

(030)

ECONOMICS CLASS-XIISECTION-A(MICROECONOMICS)

Answer-1)

According to the question,

TR earned by selling 20 units = Rs 700

MR earned by selling 21 units = ₹70

TR earned by selling 21 units = ?

⇒ We know that

$$MR = TR_n - TR_{n-1}$$

(Here  $n = 21$  units)

$$70 = TR_n - 700$$

$$TR_n = 70 + 700$$

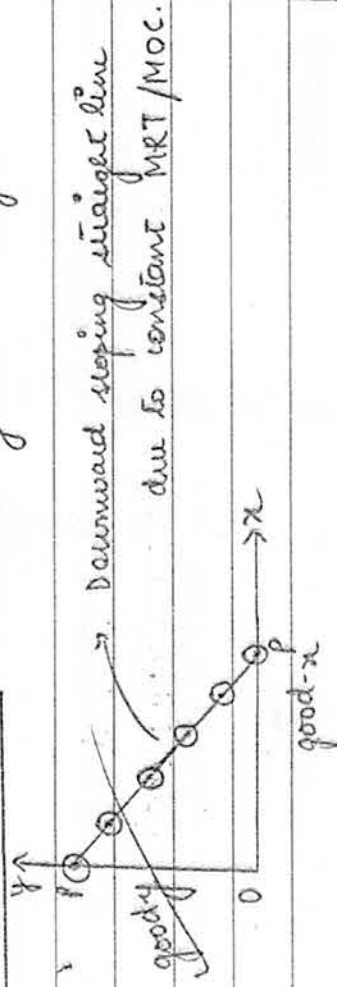
$$= ₹770$$

Therefore the answer will be (c) ₹770.

Answer-2)

The Marginal Rate of Transformation is constant. The Production

Possibility Curve, so formed would be a downward sloping straight line touching both the axis and not touching to the origin.

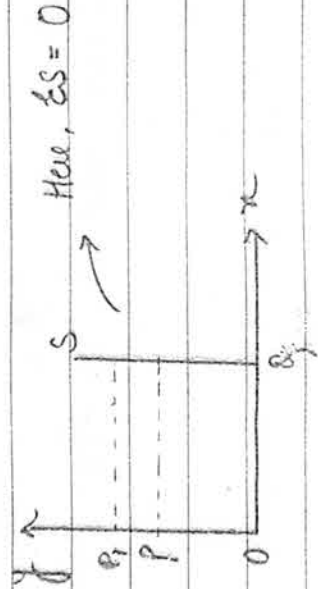


Answer-3)

for a firm to be in equilibrium, Marginal Revenue (MR) and Marginal Cost (MC) must be equal and beyond that level of output Marginal cost must be rising.

Answer-4)

(a) Perfectly Inelastic Supply



Answer-5

i) It is the which depends on what

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iv) Statements

be verified

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Example-

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### Ques-5)

#### Positive economics

i) It is that branch of economics which deals with questions such as 'what is?', 'how it is' etc.

ii)

It does not pass value judgement.

iii)

It is based on real and

scientific facts.

iv)

It is descriptive in nature

v)

Statements of positive economics can be verified and tested using scientific methods.

Example - Poverty rate in India is increasing at a considerable rate as compared to last decade.

#### Normative economics

It is that branch of economics which deals with questions such as 'what ought to be?'.  
It passes value judgement.

It is based on opinions.

It is prescriptive / suggestive in nature.

Statements of normative economics cannot be tested using scientific methods.

Example - Government should initiate policies for reducing the level of unemployment in the country.

Answer- 6)

### Law of Diminishing Marginal Utility

Introduction - It was given by a German economist Gossen. That is why it is also known as 'Gossen's First Law of Consumption'.

Meaning - The Law of Diminishing Marginal Utility states that as the consumer increases the consumption of units of a commodity, the marginal utility derived from it goes on falling (diminishing).

Assumptions -

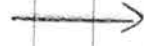
- i) Continuous consumption of commodity.
- ii) Cardinal Measurement of Utility
- iii) Standard unit of measurement
- iv) Marginal Utility of Money ( $MU_m$ ) remains constant.

