,000 in cash with bank A.This is also known as Primary deposit. Bank A will not lend all this money. Some part of it will be kept as cash reserves to meet the withdrawals by the depositors. Suppose that cash reserve ratio is 10%, that is, bank A will keep Rs.1000 as cash reserves and remaining amount it will use for giving loans ieRs. 9,000 which is also known as secondary or derivative deposit.

Let us assume that bank A lends Rs.9,000 to a businessman. For this an account will be created with Rs.9,000 and the businessman will be allowed to withdraw money as and when required. Now suppose that the businessman will make payment to his creditors through cheques; the recipients of these cheques will deposit them in some other bank, say, bank B. Of this deposit of Rs.9,000, bank B will keep Rs.900 as cash reserves and remaining Rs.8,100 will be used for lending purpose.

The amount of Rs.8,100 lent by bank B will go to another bank as deposit(bank C) which in turn will keep Rs.810 as reserves and use remaining amount of Rs.7,290 for giving loans.

Total credit created by commercial bank can be arrived at with the help of the following formula.

Total credit created = A X 1/R
A=amount of primary deposit
R= Reserve ratio
I= ratio of primary deposit
For eg: If primary deposit is Rs. 10,000 and CRR is 20% the amount of credit creation shall be

$\frac{10000 \times 1}{20/100} = 10000 \times 1 \times 100/20 = 100000/2 = 50000$

Bank	Initital deposit	Cash reserve ratio maintained by bank	Credit given by bank
A	1000	200	800
B	800	160	640
C	640	128	512
Total	5000	1000	4000

The cash reserve maintained by banks shows leakage in banking money. This process will stop when total cash reserve ratio reaches Rs 1000. When total of cash reserve ratio reaches Rs 1000 , Total of Initial deposit will be Rs 5000. There fore credit created is 5 times of initial deposit.

$$\text{Credit Multiplier} = \frac{1}{\text{Required Reserve RAtio}}.$$

Q.8 Why empirical analysis of money supply is important? (RTP NOV-19)

ANS: Empirical analysis of money supply is important for two reasons:

1. It facilitates analysis of monetary developments in order to provide a deeper understanding of the causes of money growth.
2. It is essential from a monetary policy perspective as it provides a framework to evaluate whether the stock of money in the economy is consistent with the standards for price stability and to understand the nature of deviations from this standard. The central banks all over the world adopt monetary policy to stabilise price level and GDP growth by directly controlling the supply of money. This is achieved mainly by managing the quantity of monetary base. The succ ess of monetary policy depends to a large extent on the controllability of money supply and the monetary base.

Q.9 (a) Calculate the narrow money from the following information. (RTP NOV-19)

Components	in Million (`)
Currency with the public	15473.2
Demand deposits of banks	6943.1
Saving deposits with post office saving banks	978.1
Other deposits of the RBI	501.2

(b) What is high powered money? Calculate it from the following data: (RTP NOV-19)

Components	in Million (`)
Net RBI Credit to the Government	41561.2
RBI credit to the Commercial sector	18459.3
RBI's net non-monetary liabilities	24981.2
RBI's claims on banks	31456.2
RBI's Net foreign assets	10456.1
Government's currency liabilities to the public	21417.1

ANS: (a) M1= Currency with the public+ demand deposits of banks+ other deposits of the RBI

= 15473.2 + 6943.1+ 501.2 = 22917.5 million

(b) High powered money is also known as reserve money which determines the level of liquidity and price level in the economy.

Reserve Money = Net RBI Credit to the Government + RBI credit to the Commercial sector+ RBI's claims on banks+ RBI's Net foreign assets+ Government's currency liabilities to the public- RBI's net non-monetary liabilities

= 41561.2 + 18459.3 + 31456.2 + 10456.1 + 21417.1 - 24981.2 = 98368.7 million

Q.10 Suppose M3 = Rs. 450000 Crore

Currency with Public = Rs 3000 Crore

Demand Deposits of Banks = Rs.

100000 Crore Other deposits with

RBI= Rs. 100000 Crore

Saving Deposits with Post Office Saving Banks = Rs. 150000 Crore

Total deposits with the Post Office Savings Organization (excluding National Saving Certificate) = Rs. 20000 Crore

National Saving Certificate = Rs. 250 Crore

Calculate Net Time Deposits and M4 with the banking system? (OCT-19 MTP) (3)

ANS: M3 = M1+ net time deposits with the banking system

M1= Currency notes and coins with the public+ demand deposits of banks+ other deposits with RBI

Therefore, Net time deposits with the banking system = M 3 - M1

450000- 3000-100000-100000

= Rs. 247000 Crore

M4 = M3 + total deposits with the post office savings organization (excluding National savings Certificate)

M4 = 450000 + 20000

M4 = 470000 Crore.

Q.11 Define the deposit expansion multiplier? How it is calculated?(OCT-19 MTP) (3)

ANS: The deposit expansion multiplier describes the amount of additional money created by c ommercial bank through the process of lending the available money it has in excess of the central bank's reserve requirements. The deposit expansion multiplier is, thus inextricably tied to the bank's reserve requirement. This measure tells us how much new money will be created by the banking system for a given increase in the high powered money. It reflects a bank's ability to increase the money supply. The deposit expansion multiplier is the reciprocal of the required reserve ratio.

If reserve ratio is 20%, then credit multiplier = 1/0.20 = 5.

The deposit expansion multiplier = 1/ Required Reserve Ratio

Q.12 Compute reserve money from the following data published by RBI : NOV. 2019 (3)

	(Rs. in crores)
Net RBI credit to the government	8,51,651
RBI Credit to the commercial sector	2,62,115
RBI's claim on Banks	4,10,315
Government's Currency liabilities to the public	1,85,060
RBI's net foreign assets	72,133
RBI's net non-monetary liabilities	68,032

Q.13 Compute credit multiplier if the Required Reserve Ratio is 10% and 12.5% for every Rs.1,00,000 deposited in the banking system. What will be the total credit money created by the banking system in each case ? NOV. 2019 (2)

9 -MONETARY POLICY

Q1 Concept of Monetary Policy

1. **Meaning :** Monetary Policy refers to the use of **Monetary Policy Instruments** which are at the disposal of the Central Bank,. These instruments are used to achieve the following objectives -

(a) to **regulate** the availability, cost and use of Money and Credit,
(b) to promote **economic growth,**
(c) to ensure **Price Stability,**
(d) to achieve **optimum levels** of output and employment,
(e) to obtain Balance of Payments **equilibrium,**
(f) to ensure **stable currency,** or
(g) to meet **any other goal** of Government's Economic Policy.

Monetary policy refers to action taken by monetary authorities to control and regulate demand for money, supply of money and flow of credit. Such actions are taken with a view to achieve predetermined macro economic goals.

	Objectives of monetary policy generally co-inside with the overall objectives of economic policy
	Objectives of monetary policy differ from country to country due to difference in underlying economies ,
	We will be discussing objective of monetary policy in the context of India economy.
	In pre Keynesian period monetary policy was the single well acknowledged instrument of macro economic policy. The main objective of monetary policy was maintaining price stability.
	The great depression in 1930s and resulting economic crises forced the governments to shift the objective of economic policy in favour of maintenance of full employment and achieving economic stability
	In India Monetary policy is framed and executed by Reserve Bank of India
	Preamble to the Reserve bank of India`s Act, 1934 set outs the following objectives to be pursued by Reserve bank of India
a)	To regulate issue of bank notes and keeping of reserves with a view to secure monetary stability in India
b)	Generally to operate the currency and credit system of the country to its advantage
	It should be noted that the above two objectives does not include the objective of maintaining price stability. However monetary policy in India has evolved towards maintaining price stability and ensuring adequate flow of credit to the productive sectors of the economy

Q2. State the component of monetary policy framework.

Ans The monetary policy is executed by Central bank of the country. In India Reserve bank of India is the central bank. while implementing the monetary policy, the central Bank has to execute the monetary policy within the articulated monetary framework.

The three basic components of monetary policy frame work are given below.

1. The objectives of monetary policy

2. The analytics of monetary policy which focuses on the transmission mechanism
3. The operating procedure which focuses on operating targets and instruments

Q3. Discuss the objective of Monetary policy

"The objectives of monetary policy are listed below

1 Price Stability	Establishment and Maintenance of stability in Prices (or controlling Inflation)
2 Economic stability	Maintenance of Full Employment and achievement of high level of economy's growth.

3. Other Objectives: Other Objectives, which flow out of the Primary Objectives, include -

(a)	Rapid Sustainable Economic Growth,
(b)	Debt Management
(c)	Balance of Payments Equilibrium
(d)	Exchange Rate Stability,
(e)	Adequate Flow of Credit to the Productive Sectors,
(f)	Stability of Long-Term Interest Rates to encourage Investments.
(g)	Creation of an efficient Market for Government Securities.

Q4 Analytics of Monetary Policy

Monetary policy influences macro economic variables such as the aggregate demand, quantity of money and credit and interest rates which again influences economic performances such as employment level, pr*ice level* and level of output.

The process or channels through which a change of monetary aggregates affects the level of product and prices is known as monetary transmission mechanism.

There are mainly four different mechanism though which monetary policy influences the price level and national incomes

These channels are

a) Interest rate channel
b) Exchange rate channel
c) Quantum channel (money supply and credit)
d) Asset price channel.

Each of these channels/mechanisms are discussed below.

Item	**Description**
Interest Rate Channel	
Rates of Interest are influenced by the Reserve bank of India.	
(a)	Increase in Interest Rate increases the Cost of Capital & Real Cost of Borrowing for Firms & Households.

(b)	Due to higher Borrowing Cost, Firms cut back on their Investment Expenditures and Households cut back on purchases of Homes, Automobiles, and all Durable Goods.
(c)	A decline in Aggregate Demand results in a fall in Aggregate Output and Employment.
	Decrease in Interest Rates will have the opposite effect through decrease in Cost of Capital. Decrease In cost of capital will increase the level of Investments and also boos up demand for consumer goods. This will lead to rise in aggregate output and employment.
Exchange Rate Channel.	
(a)	This Channel basically works through expenditure switching between Domestic & Foreign Goods.
(b)	Appreciation of Domestic Currency makes Domestic Goods more expensive compared to Foreign produced Goods. It causes Net Exports to fall, correspondingly Domestic Output & Employment also fall.
	Depreciation of Domestic Currency will have the reverse effect of the above.
	This Channel is applicable only for Open Economies, having International Trade.
	There are two distinct Credit Channels (e.g. relating to Money Supply and Credit) viz. -
(a)	Bank Lending Channel: RBI carries on open market operations which affects the availability of credit to the Firms and house holds. Under the open market operations RBI sells or buys Government securities from Banks. .when RBI sells securities to commercial banks, the availability of funds with banks gets reduced. Thus less credit is available to Firms. Such reduced availability reduces investment spending of the firm. This leads to fall in aggregate demand. When RBI buys Government securities from Banks, the money gets transferred to bank leading to more money available for lending by banks. This in turn increases the credit available to firms which increases the Investments by firms.
(1)	**Balance Sheet Channel:** As a Firm's Cost of Credit rises, the strength of its Balance Sheet deteriorates. Increase in Interest Rates will have the following effect on the Balance Sheet-
-	**Direct Effect:** By increase in the payments that the Firm must make to repay Floating Rate Debts.
-	**Indirect Effect:** By reducing the Capitalized Value of the Firm's long –lived**.**
Asset Price Channel	
(a)	Asset Prices respond to changes in Monetary Policy and hence affects Output, Employment and Inflation.
(b)	So, an increase in Interest Rates makes Debt Instruments more attractive for Investors than Equities leading to a fall in Equity

	Prices. If Stock Prices falls, it leads to reduction in Household Financial Wealth, leading to fall in Consumption, Output, and Employment.
	Hence, a Policy-Induced Increase in the Short-Term Interest Rate not only acts immediately to depress spending through the Traditional Interest Rate Channel, it also acts, possibly with a time-lag, to raise Firm's Cost of Capital through Balance Sheet Channel. These lead to a decline in Output & Employment.
	Effectiveness: The effectiveness / manner in which these different Channels function in a given Economy depends on -
(a)	State of Development of the Economy, and
(b)	Underlying Financial Structure of the Economy.

Q5. Operating Procedures

1. **Operating Framework:** The day-to-day Implementation of Monetary Policy by Central Banks through various Instruments is referred to as "Operating Procedures". The Operating Procedures Framework, i.e. Implementation of Monetary Policy involves 3 major aspects -

Choosing the -	**Meaning**
(a)	**Operating target**
	Operating Target is the Variable that the Monetary Policy can influence with its actions. **Examples:** Inflation.
(b)	**Intermediate Target**
	Intermediate Target is a variable which the Central Bank can hope to influence to a reasonable degree through the Operating Target and which displays a predictable and stable relationship with the Goal Variables. **Examples:** Economic Stability
(c)	**Policy Instruments**
	These are the various tools that a Central Bank can use to influence Money Market and Credit Conditions and pursue its Monetary Policy Objectives.

The operating procedure is summarised as below
Monetary policy------ policy instrument ------- operating target ---- ---- Intermediate target.
Monetary policy influences operating target and operating target influences intermediate target
For example monetary policy may effect interest (operating target) which ultimately leads to economic stability (intermediate stability)

Q6. Discuss direct v/s Indirect instruments for Implementing monetary policy.

The day to day implementation of monetary policy by Central banks is done through various instruments of monetary policy. These instruments are referred as operating procedures.

These instruments can be classified in to

Direct instruments

Indirect instruments

Direct instruments are actions taken by RBI using regulatory powers.

