CANARA VIKAAS PRE UNIVERSITY COLLEGE, MANGALURU

ECONOMICS ANSWER KEY -2023

PART –A

I. Choose the correct Answers:

1. b)Subjective

2.a)Marginal product

3.b)Monopolistic competition

4.c)Economic agents

5.b) Macro economics

6.c) Medium of exchange

7.b)Encourage of investment

8.c)Excise duty

9.c)Gold standard

10.d)All of the above.

II. Fill in the blanks.

11.Average revenue

12.Final

13.RBI

14.Not consumed

15.April 1ˢᵗ to March 31ˢᵗ.

III Match the following:

16.

A	B
a) Service of teacher	ii)Skill
b)Normal profit	iv)Zero profit
c)Market equilibrium	v)QD=QS
d)Balance of trade	iii)Trade in goods
e)Managed floating	i)Dirty floating

IV. Answer any Nine of the following in 4 sentences each

17.

Budget set	Budget line
- It is a collection of all bundles available to a consumer at the existing price at his given level of income. - It is also called as Opportunity set	- It is locus of different combinations of the two goods which the consumer consumes and whose price exactly equals his income. - It is also called as Price line.

18. These are the goods for which the demand decreases with the increase in the income of consumer. Example for inferior goods are low quality of goods like unbranded products. There is an inverse relationship between income and demand. Here the demand curve shifts towards left if the income of consumer increases.

19. A consumer's preferences are monotonic if and only if between any two bundles, the consumer prefers the bundle which has more of at least one of the goods and no less of the other good as compared to the other bundle. Preferences of this kind are called monotonic preferences.

20.a)cardinal utility analysis

   b)Ordinal utility analysis.

21.a)Technological progress

   b) Prices of Inputs.

22.
Equilibrium Price: The price at which equilibrium is reached is called equilibrium price.

Equilibrium quantity: It is the quantity which is bought and sold at equilibrium price.

23.
1. Single seller (Producer)

2. Restriction on the entry of new firms

3. Absence of close substitute

4. Price discrimination or uniform price

24. The revenue per unit of commodity sold is called **Average Revenue**.
AR=**TR**/Q

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The additional revenue generated from the sale of an additional unit of output is called **Marginal Revenue**.

$\Delta TR/\Delta Q$

25.

Factors of production	Rewards
Land	Rent
Labour	Wages
Capital	Interest
Organisation	Profit

26.

Stock Concept	Flow Concept
- Stocks are defined at a particular point of time. - It is a constant concept. - It is the quantity of economic variable which is measured at a particular point of time. - Example: How much water there is in the tank at a particular point of time is a stock concept	- Flows are defined over a period of time. - It is a variable concept. - It refers to that quantity of economic variable measured over a period of time. - Example: The amount of water which is flowing into the tank from the tap per minute is a flow.

27. Cash Reserve Ratio (CRR) = Percentage of deposits which a bank must keep as cash reserves with RBI

Statutory Liquidity Ratio (SLR) = Banks are required to keep some reserves in liquid form in the short term with themselves.

28. If all the people of the economy increase the proportion of the income they save (i.e. if the MPS of the economy increases), the total value of savings in the economy will not increase. It will either decline or remain unchanged. This result is known as **paradox of thrift.**

29. If some users do not pay and it is difficult and sometimes impossible to collect fees for the public good, such non-paying users are known as **free riders**. They are called so because, consumers will not voluntarily pay for what they can get for free and for which there is no exclusive title (ownership) to the property being enjoyed.

30. The price of one currency in terms of another is also known as foreign exchange rate or forex rate

PART –C

V.Answer **any seven o**f the following

31. **Market Economy:**

In a market economy all economic activities are organised through the market. A market is a set of arrangements where economic agents can freely exchange their endowments and products with each other.