Explainate

Units

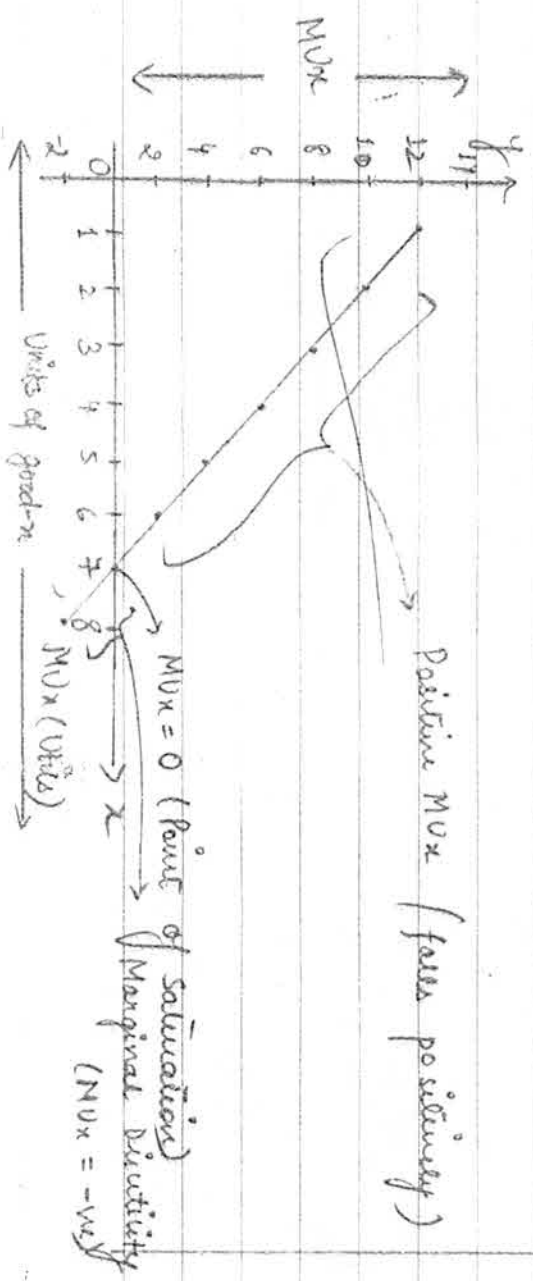


$MU_x$



Explanation with the help of Schedule and Diagram

Units of commodity	MUX	Conditions
1	12	Positive MUX But MU decreases falls with every additional unit
2	10	
3	8	
4	6	
5	4	
6	2	MUX = 0 (Point of Saturation) } Negative MUX (Marginal Disutility)
7	0	
8	-2	





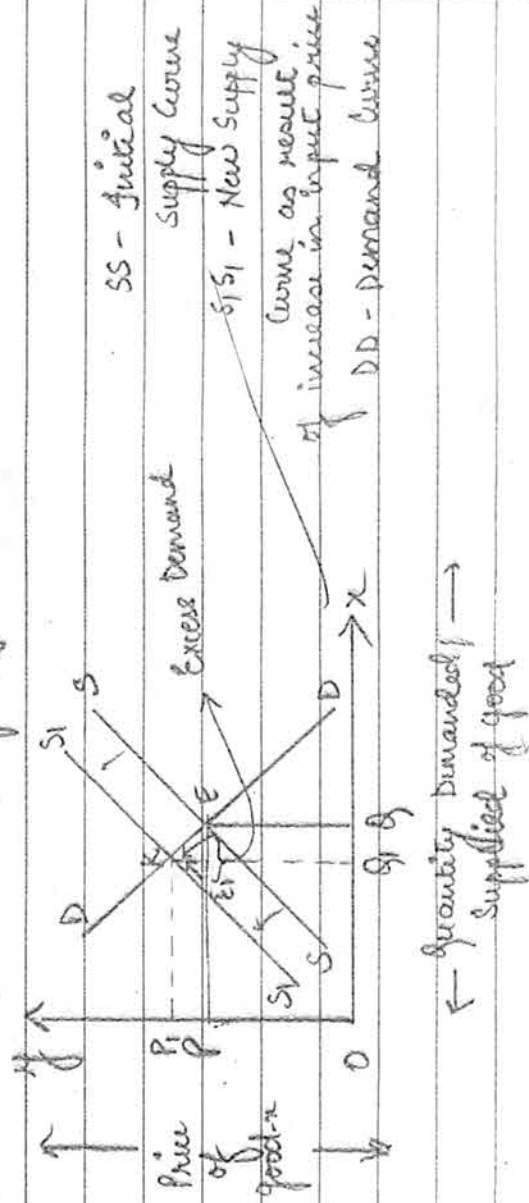
Thus, Marginal Utility declined decreases with every additional unit consumed.

