

Section - A

Answer - 12

Perfect competition : Perfect competition is the market situation where there are large number of sellers and buyers dealing in homogenous product at a price fixed by market forces of demand and supply.

Characteristics of Perfect competition :

1). Large number of buyers and sellers : In perfect competition there are large number of buyers and sellers.

\* Buyers - In perfect competition, the number of buyers is so large that role of a single buyer is insignificant, which can not influence price of the good. Therefore uniform price prevails in the market.

\* Sellers - In perfect competition, the number of sellers is so large that role of a single seller is insignificant therefore it can not influence market price and hence

uniform price prevails in the market.

2) Homogenous Product: In perfect competition, the buyers and sellers deal in homogenous product which refers to the product that is identical in shape, size, quality etc. due to this, there is perfect knowledge among buyers and sellers. No buyer will pay more and no seller is in the condition to earn more, hence uniform price prevails.

3) Perfect Knowledge: The buyers and sellers in perfect competition have perfect knowledge about the product and its price fixed by market forces. Therefore no buyer will pay more than fixed price and no seller could charge more!

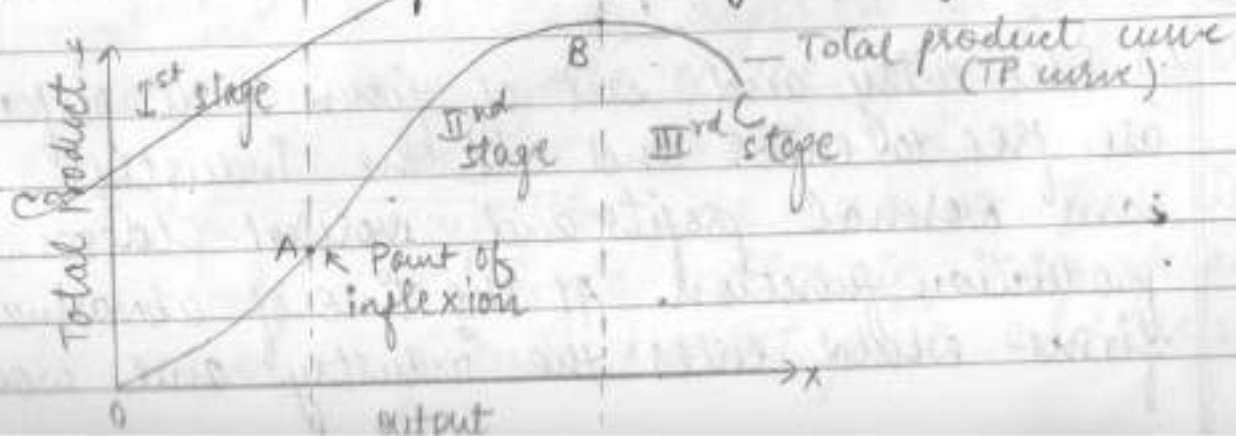
4) Free entry and exit of firms: In perfect competition, firms are free to enter and exit the industry. Firms can only earn normal profits and normal losses in the long-run production function. At the time of abnormal profits, the new firms would enter the industry and would lead to reduction

in profits from abnormal to normal, similarly, during abnormal losses, the existing firms would exit the industry which would increase profits and decrease losses from abnormal losses to normal losses.

Answer - 11

6

Law of variable proportions: The law of variable proportions states that, keeping fixed factors constant, as we go on increasing variable factors, the total product initially increases at increasing rate, then increases at diminishing rate and after reaching the maximum point it begins to fall.



## stages of law of variable proportions :

1) I<sup>st</sup> stage : increasing returns to factor  
 In the increasing returns to a factor stage, the total product increases at increasing rate.

In the given diagram, I<sup>st</sup> stage starts from O and ends till A, where the TP curve changes its shape from convex to concave i.e. point of inflexion.

2) II<sup>nd</sup> stage : diminishing returns to factor  
 In this stage, the total product increases at decreasing rate, becomes constant and attains its maximum point.

In the given diagram, II<sup>nd</sup> stage starts after point A till point B.

3) III<sup>rd</sup> stage : negative returns to factor  
 In this stage, the total product begins to fall.

