## HKS PU COLLEGE HASSAN

ACADEMIC ASSOCIATES WITH

## CREATIVE PU COLLEGE KARKALA

## II PU ANNUAL EXAMINATION April - 2022 <br> ANSWER KEY <br> SUBJECT : ECONOMICS

I. Answer the following questions by choosing correct answer

1. A) Competitive usage
2. A) Convex to the origin
3. B) Monopolistic competition
4. C) Economic agents
5. D) All of the above
II. Answer any five of the following by fill in the blanks
6. Rightward
7. Inverse $U$ in shape
8. House holds
9. No substitutes
10. Export
11. Not spent
12. Balanced budget
13. Capital account
III. Match the following
14. 

A) Service by a teacher. iv) skill
B) $\mathrm{TFC}+\mathrm{TVC}$.
iii) TC
C) Perfect competition.
v) perfect information
D) Labour.
i) Wages
E) Raw material.
ii) Intermediate good
IV. Answer any five of the following in a word or sentences
15) Utility which is measured in numbers is called cardinal utility analysis
16) Average revenue $=$ Total revenue / quantity
17) A market equilibrium is a situation where the plans of all consumers and firms in the market match and the market clears. Here Quantity demanded is equal to Quantity supplied. It is a zero excess demand and zero excess supply situation.
18) When the market structure has large number of firms, free entry and exit of firms and differentiated goods, then it is called monopolistic competition.
19) GDP (Gross Domestic Product) is the market value of all final goods and services produced within a domestic territory of a country measured in a year.
20) The consumption which is independent of income is called as autonomous consumption.
21.) If some users do not pay and it is difficult and impossible to collect fees for the public good, such non paying users are known as free riders.
22.) Balance of trade is the difference between the value of exports and value of imports of goods of a country in a given period of time

## V) Answer any nine of the following questions in four sentences each

23) Price elasticity of demand is a measure of the responsiveness of the demand for a good to changes in its price.
In the words of Prof. Stonier \& Hague, "Price elasticity of demand is a technical term used by economists to describe the degree of responsiveness of the demand for a good to a change in its price.
It is measured by using the following formula.
PED = Percentage change in demand for the good/Percentage change in price of the goods
24) The inferior goods are those goods for which the demand increases with the fall in income of consumer and vice-versa. That is, there will be a negative relationship between income of consumer and demand for inferior goods. Here the income of consumer and demand move in opposite directions.
Example: Low quality goods.
25) There are two long run costs namely,
(a) Long run Average Cost.
(b) Long run Marginal Cost.
26) Opportunity cost of some activity is the gain foregone from the second best alternative activity.
For example, you have Rs. 10000 which you decide to invest in your family business. What is the opportunity cost of your action? If you do not invest this money, you can either keep it in the house safe which will give you zero return or you can deposit it in either bank A or bank B in which case you get an interest at the rate of $\mathbf{2 0}$ percent or 10 percent respectively. So the maximum benefit that you may get from other alternative activities is the interest from the bank $A$. But this opportunity will no longer be there once you invest the money in your family business. The opportunity cost of investing the money in your family business is therefore the amount of forgone interest from the bank $A$.
27) In a perfectly competitive market with a fixed number of firms, the firms are operating in the short run, and the equilibrium price is determined by the intersection of the market demand curve and supply curve.

At this price the market demand equals supply.
28) Existence of single seller or firm.

No close substitutes.
Barriers on entry of new firms.
Firm is a Price maker and buyers are price takers.
Uniform price or price discrimination.
No difference between firm and industry.
Perfect knowledge.
29)

| Capital goods | Consumer goods |
| :--- | :--- |
| These are the durable goods which <br> are used in the production process. | These are the goods which are <br> purchased for consumption by <br> ultimate consumers. |
| Examples are machinery, tools, <br> implements | Example food, clothes, services like <br> recreation. |

30) The three methods of measuring GDP are
a) Product or Value Added Method
b) Expenditure Method and
c) Income Method.
31) The two functions of Money are