- A market economy also known as capitalistic economy is that economy in which the economic decisions are undertaken on the basis of market mechanism by the private entrepreneurs. It functions on demand and supply conditions. In USA, Japan, Australia, UK and other countries we can see Market Economic systems.
- In market economy, private individuals own the factors of production. Here, the profit is the main goal of business. There is least intervention of Government.
- Price mechanism plays a major role in market economy. It is a balancing wheel of the market mechanism. Prices coordinate decisions of the producers and consumers. The price is determined by demand and supply in the market. No individual organization or Government is responsible for the production and distribution or pricing of goods. All depend on market mechanism.
- Thus, in a market system, the central problems regarding how much and what to produce are solved through the coordination of economic activities brought about by the price signals.
- In reality, all economies are **mixed economies** where some important decisions are taken by the government and the economic activities are by and large conducted through the market.

32. **Long Run Costs:**

In the long run, all inputs are variable. There are no fixed costs. The total cost and the total variable cost therefore, coincide in the long run
.
Types of Long Run costs:

1. **Long run average cost (LRAC):** It is defined as cost per unit of output.

LRAC = TCq
2. **Long run marginal cost (LRMC):** It is the change in total cost per unit of change in output.

When output changes in discrete units, then, if we increase production from q1–1 to q1 units of output, the marginal cost of producing q1th unit will be measured as;
LRMC = (TC at q1 units) – (TC at q1 – 1 units)

33. Every firm under perfect competition wants to maximize its profit. If there is positive level of output, q0, at which profit is maximized, then three conditions must be fulfilled. The three conditions are as follows:

1. P or market price is equal to MC or P=MC.

2. MC or Marginal cost is non- decreasing at q0.

3. For the firm to continue to produce,
a. In the short run, price must be greater than the average variable cost (p > AVC).

b. In the long run, price must be greater than the average cost (p > AC).

Condition–1: P or market price is equal to MC or P=MC.
☐ A profit maximizing firm will not produce at an output level where market price exceeds MC (P>MC) or MC exceeds Market price (MC>P).

☐ As long as P>MC a firm under perfect competition continues to expand its output level till market price equals marginal cost.

☐ If it continues to expand its output level even afterwards marginal cost exceeds price and the firm incurs loss.

☐ In other words, profits are maximum at the level of output (which we have called q0) for which MR = MC. Therefore, MR=MC=P.

Condition 2: MC or Marginal cost is non- decreasing at q0.
As shown in the figure below at the output level q1, P=MC. However, MC curve is downward sloping. We argue that q1 cannot be a profit maximizing output level.
For all output levels slightly to the left of q1, the P is lower than MC. It implies that the firm's profit at an output level slightly greater than q1 exceeds that corresponding to the level of output q1. So q1 cannot be a profit maximizing output level.
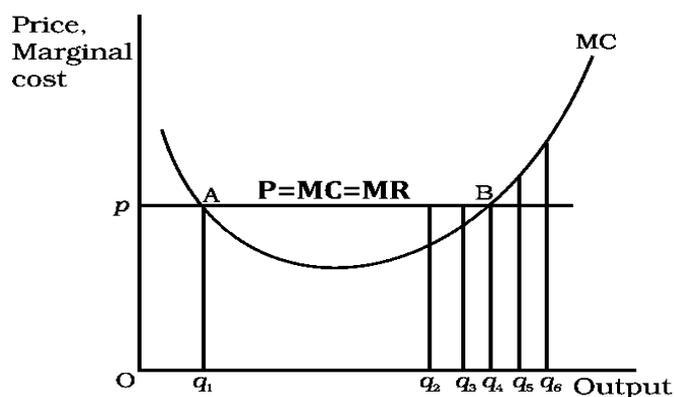
34. **Role of Government:**

- In both the developed and developing countries, apart from capitalist sector, there is the institution of State.

- The role of the state includes framing laws, enforcing them and delivering justice. The State here refers to the Government which performs various developmental functions for the society as whole.
- It undertakes production, apart from imposing taxes and spending money on building public infrastructure, running schools, providing health services etc. These economic

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functions of the state have to be taken into account when we want to describe the economy of the country.

Role of Household sector:

- By household we mean a single individual who takes decisions relating to her own consumption or a group of individuals for whom the decisions relating to consumption are jointly determined.

- Households consist of people. These people work in firms as workers and earn wages. They are the ones who work in government departments and earn salaries or they are the owners of firms and earn profits.