Indirect instruments are actions taken by RBI using its influence on money market conditions.

Direct instruments consists of

a) Cash reserve ratio and liquidity reserve ratio prescribed from time to time
b) Prescribing targets for allocation of credit to preferred sectors.
c) Administered rates of Interest (deposit and lending rates are prescribed by RBI Indirect Instruments consists of

a) Repos
b) Open Market operations
c) Standing facilities
d) Market based discount window.

1 Cash Reserve Ratio.

Scheduled Commercial Banks should maintain a fraction of the total Net Demand & Time Liabilities (NDTL) as Cash Deposit with RBI. RR has to be maintained as Cash with RBI. RBI does **not** pay any Interest on such balances.

Non – Bank Financial Institutions (NBFIs) are outside the purview of this Reserve Requirement.

Failure to meet its Required Reserve Requirements would attract penalty in the form of Penal Interest charged by RBI.

CRR is an Important quantitative tool in Liquidity Management

Higher the CRR, lower will be the liquidity of Banks, and vice-versa.

During economic slowdown, RBI reduces CRR to enable to Banks to expand Credit and increases the Money Supply During periods of High Inflation, RBI increases CRR to contain credit expansion.

RBI may set CRR in keeping with the broad objective of maintaining Monetary Stability.

Presently

As on 18.08.2017,CRR is 4%

2 Statutory Liquidity Ratio (SLR)

Scheduled Commercial Banks should maintain a stipulated percentage of their Total / Net DTL in Cash or Gold, or prescribed Investments.

SLR requires holding of Assets in one of the 3 categories **(Cash / Gold / Investments)** by the Bank itself. SLR is an important tool for controlling Liquidity in the Domestic Market by manipulating Bank Credit. Changes in SLR chiefly influence the availability of resources in the Banking System for lending. During high liquidity period, a rise in SLR rises the fraction of Bank's Assets locked in eligible Instruments & thus reduces Credit Creation Capacity

During period of economic slowdown, a reduction in SLR has the opposite effect.

SLR also facilitates an effective operating market for Government Securities.

As on 18.08.2017, SLR is 20%

Prescribed Investments should be made in un-encumbered Instruments that includes -

(a) Treasury – Bills of the Government of India.

(b) Dated Securities including those issued by the Government of India under the Market Borrowings Programme and the Market Stabilization Scheme (MSS).

(c) State Development Loans (SDLs) issued by State Governments under their Market Borrowings Programme.

(d) Other Notified Instruments, mainly the Securities issued by PSEs.

Borrowing Facilities – LAF & MSF

3 Liquidity Adjustment Facility (LAF)

Central Bank's Role

RBI, being a Bankers' Bank, provides Liquidity to Banks when it faces shortage of Liquidity

The Liquidity Adjustment Facility(LAF) is a facility extended by Reserve bank of India to the scheduled commercial banks (excluding RRBs) and primary dealers to available of liquidity in case of requirement(or park excess funds with RBI in case of excess liquidity)

Objective

Its objective is to assist Banks to adjust their day to day mismatches in Liquidity. Currently, RBI provides Financial Accommodation to the Commercial Banks through Repos / Reverse Repos under this Facility.

Process

Scheduled Commercial Banks (SCBs) can borrow from the Discount Window against the Collateral of Securities like Commercial Bills, Govt. Securities, Treasury Bills, or other Eligible Papers.

Repo means Repurchase options. Repo is defined as " an Instrument for borrowing funds by selling securities with an agreement to repurchase the securities on a mutually agreed future date at an agreed price which includes interest for the borrowed funds "

Repo enables collaterized short term borrowing and lending through sale/purchase operation indebt instruments. The rate charged by RBI for this transaction is called repo rate. Repo operations thus inject liquidity in to the system.

Reverse Repo is defined as an instrument for lending funds by purchasing securities with an agreement to resell the securities on a mutually agreed future date at an agreed price which includes interest for the fund lent. Reverse repo operations take place when

RBI borrows money from banks by giving them securities. The securities transacted can either be Government securities of corporate securities. The interest paid by RBI for such transactions is called as "Reverse repo rate"

Reverse repo operation absorbs the liquidity in the system. The collaterals used for repo and reverse repo operations consist of primarily Government of India securities

4 Marginal Standing Facility (MSF)

RBI, being a Bankers' Bank, acts as a Lender of Last Resort to Commercial Banks, in suitable situations.

It has been introduced by RBI with the main aim to –

(a) reduce Volatility in the Overnight Lending Rates in the Inter-Bank Market,

and

(b) enable smooth Monetary Transmission

Scheduled Commercial Banks can borrow additional amount of Overnight Money from RBI over and above LAF Window by dipping into their SLR Portfolio up to a limit at Penal Rate of Interest.

MSF Provides a Safety Valve against unexpected Liquidity Shocks to the Banking System. It is the last resort for Banks once they exhaust all Borrowing Options including LAF.

MSF Rate, being a Penal Rate, gets adjusted to a fixed percent above the Repo Rate. MSF is at present aligned with the Bank Rate.

Banks can borrow through MSF on all working days (except Saturdays) from 7.00 pm to 7.30 pm, in Mumbai, Minimum Amount of MSF is Rs.1 Crore and more will be available in multiples of Rs. 1 Crore.

5. Market stabilisation.

This instrument is used to absorb excess liquidity from the market arising from large capital inflows. Significant inflow of foreign capital creates excess liquidity in domestic market.

This excess liquidity is removed through a process known as sterilisation.

Under this scheme the Government of India borrows from RBI (such borrowings being additional to its normal borrowing requirements) and issues treasury bills/dated securities for absorbing excess liquidity from market arising from large capital inflows.

6. Bank rate. Bank rate is the rate of interest charged by Reserve bank of India when Commercial banks discounts bills of exchange or other commercial papers with reserve bank of India.

Bank rate used to be the policy rate in India i.e key interest rate based on which all other short term interest rates moved. Discounting /rediscounting of bills of exchange by reserve bank has been discontinued on introduction of liquidity adjustment facility. As a result the bank rate has become dormant as an instrument of monetary management.

7. Open market operations.

Open market operations refers to operations of reserve bank of India by way of sale/purchase of Government securities to/from the market. The objectives of such operations is to adjust liquidity in the market. When there is excess liquidity in the market, RBI resorts to sale of Government securities thereby absorbing the excess liquidity from the market. When the liquidity conditions are tight, RBI buys Government securities from the market thereby releasing liquidity in the market

Q7 Write a short note on " The monetary policy framework Agreement "

The monetary policy framer work agreement is an agreement between Government of India and the RBI on the maximum tolerable inflation rate that RBI should target to achieve.

For Achieving this RBI Act was amended in 2016 to provide a statutory basis for the implementation of flexible inflation targeting framework. The export committee under Urjit Patel suggested the RBI make inflation targeting the primary objective of its monetary policy. The inflation target is to be set by the Government of India in consultation with the Reserve bank. This target is set once in five years.

The central Government has notified 4 percent consumer price index inflation as the target for the period from August 5 2016 to March 31 2021 with upper tolerance limit of 6 percent and lower tolerance limit of 2 percent.

The RBI is mandated to publish a monetary policy report every six months explaining the source of inflation and forecasts of inflation for the coming period of six to eighteen months.

Following situations will constitute Failure to achieve inflation target

a) The average inflation is more than the upper tolerance level of the inflation target for any three consecutive quarters.

b) The average inflation is less than the lower tolerance level for any three consecutive quarters.

Q8 Write a note on Monetary policy committee (MPC)

Monetary policy committee is a six member committee constituted in September 2016.

Monetary policy committee comprises of

a) RBI Governer (Chairperson)
b) RBI deputy government
c) One official nominated by the RBI board
d) Three central government nominees representing government of India

The MPC shall determine policy rate required to achieve inflation target. Accordingly fixing of bench mark policy interest rate (Repo rate) is made through debate and majority vote by this panel of

experts. With the formation of monetary policy committee, the RBI will follow a system which is more consultative and participative.

The new system is intended to incorporate (a) Diversity of views b) specialised experience c) independence of opinion d) representative ness e) accountability Before constitution of MPC, a technical Advisory committee (TAC) on monetary policy with experts from monetary economics, central banking, Financial Markets and public Finance Advised the RBI on the standpoint of monetary policy. However its role was only advisory in nature, with the formation of MPC, TAC on monetary policy has been discontinued.

Q9 Why Marginal Standing Facility (MSF) would be the last resort for banks?(OCT- 19 MTP)

(3)

ANS: The Marginal Standing Facility (MSF) refers to the facility under which scheduled commercial banks can borrow additional amount of overnight money from the central bank over and above what is available to them through the LAF window by dipping into their Statutory Liquidity Ratio (SLR) portfolio up to a limit .The scheme has been introduced by RBI with the main aim of reducing volatility in the overnight lending rates in the inter-bank market and to enable smooth monetary transmission in the financial system. Banks can borrow through MSF on all working days except Saturdays, between 7.00 pm and 7.30 pm, in Mumbai. The minimum amount which can be accessed through MSF is ` 1 crore and more will be available in multiples of ` 1 crore. The MSF would be the last resort for banks once they exhaust all borrowing options including the liquidity adjustment facility on which the rates are lower compared to the MSF.

Q10 Explain the open market operations conducted by RBI. NOV. 2019 (2)

Q11 Explain 'Reserve Repo Rate'. NOV. 2019 (2)

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10 -INTERNATIONAL TRADE

Q1. Distinguish between Internal Trade and International Trade.

Ans. Trade of any type is based upon the principle of division of labour and specialization of task. But internal trade and international trade differ from each other on following points.

1. Mobility of factors:

The factors of production are mobile within the country, but relatively immobile between different countries.

2. Balance of Payments:

No BOP concept in internal trade. But it is an important concept in international trade.

3. Foreign Exchange Market:

In internal trade only one currency is involved. No question of exchange of currency. In International trade two currencies are involved it gives rise to the problem of exchange between currencies.

Foreign Exchange Market.

4. Different monetary standards:

Taxation, public expenditure, foreign trade policy etc.

5. Different political entities:

Different social and political conditions, different customs and traditions, different historical set up.

All these factors affect foreign trade of the country.

These factors necessitate a separate theory of international trade.

Q2. What is the basis of international trade.

Each country specializes in the production of some commodities which it can produce at a lower cost. Each country imports those goods which it can produce only at a higher cost. Each country has advantage in production of some commodities this may be due to specialization or factor endowment. For example Bangladesh specializes in production of jute. India specialization in computer software industry. Since a country enjoys advantage in production of some commodities and is at a disadvantage in comparison to other countries in production of other commodities this becomes a basis of International trade.

Q3. What are the advantages of International trade.

a) Economic Growth.

International trade promotes economic efficiency and contributes to economic growth.

International trade offers wider market for goods and services. Due to wider market it is possible to produce on large scale at a lower cost per unit.

b) Lower prices and variety of goods.

In case of international trade, the supplier/manufacturers of goods has to compete with Suppliers/.manufacturers existing across the Globe. International trade is usually a large volume game. Due to cut throat competition in international trade, prices of goods and services are lower. Also suppliers and manufactures offers variety of produces and innovative products

c) Promotes mechanization and specialization. Since international trade is carried on a large scale, it promotes mechanization of production process. Also it leads to specialization.

d) Employment

As already discussed, international trade stimulates economic growth. Higher growth leads to more jobs. More employment leads to reduction of poverty and strengthening of incomes of factors of production.

e) Rise in investment.

International trade also involves investments made by one country in another country. Foreign direct Investment is a part of international trade. Foreign direct investment bring new technology and new product in the market.

f) Economic stability

Since international trade creates wide markets, it opens up new markets. Countries can gainfully dispose off their surplus output and thus prevent undue fall in domestic prices caused by overproduction.This helps a nation to maintain stability in prices and supply of goods during period of natural calamities like famine, flood etc.

g) International relations. Trade strengthens bonds between nations by bringing citizens of different countries together. It promotes harmony and cooperation among nations.

Q4. State arguments against international trade

Ans. There are certain disadvantages associated with international trade

1. **Loss of employment of unskilled workers.** International trade brings about a change in technology with renders many workers unemployed.It depresses the demand for unskilled workers. It reduces bargaining power of labourers.

2. **Unfair towards under-developed countries**. International trade is often not equally beneficial to all nations. In many cases it leads to economic exploitation of underprivileged countries. It leads to growing political power of corporation operating globally. The domestic entities can be easily outperformed by financially stronger transnational companies.

3. **Excessive stress on exports**. International trade is often criticized for excessive stress on exports. It leads to profit driven exhaustion of natural resources due to unsustainable production and consumption. Substantial environmental damage and exhaustion of natural resources in a shorter span of time could be a serious negative consequences of the society at large.

4. **Adverse effects of domestic industries.** International trade leads to global competition in goods and services. Local and domestic producers may not be able to survive such severe competition.

5. **Curtails economic freedom of underdeveloped country.** It increases the dependency of underdeveloped country. Dependency of underdeveloped countries on foreign nations impairs economic autonomy.

6. **Harmful effects of consumption.** Welfare of people may be ignored. There may be shortage of goods due to exports and at the same time harmful goods causing health hazards and environmental damage may be imported.

Q5. State and explain the Ricardian Theory of Comparative Cost Advantage.

Ans. Explanation of why international trade takes place.

Economic problem arises out of the basic facts that resources are limited and wants are unlimited.

The aim of all economic activities is to produce maximum with the available limited resources.

Division of labour and specialization of task is an instrument to get maximum output with given resources.

Different countries have different capacities to produce different goods with given resources.

According to classical economists like Adam smith, a country will specialize in production of those commodities in which it has advantage.