- Medium of exchange
- Measure of value

32) If the equilibrium level of output is more than the full employment level, it is due to the fact that the demand is more than the level of output produced at full employment level. This situation is called excess demand.
If the equilibrium level of output is less than the full employment of output, it is due to fact that demand is not enough to employ all factors of production. This situation is called deficient demand.
33) As people become more thrifty, they end up saving less or same as before in aggregate, known as Paradox of thrift.
In other words, If all the people of the economy increase the proportion of income they save, total value of savings in the economy will not increase - it will either decrease or remain unchanged. This result is known as the Paradox of Thrift.
34) 

| Surplus Budget | Deficit Budget |
| :--- | :--- |
| Here, the tax collection of <br> Government exceeds its required <br> expenditure. | Here, the Government's <br> expenditure exceeds its revenue. |
| It generally made by developed <br> countries. | It is generally made by developing <br> countries |

35) Foreign exchange rate is the price of one currency in terms of another currency. It links the currencies of different countries and enables comparison of international costs and prices.
For example, if we need to pay Rs. 68 for 1 dollar, then the exchange rate is Rs. 68
per dollar
36) The three linkages of open economy are as follows:

- Output market linkage
- Financial Market linkage
- Labour market linkage


## VI) Answer any seven questions in twelve sentences each

37) The production possibility frontier is a graphical representation of the combinations of two commodities (cotton and wheat) that can be produced when the resources of the economy are fully utilized. It is also called as Production possibility curve (PPC) also known as transformation curve. It gives the combinations of cotton and wheat that can be produced when the resources of the economy are fully utilized.
This can be graphically represented as follows:


As per the above graph, the points lying strictly below the production possibility curve represents a combination of cotton and wheat that will be produced when all or some of the resources are either underemployed or are utilized in a wasteful fashion.
38)

| Total utility | Marginal utility |
| :--- | :--- |
| - It is the aggregate utility derived by the |  |
| consumer by consuming all the units. | - It is the additional utility derived by <br> the consumer by consuming <br> additional unit |
| - It represents utility of all the units | - It represents the utility of single unit. |
| consumed. | - It may be written as |
| - It may be symbolically written as |  |
| TUn=U1+U2+U3+U4..........Un. | MUn=TUn-TUn-1. |
| - It increases in the beginning and later <br> decreases as the consumer consumes <br> more and more units | - It decreases from the beginning and <br> becomes negative later. |

39) An isoquant is the set of all possible combinations of the two inputs that yield the same maximum possible level of output. Each isoquant represents a particular level of output and is labelled with that amount of output. It is just an alternative way of representing the production function.
The concept of isoquant can be explained with the help of following diagram:


The above diagram generalizes the concept of isoquant. In the above diagram, labour is measured in OX axis and Capital is measured in OY axis. There are 3 isoquants for the three output levels viz., $q=q 1, q=q 2$ and $q=q 3$. Two input combinations (L1, K2) and (L2, K 1 ) give us the same level of output q1. If we fix capital at K1 and increase labour to L3, output increases and we reach a higher isoquant $q=q 2$. When Marginal products are positive, with greater amount of one input, the same level of output can be produced only using lesser amount of the other. Therefore, isoquants curves slope downwards from left to right (negatively sloped).
40) The returns to scale can happen only in the long run as both the factors (Labour and Capital) can be changed. One special case in the long run occurs when both factors are increased by the same proportion or factors are scaled up.

- Constant returns to scale: When a proportional increase in all inputs results in an increase in output by the same proportion, the production function is said display constant returns to scale.
- Increasing returns to scale: When proportional increase in all inputs results in an increase in output by a larger proportion, the production function is said to display increasing returns to scale.
- Decreasing returns to scale: When a proportional increase in all inputs results in an increase in output by a smaller proportion, the production function is said to display decreasing returns to scale.