Answer - 7)

Given: Market of a good is in equilibrium

Condition: There is increase in input price, keeping other factors constant.

Explanation with the help of diagram



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→ As per the question, the market for the good is in equilibrium.

DD - Demand curve and SS - Supply curve intersect at point E.  
(point of equilibrium).

→  $OP = \text{Equilibrium Price}$

$OQ = \text{Equilibrium Quantity}$

→ As a result of increase in input price, the cost of production will rise. Because the cost of production will rise, therefore the supply will decrease (leftward shift in supply curve as other factors are constant).

→ Since supply reduces, therefore at existing price  $OP$ , demand =  $PE$  and supply =  $ES$ , thereby creating a situation of Excess Demand.

→ Due to pressure of excess demand, price of the good rises from  $OP$  to  $OR$  and as a result of increase in price, two forces will operate → i) Extension of supply from  $E$  to  $K$ .  
ii) contraction of demand from  $E$  to  $R$ .

→ This process will continue till excess demand is eliminated and

$K$  will be the new equilibrium point.

As a result, New equilibrium Price =  $OR$  (price increases from  $OP$  to  $OR$ )

New equilibrium Quantity =  $OQ$  (quantity decreases from  $OQ$  to  $OQ_1$ ).

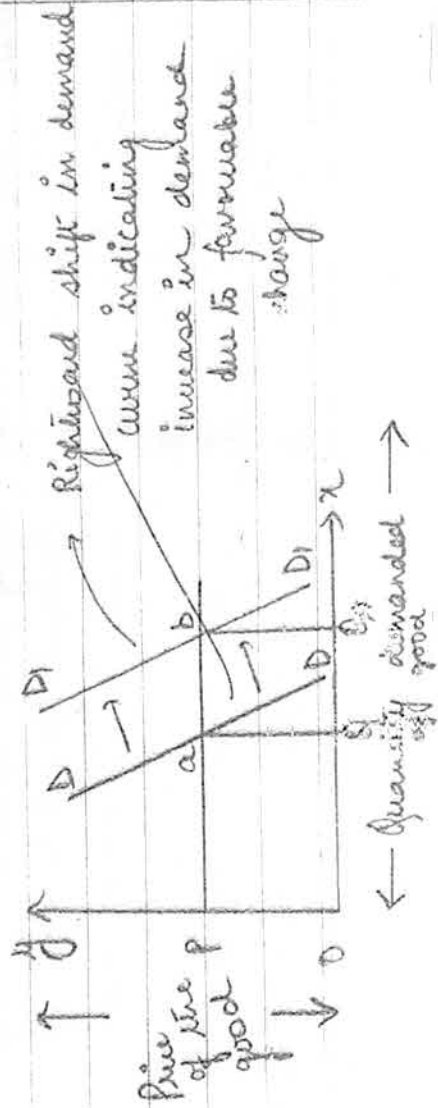
Thus due to increase in input price, equilibrium price rises and the equilibrium quantity falls, keeping other factors constant.

Answer-3)

How would — — — — — diagram.

According to the question, there is change in taste and preference of the consumers in favour of the commodity. Therefore, due to a favourable change in taste and preference of the consumers and keeping factors such as price of the good and price of related goods constant, there will be an increase in demand.

