

## MINIMUM LEVEL OF LEARNING - MACROECONOMICS

1. Distinguish between Stock & Flow.
2. Differentiate between consumption goods and capital goods.
3. Write the steps while calculating National Income by Value Added Method? OR  
Write the steps while calculating National Income by Income Method? OR  
Write the steps while calculating National Income by Expenditure Method?
4. What precautions should be taken while calculating National Income by Value Added Method? OR  
What precautions should be taken while calculating National Income by Income Method? OR  
What precautions should be taken while calculating National Income by Expenditure Method?
5. Explain the credit creation by commercial bank with a numerical example.
6. Explain the functions of Central Bank.
7. What do you mean by double coincidence of wants? OR  
What are the drawbacks of barter system? How money overcome to this problem?
8. Explain the Income determination by  $AD = AS$  approach. How to reach at Equilibrium when  $AD > AS$  &  $AS > AD$ ?
9. Explain the Income determination by  $I=S$  approach. How to reach at equilibrium when  $I > S$  &  $I < S$ ?
10. How will you derive the consumption curve from saving curve? OR  
How will you derive the saving curve from consumption curve?
11. Distinguish between Excess demand & Deficient demand. How will you correct the Excess demand ( $AD_{required} < AD_{actual}$ ) (Inflationary Gap) situation with fiscal policy and monetary policy? OR  
Distinguish between Excess demand & Deficient demand. How will you correct the Deficient demand ( $AD_{required} > AD_{actual}$ ) (Deflationary Gap) situation with fiscal policy and monetary policy?
12. Explain the objectives of budget.
13. Explain the implications of:  
1. Revenue Deficit.      2. Primary Deficit.      3. Fiscal Deficit,
14. Differentiate between Revenue Budget & Capital Budget.
15. What are the components of current account of Balance of Payment?
16. What are the components of capital account of Balance of Payment?
17. Differences between Balance of Trade and Balance of Payment.
18. Differences between Autonomous items & Accommodating items.
19. Why foreign exchange demanded?
20. What are the supply sources of foreign exchange?
21. Impact of Appreciation / Revaluation and Depreciation / Devaluation on its export & Import of a country.
22. Differentiate between Appreciation & Depreciation.
23. Differentiate between revaluation & devaluation.
24. Explain foreign exchange rate determination.
25. Write short notes on fixed exchange rate, Flexible exchange rate & Managed floating exchange rate.
26. Merits & demerits of fixed exchange rate, Flexible exchange rate & managed floating exchange rate.

## MINIMUM LEVEL OF LEARNING - MICROECONOMICS

1. Explain central problems of an economy with the help of PPC.
2. What are the possible situations when PPC shifts rightward or leftward.
3. Differentiate between Positive economics & Normative economic.
4. What do you mean by Marginal opportunity cost.
5. Explain relation between MU & TU.
6. Explain Law of diminishing Marginal utility.
7. What is Production Possibility Curve? Explain its properties.
8. What is Budget line?
9. Cases related to equilibrium of consumers:
  - i).  $MU_x > P_x$  OR  $MU_x < P_x$
  - ii).  $\frac{MU_x}{P_x} > \frac{MU_y}{P_y}$  OR  $\frac{MU_x}{P_x} < \frac{MU_y}{P_y}$
  - iii).  $MRS_{xy} > \frac{P_x}{P_y}$  OR  $MRS_{xy} < \frac{P_x}{P_y}$
10. Explain factors affecting individual demand and market demand.
11. Differentiate between change in demand & change in quantity demanded.
12. Explain the chain effect of change in prices of related goods & its impact on demand of given commodity.
13. Explain Factors affecting elasticity of demand.
14. Differences between change in supply & change in quantity supplied.
15. Explain Factors affecting supply.
16. Differences between Returns to factor & returns to scale.
17. Reasons behind the phases of Increasing Returns to a Factor, Diminishing Returns to a Factor and Negative Returns to a Factor.
18. Explain the relationship between different cost concepts.
19. Explain relationship between different revenue concepts in different markets.
20. Explain producer's equilibrium with  $MR = MC$  approach.
21. Differentiate between market forms on the basis of no. of buyers & sellers, control over price, selling cost, product, knowledge about market, entry & exit & shape of demand curve.
22. What are the regions for emergence of monopoly?
23. Differentiate between Collusive & non collusive oligopoly & Perfect & differentiated oligopoly.
24. Chain reaction of excess demand & excess supply situations.
25. Explain Price ceiling & price floor concept.

### Contact if you have any doubt

**Dr. Asad Ahmad**  
**PGT Economics**  
**K V IIM Campus, Lucknow**  
**Lucknow Region**  
**09451927636, 08770981320, 08889341805(W)**  
**Facebook page - @madeeconomicseasy**  
**Blog – drahmadasad.blogspot.com**  
**You tube channel – Dr. Asad Ahmad**

## MINIMUM LEVEL OF LEARNING - MACROECONOMICS

### 1. Distinguish between Stock & Flow.

<u>STOCK</u>	<u>FLOW</u>
* It refers to that variable which is measured at a point of time.	* It refers to that variable which is measured over a period of time.
It does not have time dimension.	* It has a time dimension as its magnitude can be measured over a period of time
* It is a static concept.	* It is a dynamic concept.
* Examples – Population of India as on 31.3.2014, Money Supply, National Wealth	* Examples – No of birth during 2014, national income, Expenditure in money.

### 2. Differentiate between consumption goods and capital goods.

<u>CONSUMPTION GOODS</u>	<u>CAPITAL GOODS</u>
* These goods satisfy human wants directly.	* Such goods satisfy human wants indirectly.
* These goods have direct demand.	* Such goods have derived demand.
They do not promote production capacity.	* They help in rising production capacity.
* Most of the consumption goods (except durable goods) have limited expected life.	* Capital goods generally have an expected life more than one year.

### 3. Write the steps while calculating National Income by Value Added Method?

#### STEPS-

(1) Identify and classify the production units. (2) Estimate Gross Domestic product at Market Price  $\Sigma GVA_{MP} = GDP_{MP}$ . (3) Calculate Domestic Income ( $NDP_{FC}$ ) =  $NDP_{FC} = GDP_{MP} - \text{Depreciation} - \text{Net Indirect Tax}$ . (4) Estimate net factor income from abroad (NFIY) to arrive at National Income.  $NNP_{FC} = NDP_{FC} + NFIA$ . **OR**

#### **Write the steps while calculating National Income by Income Method?**

#### STEPS-

(1) Identify and classify the production units. (2) Estimate the factor income paid by each sector. (3) Calculate Domestic Income ( $NDP_{FC}$ ) =  $NDP_{FC} = C.O.E. + \text{Rent and Royalty} + \text{Interest} + \text{Profit} + \text{Mixed Income}$  (4) Estimate net factor income from abroad (NFIY) to arrive at National Income.  $NNP_{FC} = NDP_{FC} + NFIA$ . **OR**

#### **Write the steps while calculating National Income by Expenditure Method?**

#### STEPS-

(1) Identify the Economic units incurring Final Expenditure (2) Classification of Final Expenditure ( $PFCE + GFCE + GDCE + \text{Net Export} = GDP_{MP}$ ) (3) Calculate Domestic Income ( $NDP_{FC}$ ) =  $NDP_{FC} = GDP_{MP} - \text{Depreciation} - \text{Net Indirect Tax}$ . (4) Estimate net factor income from abroad (NFIY) to arrive at National Income.  $NNP_{FC} = NDP_{FC} + NFIA$ .

### 4. What precautions should be taken while calculating National Income by Value Added Method?

#### PRECAUTIONS-

(1) Intermediate Goods are not to be included in N.I. (2) Sale and Purchase of second hand goods is not included. (3) Production of services for self consumption (Domestic Services) is not included. (4) Production of Goods for self consumption is not included. (5) Imputed value of owner occupied houses should be included. (6) Change in stock of Goods (inventory) will be included. **OR**

#### **What precautions should be taken while calculating National Income by Income Method?**

#### PRECAUTIONS-

(1) Transfer Incomes are not included in the N.I. (2) Income from sale of second hand goods will not be included. (3) Income from sale of shares, bonds and debentures will not be included. (4) Windfall gains. (5) Imputed value of services provided by owners of production units will be included. (6) Payments out of past savings are not included in the N.I. (7) Indirect Taxes are not included in N.I. at factor cost. **OR**

#### **What precautions should be taken while calculating National Income by Expenditure Method?**

#### PRECAUTIONS-

(1) Expenditure on Intermediate Goods will not be included in the National Income. (2) Transfer payments are not included. (3) Purchase of second hand goods will not be included. (4) Purchase of financial assets (shares, debentures, Bonds) will not be included. (5) Expenditure on own account production will be included in the National Income.

**5. Explain the credit creation by commercial bank with a numerical example.**

**MONEY CREATION OR CREDIT CREATION** - Money creation (or deposit creation or credit creation) by the commercial banks is determined by (1) The amount of the **initial fresh deposit** and (2) The **Legal Reserve Ratio (LRR)** – It is the minimum ratio of deposit legally required to be kept as cash by the banks. LRR includes **Cash Reserve Ratio** – It is the minimum proportion of cash reserves which is kept by commercial banks with the central bank against its total deposits; and **Statutory Liquidity Ratio** – It is that proportion of the total deposits which a commercial bank has to keep with itself in the form of liquid assets (i.e. cash, gold and unencumbered approved securities). It is assumed that all the money that goes out of banks is re-deposit into the banks.

**PROCESS** - Let the LRR be 20% and there is a fresh deposit of Rs.10000. As required the banks keep 20% i.e. Rs 2000 as cash. Suppose the banks lend the remaining Rs8000 those who borrow use this case money for making payments as assumed those who receive payments put the money back into the banks in this way banks receive fresh deposits of Rs 8000. The banks again keeps 20% i.e. Rs1600 as cash and lend Rs.6400 which is also 80% of the last deposit the money again comes back to the banks' lending to a fresh deposit of Rs 6400. The money goes on multiplying in this way and ultimately total money creation is Rs =50000. Credit creation by banks is done by the formula.

As seen in the table, banks are able to create total deposits of Rs. 50000 with the initial deposits of just Rs. 10000. It means, total deposits become 'five times' of the initial deposit. Five times means Value of 'Money Multiplier'.

**Money Multiplier or Deposit Multiplier** – It measures the amount of money that the banks are able to create in the form of deposits with every unit of money it keeps as reserves.

<u>Initials Deposits</u>	<u>Deposits</u>	<u>Loans</u>	<u>LRR=20%</u>	Money Creation = Initial Deposit x 1/LRR, Money Multiplier = 1/LRR Money Creation = Initial Deposit x Money Multiplier Money Multiplier = 1/ (20/100),            1/0.20 = 5 Money Creation = Initial Deposit x Money Multiplier Money Creation = 10000 x 5       = 50000
Round - 1	10000	8000	2000	
Round - 2	8000	6400	1600	
Round - 3	6400	5120	1280	
	---	---	---	
	---	---		
Total	50000	40000	10000	

**6. Explain the functions of Central Bank.**

**1. Currency Authority or Bank of Note Issue** - Central bank is a sole authority to issue currency in the country. The main advantages of sole authority of note issue. (a) Uniformity in note circulation, (b) Better supervision and control, (c) It is easy to control credit, (d) Ensure public faith, (e) Stabilization in internal and external value of currency.