Consider two countries country A and country B and two commodities rice and cloth.

1 unit of labour can produce both these commodities as shown in table below.

	Rice	**Cloth**
Country A	100	30
Country B	50	120

Country A has advantage in production of Rice as it can produce 100 units of Rice with 1 unit of labour. Country B has advantage in production of cloth as it can produce 120 units of cloth with 1 unit of labour.

If countries do not specialize in production of a commodity

The total production will be as under

Country A using 2 units of Labour will produce 100 kg of rice and 30 u nits of cloth

Country B using 2 units of labour will produce 50 kg of rice and 120 units of cloth

Total production will be 150 kg of rice and 150 units of cloth.

If country A specializes in production of rice it can produce 200 units of Rice

If country B specilises in production of cloth it can produce 240 unit of cloth

Each country using 2 units of labour.

Thus total production of rice will rise to 200 units and total production of cloth will rise to 240 units.

Countries A will now import cloth and export rice.

In the above example country A had a distinct advantage in production of Rice

and country B had an advantage in production of Cloth.

This specialistion will lead to international trade. Country A has surplus of 100 kg of rise, it require 30 units of cloth.

Where as country B has 120 Units of cloth in excess and requires 50 Kg of rice

If entire gain of international trade is to be enjoyed by country A, then country A will give its 100 kg of rice and 240 Units of cloth. (As country B will give maximum of 120 units of cloth against 50 Kg of rice)

Entire gain taken by country A 50 kg of rice = 120 Units of cloth

If entire gain of international trade is to be enjoyed by country B

Then country A will give up 100kg of rice against 30 units of cloth

Or 50 Kg or rice for 15 units of cloth

Entire gain taken by country B 50 kg of rice = 15 units of cloth

Actual exchange rate will be between these two extreme exchange rates.

What happens if one country has advantage in production of both the commodities.

According to David Ricardo even if one country has advantage in production of both the commodities and other country has disadvantage in production of both the commodities,

Even in such a case Country A will specialize in production of that commodity in which it has comparatively more advantage and country B will specialize in production of that commodity in which it has comparatively lower disadvantage.

This is explained below.

1 unit of labour can produce both these commodities as shown in table below.

	Rice	**Cloth**
Country A	**200**	**180**
Country B	**80**	**120**

The cost ratios are as follow:

In country A, 1 unit of labour can produce

200 units of rice Or 180 units of cloth.

So the ratio of opportunity cost is 1 unit of rice: 0.9 units of cloth

In country B, 1units of labour can produce 80 units of rice Or 120 units of cloth.

So the ratio of opportunity cost is 1 unit of rice to 1.5 units of cloth.

Country A has an advantage in the production of both rice and cloth because it can produce both the commodities in larger quantities with given resources i.e., 1 unit of labour.

But the advantage is higher in the production of rice than in the production of cloth.

Country A can produce 2½ times(200/80) as much rice as country B can, but 1.5 times as much cloth as country B can produce.

So country A specializes in the production of rice and leaves the production of cloth to country B.

If country A uses 2 units of labour it will produce 200 kg of rice and 180 units of cloth

If country B uses 2 units of labour it will produce 80 kg of rice and 120 units of cloth

Total production will be 280 kg of rice and 200 units of cloth.

However if country A specializes in production of rice and country B specilises in production of cloth production will be as under

Country A uses 2 units of labour and produces 400kg of rice

Country B uses 2 units of labour and produces 240 units of cloth

Thus the gain due to specialisation will be 120 kg of rice and 40 units of cloth

Country A has advantage in production of both the commodities

But country A had more advantage in production of rice (200/80) 2.5 times as compared to that of cloth (180/120) 1.5 times.

Country A can now import cloth as country B has surplus cloth and country A can export rice since it has excess rice.

If there was no specialisation country A would have produced 180 units of cloth but it now has extra 200 kg of rice against 180 units of cloth

If there was no specialization country B would have produced 80 kg of rice. Since it has specialised in production of cloth country B has extra 120 units of cloth against 80 kg of rice

So for country A cost of 200 kg of rice is 180 units of cloth

For country B cost of 120 units of cloth is 80 kg of rice

Now country A will import cloth and export rice.

The terms of international trade will decide how the gains of international trade will be share.

Suppose A gives up 80 kg of rice for 90 units of cloth

It will have to give up 160 kg of rice for 180 units of cloth

In such a case A will get the benefit of 40 kg of rice from international trade

Country B has 120 units of cloth , It requires 80 kg of rice.

It will give up 90 units of cloth and get 80 kg of rice

It will be left with surplus of 30 units of cloth.

Thus, both countries are benefited. This is the gain from international trade. It induces countries to specialize in the production of different goods, and trade with each other.

Assumption of Ricardian theory.

Assumptions

1. There are two countries and two commodities.
2. There is perfect competition both in commodity and factor markets.
3. Cost of production is expressed in terms of labour i.e. value of a commodity is measured in terms of labour hours/days required to produce it. Commodities are also exchanged on the basis of labour content of each good.
4. Labour is the only factor of production other than natural resources.
5. Labour is homogeneous i.e. identical in efficiency, in a particular country.
6. Labour is perfectly mobile within a country but perfectly immobile between countries.
7. There is free trade i.e. the movement of goods between countries is not hindered by any restrictions.
8. Production is subject to constant returns to scale.
9. There is no technological change.
10. Trade between two countries takes place on barter system.
11. Full employment exists in both countries.
12. There is no transport cost.

Merits of the Ricardian Theory:

1. Reference to comparative cost advantage:

This theory brings out the importance of comparative cost advantage enjoyed by a country over another country.

2. Model can be expanded:

The two country two commodities model used by David Ricardo can be expanded to cover more countries and more commodities.

3. Money Cost:

The theory was restructured by Taussig to introduce the concept of money cost to replace labour cost.

Criticism of the Classical Theory:

1. **Assumption of the labour Theory of Value:**

Ricardo calculated cost in terms of labour. In practice commodities are not produced only by labour.

2 **Ignoring transport cost:**

This theory ignored transport cost, In practice transport cost are substantial.

A country imports a commodity only if the cost of production in the other country plus cost of transport is greater than the cost of production within the country.

3. **Assumption of constant costs:**

The theory is based on assumption of constant costs due to which the cost ratios do not change when a country specializes in the production of a commodity and increases its output. In practice, constant

cost is a rare thing.

4. **Complete specialization is not possible:**

Complete specialization is not possible unless the two countries are of the same size and same availability of resources.

If one country is big and the other small, the small country will not be able to satisfy the requirements of the big country and will not be able to absorb the entire surplus of the big country.

5. **Complete specialization not desirable:**

It would be risky to depend upon another country in case of a strategic industry.

6. **Assumption of full employment:**

The theory is based on the assumption of full employment so that the country has to reduce the production of one commodity for increasing the production of another commodity.

In practice, often countries have idle resources. A country can increase the production of one commodity without reducing the production of some other commodity.

7. <u>One sided theory</u>:

The theory points at only cost, which determines supply, as the cause of international trade.

It completely ignores the demand side which also influences internationals trade.

8. <u>No explanation of the cause of comparative cost advantage</u>:

The theory does not provide any explanation as to why countries have comparative cost advantages in respect of certain commodities.

9. <u>Restrictive model</u>:

The theory is based upon the assumption of 2 commodities. In practice a country produces a large number of commodities.

<u>Conclusion</u>: The theory provides a general explanation of international trade.

Q4. Explain and evaluate the Modern Theory of International Trade.

Ans. Also called the factor Endowment Theory. **OR**

Heckescker Ohlin Theory because it was given by Eli F. Heckscher in 1919 and refined by

Bertil Ohlin in 1939.

Background:

The classical theory of international trade was given by David Ricardo in the form of Comparative Cost Advantage.

It maintained that a country specializes in the production of those goods in which it has a comparative cost advantage.

But it does not explain why the country has that comparative cost advantage. It did not go to the root cause of international trade.

Heckscher – Ohlin theory goes to the root cause of international trade.

Thus the Modern Theory does not invalidate the Classical Theory. It goes behind it and strengthens it.

The Theory in Basic Stages.

The Modern Theory which is also called the General Equilibrium Theory is developed through the following stages.

1. The immediate cause of international trade is differences in commodity prices in different countries. Commodities flow from a country where prices are low to the country where their prices are high.

2. Difference in commodity prices are due to differences in the prices of the factors which are used in the production of the commodities.

3. The prices of the factors of production depend upon their supplies. If the supply of a factor is relatively more its price is relatively lower.

4. The basis of international trade is the difference in factor endowments in different countries.

Explanation of the Theory

Different countries are endowed with different quantities of different factors.

Suppose India has abundance of labour and scarcity of capital.

So labour will be relatively cheaper in India, as compared to capital.

India will specialize in the production of goods which require more labour and less capital.

England has abundance of capital and scarcity of labour.

So capital will be comparatively cheaper in England, as compared to labour.

England will specialize in the production of goods which require more capital and less labour.

India and England exchange their products amongst themselves.

Ratios in terms of Quantities:

The relative abundance and scarcity of factors was presented in the theory in the form of the following ratios:

(C/L)I > (C/L)II

C – Capital

L – Labour

The ratio of capital to labour in Country I is greater than the same ratio in country II.

It means that in country I capital is abundant in comparison with labour

And

In country II labour is abundant in comparison with capital.

Ratios in terms of Prices of Factors.

The same were presented in terms of prices of the factors.

The abundant factor is cheaper and the scarce factor is dearer.

This fact was presented in the form of the following ratios:

(PC/PL)I < (PC/PL)II

Meaning: The ratio of price of capital to price of labour is lower in country I than in country II.

It means that capital is cheaper in country I as compared to labour

And

Labour is cheaper in country II as compared to capital.

So country I specializes in the production of goods requiring more of capital and less of labour.

Country II specializes in the production of goods requiring more of labour and less of capital.

They exchange those goods amongst themselves.

Assumptions of the theory.

1. **Two X Two X Two Model:**

There are two countries in the world.

There are two commodities which they can produce.

There are two factors available to them.

2. **Perfect competition.**

There is perfect competition in both the product market and the factor market.

So the commodities are produced at the minimum cost and sold at minimum prices.

3. **Quality of factors:**

The quality i.e., productivity of a factor in the two countries is the same.

If a unit of capital can produce a particular quantity of a commodity in country I, it can produce the same quantity of that commodity in country II.

4. **Full employment.**

The resources in both the countries are fully employed. If a country wants to increase the production of one commodity, it has to reduce the production of the other commodity.

5. Production function:

The production function in respect of a particular commodity is the same in the two countries.

The production function in respect of the two commodities are different in a country.

If X units of a factor can produce 10 units of a commodity A in country I, then X units of that factor can produce 10 units of commodity A in country II also. But in country I as well as II X units of the same factor will produce some other quantity of commodity B.

6. Free trade:

No restrictions on movements of goods between the two countries.

7. Mobility of factors:

Factors can move freely within a country, but not between different countries.

Evaluation of the Modern Theory of International Trade:

Superiority over Classical Theory

1. Root Cause:

It goes to the root cause of international trade whereas the classical theory gives a superficial explanation.

2. Part of General Equilibrium:

It connects the theory of international trade with the central working of an economic system.

It maintains that there is no basic difference between internal trade and international trade. Both are due to working of the forces of demand and supply.

Drawbacks of the Theory:

1. **Absence of perfect competition:**

The theory assumes that there is perfect competition in both product market and factor market.

In practice there is no perfect competition.

2. **Mobility of factors:**

The factors of production are neither perfectly mobile within the country nor perfectly immobile between different countries.

3. **Excessive importance to supply of factors:**

The price of a factor (as well as a commodity) depends upon supply as well as demand.

This theory concentrates only on supply and totally ignores demand.

4. **No identical production function:**

The functional relationship between a factor and a product is not identical in two countries because the productivity of a factor is not the same in the two countries.

5. **No uniform technique:**

The technique of production in respect of the production of any commodity is not uniform in all countries.

6. **No constant returns:**

When a country specializes in the production of a particular commodity, and produces it on a larger scale, it may get economies of scale due to which the average cost may fall and cost ratios may change.

7. **No free trade:**

Every country imposes some restrictions on imports and exports, particularly imports.

8. Cost of transport:

The cost of transport is not insignificant.

9. Cost ratios/price ratios:

The price ratios may be different from cost ratios.

Conclusion: The theory gives a fairly satisfactory explanation of international trade.

Comparison of Theory of Comparative Costs and Modern Theory

Theory of Comparative Costs	Modern Theory
The basis is the difference between countries is comparative costs.	Explains the causes of differences in comparative costs as differences in factor endowments.
Based on labour theory of value	Based on money cost which is more realistic.
Considered labour as the sole factor of production and presents a one-factor (labour) model	Widened the scope to include labour and capital as important factors of production. This is 2-factor model and cand be extended to more factors.
Treats international trade as quite distinct from domestic trade	International trade is only a special case of inter-regional trade.
Studies only comparative costs of the goods concerned.	Considers the relative prices of the factors which influence the comparative costs of the goods.
Attributes the differences in comparative advantage to differences in productive efficiency of workers.	Attributes the differences in comparative advantage to the differences in factor endowments.
Does not take into account the factor price differences	Considers factor price differences as the main cause of commodity price differences.
Does not provide the cause of differences in comparative advantage.	Explains the differences in comparative advantage in terms of differences in factor endowments.
Normative; tries to demonstrate the gains from international trade.	Positive; concentrates on the basis of trade.