For example, if in a production process, all inputs get doubled. As a result, if the output gets doubled, the production function exhibits constant returns to scale, if output is less than doubled, exhibits decreasing returns to scale and if is more than doubled, exhibits increasing returns to scale.
41) Perfect competition is a market where there will be existence of large number of buyers and sellers dealing with homogenous products. It is a market with highest level competition.
i) Large number of sellers and sellers: The first condition which a perfectly competitive market must satisfy is concerned with the sellers' side of the market. The market must have such a large number of sellers that no one seller is able to dominate in the market. No
single firm can influence the price of the commodity. The sellers will be the firms producing the product for sale in the market. These firms must be all relatively small as compared to the market as a whole. Their individual outputs should be just a fraction of the total output in the market. There must be such a large number of buyers that no one buyer is able to influence the market price in any way. Each buyer should purchase just a fraction of the market supplies. Further the buyers should have any kind of union or association so that they compete for the market demand on an individual basis.
ii) Homogeneous products: Another prerequisite of perfect competition is that all the firms or sellers must sell completely identical or homogeneous goods. Their products must be considered to be identical by all the buyers in the market. There should not be any differentiation of products by sellers by way of quality, colour, design, packing or other selling conditions of the product.
iii) Free Entry and Free exit for firms: Under perfect competition, there is absolutely no restriction on entry of new firms in the industry or the exit of the firms from the industry which want to leave. This condition must be satisfied especially for long period equilibrium production industry. If these four conditions are satisfied, the market is said to be purely competitive. In other words, a market characterized by the presence of these four features is called purely competitive. For a market to be perfect, some conditions of perfection of the market must also be fulfilled.
iv) Price Taker: The single distinguishing character of perfect competition is the price taking behaviour of the firms. A price taking firm believes that if it sets a price above the market price, it will be unable to sell any quantity of the good that it produces. On the other hand, if the firm set the price less than or equal to the market price, the firm can sell as many units of the good as it wants sell. The firms in the perfect competitive market are price takers. That means, the producers will continue to sell their goods and services in the price existing in the market. Firms have no control over the price of the product.
v) Information is perfect: Price taking is often thought to be a reasonable assumption when the market has many firms and buyers have perfect information about the price prevailing in the market. Since all firms produce the same good and all buyers are aware of the market price in question loses all its buyers if it rises price.
42) A firm always wishes to maximize its profit. The firm would like to identify the quantity q 0 , the firm's profits are less than at q 0 . For profits to be maximum, the following conditions must hold at q0.
a) The price $P$ must equal $M C(P=M C)$ : Profit is the difference between Total Revenue and Total Cost. Both total revenue and total cost increase as output increases. As long as the change in total revenue is greater than the change in total cost, profits will continue to increase.
The change in total revenue per unit increase in output is the marginal revenue and the change in total cost per unit increase in output is the marginal cost.
Therefore, we can conclude that as long as marginal revenue is greater than marginal cost, profits are increasing and as long as marginal revenue is less than marginal cost, profits will fall. It follows that for profits to be maximum, marginal revenue should be equal to
marginal cost.
For the perfectly competitive firm, we have established that the MR=P. So the firm's profit maximizing output becomes the level of output at which $\mathrm{P}=\mathrm{MC}$.
b) Marginal cost must be non-decreasing at $q 0$ : It means that the marginal cost curve cannot slope downwards at the profit maximizing output level. This can be explained with the help of diagram:


In the above diagram, at output levels q1 and q4 the market price is equal to the marginal cost. However, at the output level q1 the marginal cost curve is downward sloping. The q1 is not profit maximizing output level.
If we observe all output levels left to the q1 the market price is lower than the marginal cost. But the firm's profit at an output level slightly smaller than q1 exceeds that corresponding to the output level q1. Therefore, q1 cannot be a profit maximizing output level.
43) The micro and macro economics are distinguished on the following grounds:

## Scope:

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


## Method of study:

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

Economic Agents:

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

Equilibrium:

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

Domain:

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

44) : The circular flow of income of an economy can be explained with the help of following assumptions:
a) Existence of two sectors viz., household sector and producers.
b) Households are the owners of the factors of production.
c) Households receive income by selling the factor services.
d) There are no savings.
e) The firms produce goods to the households.
f) The economy is a closed economic system( where no Government or external trade or savings) The circular flow of income in a simple economy can be illustrated with the help of following chart.


In the above chart, the uppermost arrow, going from the households to the firms, represents the spending by the households to buy goods and services produced by the firms. The second arrow going from the firms to the households is the counterpart of the arrow above. It stands for the goods and services which are flowing from the firms to the households. Thus the two arrows on the top represent the goods and services market - the arrow above represents the flow of payments for the goods and services, the arrow below represents the flow of goods and services.
The two arrows at the bottom of the diagram similarly represent the factors of the production market. The lower most arrow going from the households to the firms symbolizes the service that the households re rendering to the firms. Using these services the firms are producing the output. The arrow above this, going from the firms to the households, represents the payments made by the firms to the households for the services provided by the households. Thus, When the income is spent on the goods and services produced by the firms, it takes to the form of aggregate expenditure received by the firms. Since the value of expenditure must be equal to the value of goods and services, we can measure the aggregate income by calculating the aggregate value of goods and services produced by the firms. This is clearly shown above in the form of circular flow of income.
45) Change in inventories may be planned or unplanned. In case of unexpected fall in sales, the firm will have unsold stock of goods which it had not anticipated. Hence there will be unplanned accumulation of inventories. If there is unexpected increase in the sales there will be unplanned decumulation of inventories. This can be explained with the help of following illustration:
Suppose a firm produces T Shirts. It starts the production year with an inventory of 200 T