- Therefore, the market in which the firms sell their products could not have been functioning without the demand coming from the households. Further, they also earn rent by leasing land or earn interest by lending capital.

35. **Externalities:**

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, namely:

- **Positive Externalities**
- **Negative Externalities.**

Positive Externality: 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.

Negative externalities: 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.

36. **Unplanned Accumulation and decumulation of Inventories:**
Unplanned accumulation of inventories: 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.

Unplanned decumulation 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:

Example 1: Suppose a firm produces T Shirts. It starts the production year with an inventory of 100 T Shirts. During the coming year it expects to sell 1000 T shirts. Hence, it produces 1000 T shirts, expecting to keep an inventory of 100 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 600 T Shirts. This means that the firm is left with 400 unsold T Shirts.

Unplanned accumulation of inventory = (1000-600) + 100 = 500 T shirts. The unexpected increase of inventories by 400 T shirts is an example for unplanned accumulation of inventories.

Example 2: On the other hand, if the sales had been more than 1000 we would have unplanned decumulation of inventories. For instance, if the sales had been 1050, then not only the production of 1000 T shirts will be sold, the firm will have to sell 50 T shirts out of the inventory.

Unplanned decumulation of inventory = (1000 - 1050) + 100 = -50+100=50 T shirts. This 50 (T shirts) unexpected reduction in inventories is an example of unexpected decumulation of inventories.

37. **Functions of RBI:**

Central bank has several important functions. They are as follows:

1) It issues the currency of the country.

2) The currency issued by the central commercial banks, acts as a basis for credit creation.

3) It controls money supply of the country through various methods, like bank rate, open market operations and variations in reserve ratios. It acts as a banker to the government.

4) It is the custodian of the foreign exchange reserves of the economy.

5) It also acts as a bank to the banking system, acts as a lender of last resort.

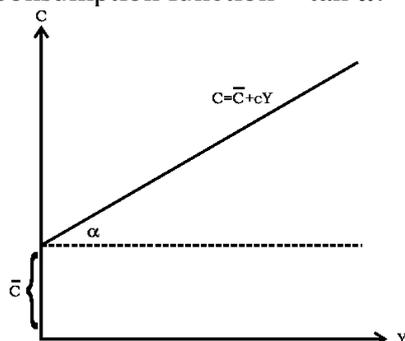## 38. **Consumption function – Graphical representation:**

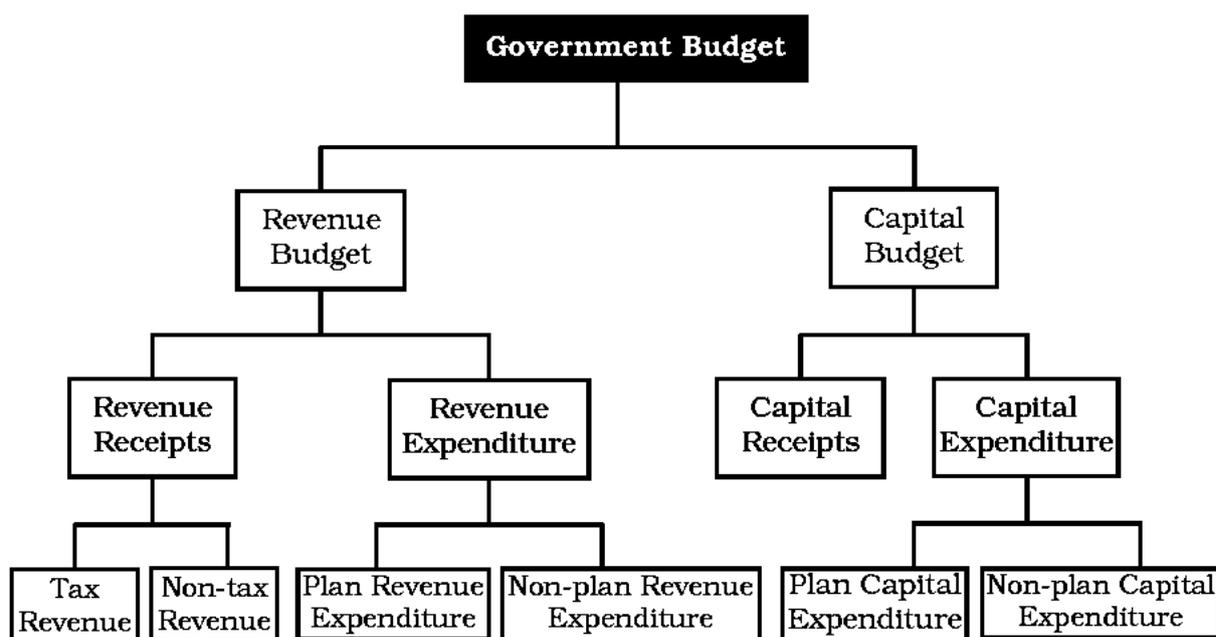The functional relationship between consumption and income is called **consumption function.**
We can describe this function as,
$$C=\bar{C} + cY$$