**2. Banker's Bank-**

RBI acts as Bankers bank in 3 capacities-

**Banker's Bank and Supervisor** – There are no of commercial bank in country. There should be some agency top regulate and supervise their proper functioning. Being the apex bank, The RBI regulates and controls the commercial banks. The regulation of banks may be related to their licensing, branch expansion, liquidity of assets, management, Merging, winding up etc. The control is exercised by periodic inspections of banks and the returns filed by them.

**Custodian of Cash Reserve** – Commercial Banks must keep a certain proportion of cash reserves with the central banks from their total Deposit (known as Cash Reserve Ratio or CRR).

**Lender of Last Resort** - The central bank also acts as lender of last resort for the other banks of the country. It means that if a commercial bank fails to get financial accommodation from anywhere, it approaches

the central bank as a last resort. Central bank advances loan to such a bank against approved securities. As a lender of the last resort, central bank exercises control over the entire banking system of the country.

**3. Banker to the Government** – The central bank act as a banker, an agent and a financial advisor to the central government and all the state governments except J&K).

**Banker to the Government** – As a Banker - to the govt., it acts like commercial bank to the public. Accepts receipts & makes payment for the govt. It provides short term credit to the govt. It provides foreign exchange resources to the govt. to repay external debt. It manages public debt. It advises the govt. on banking & financial matters.

**As an Agent** – The central bank also has the responsibility of managing the public debt and collect taxes.

**As a financial Advisor** – The central bank advises the government from time to time on economic, financial and monetary matters.

**4. Clearing House** - Every bank keeps cash reserves with the central bank. The claims of banks against one another can be easily and conveniently settled by simple transfers from in to their account. Supposing, Bank A receives a cheque of Rs 10,000 drawn on Bank B and Bank B receives a cheque of Rs. 15000 drawn on Bank A. The most convenient method of settling or clearing their mutual claims is that Bank A should issue a cheque amounting to Rs 5000 in favour of Bank B, drawn on central Bank. As a result of this transference, a sum of Rs 5000 will be debited to the account of Bank A and credited to the account of B. There is no need of cash transactions between the banks concerned. It facilitates cash transaction across the entire banking system, it also reduces requirement of cash reserves of the commercial banks.

**5. Custodian of Foreign Exchange Reserves** - Another important function of Central Bank is the custodian of foreign exchange reserves. Central Bank acts as custodian of country's stock of gold and foreign exchange reserves. It helps in stabilizing the external value of money and maintaining favorable balance of payments in the economy.

**6. Controller of Money Supply and Credit** – Central bank or RBI plays an important role during the times of economic fluctuations. It influences the money supply Through Quantitative instruments ( like – Bank Rate, Open Market Operations, legal Reserve ratios, Cash reserve Ratios, Statutory Liquidity ratios) and Qualitative instruments ( like – Moral Suasion, Credit Rationing, Direct Action, Margin Requirements).

7. **What do you mean by double coincidence of wants?**

OR

**What are the drawbacks of barter system? How money overcome to this problem?**

**Draw Backs of Barter System** –

1. Problem of Double Co incidence of Wants – A can exchange goods with B only when A has what B wants and B has what A wants.
2. Lack of Common Measure of Value
3. Lack of Standard of Deferred Payment
4. Difficulty in Storing Wealth.
5. Lack of Divisibility.

8. **Explain the Income determination by  $AD = AS$  approach. How to reach at Equilibrium when  $AD > AS$  &  $AS > AD$ ?**

**$AD = AS$  Approach** – Equilibrium level is determined when AD is equal to AS.

**$AD > AS$**  = It means that consumers and firms together would be buying more goods than the firms are willing to produce. As a result planned inventory would fall below the desired level. To bring the inventory back to the desired level, firms would resort to increase in employment and output till the economy is back at output level at OY, where AD is become to AS and there is no further tendency to change.

**$AS > AD$**  = It means that consumers and firms together would be buying less goods than the firms are willing to produce. As a result planned inventory would rise. To clear the unwanted increase in inventory, firms Plan to decrease the employment and output till the economy is back at output level at OY, where AD is become to AS and there is no further tendency to change.

9. **Explain the Income determination by  $I = S$  approach. How to reach at equilibrium when  $I >$  &  $I < S$ ?**

**$I = S$  Approach** –Equilibrium level is determined when  $I = S$ .

**$I > S$**  = If planned saving is less than planned investment, i.e. before point E. It means that households are consuming more and saving less than what the firms expected them to. As a result planned inventory would fall below the desired level. To bring the inventory back to the desired level, firms would plan to increase in employment and output till saving and investment equal to each other and there is no further tendency to change.

**$S > I$**  = If planned investment is less than planned saving, i.e. after point E. It means that households are not consuming as much as the firms expected them to. As a result inventory rises above the desired level. To clear the unwanted increase in inventory, firms would plan to reduce the production till saving and investment equal to each other and there is no further tendency to change.

10. How will you derive the saving curve from consumption curve?

OR

How will you derive the consumption curve from saving curve?

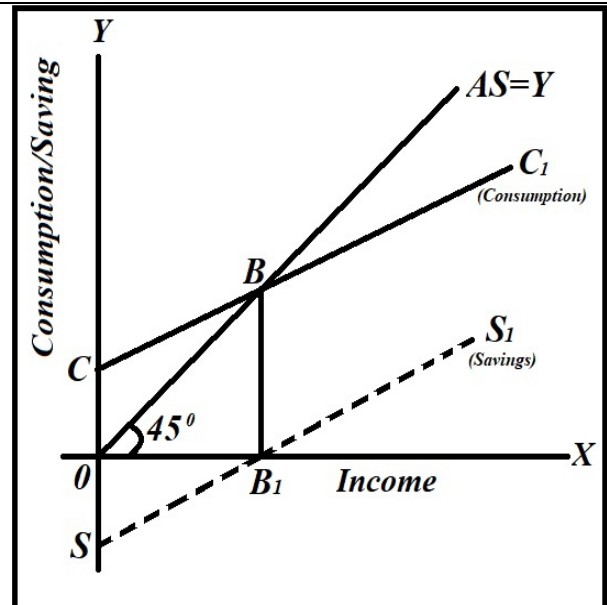
**saving curve from consumption curve**

We can derive saving curve from the given consumption curve by taking following steps –

1. Take a point B on consumption curve and from it draw a perpendicular on x axis intersecting it at point B1.
2. Take OS on y axis of lower part as equal to OC (as  $OC=OS$  as Autonomous Consumption is equal to dissaving). This gives point S from where saving curve will start.
3. Join pint S and B1 and extend the straight line upward and thus we get saving curve SB1S1.

In this way saving curve is diagrammatically drawn from consumption curve.

APC at point B is = 1, because consumption is equal to income and savings = 0.



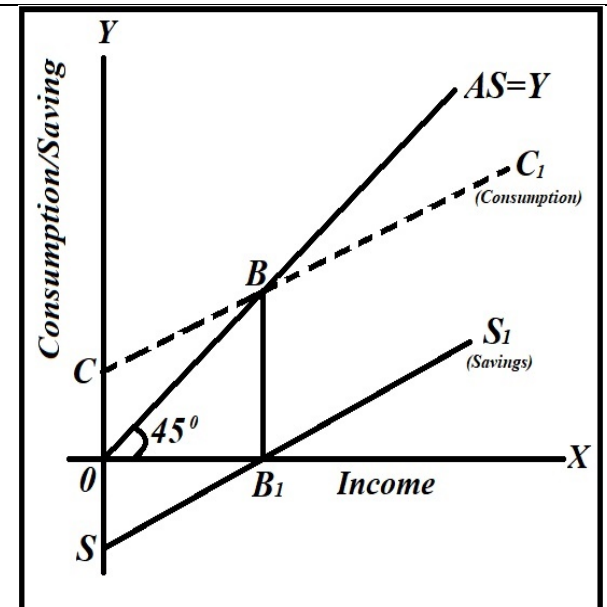
**consumption curve from saving curve**

We can derive consumption curve from the given saving curve by taking following steps –

1. Take a point B1 on Saving curve and from it draw a perpendicular on x axis parallel to Y axis intersecting Income curve at point B.
2. Take OC on y axis as equal to OS (as  $OS=OC$  as dissaving is equal to Autonomous Consumption). This gives point C from where consumption curve will start.
3. Join pint C and B and extend the straight line upward and thus we get consumption curve CBC1.

In this way consumption curve is diagrammatically drawn from saving curve.

APC at point B is = 1, because consumption is equal to income and Savings = 0.



11. Distinguish between Excess demand & Deficient demand. How will you correct the Excess demand ( $AD_{required} < AD_{actual}$ ) (Inflationary Gap) situation with fiscal policy and monetary policy? OR

Distinguish between Excess demand & Deficient demand. How will you correct the Deficient demand ( $AD_{required} > AD_{actual}$ ) (Deflationary Gap) situation with fiscal policy and monetary policy?

**EXCESS DEMAND** - It is a situation when actual aggregate demand is more than aggregate demand required at the full employment equilibrium. It is also known as Inflationary Gap.

**DEFICIENT DEMAND** - It is a situation when actual aggregate demand is less than aggregate demand required at the full employment equilibrium. It is also known as Deflationary Gap.