Shirts. During the coming year it expects to sell 2000 T shirts. Hence, it produces 2000 T shirts, expecting to keep an inventory of 200 T Shirts at the end of the year. However, during the year, the sales of T-shirts became low unexpectedly. The firm is able to sell only 1200 T Shirts. This means that the firm is left with 800 unsold T Shirts. The firm ends the production year with $800+200=1000$ T-shirts. The unexpected increase of inventories by 800 T shirts is an example for unplanned accumulation of inventories.
On the other hand, if the sales had been more than 2000 we would have unplanned decumulation of inventories. For instance, if the sales had been 2100 , then not only the production of 2000 T shirts will be sold, the firm will have to sell 100 T shirts out of the inventory. This 100 ( T shirts) unexpected reduction in inventories is an example of unexpected decumulation of inventories.
46) An externality is a cost or benefit conferred upon second or third parties as a result of acts of individual production and consumption. But the cost or benefit of an externality cannot be measured in money terms because it is not included in market activities. In other words, Externalities refer to the benefits or harms a firm or an individual causes to another for which they are not paid or penalized. They do not have any market in which they can be bought and sold.
There are two types of externalities viz.,

- Positive Externalities and
- Negative Externalities.

For example, let us imagine that there is chemical fertilizer industry. It produces the chemical fertilizers required for agriculture. The output of the industry is taken for counting GDP of an economy. This is positive externality. While carrying out the production the chemical fertilizer industry may also be polluting the nearby river. This may cause harm to the people who use the water of the river. Hence their health will be affected. Pollution also may kill fish and other organisms of the river. As a result, the fishermen of the river may lose their livelihood. Such harmful effects that the industry is inflicting on others, for which it will not bear any cost are called negative externalities.
47) In a two sector model, there are two sources of final demand. The first is consumption and the second is investment.

The investment function was shown as I = ï. Graphically, this is shown as a horizontal line at a height equal to $I$ above the horizontal axis.


In this model, I is autonomous which means, it is the same no matter whatever is the level of income.
48) The chart which consists of different components of current account can be drawn as follows:


## VII) Answer any four of the following in twenty sentences each

49) The basis of this law is that every want needs to be satisfied only upto a limit. After this limit is reached the intensity of our want becomes zero. It is called complete satisfaction of the want. Therefore, $s$ we consume more and more units of a commodity to satisfy our need, the intensity of our want for it becomes less and less. Therefore, the utility obtained from the consumption of every unit of the commodity is less than that of the units consumed earlier This can be explained with the help of the following table. TUTotal Utility, U- Marginal Utility

| Units of <br> Apples | TU | MU |
| :---: | :---: | :---: |
| 1 | 30 | 30 |
| 2 | 50 | 20 |
| 3 | 65 | 15 |
| 4 | 75 | 10 |
| 5 | 80 | 5 |
| 6 | 82 | 2 |
| 7 | 82 | 0 |
| 8 | 80 | -2 |

Suppose a man wants to consume apples and is hungry. In this condition, if he gets one apple, he has very utility for it. Let us say that the measurement of this utility is equal to 30 utils. Having eaten the first he will not remain so hungry as before. Therefore, if he consumes the second apple he will have a lesser amount of utility from the second apple even if it was exactly like first one. The utility he got from the second apple equals 20 units, the third, fourth, fifth and sixth apples give him utility equal to $15,10,5$ and 2 units respectively. Now, if he is given the seventh apple he has no use for it. That means the
utility of the seventh apple to the consumer is zero. It is just possible that if he is given the eight apple for consumption, it may harm him. Here the utility will be negative i.e., $\mathbf{- 2}$. Therefore, we are clear that the additional utility of the successive apples to the consumer goes on diminishing as he consumes more and more of it.

The Law of Diminishing Marginal Utility can be explained with the help of the following diagram.