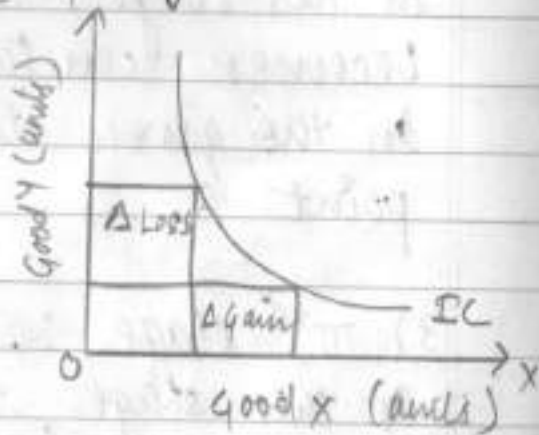
In the given diagram, III<sup>rd</sup> stage starts after point B and continues till point C.

Answer-10

(6) Indifference curve: Indifference curve is the graphical representation of all possible combinations of <sup>two</sup> goods that a consumer can buy and he is <sup>totally</sup> indifferent towards them.

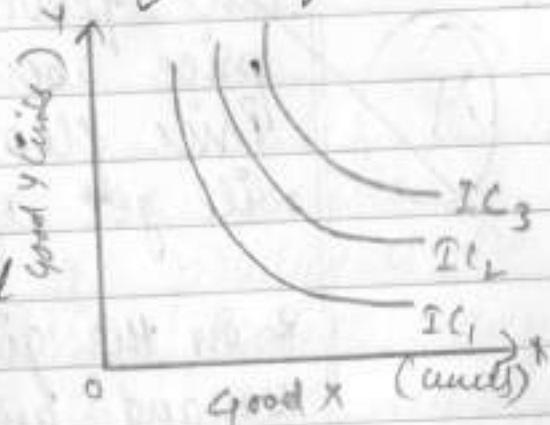
Properties of Indifference Curve:

1) ~~Indiff~~ Indifference curve is downward sloping: The Indifference curve is downward sloping from left to right because a consumer can increase the consumption of one good only by reducing the consumption of other good since the income of consumer is same.



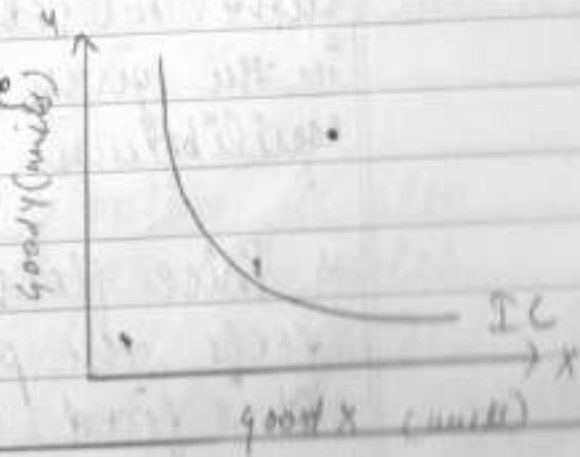
2). Higher indifference curve gives higher level of satisfaction :

The consumer is rational and has monotonic preferences which means that he will prefer only that bundle of goods which will give him higher level of satisfaction. The higher indifference curve shows more quantities of goods than the lower indifference curves. In the given diagram,  $IC_1 < IC_2 < IC_3$ . i.e.  $IC_3$  gives highest level of satisfaction.



3). Indifference curve can never touch X-axis or Y-axis.

Indifference curve can never touch X-axis or Y-axis because the indifference curve analysis is based on ranks and preferences therefore, consumer has to consume both the goods.



Answer-9

Price flooring : Price flooring refers to the fixing of price above the equilibrium price by the government. Price flooring is the minimum price that producers will get of their product in the market.

\* In the given diagram,  $OX$  represents demand and supply of good  $X$  and  $OY$  represents price.

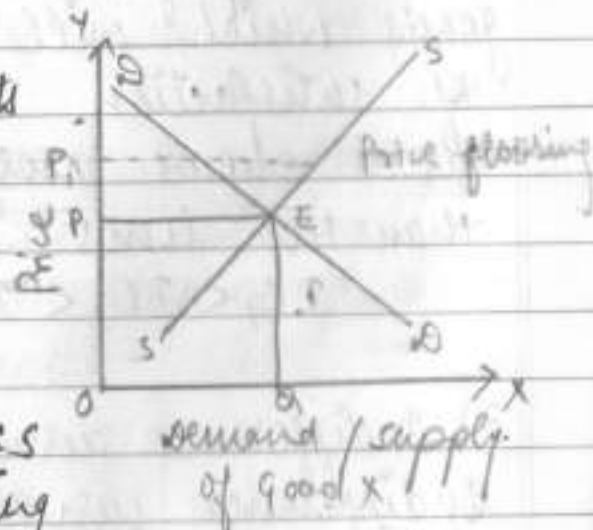
$OQ$  is equilibrium quantity and

$OP$  is equilibrium price,  $E$  is the

equilibrium point where  $DD$  and  $SS$

curve intersects. The price flooring

in the given diagram is shown by  $OP_1$  i.e. above equilibrium price  $OP$ .