<b>EXCESS DEMAND</b>	<b>CORRECTION MEASURES</b>			<b>DEFICIENT DEMAND</b>
	<b>FISCAL MEASURE ( ADOPTED BY GOVERNMENT )</b>			
It refers to the situation when $AD > AS$ at full employment equilibrium.	Decrease	<b>Expenditure Policy</b>	Increase	It refers to the situation when $AD < AS$ at full employment equilibrium.
	Increase	<b>Taxation Policy</b>	Decrease	
It leads to Inflationary gap.	Increase	<b>Public Borrowings</b>	NO	It leads to Deflationary Gap.
Its indicate Over Full Employment equilibrium.	NO	<b>Deficit Financing</b>	Yes	Its show Under Employment Equilibrium.
	<b>MONETARY POLICY – QUANTITATIVE ( ADOPTED BY RBI )</b>			
It occurs due to excess of anticipated expenditure, i.e. due to rise in consumption expenditure, investment expenditure, etc.	Increase	<b>BANK RATE</b>	Decrease	It occurs due to shortage of anticipated expenditure, i.e. due to fall in consumption expenditure, investment expenditure, etc.
	Increase	<b>REPO RATE</b>	Decrease	
	Increase	<b>REVERSE RAPO RATE</b>	Decrease	
	Increase	<b>CASH RESERVE RATIO</b>	Decrease	
	Increase	<b>S. L. R.</b>	Decrease	
It does not affect the Output, Employment and Income level as economy is already operating at full employment level.	Sell of Securities	<b>OPEN MARKET OPERATION</b>	Purchase of Securities	It leads to fall in output and employment due to shortage of aggregate demand.
	<b>MONETARY POLICY – QUALITATIVE ( ADOPTED BY RBI )</b>			
	Increase	<b>MARGIN REQUIRMENTS</b>	Decrease	
It leads to inflation, i.e. it results in rise in general price level.	Follow by Commercial banks	<b>MORAL SUASSION</b>	Follow by Commercial banks	Its leads to deflation, i.e. it results in fall in general price level.
<b>EX ANTE SAVING</b> – What households plan to save at different levels of Income in an economy. It is shown by saving function. <b>EX-ANTE INVESTMENT</b> – What firms plan to invest at different levels of income in an economy. It is shown by investment demand function.	Selected Credits	<b>CREDIT RATIONING</b>	Encourage Credits	<b>EX-POST SAVING</b> – It is the actual or realized savings in an economy during a year. <b>EX-POST INVESTMENT</b> – It refers to the actual or realized investment in an economy during a year. Ex-post saving and Ex-post Investment are equal at all levels of income.
	Stop functioning as banker's bank	<b>DIRECT ACTION</b>	Stop functioning as banker's bank	
	<b>IMPACT ON VARIOUS SECTOR</b>			
	<b>EXCESS DEMAND</b>		<b>DEFICIENT DEMAND</b>	
	No Change	<b>Employment</b>	Fall	
	No Change	<b>Output</b>	Fall	
	No Change	<b>National Income</b>	Fall	
	Rise	<b>General Price Level</b>	Fall	
	<b>POSSIBILITIES OF EQUILIBRIUM AT EMPLOYMENT LEVEL</b>			
	<b>FULL EMPLOYMENT EQUILIBRIUM</b>	<b>UNDER EMPLOYMENT EQUILIBRIUM</b>		

**12. What is Government budget? Explain the objectives of budget.**

**Meaning of Government Budget:**-A government budget is an annual statement of the estimated receipts and estimated expenditure during a fiscal year.

**Objective of the Government Budget**

The objective that are pursued by the government through the budget are-

1. To Achieve Economic Growth.
2. To Reduce Inequalities in Income and Wealth.
3. To Achieve Economic Stability.
4. To Management of Public Enterprises.
5. To Reallocation of Resources.
6. To Reduce regional Disparities.

**13. Explain the implications of:**

- 1. Revenue Deficit.      2. Primary Deficit.      3. Fiscal Deficit.**

**@ Revenue Deficit:**-Revenue deficit refers to the excess of revenue expenditure of the government over its revenue receipts.

**Revenue deficit = Total revenue expenditure – Total revenue receipts.**

**Importance:-** Since it is largely related with the recurring expenditure. Therefore, high revenue deficit gives a warning to the government either to cut expenditure or to increase revenue receipts. It also implies requirement burden in future.

**@ Fiscal Deficit:**-Fiscal deficit is defined as excess of total expenditure over total receipts excluding borrowings.

**Fiscal Deficit = Total budget expenditure - Total budget receipts (excluding borrowings)**

**Importance:** - Fiscal deficit is a measure of total borrowings required by the government. Greater fiscal deficit implies greater borrowings by the government. This creates a large burden of interest payments in the future that leads to increase in revenue expenditure, causing an increase in revenue deficit. Thus a vicious circle sets in. In the present, a large fiscal deficit may also lead to inflationary pressures.

**@ Primary Deficit:** -Primary deficit is defined as fiscal deficit minus interest payment. It is equal to fiscal deficit reduced by interest payment.

**Primary deficit = Fiscal deficit – interest payment.**

**Importance:** - Primary deficit signifies borrowing requirements of the government. A low or zero primary deficit means that while government’s interest requirement on earlier loans have compelled the government to borrow but it is aware of the need to tighten its belt.

**14. Differentiate between Revenue Budget & Capital Budget.**

<b>BUDGET COMPONENT</b>							
<b>BUDGET RECEIPT</b>				<b>BUDGET EXPENDITURE</b>			
<b>CAPITAL RECEIPT</b>		<b>REVENUE RECEIPT</b>		<b>CAPITAL EXPENDITURE</b>		<b>REVENUE EXPENDITURE</b>	
Either Creates Liability	Or Reduce Assets	Neither Create Liability	Nor Reduce Assets	Either Creates Assets	Or Reduce Liability	Neither Create Assets	Nor Reduce Liability
* It's always creating a liability.		* Revenue Receipts do not create any liability.		* It results in creation of assets.		* It does not result in creation of assets.	
* Capital Receipts causes for reduction in the assets of the government.		* It's does not reduce assets of the government.		* It result in reduce in liability.		* It does not reduce any liability.	
* Eg. Borrowings, Disinvestment, Recovery of loans etc.		* Eg. Dividend, Tax and non tax revenue.		* It for long period and non-recurring in nature.		* It is for day to day activity and recurring in nature.	
1. Borrowing		1. Tax and Non Tax Revenue		* Eg. Expenditure on acquisition of assets like land, building etc.		* Eg. Expenditure on salaries of employees.	
2. Disinvestment		2. Interest Received on loans		1. Construction Activities		1. Payment of Interest	
3. Recovery of Loans		3. Gift and Grants		2. Lending loans		2. Expenditure on General Services	
4. Small Savings- NSC, KVP		4. Profit of PSUs		3. Defense Capital Equipments		3. Subsidies	
				4. Repayment of Loan		4. Grants Given to State Govt.	



**15. Differentiate between Direct and Indirect tax.**

Direct Tax	Indirect Tax
* Liability to pay and burden of direct tax falls on same person.	* Liability to pay and burden of direct tax falls on some other person.
* Direct taxes are levied on individuals and companies.	* Indirect taxes are levied on goods and services.
* Levied on income and property of person.	* Levied on goods and services on their sale, Production, import and export.
* Direct taxes are generally progressive in nature.	* Indirect taxes are generally proportional in nature.
* Eg. Income tax, Corporate tax, Wealth Tax, Capital Gains etc.	* Eg. Sales tax, Service Tax, Excise duty, Custom duty etc.

**16. What are the components of current account of Balance of Payment?**

**CURRENT ACCOUNT** - The current account records all transactions related to imports and exports of goods and services and unilateral transfers during a given period of time. The main components of this account are -

**(1) EXPORT AND IMPORT OF GOODS – (Visible Items) –** The balance of export and import of goods is called the balance of visible trade. Payment for import of good is written on the negative side and receipt from export is shown on positive side.

**(2) EXPORT AND IMPORT OF SERVICES (Invisible Trade) -**The balance of exports and imports of services is called the balance invisible trade. Example - Shipping, Banking, Insurance etc. Payments for these services are written on the negative side and receipt on positive side.

**(3) UNILATERAL TRANSFER TO AND FROM ABROAD -**Unilateral transfers is receipts which residents of a country make without getting anything in return eg. Gifts, donation, personal remittances etc.

**(4) INCOME RECEIPT AND PAYMENT TO AND FROM ABROAD –** It includes income in the form of interest, rent and profits.

The net balance of visible trade, invisible trade and of unilateral transfers is the balance on current account. Current Account shows the Net Income.

**17. What are the components of capital account of Balance of Payment?**

It records are international transactions that involve a resident of the domestic country **changing his assets or liability** with a foreign resident. It is concerned with financial transfers. So it does not have direct effect on income, output and employment of the country.

**Various forms of capital account transactions:-**

**(1) PRIVATE TRANSACTIONS** - There are transactions that affect the liabilities and assets of individuals.

**(2) OFFICIAL TRANSACTIONS** - Transactions affecting assets and liabilities by the govt. and its agencies.

**(3) PORTFOLIO INVESTMENT (FII)** - It is the acquisition of an asset that does not give the purchaser control over the asset.

**(4) DIRECT INVESTMENT (FDI)-** It is the act of purchasing an asset and at the same time acquiring control of it.

**(5) BANKING INFLOW –** Inflow of hot money seeking the highest rate of return as NRI deposits.

**(6) OFFICIAL RESERVE TRANSACTION –** It includes change in a countries gold reserves, foreign exchange reserves, foreign securities and SDRs with IMF.

The net value of the balance of direct and portfolio investment is called the balanced on Capital Account.

**18. Differentiate between Balance of Trade and Balance of Payment.**

**OR**

**Differentiate between Autonomous items & Accommodating items.**

AUTONOMOUS ITEMS	ACCOMODATING ITEMS
Autonomous items refer to international economic transactions that take place due to some economic motive such as profit maximization.	This refers to transactions that occur because of other activity in the BOP, such as government financing.
These transactions are independent of the state of	These transactions are responsible for country's

the country's BOP.	BOP.
These items are often called above the line items in the BOP.	These items are called below the line items.
<b><u>CURRENT ACCOUNT</u></b>	<b><u>CAPITAL ACCOUNT</u></b>
<ul style="list-style-type: none"> <li>* It records all transaction between the resident of a country and the rest of the world which does not change asset and liability</li> <li>* It is a flow concept</li> <li>* It consist of export and import of goods, services and unilateral transfer</li> </ul>	<ul style="list-style-type: none"> <li>* It records all transaction between the resident of a country and the rest of the world which change asset and liability</li> <li>* It is a stock concept</li> <li>* It consist of borrowing and lending, change in foreign exchange reserve and FDI</li> </ul>
<b><u>BALANCE OF TRADE</u></b>	<b><u>BALANCE OF PAYMENTS</u></b>
Balance of trade is a record of only visible items i.e. exports and imports of goods.	Balance of payments is a record of both visible items (goods) and invisible items (services)
Balance of trade can be in a deficit, surplus or balanced	Balance of payments must always balance.
Unfavorable BoT can be met out with of favorable BoP.	Unfavorable BoP cannot be met out with of favorable BoT.
BoT does not record ant transaction of capital nature.	BoP records all the transactions of capital nature.
Balance of trade is a narrower concept as it is only a part of the balance of payments account.	Balance of payments is a wider and more useful concept as it is a record of all transactions in foreign exchange including balance of trade.