Q.5 The table below shows the output of Wheat and Rice by using one hour of labour time in country A and country B -

Goods	Country A	Country B
Wheat (Quintal /hour)	10	5
Rice (Quintal/hour)	5	10

Which country has an absolute advantage over other country in production of wheat and rice and which good they obtain through international trade? (RTP NOV-19)

ANS: As can be seen from the table, one hour of labour time produces 10 quintal and 5 quintal of wheat respectively in country A and country B. On the other hand, one hour of labour time produces 5 quintal of rice in country A and 10 quintal of rice in country

B. Country A is more efficient than country B, or has an absolute advantage over country B in production of wheat. Similarly, country B is more efficient than country A, or has an absolute advantage over country A in the production of rice. If both nations can engage in trade with each other, each nation will specialize in the production of the good it has an absolute advantage in and obtain the other commodity through international trade. Therefore, country A would specialise completely in production of wheat and country B in rice.

Q.6 How does trade increase economic efficiency and which view argued that trade is a zero- sum game and how? (OCT-19 MTP)

(3)

ANS: Economic efficiency increases due to quantitative and qualitative benefits of extended division of labour, economies of large scale production, betterment of manufacturing capabilities, increased competitiveness and profitability by adoption of cost reducing technology and business practices and decrease in the likelihood of domestic monopolies.Efficient deployment of productive resources - natural, human, industrial and financial resources ensures productivity gains.

Mercantilist argued that trade is a zero sum game. Mercantilism advocated maximizing exports in order to bring in more precious metals and minimizing imports through the state imposing very high tariffs on foreign goods. This view argues that trade is a 'zero-sum game', with winners who win does so only at the expense of losers and one country's gain is equal to another country's loss, so that the net change in wealth or benefits among the participants is zero.

Q.7 Explain the key features of modern theory of international trade.NOV.2019 (3)

Q.8 The price index for exports of Bangladesh in the year 2018-19 (based on 2010-11) was 233.73 and the price index for imports of it was 220.50 (based on 2010-11)

NOV. 2019 (5)

(i) What do these figures mean ?

(ii) Calculate the index of terms of trade for Bangladesh.

(iii) How would you interpret the index of terms of trade for Bangladesh ?

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11- Trade Policy

Q1. Why does countries impose restrictions on International trade.

All the theories of International trade clearly show the benefits arising from international trade, The benefits of international trade are in terms of economic growth, job creation and welfare.
The advocates of free international trade presuppose the existence of fair competition between domestic and foreign produces.
However such fair competition exists only in theory and unobstructed international trade brings in severe dislocation of many domestic firma and industries.

In view to ensure protection and growth of domestic industries, countries impose restriction on international trade.
Government of different countries have used different types of policy instruments, for restricting free flow of goods and services across national boundries. Some of these measures are simple and relatively transparent whereas others are complex, less transparent.

Trade policy is collection of all instruments that Government uses to promote or restrict imports and exports. It also includes approach taken by countries in trade negotiations.

The instruments of trade policy that countries use to restrict imports and encourage exports can be broadly classified in

1) Tariffs (price related measures)
2) Non price related measures (Non tariffs measures)

These measures are imposed by Various Governments to

(a) To protect Domestic Industries from Foreign Competition,
(b) To conserve the Foreign Exchange Resources of the Country,
(c) To make the Balance of Payments Position favourable.
(d) To curb conspicuous Consumption,

(e) To mobilise Revenue for the Government and,
(f) To discriminate against certain countries.

Tariff Measures

Meaning: Tariff (also called Customs Duty) is a tax or duty imposed on goods and services that are imported or exported. Tarrifs are usually imposed on imports however in some cases tariffs may be imposed on exports.

Effect of tariffs

Tariffs are aimed at altering the relative prices of goods and service imported.
Tariffs are taxes imposed on goods. This makes imported goods costly in comparison to domestically produced goods.
Tarrifs leaves the world market price of goods unaffected, while raising their prices in domestic market.
The object of tarrif is to raise revenue for the government and more importantly to protect the domestic import competing industry

Objects of : Tariff increases the price of Imported Goods in the local market only. Their prices in the world market are not affected. The impact of Tariff includes the following -

(a) to restrict trade, by increasing the price of imported goods and services,
(b) to protect the domestic import-competing Industries,
(c) To discourage consumption of imported foreign goods, by making them "dear",
(d) to decrease the volume of imported goods into the country.
(e) to ensure that Domestic Producers of the same product to charge a "Fair Price" for such item, when compared with the imported item, and do not overcharge the Consumers,
(f) to contribute to increase in Government Revenue in the form of Import Duties.

Negative Impact: However, Tariffs also have the following negative impact –

(a) reduction in consumer well-being, due to higher cost of imported goods,
(b) increase in Prices by Domestic Producers of same item, to match with high cost of imported goods,
(c) loss of output and employment in case of Sectors that are rendered redundant due to import of goods,
(d) creation of trade distortions, by encouraging inefficient production in Home Country, and discourage efficient production in the rest of the world.

Q2. Discuss the types of Tariffs

Types of Tariff: Tariffs may be classified as under -

A. Based on manner of computation:

	Ad Valorem Tariff

(a)	In this type of tarrif Duty is levied on the basis of value of goods . Duty is computed as a **Percentage** of the Value of Imported Goods, e.g. 10% ad valorem means 10% on the Value of Imported Goods.
	Since Duty is based on the Value, sometimes importers may resort to under- valuation.
	Advoleram duty is widely used all over the world
(b)	**Specific Tariff**
	Specific tariff or specific duty is a duty imposed by way of fixed amount on physical unit of good imported. It is calculated on the basis of unit or measure such as weight , volume etc of imported goods. For example Rs 1000 duty may be charged on each bicycle imported. The duty is not based on value.
(c)	**Mixed Tarrif**. It based on value (advoleram tarrif) or physical units (specific tariff) which ever is more. For example import duty may be 10% of value or Rs 1,00,000 per tonne which ever is higher.
(d)	**Compound Tariff**
	It is a combination of Ad Valorem Tariff **and** a Specific Tariff, e.g. Duty at 3% ad valorem + Rs.500 per kg.

(e)	**Technical Tariff**
(a)	Duty is calculated on the **components** of the imported item.
(b)	Separate Duty Rate may be applied on each component of the item.
	For example tariff may be imposed @ 10% to 15% of value on the basis of cotton content in cloth.
(f)	**Tariff Rate Quotas**
(a)	Tariff Rate Quota (TRQ) Protects domestic producers as well as products.
(b)	TRQ combines two aspect – (a) **Quota,** i.e. Low or Nil Rate Duty on imports upto a specified limit, and (b) **Higher Rate** of Tariff on Imports beyond the specified limit. For example 5% duties on import of white goods up Rs 1000 crores in a year . and 15% on imports of white goods above Rs 1000 crore in a year from a particular country.
(g)	**Variable Tariff**
	Duty Rate is fixed so as to make the price of the Imported Item **equivalent** to the Domestic Price (Support Price in certain cases) in the Home Country. For example price of TV sets in India is Rs 20,000 and Price of TV set in India is Rs 15,000. A duty of Rs 5000 per TV set will be imposed so as to make the price of imported item equal to price at which such goods are sold in domestic market.
(h)	**MFN Tariffs**
	Most Favoured Nation (MFN) Tariffs are the **normal** non-discriminatory Tariff charged on imports from countries which are members.
	However, in case of Free Trade Agreements, Customers Unions, Tariff under Quota Schemes, rates lower than MFN Rates may be applicable. Thus, MFN Rates are generally the highest rates.
	Sometimes, Countries may impose a higher than MFN Rate for imports from non –WTO Countries.
(i)	**Preferential Tariff**
(a)	These are rates **lower than MFN Rates,** which are levied for imports from a country that are part of a Free Trade Agreement, e.g. North American Free Trade Agreement (NAFTA).
	In most cases, Preferential Tariff Rates are Zero, i,e. no Import Duty.
	Sometimes, even without agreement, some countries may have lower rates of Tariff on selected goods, imported from selected countries, for a specified period.
(b)	Duty Rates on Raw Materials, Semi – Processed Goods, and Final Products are **progressively higher**.
(c)	This method ensures protection of domestic processing industries if Raw Materials originate in the Home Country, by making semi-processed and final goods costlier.
(d)	However, this affects developing manufacturing industries of exporting countries where the Raw Materials originate. Such countries are forced to export Raw Materials, without making value-

	addition.
(j)	**Bound Tariff**
(a)	A Bound tariff is a tariff which WTO members binds itself with a legal commitment not to raise it above certain level. It is a commitment **not to increase** the Tariff beyond an agreed level, without negotiating with Trading Countries and compensating the affected parties.
(b)	Bound Tariff ensures transparency, predictability, and improvised trade relations.
	Bound tariff are specific to individual products and represent the maximum level of import duty that can be levied ona product imported by that member A member is always free to impose tariff that is lower than the bound level.
(k)	**Applied Tariff**
	It is the **Actual Duty** charged on imports from a MFN status country.
	Applied Tariff can also be **below the Bound Tariff Rates.**
	A WTO member can have an applied tariff for a product that differs from the bound tariff for that product as long as the applied level is not higher than the bound level.
(l)	**Escalated Tariff**
	Escalated tariff structure refers to the system where in the nominal tariff rates on imports of manufactured goods are higher than the nominal tariff rates on intermediate inputs and raw material. For example 5% duty on imports of raw material. 20% duty on imports of goods manufactured from the same raw material.
(m)	**Prohibitive Tariffs**
	A prohibitive tariff is one that is set so high that no imports can enter. The object is that there should be no imports of such goods.
(n)	**Anti Dumping Duties**
(a)	It is applicable when an Article is imported at less than its **Normal Value,** i.e. Foreign Seller dumps goods in a country at less than Sale Prices in his market, or less than Full Average Cost.
(b)	**Dumping –** (i) constitutes international price discrimination, (ii) harms the domestic producers of the importing country, (iii) creates monopolies, (iv) promotes consumption of foreign goods at undesirable levels, (v) affects national interest in certain situations.
(o)	**Safeguard Duties**
	It is a form of duty levied to avoid import of increased quantities and in conditions to cause serious injury to the Domestic Industry.
(p)	**Counter Vailing Duty (CVD)**
	It is levied on imports from any country which pays directly or

	indirectly, any **subsidy,** on the manufacture, production, etc. of an Article.
	These Duties seek to offset the **artificially low prices** charged by Foreign Sellers, on account of Subsidies and Concessions offered to them in their Home Country.
	Effects of Tariffs
	A Tariff levied on imported product affects both the country exporting a produce and country importing that product
1	Reduction of volume of trade: Trade barriers create obstacles to trade and decrease the volume of imports and exports. When tariffs are imposed, it reduces the volume of international trade
2	**Loss of surplus for domestic consumers.**
	Due to tariff the prices of imported goods goes up, This discourages domestic consumers to consume imported foreign goods. Domestic consumer suffer a reduction in consumer surplus because they may pay a higher price for the goods .
3	**Encouragement to domestically produced goods.**
	Tariffs encourage consumption and production of the domestically produced import substitutes and thus protect domestic industries.
4	**More profits to producers of domestic goods.** Imposition of tariffs reduce the severity of competition. This increases the prices of domestically produced goods resulting in to higher profits to producers of such goods.
5	**Increase in production of domestic goods**. Since imposition of tariff increase the profitability of producers of domestic goods, new firms may enter in the market to produce such goods.
6	Increase in Government revenues. Tariffs increase Government revenues of the importing country
7	**Promotes inefficient production.** Tariffs discourage efficient production of goods in the rest of the world and encourages inefficient production in the home country.

Q3. Explain Non tarrif barriers and Non Tariff measures.

Non-Tariff Measures (NTMs)

1. Non-Tariff Measures (NTMs) vs Non-Tariff Barriers (NTBs):

(a)	**Meaning**
	Non Tariff Measures These are Policy Measures, other than Ordinary Customers Tariff, that can have an effect on international trade in goods, changing quantities traded, or prices, or both
	Non Tariff Barriers- These are simple discriminatory practices, by which Domestic Suppliers are preferred over Foreign Suppliers.
(b)	**Scope**

	Non Tarrif measures- these include regulations that restrict trade, or that facilitate higher trade. These have a wider scope.
	Non tariff Barriers - NTBs are oriented only towards restricting imports. Thus, lower in scope.

Q4. Discuss various types of Non Tariff measures

The official definition of NTMs.: **NTMs are policy measures other than ordinary customs tariffs that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both.**

A detailed classification is therefore critical in order to clearly identify and distinguish among the various forms of NTMs.

The classification of NTMs follows a taxonomy of all measures considered relevant in today's international trade. It comprises technical measures, such as sanitary or environmental protection measures. Moreover, it also includes other measures traditionally used as instruments of commercial policy, e.g. quotas, price control, exports restrictions, or contingent trade protective measures. Finally, the MAST NTM classification also comprises behind-the-border measures, such as competition, trade-related investment measures, government procurement or distribution restrictions.

The classification does not judge on legitimacy, adequacy, necessity or discrimination of any form of policy intervention used in international trade. It acknowledges existence and is designed to organize information in a database format.

Classification of Non Tariff measures

Non tariff barriers can be classified in to

A. Technical measures

1. **Sanitary and phytosanitary measures**
2. **Technical barriers to Trade**

B Non Technical measures

1. **Import quotas**
2. **Price control measures**
3. **Non-automatic licensing and prohibitions**
4. **Financial Measures**
5. **Measures affecting competition**
6. **Government procurement policies**
7. **Trade related Investment measures**
8. **distribution Restrictions**
9. **restriction on post sales Ser vices**

10. Rules of origin

11. Safeguard measures

12 Embargos

13. Administrative Procedures

Technical Measures

1 **SANITARY AND PHYTOSANITARY MEASURES**

Measures that are applied to protect human or animal life from risks arising from: additives, contaminants, toxins or disease-causing organisms in food.