The demand curve will shift rightward due to favourable change.



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As for the situation, the initial demand curve is  $D_0$ .

Keeping other factors such as price of good constant the price remains  $OP$ .  $OQ$  is initial quantity demanded.

When there is favourable change in taste and preference, (other factors constant), it will shift rightward.

The demand curve thus shifts from  $D_0$  to  $D_1$  and at the same price  $OP$ , the new quantity demanded now becomes  $OQ_1$ .

Therefore, there has been an increase in demand.

Answer-9)

Firm's Equilibrium under Perfect Competition

Perfect Competition Market - A Perfect Competition Market refers to that market where there are large no. of buyers and sellers, the sellers sell a homogeneous product and there is freedom of entry and exit to different firms.

Producers

Producers

Producers' Equilibrium - Producers' Equilibrium refers to a situation

when the producer maximises his profit (the firm is able to

achieve the maximum level of profit.

~~It is a situation when~~ It is a situation when he is able to sell more of his produce and also attain profit, i.e.

Actual stock of producer = Required stock of producer.

Conditions for Producer's Equilibrium

- i) The Marginal Revenue should be equal to Marginal Cost ( $MR=MC$ )
- ii) MC should be rising (after equilibrium level).

Explanation with the help of Schedule

Units	MR (Price)	MC
1	12	15
2	12	12
3	12	10
4	12	9
5	12	8
6	12	7
7	12	8

As it is a perfect competition market, price is constant, thereby meaning  $AR = MR = P$ .

Thus MP is constant and is equal to the Uniform Price.

Thus we find that

→

At 20

But,

→

At 100

Also, at 15 at 1

Therefore, competition

8	12	9
9	12	10
10	12	12
11	12	15

Thus we can find that, at two levels, we have the first condition ( $MR=MC$ ).

→ at 9th unit of output,  $MR=MC$  ( $12=12$ )

but we can see that  $MC$  falls after this point.

→ at 10th unit of output,  $MR=MC$  ( $12=12$ )

Also, at this level  $MC$  is rising as it rises from 12 to 15 at 11th unit of output.

Therefore, the equilibrium situation for a firm under perfect competition will be at 10th level of output.

Ques - 10)

a) Non Price Competition.

An Oligopoly Market is a market where there are a few big firms and large number of buyers. There is barrier to the entry and exit of firms and they enjoy partial control over price.

Since in a oligopoly market, there are few firms therefore each has a partial control and high interdependence between the firms. Because the price output policy of one firm highly affects the other firms, firms engaged in Non Price Competition.

Non-Price Competition refers to the situation where there is no change in price of goods but firms engage in advertising their product, they use methods like sponsorship of their product by celebrities, they associate themselves with well known people, contribute funds for big events.

Also, they try to establish a BRAND LOYALTY.

They are engaged in promotion of their product by using

Methods  
→ They as believe.  
Sponsorship

(b) Few:

An Oligopoly  
few big  
Example -

Maruti  
INDICATO

→ A few  
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firms and  
also few  
and they

methods other than control over price.

→ They are against aggressive price competition and rather believe in increasing their sale through advertisements, sponsorships.

## (b) Few Sellers

An Oligopoly Market is a market which consists of a few big firms and large number of buyers.

Example - few big automobile firms such as Toyota, Ford, Maruti dominate the automobile industry.

### IMPLICATION -

→ A few sellers in the market means that the firms enjoy a partial control over price and their price-output policy impacts the other firms.

→ It means that more can influence the price as a whole because there is a high degree of interdependence due to less firms and they plan their policies in relation to that of others.

→ Also few sellers indicates partial monopoly in the market and they can also form cartels for maximum output.



at minimum cost. Presence of few sellers indicates presence of cut-throat competition between firms and the need of measures like non-price competition.

Answer-11)

(a) The Law of Variable Proportions consists of <sup>three</sup> ~~the~~ <sup>main</sup> stages -  
 Increasing Returns to Factor and Diminishing Returns to Factor.  
 Increasing Returns to Factor refers to the first stage of Law of Variable Proportion when the Marginal Product increases positively as a result of which the Total Product also increases at an increasing rate.