19. Why foreign exchange demanded?

20. What are the supply sources of foreign exchange

21. Explain foreign exchange rate determination.

<p><b><u>DEMAND OF FOREIGN CURRENCY</u></b></p> <ol style="list-style-type: none"> <li>1. Import of goods and services from other countries;</li> <li>2. Tourism;</li> <li>3. Unilateral Transfers sent to abroad;</li> <li>4. To purchase assets in foreign countries;</li> <li>5. To speculate on the value of foreign currencies</li> </ol>	
<p><b><u>SUPPLY SOURCES OF FOREIGN</u></b></p> <ol style="list-style-type: none"> <li>1. Export of Goods and Services to other countries;</li> <li>2. Tourism;</li> <li>3. Foreign investment like FDI and FII;</li> <li>4. Unilateral Transfers received from abroad;</li> <li>5. Speculation</li> </ol>	
<p><b><u>DETERMINATION OF EXCHANGE RATE</u></b> Equilibrium in the foreign exchange market is determined in the same way as the price of a commodity through the forces of supply and demand. The foreign exchange market, like any other normal market, contains a downward sloping demand curve and an upward sloping supply curve. The price on the vertical axis is stated in terms of domestic currency (i.e. how many rupees for one US dollar).The horizontal axis measures the quantity demanded or supplied. The intersection of the supply and demand curve determines the equilibrium foreign exchange rate</p>	

**22. Impact of Appreciation / Revaluation and Depreciation / Devaluation on its export & Import of a country.**

**23. Differentiate between Appreciation & Depreciation.**

**24. Differentiate between revaluation & devaluation.**

DEPRICIATION	DEVALUATION
Depreciation refers to fall in the price of domestic currency in terms of foreign currency.	It refers to reduction in the price of domestic currency by the government in terms of foreign currency.
It takes place due to market demand and market supply of foreign exchange.	It is done deliberately by the government or central bank
It takes place under Flexible Exchange Rate System	It takes place under Fixed Exchange Rate System.
It is very common.	It is very uncommon.
DEPRICIATION	APPRICIATION
Depreciation refers to fall in the price of domestic currency in terms of foreign currency.	Appreciation refers to rise in the price of domestic currency in terms of foreign currency.
<b>IMPACT ON EXPORT AND IMPORT</b> -It makes domestic goods cheaper in foreign country as more of such goods can now be purchased with same amount of foreign currency. So, it <u>leads to increase in export and decrease in Import.</u> (Same result will be in case of Devaluation)	<b>IMPACT ON EXPORT AND IMPORT</b> -It makes foreign goods cheaper in domestic country as more of such goods can now be purchased with same amount of domestic currency. So, it <u>leads to increase in import and decrease in Export.</u> (Same result will be in case of Revaluation)
A change from 1 \$ = 50 Rs. to 1 \$ = 55 Rs. is Depreciation of Indian Currency.	A change from 1 \$ = 50 Rs. to 1 \$ = 45 Rs. is Appreciation of Indian Currency.
FIXED EXCHANGE RATE	FLEXIBLE EXCHANGE RATE
It is officially fixed by the government in terms of gold or any other currency.	It is determined by the forces of demand and supply of foreign exchange.
Traditional exchange rate system (adopted by all countries from 1946 to 1973)	New exchange rate system ( adopted by almost all countries after 1973)
The exchange rate is generally stable or a very small variation possible	The exchange rate keeps on changing.
In this system only government has the power to change exchange rate.	Market forces changes the exchange rate. ( In Managed Floating RBI can intervene under certain limits)

**25. Write short notes on fixed exchange rate, Flexible exchange rate & Managed floating exchange rate.**

**26. Merits & demerits of fixed exchange rate, Flexible exchange rate & managed floating exchange rate.**

**FIXED EXCHANGE RATE** - Under the fixed exchange rate system the exchange rate is officially declared and it is fixed. Only a very small deviation from this fixed value is possible. It is not determined by supply of and demand for foreign exchange.

**MERITS – 1.** Stability in the exchange Rate; **2.** Promote International Investment; **3.** Promotes International Trade; **4.** Prevent Speculative Activity; **5.** Coordination of Macroeconomics Policies. **DEMERITS – 1.** Huge foreign Exchange Reserves Required; **2.** Difficulty in fixing the Exchange rate; **3.** Exchange Rates are not fixed.

**FLEXIBLE EXCHANGE RATE** - In the flexible exchange rate system exchange rate is determined by the supply and demand for foreign exchange. There is no intervention by the central bank

**MERITS – 1.** Maintains Equilibrium Level; **2.** No need or Huge Foreign Exchange Reserves; **3.** Optimum Utilization of resources **DEMERITS – 1.** Instability in the Exchange Rate; **2.** Speculative Activities; **3.** Creates Inflationary Situation

**MANAGED FLOATING EXCHANGE RATE** - In this system foreign exchange rate is determined by the market demand and supply and central bank can intervene in foreign exchange rate determination whenever it feels desirable. It is also known as dirty floating.

# MINIMUM LEVEL OF LEARNING - MICROECONOMICS

## 1. Explain central problems of an economy with the help of PPC.

### CENTRAL PROBLEMS OF AN ECONOMY

Economic problem is the problem of making choice. It arises due to \* Endless Human Wants and differences in their urgency; \* Limited or Scare Resources; and \* Alternative Uses of Resources.

#### WHAT TO PRODUCE

It refers to which goods and services are to be produced and how much quantity of each good or services is to be produced i.e. consumption goods or capital goods, with the limited resources.

#### HOW TO PRODUCE

It refers to the choice of methods of production of goods & services i.e. whether Labour Intensive Technique or Capital Intensive Technique is to be adopted taking into consideration the proportion of capital and labour in an economy.

#### FOR WHOME TO PRODUCE

It concerns with the distribution of income & wealth which refers to who earns how much or who has more assets than others. It is categorized as Personal Distribution – It refers to income share of individuals and households in the society. Functional Distribution – It relates to income share of different factors of production between labour, capital, land and entrepreneur.

## 2. What are the possible situations when PPC shifts rightward or leftward?

Rightward shift when there is an increase in resources and up gradation in technology. Leftward shift when there is a decrease in resources and degradation in technology.

## 3. Differentiate between Positive economics & Normative economic.

<u>MICRO ECONOMICS</u>	<u>MACRO ECONOMICS</u>	<u>POSITIVE ECONOMICS</u>	<u>NORMATIVE ECONOMICS</u>
1. It is the study of individual units of an economy	1. It is the study of the whole economy	1. It is that branch of economics which is based on facts and data.	1. It is that branch of economics which is based on opinions, values and judgments.
2. It deals with allocation of resources	2. It deals with growth and development of resources	2. "What it is" or "What is was"	2. "What ought to be" or "What should be"
3. It is also called price theory.	3. It is also called income theory.	3. Analyses the cause and effect relationship for various economic issues.	3. It passes value judgments for various economic issues.
4. Demand and Supply are the tools.	4. Aggregate Demand and Aggregate Supply are the tools.	4. Can be proofed with data.	4. Can't be proofed with data.
5. It is a narrower concept.	5. It is wider concept.	5. * Prices are increasing. * Population is growing very fast.	5. * Rising prices must be controlled. * Population must be controlled.

## 4. What do you mean by Marginal opportunity cost.

**Marginal Opportunity Cost or Marginal Rate of Transformation** – It means the rate at which an additional unit of a good is transformed in another good i.e. number of a good that are sacrificed for the production of an additional unit of good X. It is also known as marginal opportunity cost.  $MRT_{xy} = \Delta Y / \Delta X$

$MRT_{xy} = \text{Loss of good Y} / \text{Gain of good x}$

MRT Constant = PPC Downward Sloping Straight Line.

MRT Increasing = PPC will be Downward Sloping Concave to the Origin;

MRT Decreasing = PPC will be Downward Sloping Convex to the origin.

## 5. Explain relation between MU & TU.

**Relation Between Total Utility and Marginal Utility –**

- \* As long as MU is positive, TU increases.
- \* When MU is zero, TU is maximum and constant.
- \* When MU is negative, TU decreases.
- \* TU is summation of MU.
- \* MU is the slope of TU.

**6. Explain Law of diminishing Marginal utility.**

**LAW OF DIMINISHING MARGINAL UTILITY** -As we consume more units of a commodity, each successive unit consumed gives lesser and lesser satisfaction, that is marginal utility diminishes. It is termed as the Law of Diminishing Marginal Utility.

**Exceptions** – Hobbies; Drunkards; Misers; Music and Poetry; Reading.

**7. What is Production Possibility Curve? Explain its properties.**

**PROPERTIES OF PPC**

**A Production Possibility Curve is a downward sloping curve** - In a full employment economy, more of one goods can be obtained only by giving up of other goods. It is not possible to increase the production of both of them with the given resources.

**The shape of the production possibility curve is concave to the origin**- The opportunity cost for a commodity is the amount of other commodity that has been forgone in order to produce the first. The marginal opportunity cost of a particular good along the PPC is defined as the amount sacrificed of the other good per unit increase in the production of the good in question. Increasing marginal opportunity cost implies that PPC is concave.

**PPC can be shifted rightward or Leftward** - If resources are increased or technology upgraded, there is an rightward shift in PPC and If resources are decreased or technology degraded, there is an leftward shift in PPC.

**8. What is Budget line.**

**BUDGET SET** – It is a set of all bundles of 2 goods that a consumer can buy with his given income and prices of commodities.

**BUDGET LINE** – It is graphical representation of Budget Set.

\*  $PL \text{ or } BL = M \geq P_x.Q_x + P_y.Q_y$

\* B.L. is downward sloping.

\* Slope of BL is  $P_x/P_y$ .

\* Consumer can afford any bundle that lies on or inside Budget Line.

$M = 20; P_x=2; P_y=4$

**9. Cases related to equilibrium of consumers:**

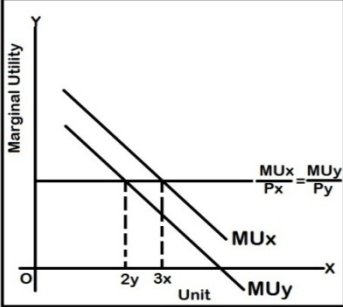
**Consumer equilibrium in case of one commodity :**

i).  $MU_x > P_x$  OR  $MU_x < P_x$

<b>CASE OF A SINGLE COMMODITY</b>				
<p>It refers to a situation in which a consumer spends his income on purchase of a commodity in such a way that gives him maximum satisfaction. Consumer equilibrium is determined when the following conditions are satisfied.</p> <p><b><math>MU_x = P_x</math> (Price)</b> Total satisfaction decreases with additional purchase after equilibrium.</p>	<b>Unit</b>	<b><math>P_x</math></b>	<b><math>MU_x</math></b>	<b>Remarks</b>
	1	3	5	$MU_x > P_x$
	2	3	4	$MU_x > P_x$
	<b>3</b>	<b>3</b>	<b>3</b>	<b><math>MU_x = P_x</math></b>
	4	3	2	$MU_x < P_x$
	5	3	1	$MU_x < P_x$
	6	3	0	$MU_x < P_x$
<p style="text-align: center;"><b><math>MU_x &gt; P_x</math></b></p> <p>Consumer gains more satisfaction in comparison to sacrifice. Purchase of X will increase, <math>MU_x</math> will fall and become equal to price. <math>MU_x = 4,</math> <math>P_x = 3;</math> <math>MU_x &gt; P_x</math> <math>4 &gt; 3</math></p>	<p style="text-align: center;"><b><math>MU_x = P_x</math></b></p> <p>MU implies Satisfaction. Price implies Sacrifice. <math>MU_x = 3;</math> <math>P_x = 3;</math> <math>MU_x = P_x</math> <math>3 = 3</math> No change in purchasing or consumption</p>	<p style="text-align: center;"><b><math>MU_x &lt; P_x</math></b></p> <p>Consumer suffers losses as he is sacrifice more than gain. Purchase of X will reduce, <math>MU_x</math> will rise and become equal to price. <math>MU_x = 2,</math> <math>P_x = 3;</math> <math>MU_x &lt; P_x</math> <math>2 &lt; 3</math></p>		