\* Price floor is the minimum price that government feels the producers must get for their product. It is fixed when government feels the equilibrium

price is low. The government fixes the price in order to protect the interest of producers.

### Implication:

- 1) Excess supply: Price flooring raises the condition of excess supply in the market. Since the producers are promised to get a good price for their product, they tend to produce more which results in excess supply.
- 2) Buffer stock: Another important implication of price flooring is buffer stock. The government buys the excess or surplus product from producers at this price to maintain buffer stock of the country so that it could be provided at the time of calamities.
- 3) Minimum wages litigation: Price flooring is also applicable in minimum wages litigation in which value of wages to the labour is fixed by government in order to protect them against exploitation at low wages.



Answer-8

supply : Supply refers to the quantity of a commodity that producers are willing to produce in a given period of time in the market.

④

Increase in supply

\* Increase in supply is the rise in supply caused due to all factors other than own price of a commodity.

\* Increase in supply causes 'Rightward shift of supply curve'

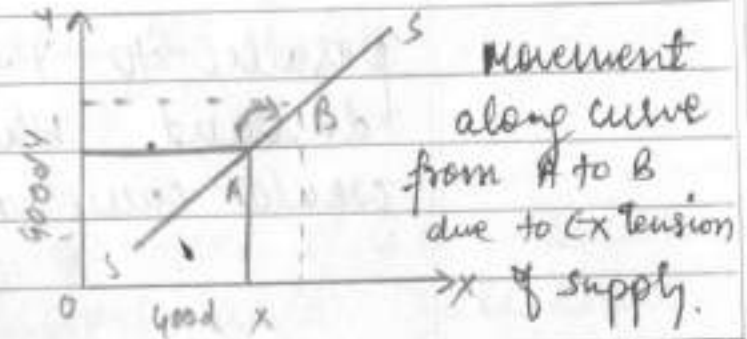
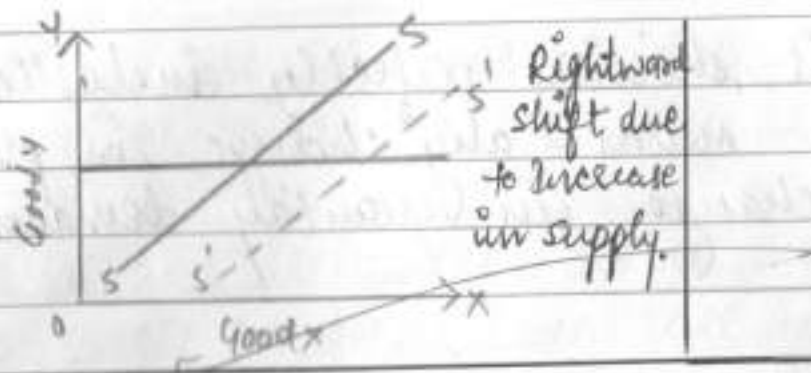
\* Law of supply is not applicable here.

Extension of supply

\* extension of supply is the rise in supply caused due to a <sup>rise in</sup> price of own commodity.

\* extension in supply causes 'Movement along the same supply curve'

\* Law of supply is applicable here.



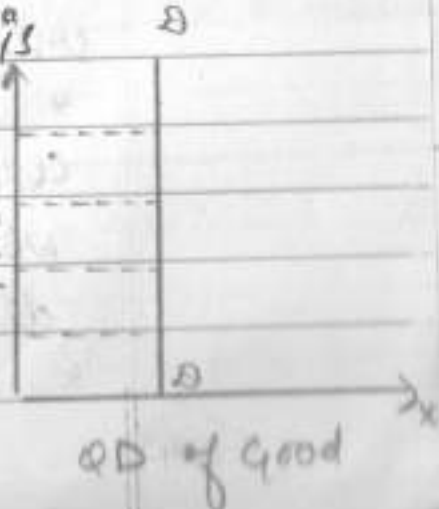
Answer = 7

According to the given question, a 10% rise in price causes 'no change in quantity demanded of the good'.