In the diagram the horizontal axis shows the units of apples and the vertical axis measures the MU and TU obtained from the apple units. The total utility Curve will be increasing in the beginning and later falls. The Marginal Utility curve is falling from left down to the right clearly tells us that the satisfaction derived from the successive consumption of apples is falling. The Marginal Utility of the first apple is known as initial utility. It is 30 utils. The Marginal utility of the seventh apple is Zero. Therefore, this point is called the satiety point. The Marginal Utility of the eighth apple is $\mathbf{- 2}$. So, it is called Negative utility and lies below the X axis.
50) It is assumed that the consumer chooses her consumption bundle on the basis of her taste and preferences over the bundles in the budget set. It is generally assumed that the consumer has well defined preferences over the set of all possible bundles. She can compare any two bundles. In other words, between any two bundles, she either prefers one to the other or she is indifferent between the two goods. It is further assumed that the consumer is a rational individual. A rational individual clearly knows what is good or what is bad for her and in any given situation, she always tries to achieve the best for herself. From the bundles which are available to her, a rational consumer always chooses the one which gives her maximum satisfaction. The consumer always tries to move to a point on the highest possible indifference curve given her budget set. Thus, the optimum point would be located on the budget line. A point below the budget line cannot be the optimum. Compared to a point below the budget line, there is always some point on the budget line which contains more of at least one of the goods and no less of the other. Thus, the consumer's preferences are monotonic. The point at which the budget line is tangent to one of the indifference curves would be the optimum choice of consumer. This is because, the budget line other
than the point at which it touches the indifference curves lies on a lower indifference curve is considered as inferior. So such a point cannot be the consumer's optimum. The optimum bundle is located on the budget line at the point where the budget line is tangent
to an indifference curve.
This can be explained with the help of the following diagram:


In the above diagram, PQ is budget line, IC1, IC2 and IC3 are indifference curves showing different levels of satisfaction. Banana is measured in OX axis and Mango is measured in OY axis.
The above diagram illustrates the consumer's optimal choice also known as consumer's equilibrium. At ( $x 1, x 2$ ), the budget line $P Q$ is tangent to the indifference curve IC2. The indifference curve just touching the budget line is the highest possible indifference curve given the consumer's budget set. Bundles on the indifference curve above IC2 are not affordable. Points on the indifference curve IC2
are certainly inferior to the points on the IC2 as they lie on IC1. Therefore, ( $\mathbf{x} 1, \mathrm{x} 2$ ) is the consumer's optimum bundle.
51) The simultaneous shifts can happen in four possible ways:
e) Both supply and demand curves shift rightwards.
f) Both supply and demand curves shift leftwards.
g) Supply curve shifts leftward and demand curve shifts rightward
h) Supply curve shifts rightward and demand curve shifts leftward.

The simultaneous shifts of demand and supply curve in perfect competition can be represented in the following table:

| Shift in Demand | Shift in Supply | Quantity | Price |
| :--- | :--- | :--- | :--- |
| Leftward | Leftward | Decreases | May increase, <br> decrease or remain <br> constant |
| Rightward | Rightward | Increases | May increase, <br> decrease or remain <br> constant |
| Leftward | Rightward | May increase, <br> decrease or remain <br> constant | Decreases |
| Rightward | Leftward | May increase, <br> decrease or remain <br> constant | Increases |

In the above table, each row of the table describes the direction in which the equilibrium price and quantity will change for each possible combination of the simultaneous shifts in demand and supply curves. For instance, from the second row of the table, we can notice that due to a rightward shift in both demand and supply curves, the equilibrium quantity
increases invariably but the equilibrium price may increase or decrease or remain constant.
The following diagrams depict the second and third cases of the above table:
(a)

(b)


In the above diagram (a) initially, the equilibrium is at E where the demand curve DD0 and supply curve SSO intersect. Here, both supply and demand curves shift rightward where the price remains constant at $P$ but the equilibrium quantity moves from $q$ to $q 1$. Similarly, in diagram (b), the supply curve shifts rightward and demand curve shifts leftward where the equilibrium quantity remains same but the equilibrium price decreases from P to P1.