MP increases  $\rightarrow$  TP increases at increasing rate  
 This occurs due to better coordination between factors, fuller utilisation of fixed factor and Division of Labour and Improvement in Efficiency.

(b) Decreasing Returns to a factor  
 This refers to the second stage of Law of Variable

Proportion when MP starts falling positively and due to this TP increases at a diminishing rate. When MP becomes zero, the Total Product becomes maximum and decreases afterwards.

MP falls positively  $\rightarrow$  TP increases at diminishing rate

Reasons-

(i) fixity of the <sup>fixed</sup> factor

$\rightarrow$  Since one factor is fixed and the variable factor is increased to get increasing returns from the output, there comes a situation when the fixed factor suffers from wear and tear, it is exhausted and cannot be used further. This leads to diminishing returns.

Example - Land as a fixed factor and labour as variable factor used in the production.

(ii)

Coordination Between factors

$\rightarrow$  Since one factor is fixed and the other is variable which is increased to get returns, there is disturbance in the ideal factor ratio. The fixed factor suffers from imperfect

factor substitutability and since it cannot be retired more further, there is lack of coordination between the two leading to decrease in output.

The two factors do not correspond together after some time and since no substitute for fixed factor, even increase in variable factor fails to achieve increasing returns.

Answer - 12)

Law of Equi-Marginal Utility

→ This law is seen and applied in the case of consumer's equilibrium when there are several commodities.

According to law of Equi-Marginal Utility, the ratio between the Marginal Utility of two commodities to their prices becomes equal to the  $MU_m$  or to each other.

According to this they can be expressed as:-

$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y} = MU_m$$

Consumer's equilibrium refers to the situation when the consumer spends his money income in such a way that gives him maximum satisfaction.

$$\text{Condition for equilibrium} - \frac{MU_x}{P_x} = \frac{MU_y}{P_y}$$

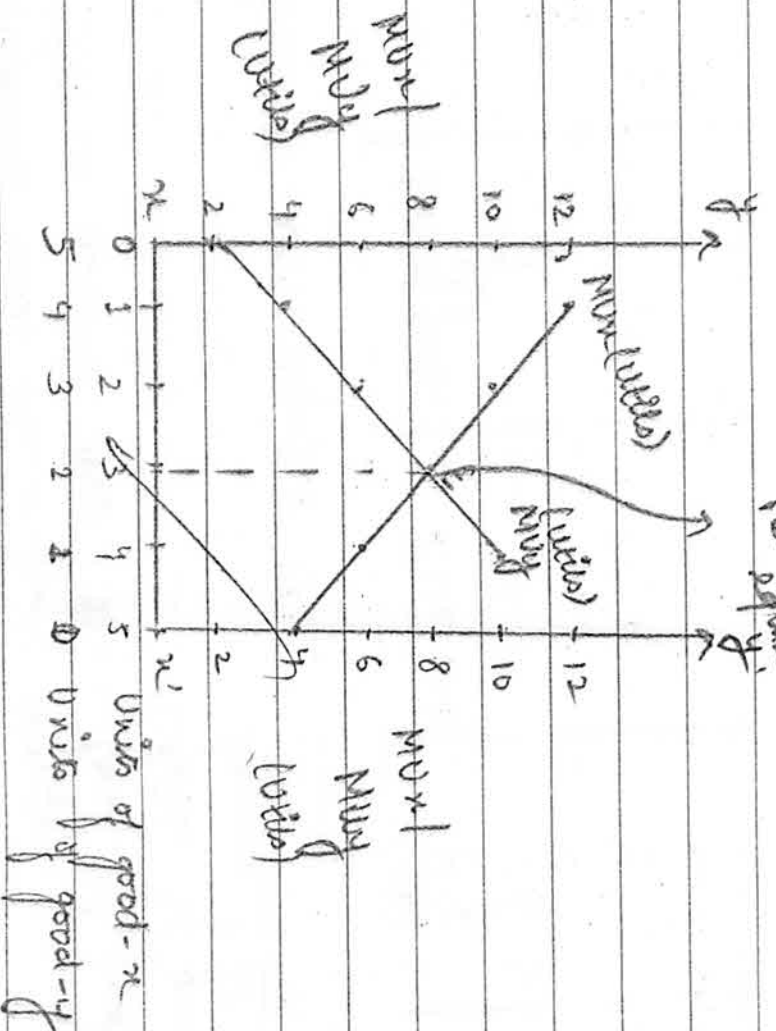
Explanation with the help of example  
Let us assume that the