When there is no change in the quantity demanded for a good even if the price has changed, then in that case, the price elasticity of demand is 'Perfectly Inelastic'.

The shape of demand curve of a good which has perfectly inelastic demand is vertically straight line parallel to Y-axis.

In the given diagram  $DD$  is demand curve



parallel to Y-axis, showing perfectly inelastic demand. Which means any change in price would cause no change in quantity demanded.

Answer - 6

Individual demand: It refers to the quantity of a commodity that a single consumer is willing and able to buy at given period of time.

Determinants of Individual Demand:

- 1). Income of The consumer: The income of the consumer affects the demand in two cases:
  - \* Normal goods: An increase in income of a consumer would increase the demand for a normal good, whereas decrease in income causes decrease in demand of normal good.
  - \* Inferior goods: An increase in income of a

consumers would decrease the demand for inferior goods and vice-versa.

2) Tastes and Preferences: Tastes and preferences of a consumer also affects demand. In case of favourable tastes and preferences, the demand would increase. And in case of unfavourable tastes and preferences, the demand of good would decrease.

3) Future expected Price: A consumer's demand also depends upon future expected price. If the future expected price are lower than present price, then the demand of consumer will fall at present but a rise in future expected price would rise the demand at present.

Answer-5

Production Possibilities curve: Production possibilities curve is the graphical representation of all the possible combinations of two goods that can be produced using given resources and technology remaining the same.

\* slope of PPC =  $\frac{\Delta \text{ units sacrificed}}{\Delta \text{ units gained}} = \text{MOC}$ .

\* Yes, the production possibility curve can shift.

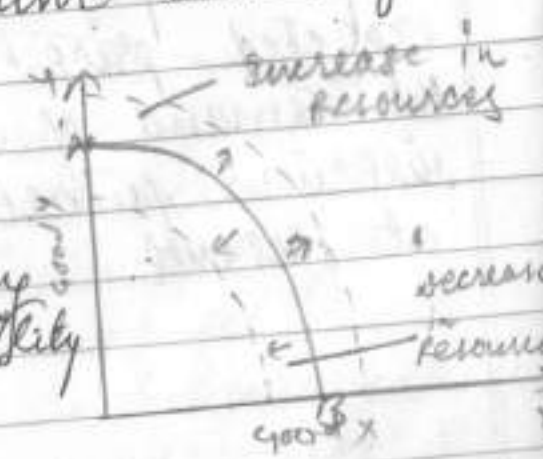
It can shift in two cases:

1) change in resources:

1) Increase in resources:

When the resources in the economy are increased, the production possibility curve shifts rightward.

2) Decrease in resources: When resources in the economy decrease, the PPC shifts leftward.



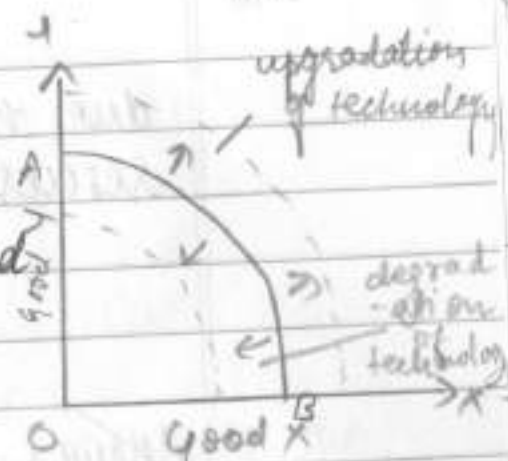
b). Change in technology:

1). Upgradation of technology

An upgradation of technology causes rightward shift of PPC.

2). Degradation of technology

Degradation of technology causes leftward shift of PPC!



Answer - 4

(b) Rises

Answer - 3

(c) may fall or may rise

Answer - 2

cost refers to the expenditure incurred on all factor and non-factor inputs during production.