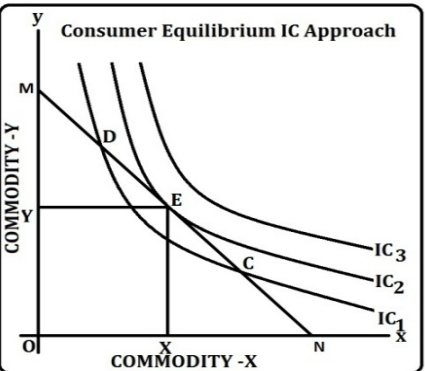
### Consumer equilibrium in case of two commodity:

ii).  $\frac{MU_x}{P_x} > \frac{MU_y}{P_y}$  OR  $\frac{MU_x}{P_x} < \frac{MU_y}{P_y}$

<b>CASE OF TWO COMMODITY</b>																				
<p>In actual life a consumer consumes more than one good. In such case Law of Equi-Marginal Utility helps to determine consumer's equilibrium. According to this law a consumer gets maximum satisfaction when ratio of MU of two commodities to their respective prices is equal. A consumer will spend his income in such a way that utility gained from the last rupee spent on each commodity is equal. In case of 2 commodities, a consumer attains equilibrium when marginal utilities of both the goods are equal. i.e.,</p> <p><math>MU_x = MU_y</math>      <math>\frac{MU_x}{P_x} = \frac{MU_y}{P_y} = MU_m</math></p>																				
<p>Suppose Price of X and Y is 1 Rs. each and Total Money Income is 5 Rs. Consumer will spend his total income and purchase 3X and 2Y and maximize his satisfaction to the 19 units. If he spends his money on any other combination, total utility would be less than 19 units. Thus he buys 3 units of X and 2 of Y.</p>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Units</th> <th>MUx</th> <th>MUy</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>5</td> <td>4</td> </tr> <tr> <td>2</td> <td>4</td> <td>3</td> </tr> <tr> <td>3</td> <td>3</td> <td>2</td> </tr> <tr> <td>4</td> <td>2</td> <td>1</td> </tr> <tr> <td>5</td> <td>1</td> <td>0</td> </tr> </tbody> </table>		Units	MUx	MUy	1	5	4	2	4	3	3	3	2	4	2	1	5	1	0
Units	MUx	MUy																		
1	5	4																		
2	4	3																		
3	3	2																		
4	2	1																		
5	1	0																		
<b><math>\frac{MU_x}{P_x} &gt; \frac{MU_y}{P_y}</math></b>	<b><math>\frac{MU_x}{P_x} = \frac{MU_y}{P_y}</math></b>	<b><math>\frac{MU_x}{P_x} &lt; \frac{MU_y}{P_y}</math></b>																		
<p>2 Unit of X &amp; 3 Units of Y  <math>MU_x/P_x = MU_y/P_y</math>  <math>MU_x = 4,</math>      <math>MU_y = 2</math>  <math>P_x = 1,</math>      <math>P_y = 1</math>                      Put values in the formula  <math>4/1 = 2/1</math>      <math>4 &gt; 2</math>                      Consumer will not be in equilibrium. In this case –                      Consumption of X <math>\uparrow \rightarrow</math>                      Decrease in <math>MU_x</math>.                      Consumption of Y <math>\downarrow \rightarrow</math>                      Increase in <math>MU_y</math>.                      Process will continue till the point –  <math>MU_x/P_x = MU_y/P_y</math></p>	<p>3 Unit of X &amp; 2 Units of Y  <math>MU_x/P_x = MU_y/P_y</math>  <math>MU_x = 3,</math>      <math>MU_y = 3</math>  <math>P_x = 1,</math>      <math>P_y = 1</math>                      Put values in the formula  <math>3/1 = 3/1</math>      <math>3 = 3</math>                      Consumer will be in equilibrium. In this case –                      No change in existing Consumption schedule.</p>	<p>4 Unit of X &amp; 1 Unit of Y  <math>MU_x/P_x = MU_y/P_y</math>  <math>MU_x = 2,</math>      <math>MU_y = 4</math>  <math>P_x = 1,</math>      <math>P_y = 1</math>                      Put values in the formula  <math>2/1 = 4/1</math>      <math>2 &gt; 4</math>                      Consumer will not be in equilibrium. In this case –                      Consumption of X <math>\downarrow \rightarrow</math>                      Increase in <math>MU_x</math>.                      Consumption of Y <math>\uparrow \rightarrow</math>                      Decrease in <math>MU_y</math>.                      Process will continue till the point –  <math>MU_x/P_x = MU_y/P_y</math></p>																		

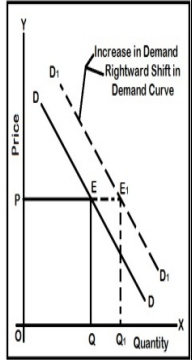
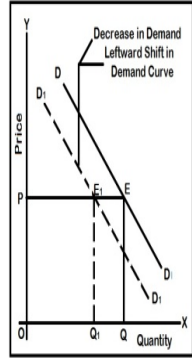
### Consumer equilibrium with IC approach.

iii).  $MRS_{xy} > \frac{P_x}{P_y}$  OR  $MRS_{xy} < \frac{P_x}{P_y}$

<b>CONSUMER EQUILIBRIUM WITH IC APPROACH</b>	
<p>Consumer's equilibrium refers to the optimum choice of the consumer when he maximizes his satisfaction. In IC approach consumer reaches on equilibrium when <b>three conditions</b> are satisfied.</p> <p><b>1.</b> <math>MRS_{xy}</math> (slope of IC) = <math>\frac{P_x}{P_y}</math> (MRE - slope of Budget Line)</p> <p>-</p> <p><b>2.</b> IC is convex to the origin at the point of equilibrium – it means <math>MRS_{xy}</math> must be diminishing.</p> <p><b>3.</b> Budget line should be tangent to the highest possible IC.</p>	
<p>MN is the budget line of consumer. IC1, IC2 and IC3 are various indifference curves representing different scales of satisfaction. Bundle D and C cost the same as bundle E, but D &amp; C lie on a lower IC, so they represent a comparatively lower level of satisfaction. Bundle E is the bundle where both the conditions get satisfied. In equilibrium, the consumer will consume X quantity of good x and Y quantity of good Y.</p>	

<b>MRS<sub>xy</sub> &gt; P<sub>x</sub>/P<sub>y</sub></b>	<b>MRS<sub>xy</sub> = P<sub>x</sub>/P<sub>y</sub></b>	<b>MRS<sub>xy</sub> &lt; P<sub>x</sub>/P<sub>y</sub></b>
<p><math>MRS_{xy} = P_x/P_y</math>  <math>MRS_{xy} = 6, P_x=4, P_y=2</math>  <math>MRS_{xy} = \frac{P_x}{P_y} 6 = \frac{4}{2}</math>  <math>6 \neq 2, \quad 6 &gt; 2</math>  Consumer will not be in equilibrium. In this case consumer is willing to pay more than the actual price for good X. As a result, he will increase the consumption of X which leads to fall in the utility of good X and finally, MRS<sub>xy</sub> starts falling till the time <math>MRS_{xy} = \frac{P_x}{P_y}</math></p>	<p><math>MRS_{xy} = P_x/P_y</math>  <math>MRS_{xy} = 3,</math>  <math>P_x = 6, \quad P_y=2</math>  <math>MRS_{xy} = \frac{P_x}{P_y}</math>  <math>3 = \frac{6}{2} \quad 3 = 3</math>  Consumer will be in equilibrium. There will be no change in consumption.</p>	<p><math>MRS_{xy} = P_x/P_y</math>  <math>MRS_{xy} = 2, P_x=6, P_y=2</math>  <math>MRS_{xy} = \frac{P_x}{P_y} 2 = \frac{6}{2}</math>  <math>2 \neq 3, \quad 2 &lt; 3</math>  Consumer will not be in equilibrium. In this case consumer is willing to pay less than the actual price for good X. As a result, he will decrease the consumption of X which leads to increase in the utility of good X and finally, MRS<sub>xy</sub> starts rising till the time <math>MRS_{xy} = \frac{P_x}{P_y}</math></p>

**10. Explain factors affecting individual demand and market demand.**

<b>Reasons for Rightward Shift</b>			<b>Reasons for Leftward Shift</b>
<ol style="list-style-type: none"> <li>Increase in Income</li> <li>Increase in Price of Substitute</li> <li>Decrease in Price of Complementary</li> <li>Favorable Change in Taste and Preference;</li> <li>Expectation to Rise in Price in Future</li> <li>Favorable Change in Population</li> <li>Favorable Change in Distribution of Income</li> </ol>			<ol style="list-style-type: none"> <li>Decrease in Income</li> <li>Decrease in Price of Substitute</li> <li>Increase in Price of Complementary</li> <li>Unfavorable Change in Taste and Preference;</li> <li>Expectation to Fall in Price in Future</li> <li>Unfavorable Change in Population</li> <li>Unfavorable Change in Distribution of Income</li> </ol>

**11. Differentiate between change in demand & change in quantity demanded.**

**OR**

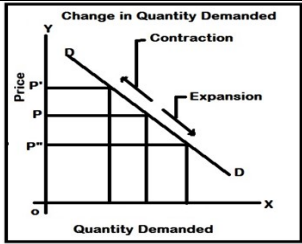
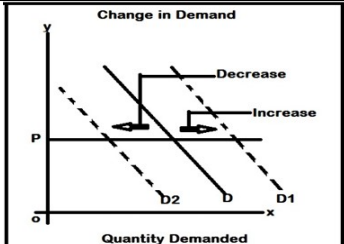
**Differentiate between Increase in demand & Expansion in demanded.**

**OR**

**Differentiate between Decrease in demand & Contraction in demanded.**

**OR**

**Differentiate between Normal Good and Inferior Good.**

<b>EXPANSION IN DEMAND</b>	<b>INCREASE IN DEMAND</b>	<b>CONTRACTION IN DEMAND</b>	<b>DECREASE IN DEMAND</b>
When there is change in Quantity demanded due to fall in Price of its own.	When change in demand due to rise in income, fall in price of comp. Goods, rise in price of substitute goods etc.	When there is change in Quantity demanded due to rise in Price of its own.	When change in demand due to fall in income, rise in price of comp. Goods, fall in price of substitute goods etc.
In this situation consumer move downward on the same demand curve.	In this situation demand curve shift rightward.	In this situation consumer move upward on the same demand curve.	In this situation demand curve shift leftward.
It is known as "Change in Quantity Demanded"	It is known as "Change in Demand"	It is known as "Change in Quantity Demanded"	It is known as "Change in Demand"
	<p><b>NORMAL GOODS</b></p> <ol style="list-style-type: none"> <li>Demand varies directly with income level.  <math>\uparrow Y \quad \uparrow \text{Demand}</math>  <math>\downarrow Y \quad \downarrow \text{Demand}</math></li> <li>Demand curve shift right /left with rise/ fall in income.</li> <li>Income effect is positive.</li> </ol>	<p><b>INFERIOR GOODS</b></p> <ol style="list-style-type: none"> <li>Demand varies inversely with income level.  <math>\uparrow Y \quad \downarrow \text{Demand}</math>  <math>\downarrow Y \quad \uparrow \text{Demand}</math></li> <li>Demand curve shift left / right with rise/ fall in income.</li> <li>Income effect is negative.</li> </ol>	