- A requirement limiting the use of hormones and antibiotics in the production of meat
- A sample test on imported oranges to check for the residue level of pesticides

2 TECHNICAL BARRIERS TO TRADE

1 Measures referring to technical regulations, and procedures for assessment of conformity with technical regulations and standards.

- Restrictions on toxins in children's toys
- Refrigerators need to carry a label indicating their size, weight and electricity consumption level

NON TECHNICAL MEASURES

1. Import quotas

An import quota is a direct restriction which specifies that only a certain physical amount of goods will be allowed in to that country during a given period. Import quotas are usually enforced by issuing licences.

2. Price control measures. Price control measures are steps taken to influence or control the prices of imported goods in order to support domestic price of a certain products when the imports prices of these goods are lower. These are known as para-tariff measures and includes measures other than tariff measures. For example a minimum import price is established for sulphur.

- A minimum import price is established for fabric and apparel

- Imports of fresh blueberries may enter free of duty between 1 January to 31 May, while in other months seasonal duties apply

1. **Non – automatic licensing and prohibitions. . . These measures are normally aimed at limiting the quantity of goods that can be imported. These measures may take the form of non -automatic licensing or through complete prohibitions. For example, textiles may be allowed only on a discretionary licence by the importing country. India prohibits import/export of arms and related material from/to Iraq.**
2. **Financial measures. The objective of financial measures is to increase import costs. This is done by regulating the access to and cost of foreign exchange for imports and also by defining the terms of payment. It includes measures such as advance payment requirement and foreign exchange controls denying the use of foreign exchange for certain types of imports or for goods imported from certain countries.**
3. **Measures affecting competition. . this involves granting importing licences or rights only to one or a few limited group of economic operators. For example statutory marketing board may be granted exclusive rights to import wheat or State trading corporation may be given monopoly right to distribute palm oil. When such state agencies or monopoly import agencies sell on domestic market at price above those in the world market, it amounts to import of tariff.**
4. **Government procurement policies.**

   This requires that all or specified percentage of government purchases should be from domestic firms rather than foreign firms. In accepting public tenders, a government may give preference to the local traders rather than foreign traders
5. **Trade –related Investment measures.**

   These measure include rules that final output should include a minimum fraction of local content. for example car manufactures may be required that at least 25% of the components should be locally made.
6. **Distribution restrictions.**

   Distribution restrictions are limitations imposed on the distribution of goods in the importing country. It involves additional licence or certification requirements. Theses may relate to Geographical restrictions or restriction as to types of agents who may resell. For example imported fruits may be sold only through outlets having refrigeration facilities.
7. **Restriction on post –sales Services. Produces may be restricted from providing after sales services in the importing country. Such services may be reserved to local service companies of the importing country**

8. **Administrative procedures. Obstacles may be created by prescribing costly and time consuming administrative procedures what are mandatory for import of foreign goods. This will increase transaction cost and discourage imports.**

9. **Rules of origin. Duties and restrictions are imposed based on the source of imports. Importing Government may institute procedures for verifying the source of origin of the imported goods. Such procedures are time consuming and costly.**

10. Safeguard measures.

Such measures are initiated by the countries to restrict imports of a product temporarily if its domestic industry is injured or threatened with serious injury cause by a surge in imports.

11. Embargos.

An embargo is a total ban imposed by government on import or export of some commodities to/from a particular country for a specified period

Q5. Discuss export related measures to restrict or increase exports.

EXPORT RELATED MEASURES

Export-related measures are measures applied by the government of the exporting country on exported goods.

Export related measures includes

a) **Ban on exports**
b) **Export taxes**
c) **Export subsidies and incentives**
d) **Voluntary export Restraints.**

a) **Ban on Exports.** Ban on exports implies not allowing export of a commodity or not allowing export of some commodities to specific countries. For example during the period of shortages, export of agricultural products such as onion, wheat etc is prohibited.

b) **Export taxes.** An export tax is a tax collected on goods meant for export. It may be specific tax or advaleroem tax (based on value). The object is to raise the cost of exported good and thus decrease quantity of exports.

c) **Export subsidy and incentive.** These measures are taken to increase/ encourage exports. Government provided financial assistance to exporters so to increase the quantity of exports. Government bodies usually provide financial contribution to domestic produces in the form of cash assistance, duty drawback .

d) **Voluntary export restraints, Voluntary export Restraints refer to a type of informal quota administered by an exporting country to restrain quantity of goods that can be exported out of that country during a specified period of time.** Such restrains originate primarily from political consideration and are imposed based on negotiations of the importer with the exporter. The inducement for the exporter to agree to a VER is mostly to appease the importing country and to avoid the effects of possible retaliatory trade restraints

Q.6 Define custom duties? What are their main goals? (RTP NOV-19)

e) ANS: Customs duties are basically taxes or duties imposed on goods and services which are imported or exported. It is defined as a financial charge in the form of a tax, imposed at the border on goods going from one customs territory to another. They are the most visible and universally used trade measures that determine market access for goods. Import duties being pervasive than export duties, custom duties are often identified with import duties. Custom duties are aimed at altering the relative prices of goods and services imported, so as to contract the domestic demand and thus regulate the volume of their imports. Custom duties leave the world market price of the goods unaffected; while raising their prices in the domestic market. The main goals of custom duties are to raise revenue for the government, and more importantly to protect the domestic import-competing industries.

Q.7 Is prohibition of import of poultry from countries affected by avian flu, meat and poultry processing standards to reduce pathogens, residue limits for pesticides in foods etc. an example of Sanitary and Phytosanitary (SPS) measure? How? (RTP NOV-19)

ANS: Yes, prohibition of import of poultry from countries affected by avian flu, meat and poultry processing standards to reduce pathogens, residue limits for pesticides in foods etc. are the examples of Sanitary and Phytosanitary (SPS) measures. These measures are applied to protect human, animal or plant life from risks arising from additives, pests, contaminants, toxins or disease-causing organisms and to protect biodiversity. These include ban or prohibition of import of certain goods, all measures governing quality and hygienic requirements, production processes, and associated compliance assessments.

Q.8 Food Laws, Quality Standards and Industrial Standards are examples of which type of non-tariff measures? Give Comments. (RTP NOV-19)

ANS: Food laws, quality standards, industrial standards are some of the examples of Technical Barriers to Trade (TBT), which cover both food and non-food traded products. Technical Barriers to Trade refer to mandatory 'Standards and Technical Regulations' that define the specific characteristics that a product should have, such as its size, shape, design, labelling/marking/packaging, functionality or performance and production methods, excluding measures covered by the SPS Agreement.

Q.9 Assume that 15% specific tariff is levied by the government on every sunglass which is imported into India, and if 2000 sunglasses are imported and price of each sunglass is Rs.1000/- , then find out the amount of total tariff revenue collected by the government? (OCT-19 MTP)

ANS: Specific tariff is an import duty which levied as a fixed charge per unit of the good imported. Therefore amount in total tariff revenue = 2000*15%= Rs. 300/-In this case, total Rs. 300/- is collected, whether the price of a sunglass is of Rs. 1000 or Rs. 2000 for different brand.

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(h)	**MFN Tariffs**
	Most Favoured Nation (MFN) Tariffs are the **normal** non-discriminatory Tariff charged on imports from countries which are members.
	However, in case of Free Trade Agreements, Customers Unions, Tariff under Quota Schemes, rates lower than MFN Rates may be applicable. Thus, MFN Rates are generally the highest rates.
	Sometimes, Countries may impose a higher than MFN Rate for imports from non –WTO Countries.
(i)	**Preferential Tariff**
(a)	These are rates **lower than MFN Rates,** which are levied for imports from a country that are part of a Free Trade Agreement, e.g. North American Free Trade Agreement (NAFTA).
	In most cases, Preferential Tariff Rates are Zero, i,e. no Import Duty.
	Sometimes, even without agreement, some countries may have lower rates of Tariff on selected goods, imported from selected countries, for a specified period.
(b)	Duty Rates on Raw Materials, Semi – Processed Goods, and Final Products are **progressively higher**.
(c)	This method ensures protection of domestic processing industries if Raw Materials originate in the Home Country, by making semi-processed and final goods costlier.
(d)	However, this affects developing manufacturing industries of exporting countries where the Raw Materials originate. Such countries are forced to export Raw Materials, without making value-

	addition.
(j)	**Bound Tariff**
(a)	A Bound tariff is a tariff which WTO members binds itself with a legal commitment not to raise it above certain level. It is a commitment **not to increase** the Tariff beyond an agreed level, without negotiating with Trading Countries and compensating the affected parties.
(b)	Bound Tariff ensures transparency, predictability, and improvised trade relations.
	Bound tariff are specific to individual products and represent the maximum level of import duty that can be levied ona product imported by that member A member is always free to impose tariff that is lower than the bound level.
(k)	**Applied Tariff**
	It is the **Actual Duty** charged on imports from a MFN status country.
	Applied Tariff can also be **below the Bound Tariff Rates.**
	A WTO member can have an applied tariff for a product that differs from the bound tariff for that product as long as the applied level is not higher than the bound level.
(l)	**Escalated Tariff**
	Escalated tariff structure refers to the system where in the nominal tariff rates on imports of manufactured goods are higher than the nominal tariff rates on intermediate inputs and raw material. For example 5% duty on imports of raw material. 20% duty on imports of goods manufactured from the same raw material.
(m)	**Prohibitive Tariffs**
	A prohibitive tariff is one that is set so high that no imports can enter. The object is that there should be no imports of such goods.
(n)	**Anti Dumping Duties**
(a)	It is applicable when an Article is imported at less than its **Normal Value,** i.e. Foreign Seller dumps goods in a country at less than Sale Prices in his market, or less than Full Average Cost.
(b)	**Dumping –** (i) constitutes international price discrimination, (ii) harms the domestic producers of the importing country, (iii) creates monopolies, (iv) promotes consumption of foreign goods at undesirable levels, (v) affects national interest in certain situations.
(o)	**Safeguard Duties**
	It is a form of duty levied to avoid import of increased quantities and in conditions to cause serious injury to the Domestic Industry.
(p)	**Counter Vailing Duty (CVD)**
	It is levied on imports from any country which pays directly or

	indirectly, any **subsidy,** on the manufacture, production, etc. of an Article.
	These Duties seek to offset the **artificially low prices** charged by Foreign Sellers, on account of Subsidies and Concessions offered to them in their Home Country.
	Effects of Tariffs
	A Tariff levied on imported product affects both the country exporting a produce and country importing that product
1	Reduction of volume of trade: Trade barriers create obstacles to trade and decrease the volume of imports and exports. When tariffs are imposed, it reduces the volume of international trade
2	**Loss of surplus for domestic consumers.**
	Due to tariff the prices of imported goods goes up, This discourages domestic consumers to consume imported foreign goods. Domestic consumer suffer a reduction in consumer surplus because they may pay a higher price for the goods .
3	**Encouragement to domestically produced goods.**
	Tariffs encourage consumption and production of the domestically produced import substitutes and thus protect domestic industries.
4	**More profits to producers of domestic goods.** Imposition of tariffs reduce the severity of competition. This increases the prices of domestically produced goods resulting in to higher profits to producers of such goods.
5	**Increase in production of domestic goods**. Since imposition of tariff increase the profitability of producers of domestic goods, new firms may enter in the market to produce such goods.
6	Increase in Government revenues. Tariffs increase Government revenues of the importing country
7	**Promotes inefficient production.** Tariffs discourage efficient production of goods in the rest of the world and encourages inefficient production in the home country.

Q3. Explain Non tarrif barriers and Non Tariff measures.

Non-Tariff Measures (NTMs)

1. Non-Tariff Measures (NTMs) vs Non-Tariff Barriers (NTBs):

(a)	**Meaning**
	Non Tariff Measures These are Policy Measures, other than Ordinary Customers Tariff, that can have an effect on international trade in goods, changing quantities traded, or prices, or both
	Non Tariff Barriers- These are simple discriminatory practices, by which Domestic Suppliers are preferred over Foreign Suppliers.
(b)	**Scope**

	Non Tarrif measures- these include regulations that restrict trade, or that facilitate higher trade. These have a wider scope.
	Non tariff Barriers - NTBs are oriented only towards restricting imports. Thus, lower in scope.

Q4. Discuss various types of Non Tariff measures

The official definition of NTMs.: **NTMs are policy measures other than ordinary customs tariffs that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both.**

A detailed classification is therefore critical in order to clearly identify and distinguish among the various forms of NTMs.

The classification of NTMs follows a taxonomy of all measures considered relevant in today's international trade. It comprises technical measures, such as sanitary or environmental protection measures. Moreover, it also includes other measures traditionally used as instruments of commercial policy, e.g. quotas, price control, exports restrictions, or contingent trade protective measures. Finally, the MAST NTM classification also comprises behind-the-border measures, such as competition, trade-related investment measures, government procurement or distribution restrictions.

The classification does not judge on legitimacy, adequacy, necessity or discrimination of any form of policy intervention used in international trade. It acknowledges existence and is designed to organize information in a database format.

Classification of Non Tariff measures

Non tariff barriers can be classified in to

B. Technical measures

3. Sanitary and phytosanitary measures

4. Technical barriers to Trade

B Non Technical measures

1. Import quotas

2. Price control measures

3. Non-automatic licensing and prohibitions

4. Financial Measures

5. Measures affecting competition

6.Government procurement policies

7, Trade related Investment measures

8. distribution Restrictions

9. restriction on post sales Ser vices

10. Rules of origin

11. Safeguard measures

12 Embargos

13. Administrative Procedures

Technical Measures

1 **SANITARY AND PHYTOSANITARY MEASURES**

Measures that are applied to protect human or animal life from risks arising from: additives, contaminants, toxins or disease-causing organisms in food.