Where, $\bar{C}$ = Intercept of the consumption function, cY= Induced Consumption, c=slope of consumption function = $\tan \alpha$.

39. **The Chart of the Government Budget:**

```
                        Government Budget
                               |
               ┌───────────────┴───────────────┐
          Revenue                          Capital
          Budget                           Budget
             |                                |
      ┌──────┴──────┐                  ┌───────┴───────┐
   Revenue      Revenue            Capital         Capital
   Receipts     Expenditure        Receipts        Expenditure
      |             |                                  |
  ┌───┴───┐    ┌────┴────┐                      ┌───────┴───────┐
 Tax   Non-tax Plan     Non-plan              Plan Capital   Non-plan Capital
Revenue Revenue Revenue  Revenue              Expenditure    Expenditure
              Expenditure Expenditure
```

40. **Public Debt:**

Public debt refers to the borrowings of the government from the public to meet the budget deficit.
Public debt is used as an effective instrument to control inflation and deflation.

Public Debt Impose a Burden To The Future Generation:

This statement is true. This can be explained as follows:
1. By borrowing the government transfers the burden of reduced consumption on future generations.

2. Government borrowings from the people reduces the savings available to the private sector.

3. Borrowings of today means higher taxes in the future.

4. When we borrow from other countries, purchasing power will transfer from our country to another through debt payment and interest payments.

41. **Balance of Trade or Trade Balance (BOT):** Balance of Trade (BOT) is the difference between the value of exports and value of imports of goods of a country in a given period of time.
 Types of BOT:

1) **Balanced balance of trade:** BOT is said to be in balance when exports of goods are equal to the imports of goods.
2) **Surplus BOT:** Trade surplus will arise if country exports more goods than what it imports.
3) **Deficit BOT:** Deficit BOT or Trade deficit will arise if a country imports more goods than what it exports

**PART –D**

VI. Answer **any four** of the following

42. **Features of Indifference Curve:**

The main features of the indifference curve are as follows:
1. Indifference curve slopes downwards from left to right.

2. Higher indifference curve gives greater level of utility.

3. Two indifference curves never intersect each other.

1. Indifference curve slopes downwards from left to right:

An indifference curve slopes downwards from left to right because, the consumer in order to have more of one product, he has to forego some units of other product. This can be explained with the help of diagram.
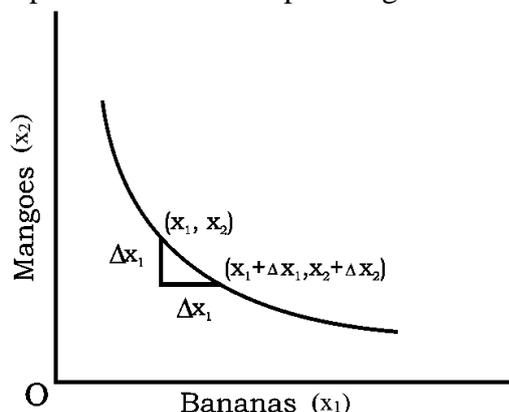

The indifference curve slopes downward. An increase in the amount of bananas along the indifference curve is associated with a decrease in the amount of mangoes. If $\Delta x1 > 0$ then $\Delta x2 < 0$.