12. Explain the chain effect of change in prices of related goods & its impact on demand of given commodity.

Change In Price Of Related Goods And Its Impact On Demand Of Given Commodity							
Substitute Goods				Complimentary Goods			
Tea		Coffee		Petrol		Car	
$P_t$	$Q_t$	$P_c$	$Q_c$	$P_p$	$Q_p$	$P_c$	$Q_c$
10	10	10	10	10	10	10	10
10	15	15	5	10	5	15	5
$P=$	$D \uparrow$	$P \downarrow$	$D \downarrow$	$P=$	$D \downarrow$	$P \uparrow$	$D \downarrow$
10	5	5	15	10	15	5	15
$P=$	$D \downarrow$	$P \downarrow$	$D \uparrow$	$P=$	$D \uparrow$	$P \downarrow$	$D \uparrow$

$P_s$  and  $Q_g$  are positively related. When  $P_s$  rises, given commodity is cheaper in comparison to substitute, so  $Q_g$  rises. On the other hand if  $P_s$  falls, given commodity is costlier in comparison to substitute, so  $Q_g$  falls. (In both cases price of given is remain constant)

$P_c$  and  $Q_g$  are inversely related. When  $P_c$  rises,  $Q_c$  falls, as to satisfy a particular want both will be used together so  $Q_g$  also falls. On the other hand if  $P_c$  falls,  $Q_c$  rises, as to satisfy a particular want both will be used together so,  $Q_g$  also rises. (In both cases price of given is remain constant)

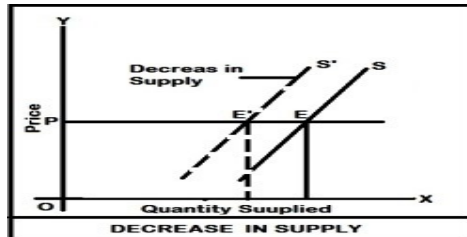
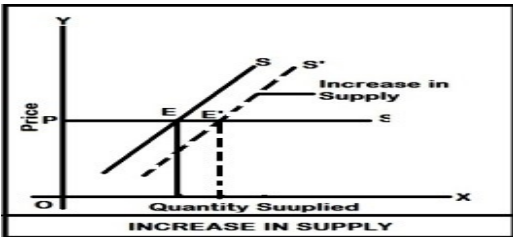
13. Explain Factors affecting elasticity of demand.

FACTORS AFFECTING ELASTICITY OF DEMAND		
LESS ELASTIC DEMAND	FACTORS	HIGH ELASTIC DEMAND
Necessities	NATURE OF COMMODITY	Luxurious
If not Available	AVAILABILITY OF SUBSTITUTE	If Available
Minor Part of Income	PORTION OF TOTAL EXPENDITURE	Major Part of Income
Habituated	HABITS	Not Habituated
Shorter	TIME PERIOD	Longer
Few / Single Use	USES OF COMMODITY	Many Uses
Very High / Low	LEVEL OF INCOME	Middle Income
Low Priced	LEVEL OF PRICE	High Priced

14. Differences between change in supply & change in quantity supplied.

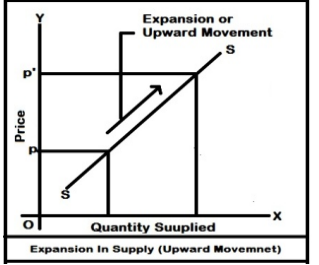
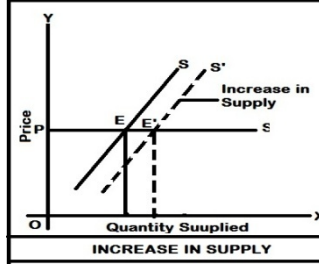
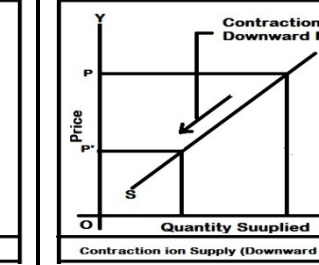
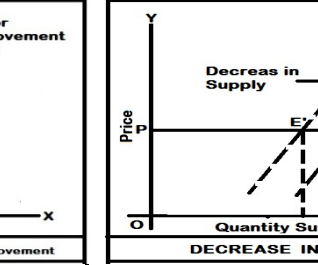
- Differentiate between change in Supply & change in quantity supply. **OR**
- Differentiate between Increase in Supply & Expansion in Supply. **OR**
- Differentiate between Decrease in Supply & Contraction in Supply. **OR**

Reasons for Rightward Shift	Reasons for Leftward Shift
<ol style="list-style-type: none"> <li>1. Decrease in Price of Substitute Goods</li> <li>2. Increase in Price of Complementary Goods</li> <li>3. Decrease in Price of Factors (Input)</li> <li>4. Improvement in Technology</li> <li>5. Expectation in fall in Price in Future;</li> <li>6. Increase in Number of firms</li> <li>7. Good Transport and Communication</li> <li>8. Goal of Sale Maximization</li> <li>9. Decrease in Taxes</li> </ol>	<ol style="list-style-type: none"> <li>1. Increase in Price of Substitute Goods</li> <li>2. Decrease in Price of Complementary Goods</li> <li>3. Increase in Price of Factors (Input)</li> <li>4. Degrade in Technology</li> <li>5. Expectation in Rise in Price in Future;</li> <li>6. Decrease in Number of firms</li> <li>7. Poor Transport and Communication</li> <li>8. Goal of Profit Maximization</li> <li>9. Increase in Taxes</li> </ol>



EXPANSION IN SUPPLY	INCREASE IN SUPPLY	CONTRACTION IN SUPPLY	DECREASE IN SUPPLY
1. When there is rise in supply due to rise in Price of its own.	1. When rise in supply due to fall in price of inputs, rise in price of related Goods, Increase in Excise duty, Up gradation in technology etc.	1. When there is fall in supply due to fall in Price of its own.	1. When decrease in supply due to De gradation in Technology, Rise in Price of Inputs, Increase in Excise Duty or tax ,Rise in the Price of Related Goods etc.



2. In this situation producer move upward on the same demand curve.	2. In this situation supply curve shift rightward.	2. In this situation consumer move downward on the same supply curve.	2. In this situation supply curve shift leftward.
3. Law of supply is applicable	3. Law of supply is not applicable.	3. Law of supply is applicable	3. Law of supply is not applicable.
4. More is supplied at more prices other things being equal.	4. More is supplied at same price and same is supplied at fewer prices.	4. Less is supplied at less prices other things being equal.	4. Less is supplied at same price and same is supplied at more prices.
5. It is known as "Change in Quantity Supplied"	5. It is known as "Change in Supply"	5. It is known as "Change in Quantity supplied"	5. It is known as "Change in supply"
			

**15. Differences between Returns to factor & returns to scale.**

<b>RETURNS TO FACTORS</b>	<b>RETURNS TO SCALE</b>
A change in total product caused by change in the quantity of only one variable factor.	A change in total product due to simultaneous & proportionate changes in the quantity of all factors.
It is short run production function.	It is long run production function.
Production can be changed only up to level of production by changing variable production.	Production can be changed by changing scale or changing all inputs simultaneously.
Factor proportion keeps changing.	All factors are increased proportionately.

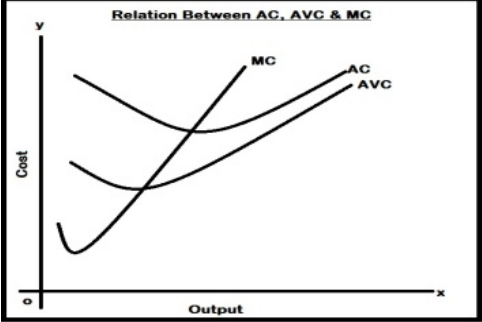
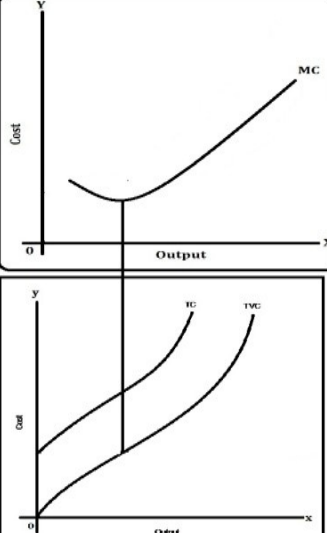
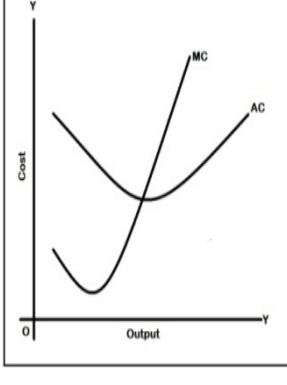
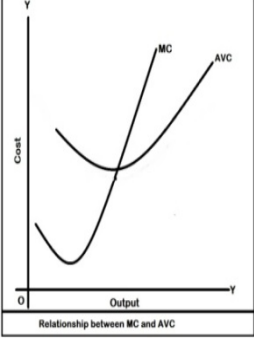
**16. Reasons behind the phases of Increasing Returns to a Factor, Diminishing Returns to a Factor and Negative Returns to a Factor.**

<b>INCREASING RETURN TO FACTORS</b>	<b>DIMINISHING RETURNS TO FACTORS</b>	<b>NEGATIVE RETURNS TO FACTORS</b>
1. Better utilization of underutilized fixed factors. 2. Labour division benefits. 3. Efficient use / utilization of variable factor. 4. Better coordination	1. Inadequate factor proportion. 2. Optimum combination. 3. Imperfect substitution of factors 4. Poor Coordination 5. Over utilization ( F. Factor)	1. Fixity of Fixed Factors. 2. Defective factor ratio 3. Overcrowding of Variable Factors.