Therefore, the rightward shifts in both demand and supply curves leads to increase in the equilibrium quantity and equilibrium price remaining constant. The equilibrium quantity remains same and the price decreases if there is leftward shift in demand curve and a rightward shift in supply curve.
52)

| Quantity | Price | TR | MR | TC | MC |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 52 | 0 | - | 10 | - |
| 1 | 44 | 44 | 44 | 60 | 50 |
| 2 | 37 | 74 | 30 | 90 | 30 |
| 3 | 31 | 93 | 19 | 100 | 10 |
| 4 | 26 | 104 | 11 | 102 | 2 |
| 5 | 22 | 110 | 6 | 105 | 3 |
| 6 | 19 | 114 | 4 | 109 | 4 |
| 7 | 16 | 112 | -2 | 115 | 6 |
| 8 | 13 | 104 | -8 | 125 | 10 |

a) Quantity where MR and MC are equal is 6
b) Equilibrium quantity is 6 and Equilibrium price is 19
c) Total Revenue is 114 and Total cost is 109
d) Profit $=$ TR-TC i.e., $114-109=5$; therefore Profit=5.
53) The macroeconomic identities are as follows:
a) Gross Domestic Product (GDP): Gross Domestic Product measures the aggregate production of final goods and services taking place within the domestic economy during a year. But the whole of it may not accrue to the citizens of the country. It includes GDP at Market prices and GDP at Factor cost.
GDP at market price is the market value of all final goods and services produced within a domestic territory of a country measured in a year. Here everything is valued at market prices. It is obtained as follows:
GDPMP $=\mathbf{C}+\mathbf{I}+\mathbf{G}+\mathbf{X}-\mathbf{M}$
GDP at factor cost is gross domestic product at market prices minus net indirect taxes. It measures money value of output produced by the firms within the domestic boundaries of a country in a year.
GDPFC $=$ GDPMP - NIT.
b) Gross National Product: It refers to all the economic output produced by a nation's normal residents, whether they are located within the national boundary or abroad. It is defined as GDP plus factor income earned by the domestic factors of production employed in the rest of the world minus factor income earned by the factors of production of the rest of the world employed in the domestic economy. Therefore,
GNP = GDP + Net factor income from abroad
c) Net National Product (NNP): A part of the capital gets consumed during the year due to wear and tear. This wear and tear is called depreciation. If we deduct depreciation from GNP the measure of aggregate income that we obtain is called Net National Product. We get the value of NNP evaluated at market prices. So, NNP = GNP - Depreciation
d) Net National Product (NNP) at factor cost: The NNP at factor is the sum of income earned by all factors in the production in the form of wages, profits, rent and interest etc., belong to a country during a year. It is also known as National income. We need to add subsidies to NNP and deduct indirect taxes from NNP to obtain NNP at factor cost. NNPFC = NNP at market prices - indirect taxes + subsidies.
e) Personal Income (PI): It refers to the part of National income (NI) which is received by households. It is obtained as follows:
PI = NI - Undistributed Profits - Net interest payments made by the households Corporate tax + Transfer payments to the households from the Government and firms.
f) Personal Disposable Income (PDI): If we deduct the personal tax payments (income tax) and Non-tax payments (fines, fees) from Personal Income, we get PDI. Therefore, PDI = PI - Personal tax payments - Non-tax payments.
54) The open market operations as one of the tools of RBI to control money supply, refers to buying and selling of bonds issued by the Government in the open market. This purchase and sale is entrusted to the RBI on behalf of the Government. When RBI buys a Government bond in the open market, it pays for it by giving a cheque. This cheque increases the total amount of reserves in the economy and thus increases the money supply. Similarly, selling of a bond by RBI to private individuals or institutions leads to reduction in quantity of reserves and money supply.
There are two types of open market operations. They are as follows:
a) Outright: Outright open market operations are permanent in nature. When the RBI buys the securities, it is without any promise to sell them later. Similarly, when the RBI sells these securities, it is without any promise to buy them later. As a result, the injection/absorption of the money is of permanent nature.
b) Repo: This is another type of operation in which the RBI buys the security with agreement of purchase on particular date and price. This is called repo. The interest rate at which the money is lent in this way is called repo rate. Similarly, instead of outright sale of securities the RBI may sell the securities through an agreement which as a specification about the date and price at which it will be repurchased. This type of agreement is called reverse repo. The rate at which the money is withdrawn in this manner is called the reverse repo rate. The RBI conducts repo and reverse repo operations at various maturities like overnight, $\mathbf{7}$ days, 14 days etc. These types of operations have now become the main tool of monetary policy of the RBI
55) The public expenditure can be classified as follows:

- Revenue Expenditure
- Capital Expenditure

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

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

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

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

The plan capital expenditure is related to central plan and central assistance for state and union territory plans. The non-plan capital expenditure covers various general, social and economic services provided by the government.
56) The balance of payments is the record of the transactions in goods, services and assets between residents of a country with the rest of the world for a specified time period i.e., a year. The balance of payments consists of two accounts viz.,
A) Current Account
B) Capital Account.