2. Higher indifference curve gives greater level of utility:

Combinations A, B and C consist of same quantity of mangoes but different quantities of bananas. Since combination B has more bananas than A, B will provide the individual a higher level of satisfaction than A.
Therefore, B will lie on a higher indifference curve than A, depicting higher satisfaction.
Likewise, C has more bananas than B (quantity of mangoes is the same in both B and C).
Therefore, C will provide higher level of satisfaction than B, and also lie on a higher indifference curve than B.
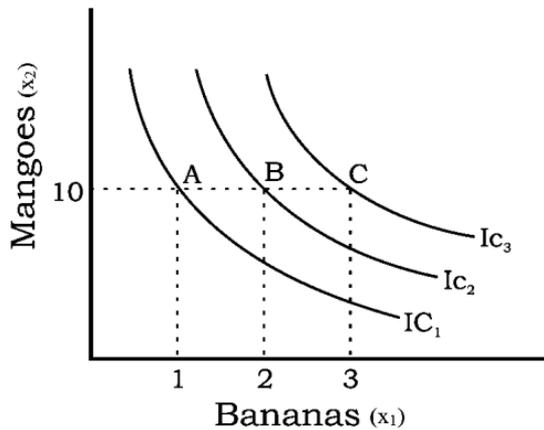
As long as marginal utility of a commodity is positive, an individual will always prefer more of that commodity, as more of the commodity will increase the level of satisfaction i.e., IC1 < IC2 < IC3.

3. Two indifference curves never intersect each other:

Two indifference curves intersecting each other will lead to conflicting results.
- To explain this, let us allow two indifference curves to intersect each other as shown in the figure. As points A and B lie on the same indifference curve IC1, utilities derived from combination A and combination B will give the same level of satisfaction.
- Similarly, as points A and C lie on the same indifference curve IC2, utility derived from combination A and from combination C will give the same level of satisfaction.
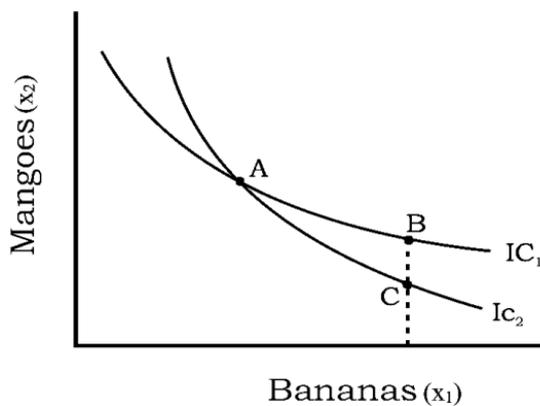

From this, it follows that utility from point B and from point C will also be the same. But this is clearly an absurd result, as on point B, the consumer gets a greater number of mangoes with the same quantity of bananas.

So, consumer is better off at point B than at point C. Therefore, it is clear that intersecting indifference curves will lead to conflicting results. Thus, two indifference curves cannot intersect each other.

43. Market supply curve:

The market supply curve represents levels of the output which firms in the market produce in aggregate corresponding to different market prices. In other words market supply curve is the summation of the supplies of individual firm's at different, market prices.