**17. Explain the relationship between different cost concepts.**

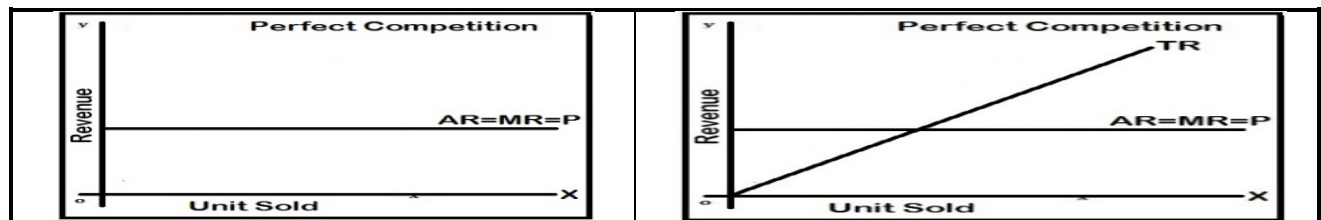
**Relationship between Total Cost (TC), Total Fixed Cost (TFC) and Marginal Cost (MC)**

- 1- TC and TVC are inversely S shaped because they initially rise at the decreasing rate, then at the constant rate and finally at the increasing rate.
- 2- At zero level of output there is no variable cost, so TC=TFC
- 3- TC and TVC are parallel to each other and the vertical distance between them is TFC which remains fixed.

<b>Relation Ship Between (AC), (AVC) and (MC)</b>	<b>Relationship between Total Cost (TC) and Marginal Cost (MC)</b>	<b>Relationship between Average Cost (AC) and Marginal Cost (MC)</b>	<b>Relationship between Average Variable Cost (AVC) and Marginal Cost (MC)</b>
<p>1-When AC and AVC declines, MC declines faster than AC and AVC. So that MC curve Remain below AC curve and AVC curve.</p> <p>2-When AVC increases, MC increases faster than AVC. So that MC is above AVC curve.</p> <p>3-When AC increases, MC increases faster than AC. So that MC is above AC curve.</p> <p>4-Since MC declines faster than AC and AVC its reaches its lowest point earlier than AC and AVC. So that MC starts rising even AC and AVC is falling.</p> <p>5-MC must cut AC and AVC from its lowest point.</p>	<p>1-When MC is falling, TC/TVC increases at a diminishing rate.</p> <p>2-When MC is minimum, TC/TVC stops increasing at a diminishing rate.</p> <p>3-When MC is rising, TC/TVC increases at an increasing rate.</p>	<p>1-Both are calculated from TC.</p> <p>2-When AC falls, MC is less than AC.</p> <p>3 - When MC = AC, AC is minimum.</p> <p>4- When AC increases, MC is greater than AC.</p> <p>5- MC curve cuts AC curve from below.</p> <p>6- Minimum point of MC comes before minimum point of AC</p>	<p>1-When MC curve lies below AVC curve, AVC decreases.</p> <p>2-When MC curve lies above AVC curve, AVC increases.</p> <p>3-MC curve intersect AVC at its minimum point.</p> <p>4-The lowest point of MC comes before the lowest point of AVC.</p>
			

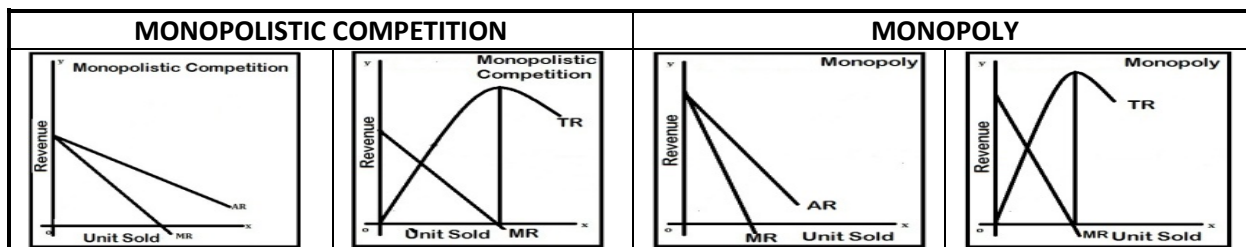
**18. Explain relationship between different revenue concepts in different markets.**

**RELATIONSHIP BETWEEN AR AND MR**(when price remains constant or perfect competition) - Under perfect competition, the sellers are price takers. Single price prevails in the Market. Since all the goods are homogeneous and are sold at the same price  $AR = MR$ . As a Result AR and MR curve will be horizontal straight line parallel to OX axis. (When price is constant or perfect competition)



**RELATIONSHIP BETWEEN TR AND MR**(When price remains constant or in perfect competition) - When there exists single price, the seller can sell any quantity at that price, the total revenue increases at a constant rate (MR is horizontal to X axis and TR is straight line curve showing constant increase).

**RELATIONSHIP BETWEEN AR AND MR UNDER MONOPOLY AND MONOPOLISTIC COMPETITION** -(Price changes or under imperfect competition) -\* AR and MR curves will be downward sloping in both the market forms. \*AR lies above MR. \* AR can never be negative. \* AR curve is less elastic in monopoly market form because of no substitutes. \*AR curve is more elastic in monopolistic market because of the presence of substitutes.



**RELATIONSHIP BETWEEN TR AND MR** -(When price falls with the increase in sale of output) - Under imperfect market AR will be downward sloping – which shows that more units can be sold only at a less price. \* MR falls with every fall in AR / price and lies below AR curve. \* TR increases as long as MR is positive. \* TR falls when MR is negative. \* TR will be maximum when MR is zero.

**19. Explain producer's equilibrium with MR = MC approach.**

**PRODUCER'S EQUILIBRIUM : MC=MR APPROACH**

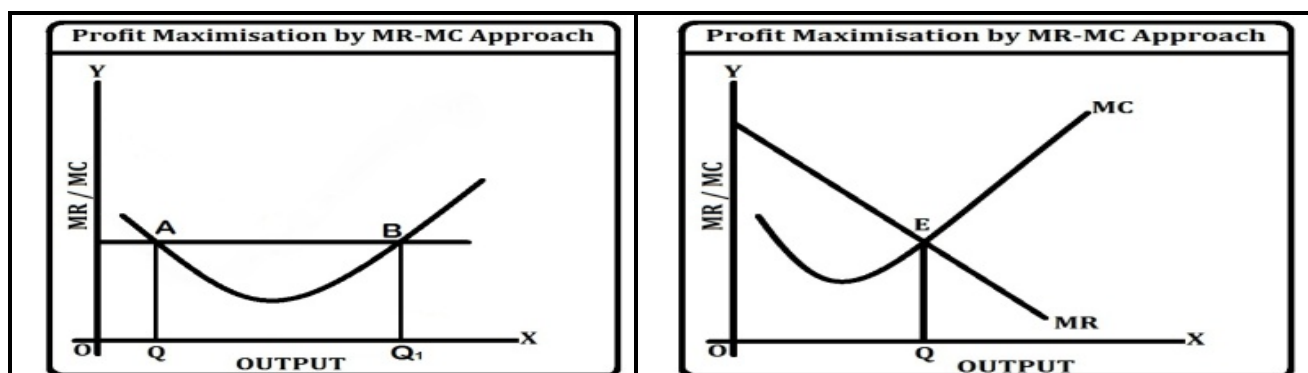
Producer's equilibrium refers to the level of output of a commodity which gives the maximum profit to the producer of the commodity.

**MC= MR approach** -MC= MR approach is another way of identifying producer's equilibrium. The two condition of MC= MR approach become.

(i)  $MC = MR$ ; (ii)  $MC$  is greater than  $MR$  after the  $MC = MR$  output level.

**(i)  $MC = MR$**  – Profit is maximum a level of output where  $MR = MC$ . A producer will not be in equilibrium if  $MR > MC$  or  $MC > MR$ .

(ii)  $MC$  should be rising or  $MC > MR$  after equilibrium or  $MC$  cuts  $MR$  from below.



Note that the first condition ( $MC = MR$ ) is satisfied both at A and B. But the second condition –  $MC$  Curve intersects  $MR$  curve from below – is satisfied only at B. After B,  $MC$  becomes greater than  $MR$ . Then the equilibrium output level is  $OQ_1$ . When a producer can sell more only by lowering the price, the  $MR$  curve is downward sloping. The typical  $MC$  curve is U-shaped.

**20. Differentiate between market forms on the basis of no. of buyers & sellers, control over price, selling cost, product, knowledge about market, entry & exit & shape of demand curve.**

## **PERFECT COMPETITION**

It refers to the market situation in which there are large no of buyers and sellers of homogenous product. Price is determined by the industry and only one price prevails in the market. Example – Agricultural Product Market

**1. VERY LARGE NO OF BUYERS AND SELLERS** - (I) As there are large number of sellers' individual seller cannot influence market supply or price. Similarly one buyer cannot affect market demand or price. (II) *Firms become price takers* as they have to accept the equilibrium price that market demand & supply decide. So market or industry is price maker. (III) Due to large number of buyers firm can sell any amount of good at equilibrium price. Hence they have perfectly elastic, horizontal Average Revenue (AR) curve.

**2. HOMOGENEOUS PRODUCT** -Perfect competition market has homogenous goods which are same in shape, size, colour, price etc. (I) So it is easy for new firms to enter into and exit from the market. (II) There is no selling cost as there is no need for advertising the good. (III) So one firm cannot effect price market decides the price.

**3. FREE ENTRY AND EXIT** -If in Short Run there are abnormal profit firms will enter the market & if there are abnormal losses firms will exit the market. Hence in the Long run firms will earn Normal Profits.

**4. PERFECT KNOWLEDGE** -Buyers as well as sellers have complete knowledge of the product.

**5. PERFECT MOBILITY OF FACTORS OF PRODUCTION** -There is no geographical restriction on their movement. The factors are free to move to the industry in which they get the best price.

**6. ABSENCE OF SELLING COST** - No advertisement or selling cost is involved because of homogeneous product.

**7. BSENCE OF TRANSPORTATION COST** -No transportation cost is involved in market because sellers and buyers have the perfect knowledge about the market.

**PURE COMPETITION**- Pure competition is the one which has following features – **1.** Large no of buyers and sellers; **2.** Homogeneous Product; **3.** Free from restriction.

## **MONOPOLISTIC COMPETITION**

It refers to a market situation in which there are large no of firms which sell differentiated products. Market of product like textiles, soap, toothpaste, TV etc. examples of Monopolistic Competition Market.

**1. LARGE NO OF BUYERS AND SELLERS** -Large no of firms are selling closely related, but not the homogeneous product. Each firm has a limited control over the supply in market. Large no of firm's leads to competition in the market. There are large numbers of buyers who have choices to buy from a variety of goods.

**2. DIFFERENTIATED GOODS** -Differentiated goods are different in shape, size, colour, packaging etc. there are large number of firms selling goods which are close substitutes. The product of one firm is different from that of other firm only in colour, size, shape, packaging, branding, advertising etc; this is known as Product differentiation.

Because of product differentiation, each firm can decide its price but it has to keep price of competitors in mind. So each firm is price maker but it has a partial control over price of its product.

**3. FREE ENTRY AND EXIT** -in Short Run there is abnormal profit firms will enter the market & if there are abnormal losses firms will exit the market. Hence in the Long run firms will earn Normal Profits. It must be noted that entry under this is not as easy and free as under perfect competition. New firms can enter to the market by adding new feature in their product.