- A requirement limiting the use of hormones and antibiotics in the production of meat
- A sample test on imported oranges to check for the residue level of pesticides

2 TECHNICAL BARRIERS TO TRADE

1 Measures referring to technical regulations, and procedures for assessment of conformity with technical regulations and standards.

- Restrictions on toxins in children's toys
- Refrigerators need to carry a label indicating their size, weight and electricity consumption level

NON TECHNICAL MEASURES

1. Import quotas

An import quota is a direct restriction which specifies that only a certain physical amount of goods will be allowed in to that country during a given period. Import quotas are usually enforced by issuing licences.

2. Price control measures. Price control measures are steps taken to influence or control the prices of imported goods in order to support domestic price of a certain products when the imports prices of these goods are lower. These are known as para-tariff measures and includes measures other than tariff measures. For example a minimum import price is established for sulphur.

- A minimum import price is established for fabric and apparel

- Imports of fresh blueberries may enter free of duty between 1 January to 31 May, while in other months seasonal duties apply

1. **Non – automatic licensing and prohibitions. . . These measures are normally aimed at limiting the quantity of goods that can be imported. These measures may take the form of non -automatic licensing or through complete prohibitions. For example, textiles may be allowed only on a discretionary licence by the importing country. India prohibits import/export of arms and related material from/to Iraq.**
2. **Financial measures. The objective of financial measures is to increase import costs. This is done by regulating the access to and cost of foreign exchange for imports and also by defining the terms of payment. It includes measures such as advance payment requirement and foreign exchange controls denying the use of foreign exchange for certain types of imports or for goods imported from certain countries.**
3. **Measures affecting competition. . this involves granting importing licences or rights only to one or a few limited group of economic operators. For example statutory marketing board may be granted exclusive rights to import wheat or State trading corporation may be given monopoly right to distribute palm oil. When such state agencies or monopoly import agencies sell on domestic market at price above those in the world market, it amounts to import of tariff.**
4. **Government procurement policies.**

   This requires that all or specified percentage of government purchases should be from domestic firms rather than foreign firms. In accepting public tenders, a government may give preference to the local traders rather than foreign traders
5. **Trade –related Investment measures.**

   These measure include rules that final output should include a minimum fraction of local content. for example car manufactures may be required that at least 25% of the components should be locally made.
6. **Distribution restrictions.**

   Distribution restrictions are limitations imposed on the distribution of goods in the importing country. It involves additional licence or certification requirements. Theses may relate to Geographical restrictions or restriction as to types of agents who may resell. For example imported fruits may be sold only through outlets having refrigeration facilities.
7. **Restriction on post –sales Services. Produces may be restricted from providing after sales services in the importing country. Such services may be reserved to local service companies of the importing country**

8. **Administrative procedures. Obstacles may be created by prescribing costly and time consuming administrative procedures what are mandatory for import of foreign goods. This will increase transaction cost and discourage imports.**

9. **Rules of origin. Duties and restrictions are imposed based on the source of imports. Importing Government may institute procedures for verifying the source of origin of the imported goods. Such procedures are time consuming and costly.**

10. Safeguard measures.

Such measures are initiated by the countries to restrict imports of a product temporarily if its domestic industry is injured or threatened with serious injury cause by a surge in imports.

11. Embargos.

An embargo is a total ban imposed by government on import or export of some commodities to/from a particular country for a specified period

Q5. Discuss export related measures to restrict or increase exports.

EXPORT RELATED MEASURES

Export-related measures are measures applied by the government of the exporting country on exported goods.

Export related measures includes

e) **Ban on exports**

f) **Export taxes**

g) **Export subsidies and incentives**

h) **Voluntary export Restraints.**

f) **Ban on Exports.** Ban on exports implies not allowing export of a commodity or not allowing export of some commodities to specific countries. For example during the period of shortages, export of agricultural products such as onion, wheat etc is prohibited.

g) **Export taxes.** An export tax is a tax collected on goods meant for export. It may be specific tax or advaleroem tax (based on value). The object is to raise the cost of exported good and thus decrease quantity of exports.

h) **Export subsidy and incentive.** These measures are taken to increase/ encourage exports. Government provided financial assistance to exporters so to increase the quantity of exports. Government bodies usually provide financial contribution to domestic produces in the form of cash assistance, duty drawback .

i) **Voluntary export restraints, Voluntary export Restraints refer to a type of informal quota administered by an exporting country to restrain quantity of goods that can be exported out of that country during a specified period of time.** Such restrains originate primarily from political consideration and are imposed based on negotiations of the importer with the exporter. The inducement for the exporter to agree to a VER is mostly to appease the importing country and to avoid the effects of possible retaliatory trade restraints

Q.6 Define custom duties? What are their main goals? (RTP NOV-19)

j) ANS: Customs duties are basically taxes or duties imposed on goods and services which are imported or exported. It is defined as a financial charge in the form of a tax, imposed at the border on goods going from one customs territory to another. They are the most visible and universally used trade measures that determine market access for goods. Import duties being pervasive than export duties, custom duties are often identified with import duties. Custom duties are aimed at altering the relative prices of goods and services imported, so as to contract the domestic demand and thus regulate the volume of their imports. Custom duties leave the world market price of the goods unaffected; while raising their prices in the domestic market. The main goals of custom duties are to raise revenue for the government, and more importantly to protect the domestic import-competing industries.

Q.7 Is prohibition of import of poultry from countries affected by avian flu, meat and poultry processing standards to reduce pathogens, residue limits for pesticides in foods etc. an example of Sanitary and Phytosanitary (SPS) measure? How? (RTP NOV-19)

ANS: Yes, prohibition of import of poultry from countries affected by avian flu, meat and poultry processing standards to reduce pathogens, residue limits for pesticides in foods etc. are the examples of Sanitary and Phytosanitary (SPS) measures. These measures are applied to protect human, animal or plant life from risks arising from additives, pests, contaminants, toxins or disease-causing organisms and to protect biodiversity. These include ban or prohibition of import of certain goods, all measures governing quality and hygienic requirements, production processes, and associated compliance assessments.

Q.8 Food Laws, Quality Standards and Industrial Standards are examples of which type of non-tariff measures? Give Comments. (RTP NOV-19)

ANS: Food laws, quality standards, industrial standards are some of the examples of Technical Barriers to Trade (TBT), which cover both food and non-food traded products. Technical Barriers to Trade refer to mandatory 'Standards and Technical Regulations' that define the specific characteristics that a product should have, such as its size, shape, design, labelling/marking/packaging, functionality or performance and production methods, excluding measures covered by the SPS Agreement.

Q.9 Assume that 15% specific tariff is levied by the government on every sunglass which is imported into India, and if 2000 sunglasses are imported and price of each sunglass is Rs.1000/- , then find out the amount of total tariff revenue collected by the government? (OCT-19 MTP)

ANS: Specific tariff is an import duty which levied as a fixed charge per unit of the good imported. Therefore amount in total tariff revenue = 2000*15%= Rs. 300/-In this case, total Rs. 300/- is collected, whether the price of a sunglass is of Rs. 1000 or Rs. 2000 for different brand.

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13 - FOREIGN EXCHANGE

Q1	**Define "foreign exchange "and explain what is direct quote and indirect quote**
	Foreign exchange refers to money denominated in a currency other than the domestic currency
	Every country has its own currency which is known as domestic currency of that country.
	Currencies of other countries are foreign exchange. For example For India INR is Indian currency where as currencies such as US $ is a foreign currency.
	Foreign exchange rate is the price of one currency expressed in terms of units of another currency. For example 1 US $ = Rs 55 is an exchange rate.
	There are two ways to express nominal exchange rate between two currencies which are known as direct quote and indirect Quote
	In a direct quote exchange rate is expressed for 1 unit of foreign currency in terms number of units of foreign currency . For example 1 $ = Rs 50 is a direct quote. In a direct quote foreign currency is the base currency.
	In case of indirect quote exchange rate is expressed as 1 unit of domestic currency in terms of number of units of foreign currency. For example Re 1 = 0.02$. In a indirect quote home currency is the base currency
	Direct quote is reciprocal of indirect quote. Direct quote = 1/ Indirect quote.
	Apart from direct and indirect quote, there are cross rates for currencies
	In case of cross rates there are two exchange rates between different currency with one currency being common in both the exchange rates. We have to establish exchange rate between other two currencies which are not common in both the exchange rates. This could be understood by an example
	Suppose US$ 1= Rs 50 and 1£ = US $ 1.5 are two exchange rates. US $ is common currency in both exchange rates. We have to establish exchange rate between £ and Rs.
	This is shown below

	£	**US$**		**US$**	**Rs**
	1	1.5		1	50
Cross rate	1	1.5		1.5	75

There fore 1£ = Rs 75

In direct quote we quote for 1 unit of foreign currency (foreign currency is considered as base currency) In indirect quote for 1

unit of domestic currency (domestic currency is considered as base currency)

Q2	**Discuss floating exchange rate regime and fixed exchange rate regime**
	Under floating exchange rate regime the exchange rate is determined by forces of demand and supply of foreign currency.
	As price of commodity is determined by demand and supply of that commodity, similarly exchange rate between foreign currency and domestic currency is determined by demand for foreign currency and supply for foreign currency.
	In a fixed exchange rate regime the exchange rate is determined or announced by the Government of the country or central bank of the country. Such rate will not be based on demand and supply of foreign currency. It will continue to be same till the authorities change such rate. **Fixed exchange rate is also called as pegged exchange rate**. For example US$ 1 =Rs.55 may be fixed by Reserve Bank of India and this rate may continue even though at this rate the demand for dollars may be more than supply of dollars.
	In case of fluctuating exchange rate regime, there is no pre-determined target rate, and exchange rates are likely to change at every moment in time depending upon the changing demand and supply. There is no interference on the part of government or the central bank of the country in the determination of exchange rate. Any intervention by the Central banks in the foreign exchange market is intended for only moderating the rate of exchange and preventing undue fluctuation in the exchange rate. Most of the countries follow floating exchange rate system
	In case of fixed exchange rate, the Government fixed the rate of exchange. Government has to take steps to defend such fixed rates. When the demand for currency exceeds supply of foreign currency at fixed rate, Government has to supply foreign currency. where as supply of foreign currency is more than demand for foreign currency, government has to buy foreign currency to maintain the exchange rate. If the government does not steps in it will lead to black marketing of foreign currency.
	Floating exchange rate and fixed exchange rate regimes are two extreme cases of exchange rates
	However exchange rates are neither pure floating rates and pure fixed rates.
	The monetary authority of the country does interfere in exchange rates.
	However there is difference in extent of interference.
	In floating exchange rate regime, monetary authority is not supposed to interfere with exchange rates, however when the exchange rate is moving only in one direction (up or down) the monetary authority does interfere to stabilise the rates. If the interference is low, exchange rate policy is called as soft pegs

	Where the rate is fixed by monetary authority, exchange rate policy is called as Hard peg.

The arguments made in favour of fixed exchange rate are as follows:

1. **Ensuring certainty in international trade:**
The prices of goods produced in one country and sold in another country depend upon the prices of the goods in the original country and the rates of exchange. If the rates of exchange are stable the prices of internationally traded goods remain fairly stable in different countries. The traders can make calculations about their prices in their own currencies; the selling prices the expected rate of profit etc. and can place orders with certainty and confidence. The calculations are likely to go right because the rates of exchange are fixed. This will induce the traders to are fast fluctuating, the speculators take undue advantage by purchasing different currencies entering into international trade.

2. **A Check on speculative dealings in foreign exchanges:**
When the rates of exchange, storing them and selling them at higher prices later. If speculators corner large amounts of different currencies the genuine buyers find it difficult to get them. But if the rates of exchange are fixed the speculators have no scope for making profit by cornering different currencies. They are available for genuine buyers.

3. **Encouraging international investment:**
When the rates of exchange are fixed the investment made by a resident of one country in another country faces no exchange rate risk. That induces the people to invest in other countries. This is particularly important for the developing countries which are always in need of foreign investment.

4. **Controls Liquidity Preference in respect of foreign exchange:**
If the foreign exchange rate are fast fluctuating the people hold large amounts of foreign exchange in the form of liquid cash. That reduces the flow of foreign exchange on the foreign market. If the rates of exchange are fixed and stable the people do not show that tendency. The foreign exchange earned by the country is available for genuine trade transactions.

The arguments made against fixed exchange rate:

1. **Subordination of all other economic policies:**
If a country decides to have fixed rates of exchange, it can not adopt any policy or can not take any action which is likely to disturb the rates of exchange. All attention is to be concentrated on the goal of keeping the rates of exchange fixed. All other policies become subordinate.

2. **Need for large idle foreign exchange reserves:**

If a country decides to maintain the rates of exchange stable and fixed, its monitory authority has to intervene in the foreign exchange market and buy and sale foreign exchange for keeping the rates of exchange stable. The monetary authority has to maintain large idle reserves of different currencies for intervening in the foreign exchange market.

3. **Not so much helpful in international investment:**
It is maintained that fixed exchange rates encourage international investment. This is not always true because normally international investment is for long periods. The rates of exchange do not remain fixed and stable over long periods and yet international investment take place.

4. **Contrary experience:**
It is maintained that fixed exchange rate are helpful to international trade. This is not substantiated by practical experience. Between 1944 and 1970 the rates of exchange were maintained stable by the IMF. But the growth of international trade was at moderate rates. After 1970 the rates of exchange are allowed to float over the forces of demand and supply. Yet the volume of international trade is fast expanding.