Let us construct the market supply curve with just two firms in the market–firm 'a' and firm 'b'. Suppose that two firm's have different cost structures. Firm 'a' will not produce anything if the price is below $p\overline{\overline{1}}$. While firm 'b' will not produce anything if the market price is less than $p\overline{\overline{2}}$. Again assume that $p\overline{\overline{2}}$ is greater than $p\overline{\overline{1}}$.
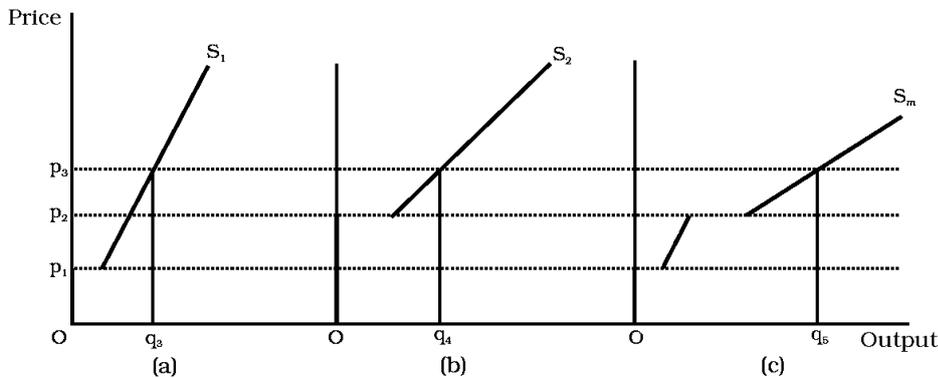
The Market Supply Curve Panel. (a) Shows the supply curve of firm 1. Panel (b) shows the supply curve of firm 2. Panel (c) shows the market supply curve, which is obtained by taking a **horizontal summation** of the supply curves of the two firms.

The interpretation of S2 (p) is identical to that of S1 (p), and is, hence, omitted. Now, the market supply curve, Sm (p), simply sums up the supply curves of the two firms; in other words:

Sm(p) = S1(p) + S2(p)

When the supply curve is vertical the **elasticity of supply is zero.**

44. The demand and supply curves of wheat are given by the following equations:

Demand for wheat. qD = 200-P and supply of wheat qS= 120+ P
Here qD= quantity demanded, qS=quantity supplied and P= price of wheat per kg in rupees.
At equilibrium qD=qS
So, 200-P=120+P
200-120=P+P
80=2P
P=80/2=40

    a) Equilibrium price P= Rs. 40.

b) The equilibrium quantity is obtained by substituting the equilibrium price P=40 into either the demand or the supply curve's equation.
So, qD =200-P   qS=120+P
qD = 200-40   qS=120+40
qD =160   qS =160
        qD=qS
c) At a price less than equilibrium price P.
Say P= Rs.25   qS =120+ P
qD=200-P
qD=200-25   qS =120+25
qD=175   qS =145
    qD > qS

d) At a price greater than equilibrium price P.

Say P= Rs.45   qS =120+ P

qD=200-P

qD=200-45   qS =120+45

qD=155   qS =165

qD < qS

45. This is a monopoly situation when the cost of production is zero. TC=0. This is very rare case. Let us suppose that there is village which is situated far away from the other village. In that village we assume there is only one well. All the village people completely depend for their water needs on this well.

We assume this well is owned by a particular individual and he has the exclusive right over the use of the well. The owner of the well does not allow any villager to draw water from this well without paying for it. Thus he enjoys monopoly and can charge any price that he wishes there is no production cost for water. That is production cost is zero.

Now we shall explain equilibrium situation. Monopoly market attains equilibrium when the profit is maximum. Profit of a monopoly firm is given by the difference between TR and TC. Symbolically,
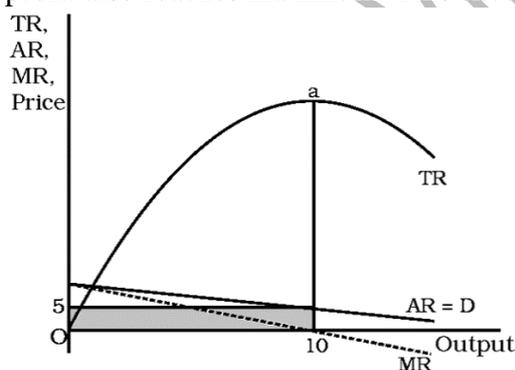
Profit π =TR-TC

Where, π = Profit, TR= Total revenue, TC = Total cost

Then, the profit of a monopoly firm with zero cost is π = TR –TC

π = TR – 0

π = TR

If the TC is 0 the maximum profit is total revenue. So when total revenue (TR) is maximum profit also reaches maximum. This situation is explain diagrammatically.