Price of good-x = Rs 1  
Price of good-y = Rs 1  
Income of consumer = Rs 5

Thus, MU can be depicted as:

Units of goods	MU <sub>x</sub> (utils)	(Utility) MU <sub>y</sub>
1	12 (1)	10 (2)
2	10 (3)	8 (4)
3	8 (5)	6
4	6	4
5	4	2

Point of equilibrium

Conclusion:

Maximum satisfaction = 48 utils

$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y} \quad \text{as} \quad \frac{8}{1} = \frac{8}{1} \Rightarrow 8.$$

Consumer is rational, aims to get maximum satisfaction



## Section B (Macroeconomics)

21

Answer-13)

(i) (d) fiscal Deficit is equal to Interest Payments

Answer-14)

(a) Reduce Cash Reserve Ratio

Answer-15)

Indirect Tax

→ An Indirect Tax refers to that tax whose burden can be shifted on another person. It is imposed on one person but is paid by somebody else as it shifts from person to person.

→ Example - Value Added to goods during production or taxes imposed in between leads to final burden on the consumer.

→ Example of Indirect Tax - GST

Answer-16)

→ Money Multiplier refers to the reciprocal of the Reserve Requirement kept by the Commercial Banks.  
It is also known as Credit Multiplier.

$$\text{Money Multiplier} = \frac{1}{RR} \quad (\text{Reserve Requirement})$$

It is the no. of times by which credit creation is increased.

Answer-17)

Given:  $MPC = 0.8$

$\Delta I = 1000$  or

To calculate:  $\Delta Y = ?$

⇒

We know that,  $K = \frac{1}{1-MPC}$

$$\text{or } K = \frac{1}{1-0.8} = \frac{1}{0.2}$$

$$= \frac{10}{2} = 5 \quad \therefore K = 5$$

We also know that  $K = \frac{\text{Change in Income}}{\text{Change in Investment}}$

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

Putting values we get,  $5 = \frac{\Delta Y}{1000}$

$$\text{(Change in Income)} \Delta Y = \frac{5 \times 1000}{1} = \Delta Y$$

or

Answer-18)

→ Under Keynesian theory of employment, in an economy we know that Excess Demand refers to the excess of AD over ~~AS~~ Required AD. It is the situation when the aggregate expenditure over the goods and services is more than the expected AD aggregate supply of goods and services produced in an economy corresponding to full employment in the economy.

~~When AD > AS~~ → ~~Excess Demand~~

~~Excess Demand~~ ⇒ ~~When Actual AD~~ > ~~Required AD~~



decrease its private final consumption expenditure.

→ There is also a reduction in subsidies provided and RBG also brings changes in its monetary policy.

Answer - 19)

(a) Financial help will be considered Revenue Receipt because these receipts will neither create any liability for the government nor they will cause a reduction in its assets. The financial help will only improve the situation of the bonded area.

(b) Sale of shares of a PSU to private company will be Capital Receipt because this talks about Disinvestment (selling of public shares to private) and Disinvestment is a Capital receipt because it reduces the assets of the government.

(c) There will be considered Revenue Receipts because RBI does the payment of dividend to govt. and it will



neither create any liability on the govt. nor reduce its assets. It can be taken as a part of non-tax receipts to the Government.

(sol) Borrowings are Capital Receipts because these impose a liability on the government to pay them back at some time in future. Therefore because they affect the liability status they are considered Capital receipts.