Arguments in favour of flexible exchange rates:

1. **Natural and automatic:**
The working of a free uncontrolled economy demands that the price of a commodity should be left to be determined by the operation of the forces of demand and supply. This is applicable to foreign exchange too. If the rate of exchange are left to be determined by the free play of the forces of demand and supply the available foreign exchange is allocated to different uses in the best possible way.

2. **No need for exchange control:**
When the rates of exchange are floating there is no need for resorting to a controlled distribution of foreign exchange. If there is a shortage of foreign exchange the price of the foreign currency will rise. The currency will be automatically distributed between different uses in order of importance of those uses. There will be an automatic adjustment of demand for the foreign currency to its supply.

3. **No Need to pay exclusive attention to exchange stability:**
It is not necessary for the country to make special efforts to maintain stability of the rates of exchange and subordinate all other policies to that goal.

4. **Automatic cure to BOP difficulties:**
If a country has a BOP deficit, the foreign exchange becomes scare. The rate of exchange i.e. the price of the foreign currency in terms of domestic currency rises. Foreign goods becomes costly. The demand for them falls. The imports falls. On the other hand

domestic goods become cheaper in foreign market. The demand for them rises. The exports rise. The BOP deficit is automatically corrected.

Arguments made against fluctuating (flexible) exchange rates:

1. **Uncertainty in international trade:**
When the price of a currency fluctuates the prices of goods stated in that currency also fluctuate. The international traders are afraid of entering into international trade. The volume of international trade contracts.

2. **Encouragement to speculative dealing in foreign exchange:**
The speculators purchase store and sell foreign exchange in if the event of frequent rises in falls in the rate of exchange with the intention of making large profits. Large amounts of different currencies are cornered by the speculators. That creates a scarcity of foreign exchange in the international currency market.

3. **Cause of internal instability:**
When the price of a currency in terms of domestic currency rises, the prices of goods produced in that country and imported into the other country also rise. Price rise is a communicable disease. When the prices of some commodities rise, the prices of other commodities also rise. The country has to face inflation. External instability generates internal instability.

Conclusion: In normal circumstances the rates of exchange should be farley stable. The fluctuations should be marginal. But if necessary they should be allowed to change. Excessive rigidity is as bad as abnormal fluctuation. Managed flexibility of foreign exchange rate is always desirable.

Nominal exchange rate and Real exchange rate.
Nominal exchange rate simply states how much of one currency can be exchanged for a unit of another currency when prices are constant. Real exchange rate describes how many of a good or service in one country can be traded for one of that good or service in foreign country.
This can be understood by the following example

Suppose exchange rate between US$ and Indian rupees is RE 1 = 0.02$

Price of one unit of petrol in India is Rs 80 and price of one unit of petrol in US is $2.

Real exchange rate = Nominal exchange rate (indirect quote) x domestic price index/ foreign price index

In this example real exchange rate will be 0.02 x 80/2 =0.8

It means 0.8 litres of USA petrol will be exchanged for 1 litre of Indian petrol

Thus nominal rate shows how many units of foreign currency can be purchased with one unit of home currency

Where as real exchange rate shows how many goods or service in one country can be traded for on of that good or services in foreign countries.

What is foreign exchange market.

The foreign exchange market is a market where currencies of different countries are exchanged for each other. In other words foreign exchange market (FOREX) is a market for purchasing and selling different currencies.

P.T. Ellsworth gives the following definition of a foreign exchange a market

"A Foreign exchange market comprises of all those institutions and individuals who buy and sell foreign exchange which may be defined as foreign money and any liquid claim on foreign money"

The exporters acquire claims on foreign currencies. They want to exchange them against domestic currencies.

The importers require foreign currency for making payments to the exporters in other countries. So the exporters and importers exchange the foreign currency for the home currency on the foreign exchange market.

Dealers on the foreign exchange market.

1) **The foreign exchange banks:**

The bigger commercial bank having braches in different countries take up the work of exchanging currencies for currencies. They collect deposits in different currencies and deal in them. They discount buy and sell foreign exchange bills. They issue bank drafts in foreign currencies, remit money abroad through telegraphic transfers which are called cable transfers and mail transfers. They collect amounts in respect of the foreign exchange bills and other instruments used in for foreign trade.

2) **The bill brokers:**

They are middleman between buyers and sellers of foreign bills of exchange. They work on commission basis. They do not purchase and sell the bills.

3) **The accepting houses:-**

They accept bills of exchange on behalf of the customers and make payments on behalf of them.

4) **The Central Bank of the Country:-**

It purchases and sells foreign exchange for two purposes

i) For satisfying the needs of the government in respect of foreign currencies

ii) For stabilizing the prices of different currencies.

Determination of Nominal exchange rate

The foreign exchange rate is determined by demand for foreign currency and supply of foreign currency. As price of a commodity is determined in a market, in the same way foreign currency is considered as a commodity in foreign exchange market.

Demand for foreign exchange is for the following reasons

1) Amount to be paid for import of goods
2) To make investment income payment abroad
3) To invest in foreign country
4) To open foreign bank account
5) For speculation and hedging

Supply of foreign currency is due to similar reasons.

Demand for foreign currency will be low at a higher rate and higher at lower rate

Supply for foreign currency will be high at higher rate and supply will be low at lower rate.

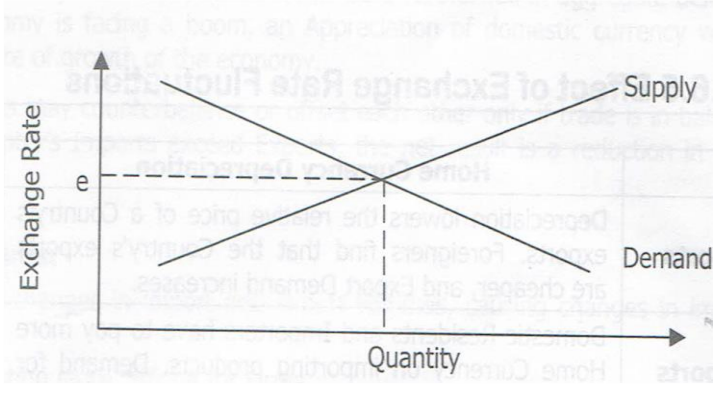
Equilibrium price will be determined when demand is equal to supply

Equilibrium Rate:

(a) The Forex Market also faces a downward-sloping Demand Curve and an upward-sloping supply curve for Foreign Currency.

(b) The Equilibrium Rate of Exchange (e) is determined by the interaction of the supply and Demand for a particular foreign currency.

(c) The Point on the Horizontal Axis represents the Quantity of Currency Exchanged (Q).



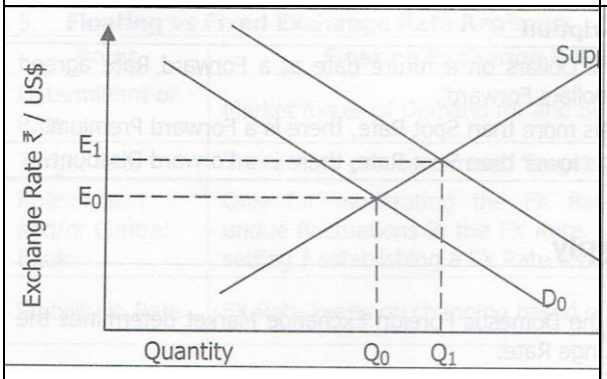
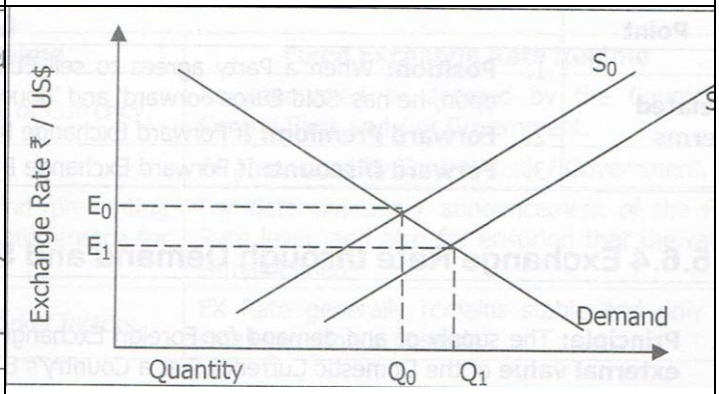
Explain changes in exchange rates.

Changes in exchange rate may be depreciation or appreciation of one currency in terms of another currency or basket of currencies.

Depreciation and Appreciation in Exchange Rates:

Meaning of appreciation of currency

When value of domestic currency rises interms of foreign currency, it is called as appreciation of currency example 1 US dollar =Rs 65.
The exchange rate changes to 1 us Dollar =Rs 60. It means lower amount of rupees are required to purchase 1 US dollar. This is appreciation of Indian Rupees. Alternatively if exchange rate changes to 1 US dollar = Rs 70 it means Depreciation of Indian rupees.

Home Currency Depreciation (or foreign – Currency Appreciation)	**Home Currency Appreciation (or Foreign – Currency Depreciation)**
Meaning	
It takes place when larger amount of home currency is required to purchase same quantity of foreign currency.	It takes place when lower amount of domestic currency is required to purchase same quantity of foreign currency
Effect	
Value of home currency has reduced	Value of home currency has increased
Example	
Suppose Rs.62/US$ becomes Rs.65/US$. This is called Depreciation of Indian Rupee, and Appreciation of the US Dollar.	Suppose Rs.62/US$ becomes Rs.59/US$. This is called Appreciation of Indian Rupee, and Depreciation of the US Dollar.
Cause	
When demand for foreign currency rises or supply of foreign currency has reduced.	When demand for foreign currency has reduced of supply of foreign currency has increased.
	
Demand increase from D0 to D1, causing Equilibrium Exchange Rate to increase from E0 to E1. This constitutes Home Currency Depreciation.	Supply increases from S0 to S1, causing Equilibrium Exchange Rate to decrease from E0 to E1. This constitutes Home Currency Appreciation.

Depreciation vs Devaluation:

Depreciation	**Devaluation**
Meaning	
Depreciation is a decrease in a Currency's Value (relative to	Devaluation is a deliberate downward adjustment in the value

another currency) due to market forces in a Floating exchange Rate Regime.	of a Country's currency relative to another currency, group of Currencies or standard.
Cause	
Depreciation is caused due to increase in Demand, with supply remaining constant.	Devaluation is caused by the action of the Government /Central Bank / Monetary Authority policy actions.
Regime	
Applicable for a Floating Exchange Rate Regime.	Applicable for a relatively Fixed Exchange Rate Regime.
Scope	
It is due to the interaction of market forces.	It is a monetary policy tool to make an official reduction in the par value of a currency.

Note: the Terms "Appreciation" and "Revaluation" are used to denote the opposite of the above two terms "Depreciation" and "Devaluation" respectively.

Effects of Exchange Rate Fluctuations

1. **International Trade.**

Changes in exchange rate has a direct effect on export and import of a country

When there is depreciation of home currency, imports will reduce as imported goods will become costlier than before and exports will increase as exported goods will become cheaper than before in foreign market.

For example Exchange rate is Rs 60/ US$ and exchange rate changes to Rs 65/US$.

In such a case commodity X which was imported for 1 US$ will cost Rs 65 instead of Rs 60. Commodity Y which was exported for 1 US$ for Rs 60 will now give a revenue of Rs 65. This will encourage exports as export becomes more profitable

In case of appreciation of Home currency, imports will increase and exports will decrease.

2. **Price Level. Changes in exchange rates influence price level**

In case of depreciation of home currency, imports become costlier therefore price level rises. Also increase in exports reduces availability of goods for domestic markets. This also raises the price level.

In case of appreciation of home currency, imports become cheaper which leads to reduction in price level to some extent.

3. **Domestic demand.**

Depreciation of domestic currency increases the prices of imported goods, therefore demand for domestic goods rises. Also increase in exports due to deprecation of domestic currency increases the demand for domestic goods.

In case of appreciation of foreign currency, imports become cheaper which reduces the demand for domestic goods

4. **Factor Mobility.** Depreciation of domestic currency leads to rise in production of exported goods and import substitute goods. Therefore factor of production move from other sectors to such goods. In case of depreciation of domestic currency there if fall in exports and fall in production of import substitutes, therefore factors of production will move from these industries to other industries

5. **Wage levels.**
If Exports Sector is labour-oriented, increased demand leads to higher employment and income levels. This happens when there is depreciation of home currency
If Export Sector is labour-oriented, drop in demand leads to lower employment and income levels. This happens when there is appreciation of home currency.

6. **Trade balance.**
Depreciation of domestic currency increases exports and reduces imports, therefore it leads to improvement in trade balance. In case of appreciation of domestic currency, imports rise and exports fall which leads to trade deficit

7. **Foreign debt and foreign debt services**.
Depreciation of domestic currency leads to increase of foreign debt in terms of domestic currency and Higher payout on account of interest payments. Incase of appreciation of foreign currency, there will be lower burden of foreign debt in terms of domestic currency.

8. **Profits of exports firms and imports firms**
Depreciation of domestic currency increases the profits of exports firms and decreases the profits of firms which import goods or services
Appreciation of domestic currency increases the profits of importing firms and reduces the profits of exporting firms

Q.3 Assume that ` 70 is needed to buy one US dollar in foreign exchange market (i.e. the nominal exchange rate is ` 70/ US $). Suppose that a price index of standardized basket of goods and services is ` 200 in India and US $ 100 in United States, find out the real exchange rate? (Treat India as a domestic country and United States as a foreign country) (RTP NOV-19)

ANS: Real Exchange Rate = Nominal exchange rate*Domestic price index/ Foreign price index

= 70*200/100

=140

Q.4 What is meant by foreign exchange market? What are the roles

played by the participants in the foreign exchange market? (OCT-19 MTP) (5)

ANS: The wide-reaching collection of markets and institutions that handle the exchange of foreign currencies is known as the foreign exchange market. Being an over-the-counter market, it is not a physical place; rather, it is an electronically linked network of big banks, dealers and foreign exchange brokers who bring buyers and sellers together.