In the above diagram,

- OX axis is output, OY axis represents TR, AR, MR and also Price.
- TR represents total revenue curve, AR and MR represents Average Revenue Curve and Marginal revenue Curve respectfully.
- The profit received by the firm equals the revenue received by the firm minus the cost incurred, that is profit=TR-TC. In this case TC is zero, profit is maximum when TR is maximum.
- The price at reach this output will be sold is the price that the consumer as a whole are willing to pay. This is given by the market demand curve 'D'.

- An output level of 10 units the price is Rs. 5. Since the market demand curve is the AR curve for the monopolist firm. Rs. 5 is the average revenue received by the firm.
- The total revenue is given by the product of AR and quantity sold, i.e., Rs. 5X10 units = Rs. 50. This is depicted by the area of the shaded rectangle in the diagram.

46.
1. 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.

GDP at Market prices:

GDPMP = C + I + G + X – M
Where, C = Consumption Expenditure
I = Investment
G = Government expenditure
M = Imports
X-M = Net Exports
GDP at Factor cost:
GDPFC = GDPMP – NIT
Where, GDPMP = GDP at Market prices and NIT = Net Indirect Taxes

2. Net Domestic Product (NDP):

Net Domestic Product (NDP) is the value obtained from deduction of depreciation charges from the GDP.
NDPMP= GDPMP – Depreciation

3. Gross National Product (GNP):

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,
GNPMP = GDPMP + Net factor income from abroad

4. 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,
NNPMP = GNPMP – Depreciation

5. 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.

6. 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.

47.
- **Medium of Exchange:** Money plays an important role as a medium of exchange. It facilitates exchange of goods for money. It has solved the problems of barter system. Barter exchanges become extremely difficult in a large economy because of the high costs people would have to incur looking for suitable persons to exchange their surpluses

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- **Measure of Value/Unit of account:** The money acts as a common measure of value. The values of all goods and services can be expressed in terms of money. It makes goods and services comparable in terms of price.

- **Store of value:** People can save part of their present income and hold the same for future. Money can be stored for precautionary motives needed to overcome financial stringencies. Money solves one of the deficiencies of barter system i.e., difficulty to carry forward one's wealth under the barter system.

- **Standard of deferred payments:** All the credit transactions are expressed in terms of money. The payment can be delayed or postponed. So, money can be used for delayed settlement of dues or financial commitments.

- **Transfer of value:** Money acts as a transfer of value from person to person and from place to place. As a transfer of value, money helps us to buy goods, properties or anything from any part of the country or the world. Further, money earned in different places can be brought or transferred to anywhere in the world.

48. **The Gold Standard (The Gold Standard Exchange System):**

The gold standard was prevailing as an exchange rate system from 1870 to 1914 all over the world. Gold standard was a typical example of fixed exchange rate system.
In this system, all currencies were defined in terms of gold. Under gold standard each country states that its currency is equivalent to particular quantity of gold and each country agrees to convert its currency in to gold at a fixed price.
For example, if one unit of say currency A was worth one gram of gold. One unit of currency B was worth two grams of gold. Currency B would be worth twice as much as currency A. Economic agents could directly convert one unit of currency B into two units of currency A without having to first buy gold and then sell it.
The rates would fluctuate between an upper limit and lower limit. These limits being set by the costs of melting shipping and re-coining between two countries.

Part-E

VII. Answer any **two** of the following

49. Money income M = Rs. 40
Price of Bananas P1 = Rs. 5
Price of Mangoes P2= Rs. 10

(a) No. of Bananas = 40/5 = 8
(b) No. of Mangoes = 40/10 = 4
(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.

50.

Labour	TP	MP1	AP1
0	0	-	-
1	10	10	10
2	24	14	12
3	40	16	13.33
4	50	10	12.5
5	56	6	11.2
6	57	1	9.5

51.

USA	-	U.S.Dollars
UK	-	Pound sterlings
Germany	-	Euro
Japan	–	Japanies Yen
China	-	Renminbi
Argentina	–	Argentina Peso
UAE	-	UAE Dhiram
Bangladesh	-	Blangadeshi Taka
Russia	-	Russian Ruble.

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