**4. PRICE POLICY** – A monopolistic is neither price taker nor a price maker. It is able to exercise partial control over price by bringing differentiation in the product, a firm is in a position to influence price.

**4. LACK OF PERFECT KNOWLEDGE** -Buyers as well as sellers do not have complete knowledge of the product. Buyer's preferences are guided by advertisement and sellers decision depend on market condition.

**5. NON-PRICE COMPETITION** - Firms compete with each other on the basis of offering free gifts, extra product etc. different features in good and not on the basis of prices.

**6. SELLING COST** – It refers to the expenses incurred on marketing, sales promotion and advertisement of the product. It is high.

## MONOPOLY

It is a market situation in which there is a single seller producer of a commodity with no close substitutes. The whole market is under his control and firm and industry is same. Example – railway.

**1. SINGLE SELELRS AND LARGE NO OF BUYERS** –The single seller is performs all the functions of industry. But large no of buyers of the product. There is no difference between firms and industry in this market; this gives an arbitrary power to the monopolist to make all important decision. Absence of other sellers also implies that the market lacks competition.

**2. UNIQUE PRODUCT WITHOUT CLOSE SUBSTITUTE PRODUCT** –Absence of close substitute gives significant power to the monopolist to exercise substantial control over market price and supply. This is the reason that demand is inelastic.

**3. RESTRICTION ON THE ENTRY OF NEW FIRMS** –Due to restricted entry, a monopolist enjoys super normal profit in the long run.

**4. FULL CONTROLL OVER PRICE** –Monopolist is a price maker. He decides the price by himself. But it doesn't mean that he has unlimited power because he only controls the price and not to the demand. He has to reduce the price to attract more buyers.

**5. PRICE DISCRIMINATION** –In monopoly market firms sell same good at different prices in different markets, to different groups and at different places. This is called Price discrimination. There are three types -

PRICE DISCRIMINATION								
PERSON			PLACE		USE			
RAILWAY – CHARGE DIFFERENT FARE			ELECTRICITY		ELECTRICITY – DIFFERENT PRICE FOR			
<div style="border: 1px solid black; width: 100%; height: 10px; margin-bottom: 5px;"></div>			<div style="border: 1px solid black; width: 100%; height: 10px; margin-bottom: 5px;"></div>		<div style="border: 1px solid black; width: 100%; height: 10px; margin-bottom: 5px;"></div>			
S. CITIZEN	ADULT	CHILD	RURAL	URBAN	HOUSEHOLD	INDUSTRIAL	AGRICULTURAL	

## OLIGOPOLY MARKET

It is that form of market where there are few sellers and the price output policy of one seller does affect the price and output policy of the other seller. Product may be homogeneous or close substitute.

**1. FEW FIRMS AND LARGE NO OF BUYERS** - There are few sellers of the commodity and each seller a substantial portion of the output of the industry. The number of firm is so small that each seller knows that he can influence the price by his own action and that he can provoke rival firms to react.

**2. RESTRICTION ON THE ENTRY** -There is few firms and new firms cannot easily enter in industry because of many reasons like high capital requirement, patent etc. So that few existing firm earn abnormal profit.

**3. INTER-DEPENDANCE BETWEEN FIRMS** – In this market the price and the output decision of a particular firm are dependent on the price and output decision of other firms. It implies that no firm can fix its output and price without considering the probable rival reactions. Normally group behavior is observed in the form of collective decision and mutual cooperation by the firms.

**4. NON-PRICE COMPETITION** - The firms are afraid of competition through lowering the price because it may start price war. Therefore they compete through the non price factors like advertising, after sales service etc. This feature has an important implication that an oligopolistic firm fixes its price and output decision after taking in to consideration the probable rival reactions.

**5. SELLING COST** – It refers to the expenses incurred on marketing, sales promotion and advertisement of the product. It is very huge in this market.

**6. PRICE RIGIDITY** – Firms are unwilling to change prices. Price remains fixed irrespective of changes in demand and supply conditions. There is price rigidity due to fear of retaliatory action by rival firms.

**21. What are the reasons for emergence of monopoly?**

**EMERGENCE OF MONOPOLY**

**Patent Right** -Patent rights are the authority given by the government to a particular firm to produce a particular product for a specific time period.

**Cartel** -Cartel refers to a collective decision taken by a group of firms to avoid outside competition and securing monopoly right.

**Government licensing** -Government provides the license to a particular firm to produce a particular commodity exclusively.

**Control in Resources** -Monopoly sometimes occurs due to substantial control over certain resources required in the production.

**22. Differentiate between Collusive & non collusive oligopoly & Perfect & differentiated oligopoly.**

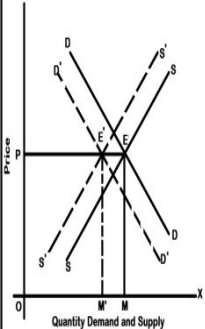
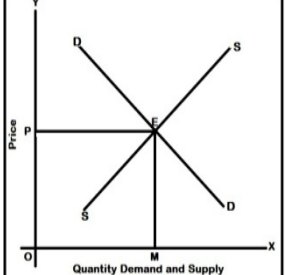
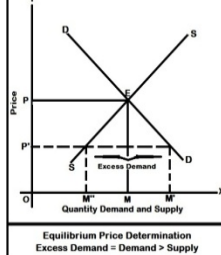
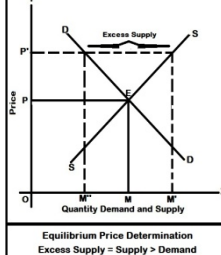
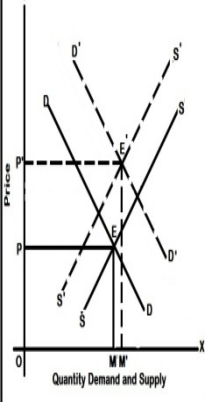
**Perfect or Pure Oligopoly** - If firms are producing homogeneous product – Steel, Cement.

**Imperfect or Differentiated Oligopoly** - If firms are producing differentiated product – Automobile.

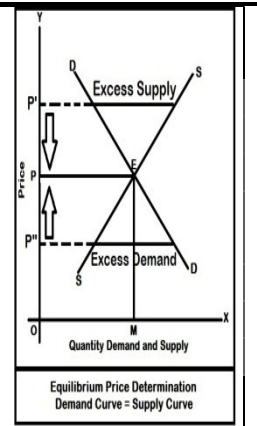
**Collusive or Cooperative Oligopoly** – When firms are agrees to avoid competition and cooperate with each other in determining price and output.

**Non-collusive or non-cooperative Oligopoly** – When each firm follows its price and output policy independent of rival firms and firms are compete with each other and there is cut throat competition. Each firm tries to increase its market share.

**23. Chain reaction of excess demand & excess supply situations.**

PRICE DETERMINATION	EXCESS DEMAND	EXCESS SUPPLY	HOW TO WRITE EXPLANATION OF CHANGE IN DEMAND AND SUPPLY	
<p>In a market price of a commodity is decided by the free sources of demand and supply. These free forces of demand and supply act and react in such a manner that the quantity demanded is exactly equal to quantity supplied. In this course price is known as the equilibrium price. Intersection of market demand and market supply curves decides the price of a product.</p>	<p>When Excess Demand in the market at a given price, the competition among the buyers to purchase the required quantity. Hence they start offering higher prices. With rising market prices, demand contracts and supply expands. This market adjustment continues till the market reaches equilibrium.</p>	<p>When Excess Supply in the market at a given price, the competition among the sellers to dispose-of their output. Hence, they start offering lower prices. With fall in the market prices, demand expands and supply contracts. This market adjustment continues till the market reaches equilibrium.</p>	<p>Initial Demand Curve = D D                      Initial Supply Curve = S S                      Initial Equilibrium = E                      Equilibrium Price = OP                      Equilibrium Quantity = OM                      When Demand and Supply Change simultaneously –                      (D↓=S↓) (D↑&gt;S↓)                      New Demand Curve = D' D'                      New Supply Curve = S' S'                      New Equilibrium = E'                      New Equilibrium Price = OP'                      New Equilibrium Quantity = OM'</p>	 <p>Decrease in Demand = Decrease in Supply</p>
 <p>Equilibrium Price Determination Demand Curve = Supply Curve</p>	 <p>Equilibrium Price Determination Excess Demand = Demand &gt; Supply</p>	 <p>Equilibrium Price Determination Excess Supply = Supply &gt; Demand</p>	<p><b>RESULT – (D↓=S↓)</b>                      Change in Equilibrium Price = No change - OP                      Change in Equilibrium Quantity= Decreases from OM to OM'  <b>RESULT – (D↑&gt;S↓)</b>                      Change in Equilibrium Price = Increases from OP to OP'                      Change in Equilibrium Quantity= Increases from OM to OM'</p>	 <p>Increase in Demand &gt; Decrease in Supply</p>

PRICE	Q. DEMAND	Q. SUPPLY	
8	2	8	<b>EXCESS SUPPLY</b> -Competition among the sellers to dispose-of their output. Hence, they start offering lower prices. With fall in the market prices, demand expands and supply contracts. This market adjustment continues till the market reaches equilibrium.
7	3	7	
6	4	6	
5	5	5	<b>EQUILIBRIUM – NO CHANGE REQUIRED – CHAIN EFFECT OF EXCESS DEMAND AND EXCESS SUPPLY</b>
4	6	4	<b>EXCESS DEMAND</b> -Competition among the buyers to purchase the required quantity. Hence they start offering higher prices. With rising market prices, demand contracts and supply expands. This market adjustment continues till the market reaches equilibrium.
3	7	3	
2	8	2	
1	9	1	



**24. Explain Price ceiling & price floor concept.**

<b>PRICE CEILING</b>		<b>PRICE FLOOR</b>	
<p>It is the maximum price for a good which a producer can legally charge in the market. It is generally fixed below the equilibrium price. It protects the interest of consumers. It leads to malpractices on part of producers such as hoardings i.e. creating artificial scarcity or black marketing. Govt. has administered price of various essential goods by fixing a ceiling on their prices.</p>	<p>Equilibrium Price Determination Excess Demand = Demand &gt; Supply</p>	<p>It's a minimum price guaranteed by the government for a good to the producers at which they can sell their product to the government. It generally fixed above the equilibrium price. It protects the interest of producers (especially farmers). It requires the government to maintain buffer stocks of basic food grains. Govt. also administers price of various agricultural goods by giving a support price to the farmers so that at least they get the cost of production.</p>	<p>Equilibrium Price Determination Excess Supply = Supply &gt; Demand</p>

**Contact if you have any doubt**

**Dr. Asad Ahmad**

**PGT Economics**

**K V IIM Campus, Lucknow**

**Lucknow Region**

**09451927636, 08770981320, 08889341805(W)**

**Facebook page - @madeeconomicseasy**

**Blog – drahmadasad.blogspot.com**

**For more videos, please visit**

**You tube channel – Dr. Asad Ahmad**