The major participants in the exchange market are central banks, commercial banks, governments, foreign exchanged dealers, multinational corporations that engage in international trade and investments, non-bank financial institutions such as asset management firms, insurance companies, brokers, arbitrageurs and speculators. The central banks participate in the foreign exchange markets, not to make profit, but essentially to contain the volatility of exchange rate to avoid sudden and large appreciation or depreciation of domestic currency and to maintain stability in exchange rate in keeping with the requirements of national economy. If the domestic currency fluctuates excessively, it causes panic and uncertainty in the business world. Commercial banks participate in the foreign exchange market either on their own account or for their clients. When they trade on their own account, banks may operate either as speculators or arbitrageurs/or both. The bulk of currency transactions occur in the inter-bank market in which the banks trade with each other. Foreign exchange brokers participate in the market as intermediaries between different dealers or banks. Arbitrageurs profit by discovering price differences between pairs of currencies with different dealers or banks. Speculators, who are bulls or bears, are deliberate risk-takers who participate in the market to make gains which result from unanticipated changes in exchange rates. Other participants in the exchange market are individuals who form only a very insignificant fraction in terms of volume and value of transactions.

Q.5 What are the main advantages of fixed rate regime in an open economy? (OCT-19 MTP) (3)

ANS: In an open economy, the main advantages of a fixed rate regime are, firstly, a fixed exchange rate avoids currency fluctuations and eliminates exchange rate risks and transaction costs that can impede international flow of trade and investments. A fixed exchange rate can thus greatly enhance international trade and investment. Secondly, a fixed exchange rate syste m imposes discipline on a country's monetary authority and therefore is more likely to generate lower levels of inflation. Thirdly, the government can encourage greater trade and investment as stability encourages investment. Fourthly, exchange rate peg c an also enhance the credibility of the country's monetary policy. And lastly, in the fixed or managed floating (where the market forces are allowed to determine the exchange rate within a

band) exchange rate regimes, the central bank is required to stand ready to intervene in the foreign exchange market and, also to maintain an adequate amount of foreign exchange reserves for this purpose.

Q.6 Explain the term 'real exchange rate'. NOV. 2019 (2)

14 -FDI and FPI

Q1. Discuss various types of foreign capital.

The term foreign capital is comprehensive one and includes any inflow of capital in to the home country from abroad

There is a difference between movement of capital and foreign investment.

Foreign capital may flow in to an economy in different ways which are stated below

I) Foreign aid or assistance which may be

a) Bilateral or direct inter government grants

b) multilateral aid from many government who pool funds to international organisation like world bank

c) tied aid with strict mandates regarding the use of money or untied aid where there are no such stipulations or conditions

d) foreign grants which are voluntary transfer of resources by governments institutions, agencies or organisations.

II. Borrowings which may take different forms such as

a) Direct inter government loans
b) Loans from international institutions
c) soft loans for e.g affiliates of world bank such as IDA
d) External commercial borrowings
e) Trade credit facilities

III) Deposits from Non resident Indians

IV) Investments in the form of

i) Foreign portfolio investments (FPI) in bonds stocks and securities

ii) Foreign direct investments in industrial, commercial and similar other enterprises.

Q2. What is foreign Direct investment

Foreign direct investments is defined as a process whereby the residents of one country (home country) acquires ownership of an asset in another country(Host country) and such movement of capital involves ownership, control as well as management of assets in the host country

Direct investments are real investments in factories, assets, land inventories etc and involve foreign ownership of production facilities

The investor retains control over the use of the invested capital and also seeks the power to exercise control over decision making to the extent of its equity participation.
The lasting interest implies the existence of a long term relationship between direct investor and the enterprise and a significant degree of influence by the investor on management of the enterprise.
Foreign direct investments may be

a) A horizontal direct investments
b) A vertical investment
c) A conglomerate type of foreign direct investment

A horizontal direct investment is said to take place when investor establishes the same type of business operation in a foreign country as it operates in its home countries. For example a company engaged in retail stores in USA Invests in India to open retail outlets (Eg Walmart)

A vertical investment is one under which the investor establishes or acquires a business activity in a foreign country which is different from the investor's main business activity. However the activity in which investment is made is a part of supply chain of the investor's Activity. For example an automobile manufacturing company may acquire an Interest in a foreign company that supplies parts or raw-materials required for the company

A conglomerate type of foreign Direct investments is one where an investor makes a foreign investment in a business that is unrelated to its existing business in home country. For example a company dealing in real estate in foreign country invests directly in ready made garments in India.

Two way foreign direct investments which are reciprocal investment between countries that occur when some industries are more advanced in one country and other industries are more advanced in other countries.
Foreign direct investors may be individuals incorporated or unincorporated private or public enterprises, association, groups of individuals.

Q3 Write a short note on Foreign portfolio investments.

FPI is a process in which the Resident of one Country (i.e. Home Country) acquires ownership of **Financial Assets / Securities** in another Country (i.e. the Host Country).
Foreign portfolio investment is the flow of what economists call "financial capital "rather than Real capital. And does not involve ownership or control on the part of investor.

Foreign portfolio investment involves purchase of shares, stock and bonds of companies, government bonds by a foreign investor

and such bonds and shares are purchased from secondary market (Stock exchange)

Foreign portfolio investments is not concerned with either manufacture of goods or with provision of services, such investor also do not have any intention of exercising control or managing the affairs of the company in whose securities they invest.

The singular intention of foreign portfolio investor is to earn a remuneration return through investment

As per international standards, portfolio investments are characterised by lower stake in companies with their total stake in a firm at below 10 percent. It is also not worth that unlike the FDIs, these investments are typically of short term nature and therefore are non intended to enhance the productive capacity of an economy.

Q4 Distinguish between foreign direct investment and foreign portfolio investment

Point	FDI	FPI
Real vs Nominal	Constitutes Investment in **"Physical"** Capital	Constitutes Investment in "**Financial**" Capital
Types of Assets created	**Physical Assets**, Factories, Production Facilities, etc.	**Financial Assets**, viz. Securities, Financial Stocks, Bonds and other Financial Instruments.
Productive Capacity	**Increases** the productive capacity of the Country in which Investment takes place.	**No increase** in the productive capacity of the Country in which Investment takes place.
Technology	Often **accompanied** by Technology Transfer, Support and Collaboration, to ensure better output.	There is **no concept** of Technology Transfer or Support in this case.
National Income of Target Country	**Increase** in Output, Employment, Wage Levels, etc. of the Country in which Investment takes place	**No increase** in Output, Wage Levels, etc. of the Country in which Investment takes place.
Immediate Impact	More on Balance of Payments or Exchange Rates.	More on Production or Income Generation for the Investor only.
Main Intention	**Business Motive**, i.e. resource-seeking, market – seeking or technology – seeking motives.	**Return on Financial Capital** by way of Dividends, Interest, and Capital Appreciation.
Voting Share held	Generally ≥ 10%	< 10%
Control & Mgmt	FDI takes place for **lasting** interest and control.	No interest in Management or Control.
Nature of Interest	**Long** – Term	**Short** – Term
Influence	**Significant** degree of influence by the Investor on the management of the acquired Enterprise.	Purely Financial Investment. **No** Significant degree of influence on the Entity's Management.
Speculative Nature	Not intended to be speculative	More speculative in nature than FDI.

Q5 Discuss the reasons for Foreign Direct Investments.

Reasons for Foreign direct investments

Many economics and organisations have accumulated huge mass of reserve capital. They seek to use such reserve capital in a profitable manner.

People with huge surplus capital see opportunity to make profits by investing in other countries

There are many reasons for internal capital movements some of which are discussed below

(i) The increasing interdependence of national economy and trade relations and international industrial co-operation established among them

(ii) Desire to reap economics of large scale operations arising from technological growth

(iii) Desire to capture large and rapidly growing potential emerging markets with substantially high and growing population

(iv) Lower environmental standards in the host country and consequent relative savings in costs

(v) Stable political environment and overall favourable climate in host country

(vi) The strategy to obtain control of strategic raw material or resource so as to ensure their uninterrupted supply at the lowest possible price , usually a form of vertical integration

(vii) Desire to secure access to minerals or raw material deposits located elsewhere and earn profits through processing them in to finished goods (FDI in petroleum)

(viii) Existence of relatively low wages in the host country because of relative labour abundance coupled with shortage and high cost of labour in capital exporting countries, especially when the production process is labour intensive

(ix) Low level of economic efficiency in host countries and identifiable gaps in development

(x) Tax differential and tax policies of the host country which support direct investments.

Q6 Discuss the modes of foreign direct Investments

Modes of foreign direct investments

i) Opening of a subsidiary or associate company in other country

ii) Equity injection into an overseas company

iii) Acquiring a controlling interest in an existing foreign company

iv) Mergers and acquisition (M and A)

v) Joint venture with a foreign company

vi) Green field investments

Q7 Discuss the benefits of foreign Direct investments

Benefits of Foreign direct investments

1. Competitive environment in the country. Entry of foreign enterprises usually fosters competition and generates a competitive environment in the host country. The domestic enterprises are compelled to compete with the foreign enterprises opening in domestic market. The domestic enterprises have to be efficient so as to be able to service. (example Automobiles industry in India developed dramatically after opening up of Foreign direct investments in Automobiles)

2. Increase in production. FDI brings huge capital. This increased capital can be used to employ labour and other resources so as to enhance production

3. Economic growth and development. Since FDI contributes towards increased production, FDI can accelerate growth and economic development by providing the much needed capital, technology, know-how skills etc

4. Employment. Since FDI involves investment in real assets such as factories, buildings plants etc. it generates direct employment. Once there is an FDI in a particular sector, it increases domestic investments in sectors which are connected with investment sector

5. Improvement in Foreign relations. FDI involves people to people relations and is usually considered as promoter of bilateral and international relations. Greater openness to foreign capital leads to higher national dependence on international investor. Dependency between countries always generates friendship and goodwill

6. Reduction of domestic monopolies. FDI increases competition in domestic market and weakens the power of domestic monopolies.

7. Increase in standards of living. FDI leads to availability of goods of international standards in domestic market which are made in host country. This leads to more choice to consumers and higher standard of living for people of the country

8. Balance of payments. Since FDI leads to inflow of foreign exchange, it leads to have a favourable impact on balance of payment of host country. Inflow through FDI is much more advantageous than external borrowings**.**

Q8 Discuss the problems associated with foreign direct investments.

1 More focus on capital intensive industries. FDI are more likely to be in capital intensive industries which leads to employment of relatively less number of workers. Such technology is in appropriate for labour abundant country as it does not support generation of jobs which is a crucial requirement to address poverty and unemployment.

2. Regional dispartity: FDI is likely to flow towards regions or states which are well endowed in terms of natural resources and availability of infrastructure and has the potential to increase regional disparity.

3. Outflow of foreign exchange. FDI brings in more foreign exchange, improves the balance of payments in the initial stages. However once the investment is made, the technology brought in with FDI requires imported raw material also a lot of money is to be paid in foreign exchange on account of Interest and dividend payments. Such outflows of foreign exchange puts a strain on the balance of payments.

4. Undercutting domestic producers. FDI firms have huge money power, They adopt anti competitive practices to wipe out domestic suppliers. In some sectors domestic producers may not be able to compete with Foreign players.

5. Exploitation of natural resources. FDI is hugely responsible for ruthless exploitation of natural resources and the possible environmental damage.

6. Dual economy. FDI has certain favourite sectors, With FDI in some sectors there is strong possibility of emergence of a dual economy with a developed foreign sector and an underdeveloped domestic sector.

7. Dilution of environmental standards. The continuance of lower labour or environmental standards in host countries is highly appreciated by profit seeking foreign enterprises. This is of great concern because efforts to conserve such standards often fail to receive support from interested parties.

Q9. Write a note on overseas investments by Indians.

Integration of Indian economy with the rest of the world is evident not only in terms of higher level of FDI inflow but also in terms of increasing level of FDI outflows Over a period of time outbound investments from India have undergone a substantial change

only in terms of size but also in terms of geographical spread and sectorial composition Many Indian firms like Tata consultancy services, Infosys, wipro have acquired global contracts and established overseas offices in developed economies to be close to their key clients.

At present any Indian investor can make overseas direct investment in any bona-fide activity except in certain real estate activities. This has been made possible by progressive relaxation of capital controls and simplification of procedures for outbound investments from India.
For example, the annual overseas investments ceiling to establish joint ventures and wholly owned subsidiaries has been raised to US dollars 1,25,000 from US dollars 75,000.
Policies in respect of foreign investment have gone far reaching changes from time to time,

Q.10 Distinguish between horizontal and vertical Foreign Direct Investment. (RTP NOV-19)

ANS: A horizontal direct investment is one under which the investor establishes the same type of business operation in a foreign countryas it operates in its home country, for example, a cell phone service provider based in the United States moving to India to provide the same service. On the other hand, vertical investment is one under which the investor establishes or acquires a business activity in a foreign countrywhich is different from the investor's main business activity yet in some way supplements its major activity. For example; an automobile manufacturing company may acquire an interest in a foreign companythat supplies parts or raw materials required for the company.

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