Answer - (24)

To find:  $GDCF = ?$ , Operating Surplus = ?  
It is given that  $NI = 22,100$  cr.

We know that by Expenditure Method,

$$GDP_{MP} = PFCF + GFCF + GDCF + (X-M)$$

So we will convert  $NI$  into  $GDP_{MP}$  and then find  $GDCF$ .

$$NNP_{FC} = 22,100 \text{ cr}$$

$$NNP_{MP} = NNP_{FC} + NIT$$

$$= 22,100 + 700 = 22,800 \text{ cr.}$$

New,  $GNI_{MP} = NNP_{MP} + \text{Depreciation}$

$$\text{So, } GNI_{MP} = 22800 + 500 \\ = 23300 \text{ cr.}$$

New, for  $GDP_{MP}$ , we will subtract the NFI from abroad. Since it is income from abroad, it will

$$\text{be } \rightarrow GNI_{MP} = GDP_{MP} + NFI_A \quad (\text{Net Factor Income from Abroad})$$

$$GDP_{MP} = 23300 - (-150) \quad [\because NFI_A = (-)150] \\ = 23300 + 150 = 23450 \text{ cr.}$$

$$\text{New, } GDP_{MP} = 23450.$$

$$\text{So, } 23450 = 7200 + 6100 + GDP_{CF} + 3400$$

$$GDP_{CF} = 6750 \text{ cr.}$$

$$\begin{array}{r} 7200 \\ 6100 \\ \hline 3400 \end{array}$$

$$\begin{array}{r} 16750 \\ 23450 \\ \hline -16700 \\ \hline 6750 \end{array}$$

$$OS = 9$$

By Income Method,  $NDP_{FC} = CDE + OS + MI$

$$NNP_{FC} = NDP_{FC} + NFI_A$$

$$\text{or } NDP_{FC} = 22100 - (-150) = 22250 \text{ cr.}$$

$$22250 \text{ cr.} = \text{Wages \& Salaries} + OS + MI$$

$$22250 = 12000 + OS + 4800$$

$$\begin{array}{r} 22250 \\ -16800 \\ \hline 5450 \end{array}$$

OS = 5450 cr.

Answer-23)

(a) Given situation =  $AD < AS$

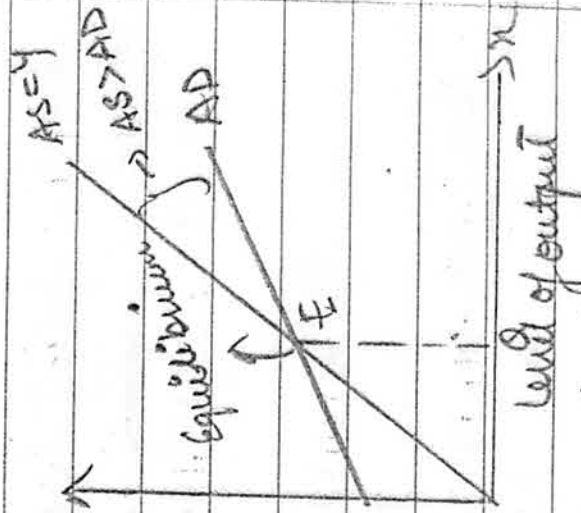
When the  $AD < AS$ , it means

that there is more supply of goods and less demand. Due to unsold stock, producer suffers loss.

Because of  $AD > AS$ , he will put down his production to reach the equilibrium level so that  $AD = AS$ .