Current Account: It is the record of trade in goods and services and transfer payments. The main components of current account are trade in goods i.e., exports and imports of goods. The Trade in services includes the factor income and non-factor income transactions. Transfer payments are the receipts which the residents of a country get for free without having to provide any goods or services in return. They consists of gifts, remittances and grants. They could be given by the government or by private citizens living abroad.
Current account is in balance when receipts on current account are equal to the payments on the current account. A surplus current account means that the nation is a lender to other countries and a deficit current account means that the nation is a borrower from other countries.
Capital Account: It is the record of all international transactions of assets. An asset is any one of the forms in which wealth can be held.
For example, stocks, bonds, government debt etc. Purchase of assets is a debit item on the capital account. If an Indian buys a UK car company it inters capital account transaction as a debit item. On the other hand, sale of assets like sale of share of an Indian company to a USA customer is a credit item on the capital account.
The capital account mainly consists of foreign direct investment, foreign institutional investments, external borrowings and assistance. The capital account will in balance when capital inflows are equal to capital outflows. Surplus in capital account arises when capital flows are greater than capital outflows and deficit in capital account arises when capital inflows are lesser than capital outflows.

## VIII.) Answer any two of the following project and assignment oriented questions

57) a) $40 / 5=8,8$ bananas
b) $\mathbf{4 0 / 1 0}=\mathbf{4 , 4}$ Mangos.
c) Slope of budget line is downward.
d) Yes, the bundles on the budget line are equal to the consumer's income.
e) True. If we want to have more of banana we have to give up mangoes.
58) $T R=P \times Q, M R=T R n-T R n-1$ and $A R=T R / Q$

| Quantity <br> sold | TR | MR | AR |
| :---: | :---: | :---: | :---: |
| 0 | 0 | - | - |
| 1 | 10 | 10 | 10 |
| 2 | 20 | 10 | 10 |
| 3 | 30 | 10 | 10 |
| 4 | 40 | 10 | 10 |
| 5 | 50 | 10 | 10 |
| 6 | 60 | 10 | 10 |

## (For blind students)

TR : The sum of revenues from all products and services that a company produces is called total revenue. It is obtained by multiplying Price into quantity

AR : This refers to the amount of money earned per individual unit or user. The average revenue is the total revenue amount divided by the quantity.

MR : Marginal Revenue of a firm is defined as the increase in total revenue for a unit increase in the firm's output. It is obtained by dividing the Change in Total Revenue by Change in quantity.
59) Demonetisation was a new step taken by the Government of India on 8thNovember, 2016. It was introduced to tackle the problem of corruption, black money, terrorism and circulation of fake currency in the economy. Old currency notes of Rs. 500 and Rs. 1000 were no longer legal tender. New currency notes in denomination of Rs. 500 and Rs. 2000 were introduced. The public were advised to deposit old currency notes in their bank account till 31st of March 2016 without any declaration and up to 31st March 2017 with the RBI with declaration.
In order to avoid a complete breakdown and scarcity of cash, Government allowed exchange of Rs. 4000 old currency notes with new currency restricting to a person per day. Further till 12th December 2016, old currency notes were acceptable as legal tender at petrol pumps, Government hospitals and for payment of Government dues like taxes, power bills etc.
This initiative had both appreciation and criticism. There were long queues outside banks and ATM centres. There was acute shortage of currency notes and had adverse effect on economic activities. But now, normalcy has returned. The demonetization also has positive effects. It improved tax compliance as a large number of people were bought in the tax ambit. The savings of individual were channelized into the formal financial system. As a
result, banks have more resources at their disposal which can be used to provide more loans at low rate of interest. Demonetisation helps in curbing black money, reducing tax evasion and corruption will decrease. It also help in tax administration in another way, by shifting transaction out of the cash economy into the formal payment system. Now a days, households and firms have started to shift from cash payment to electronic payments.
60).

| Countries | Currencies |
| :---: | :---: |
| USA | US dollars |
| UK | Brutish Pounds |
| GERMANY | Euro |
| JAPAN | Japanese Yen |
| CHINA | Chinese yuan |
| ARGENTINA | Argentine Peso |
| UAE | UAE Dirhams |
| BANGLADESH | Bangladeshi taka |
| RUSSIA | Russian Rubel |

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## HKS PU College Hassan

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