Answer - 1

Problem of scarcity is defined as excess of demand over the supply of a commodity. The scarcity arises

due to unlimited human wants and limited resources which have alternative uses.

section - B

Answer - 24

a) Gross domestic product at market price :

GDP<sub>MP</sub> =

Government final consumption expenditure +  
 Private final consumption expenditure +  
 Gross domestic capital formation + Net exports

$$\text{GDP}_{MP} = 4000 + 3500 + 1100 + 500$$

$$\boxed{\text{GDP}_{MP} = ₹ 9100 \text{ crores.}}$$

b) National Income or NNP<sub>FC</sub> :

NNP<sub>FC</sub> = GDP<sub>MP</sub> - consumption of fixed capital +  
 Net factor income from abroad - Net indirect Taxes.

$$NNP_{PC} = 9100 - 120 + 100 - 300$$

$$NNP_{PC} = \cancel{8780 \text{ crores.}}$$

Answer - 23

⑥ Fixed exchange rate : Fixed exchange rate refers to the rate of exchange that is fixed by the government of a country in terms of gold or other foreign exchange. The government has whole authority in fixing this exchange rate. Under this system, two systems have worked :

1) Gold standard system : In this system, the exchange rate was fixed in terms of gold taking as a parity value by the government.

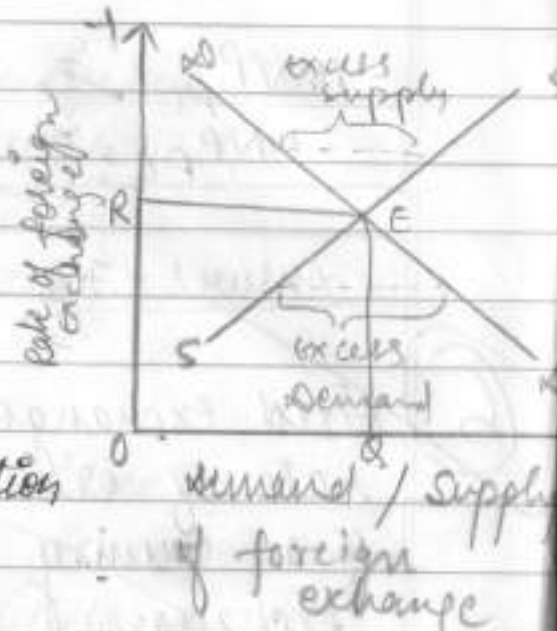
2) Bretton woods system : In this system, the exchange rate is fixed by the government in terms of US dollar. This system has given rise to International Monetary Fund or IMF.



Flexible exchange rate system:

Under flexible exchange rate system, the foreign exchange rate is determined by the market forces of demand and supply.

Flexible exchange rate includes the concept of appreciation and depreciation of currency.



In the given diagram,  $OX$  represents demand and supply of foreign exchange and  $OY$  represents rate of foreign exchange.  $DD$  is the demand curve and  $SS$  is the supply curve.  $E$  is the equilibrium point where  $DD$  and  $SS$  curves intersect.  $OQ$  is the equilibrium quantity and  $OR$  is the equilibrium rate of exchange. The rate of exchange is not fixed above  $OR$  because it would have led to excess supply and similarly it is not fixed below  $OR$  since it would have been excess demand.

Answer - 22

Revenue Receipts  
 Revenue receipts are those receipts of the government which neither creates liability and nor causes any reduction in the assets of the government.

Capital Receipts  
 Capital receipts are those receipts of the government which either creates liability or causes any reduction in the assets of the government.

\* Components of Revenue Receipts :

1). Tax Receipts : Tax is the compulsory payment made to government. All the receipts from tax sources are termed as tax receipts. Tax can be of two types :  
 Direct taxes and Indirect Taxes.

The burden of Direct taxes can not be shifted whereas the burden of Indirect taxes can be shifted from one party to another.

Example : Goods and services Tax.

2). Non-Tax Receipts : Non tax receipts are the receipts of the government from all the sources other than tax sources.

example : Fees, Perquisites, Escheats etc.

\* Components of capital receipts :

1). Borrowings : Borrowings from external and internal sources by the government are capital receipts since they create liability for the government.

2). Disinvestment : Disinvestment means withdrawing the current investment of government in public sector undertakings and giving it to private sector. Disinvestment is capital receipt because it reduces assets of the government.

3). Dissaving : Dissaving is a component of capital receipt since it reduces assets of government.

Answer-21

Investment Multiplier: Investment multiplier refers to the ratio of change in income caused due to change in investment. A change in investment can increment the income by many times.

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

Where,

K = Investment Multiplier

 $\Delta Y$  = change in Income $\Delta I$  = change in Investment

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

Working of Investment Multiplier:

\* Initially, let us assume our income to be ₹ 1000  
and MPC = 0.9

Rounds.	Income	consumption (MPC = 0.9)	Saving	Investment
I	1000	$1000 \times 900/100 = 900$	100	1000
II		$900 \times 90/100 = 810$	90	900
III		$810 \times 90/100 = 729$	81	810
IV		$729 \times 90/100 = 656.1$	72.9	729
Final round.	10,000			

In the investment multiplier, it is assumed that one person's <sup>consumption</sup> income is another person's investment.