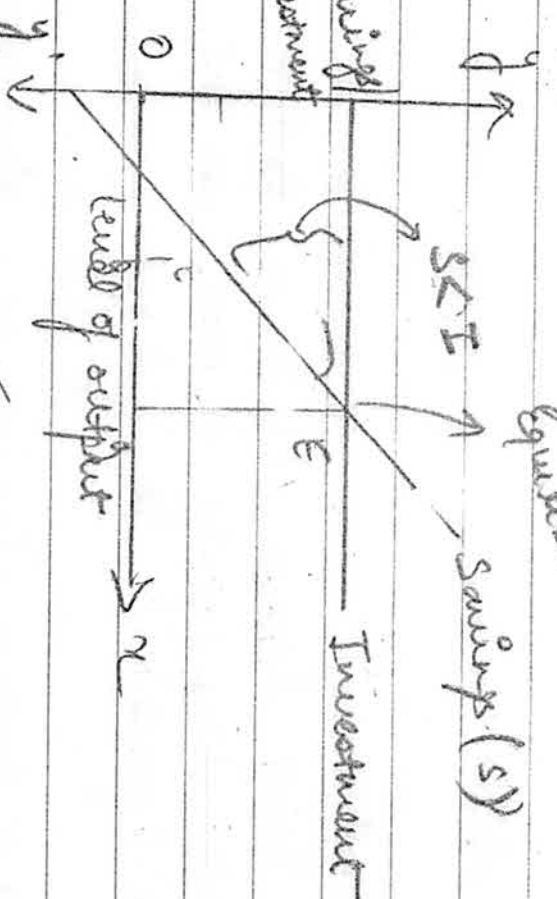
He will reduce his production till that level where

$AD = AS$ ; further for the next year, he will not start production as there is unsold stock which he will use, (increase in stock).



(b) Given: Ex-ante Investments are greater than Ex-ante Savings.

It means the Investment > Savings of producer



It means that if the ~~Net~~ Savings are lesser than the Ex-date Investment, it implies that more fund is utilised in investment and there are less savings.

To restore to equilibrium, the investment is reduced as more emphasis is on savings. Producers keep more funds on saving rather than on investment.

Decline in Investment or Expansion in Production  $\rightarrow$  Savings kept increase.

→ Govt. also reduces expenditure from its side which restricts supply of money in the economy. Therefore, cash is less in circulation (strict rules by govt) and less investment.

by producer.

Answer-22)

a) Trade Surplus refers to a situation when the export of visible items (goods) is more than the import of visible items (goods). It is denoted as:

$$X > M$$

It is a surplus situation as it denotes more inflow of receipts from rest of the world and is favourable for the economy.

Trade Deficit refers to the situation when the import of visible items (goods) is more than export of visible items (goods). It is denoted as -

$$X < M.$$

It is a deficit situation because the balance is unfavourable & leads to payments.

b) Managed Floating System of Exchange Rate Determination refers to that system when the economy is controlled by



market forces of demand & supply but there are occasional intervention by the RBI. It is also called Dirty Floating.

→ In this, for example if the domestic currency is appreciating in terms of foreign currency but exports are falling down, then RBI intervenes here and it starts demanding foreign currency. Because of increase in demand of foreign currency the exchange rate goes in favour of foreign nation and they start buying our domestic goods as export. Thus RBI and govt. intervene to maintain a situation of balance and favourable state for the economy.

Answer-21)

### Qualitative Tools

1) These refer to those measures adopted by RBI which include taking to them or implying rules in the form of qualitative aspects.

Qualitative aspects include:-

Moral suasion, Direct Action,

### Quantitative Tools

It refers to those tools adopted by RBI to control credit supply which includes Rate & Ratios.

Quantitative Tools include

cash reserves ratio, SLR, open

Retaining of Credit, Selective credit. Market Operations, Bank Rate, Repo & Reverse Repo Rate etc.

iii) Quantitative measures can lead to fulfilment & deoxygenation of banks.

iv) These are related to sectors of economy and control there.

Quantitative measures are used to correct the situation of inflation & deflation. Ex - increase in rates during inflation & vice-versa.

These are related to the funds of commercial banks and loans to consumers.

Ques

Answer - Q1) Real GDP refers to the GDP at constant prices. It is the value of goods and services produced during an accounting year using Base Year Prices which remain constant. Example - The flow of goods & services when production =  $Q \times P^*$

Q2)

Nominal GDP refers to the GDP at current prices. It is value of goods & services produced in an accounting year using the prevailing prices. It is not a good measure of welfare of people. Here value =  $Q \times P$ .

Example - Value of goods when it increases from 100 to 200 and Price changes from 50 (current year price)