In the given numerical question, an increase in investment is causing increase in income many times, this can be calculated as,

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

$$K = \frac{10}{1 - 0.9}$$

$$K = \frac{10}{0.1}$$

$$K = 10$$

This means the investment of ₹ 1000 has increased the income 10 times, i.e. ₹ 10,000.

Answer-20

### Saving and Investment Approach

According to saving and investment approach, the national income is determined where planned saving is equal to planned investment.

In the given diagram,  $OX$  represents income/output/employment and  $OY$  represents investment and saving.

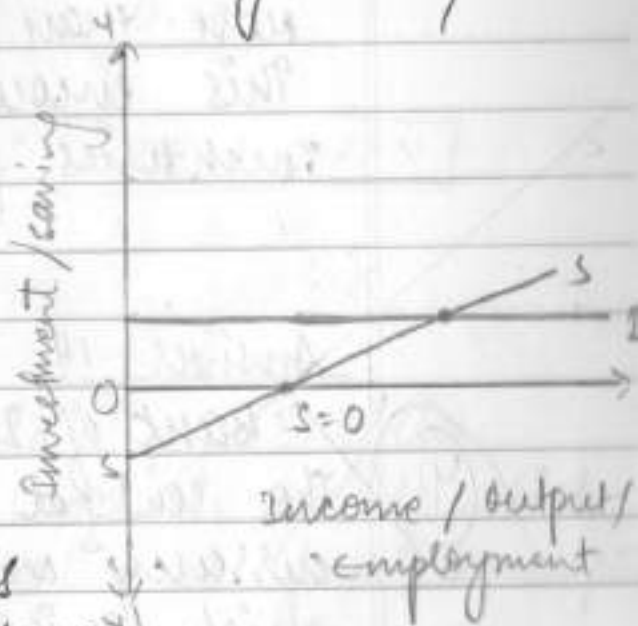
The investment curve is shown by  $I$  which is parallel to  $X$ -axis

since we assume that there is

autonomous investment which remains

same.  $SS$  is <sup>supply</sup> curve. The point where

$S = I$  is the <sup>saving</sup> point where national income  $Y$  is determined.



conditions when :

1)  $S > I$  - In this condition, consumers are not consuming what <sup>goods</sup> producers are wishing them to. This discourages

producers to produce more and inventories <sup>increase</sup> fall due to which again the  $S = I$  situation is obtained only when producers stop producing.

2).  $S < I$  - In this situation, consumers are consuming more than the producers are willing to supply. This encourages producers to produce more and inventories fall till  $S = I$  is obtained.

Answer-19

Q

'Bank of Issue' function of Central Bank:

The central bank has the sole authority to issue currency notes, other than rupee 1 note and coins which is issued by Ministry of finance.

- \* Single authority manages the money supply easily.
- \* Central Bank can operate easily on other banks.
- \* Government can check central bank on note issuing.
- \* Public faith is upheld due to sole authority.

Answer-18

Given :  $100 + 0.6Y$

(i) The value of MPC =  $\boxed{0.6}$

The value of MPS =  $1 - 0.6 = \boxed{0.4}$

(ii) corresponding saving function :  $\boxed{-100 + 0.4Y}$

Answer-17

(3) Intermediate consumption : Intermediate consumption refers to the consumption of intermediate goods which are either used for further production or final consumption within one year.

Example : Raw material used by a firm during production.

\* Intermediate consumption is different from final consumption as intermediate consumption are not included while estimating national and domestic



income whereas final consumption is included in national and domestic income.

\* Adding intermediate consumption may lead to problem of double counting whereas taking only final consumption removes problem of double counting.

Answer - 16

we know,  $APC + APS = 1$

now,  $0.75 + APS = 1$

$$APS = 1 - 0.75$$

$$\boxed{APS = 0.25}$$

Answer - 15

(b) Banking facilities to public.

Answer - 14

given  $\Rightarrow$   $IRR = 20\%$

to find  $M.M = ?$

$$LRR = \frac{20}{100} = 0.2$$

$$\begin{aligned} \textcircled{1} \text{ Money multiplier} &= \frac{1}{LRR} \\ &= \frac{10}{0.2} \\ &= 5 \end{aligned}$$

Money multiplier is 5

① Answer - 13  
(a) Rises

Money - 80