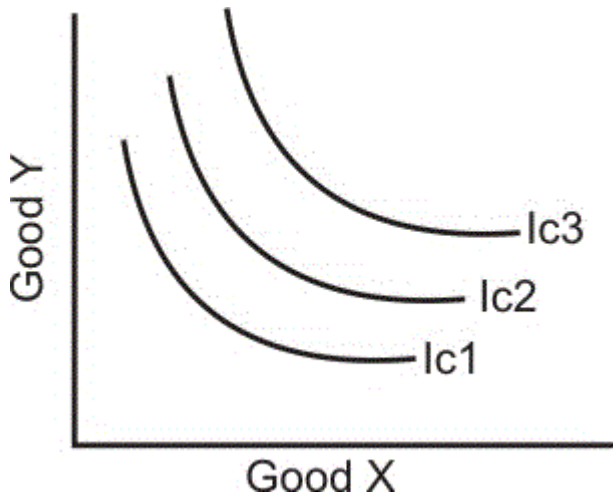


SECTION-A

[INTRODUCTORY MICRO ECONOMICS]

1. What is an indifference map? (1 Mark)

Ans. The consumer preferences for all the bundles can be represented by a family of indifference curves as given in the diagram. It is called indifference map. In other words a set of indifference curves is called indifference map.



2. Define normal goods. (1 Mark)

Ans. Normal goods are those goods whose demand generally increases with increase in income of the consumer.

3. What happen to budget set when both prices as well as income are doubled? (1 Mark)

Ans. In this situation, the budget set will remain the same because prices and income has changed in the same ratio.

4. What is monotonic preference? (1 Mark)

Ans. It means that a rational consumer always prefers a combination having more of both the commodities as it offers him a higher level of satisfaction.

5. Law of demand fails in case of a certain types of goods. What are these goods called? (1 Mark)

Ans. Giffen goods or inferior goods are the goods in case of which the law of demand fails.

6. If the MU derived from the commodity is greater than the price of the commodity then how it will affect the consumption behavior of the consumer? (3 Marks)

Ans. The consumer can achieve the level of maximum satisfaction or consumer equilibrium at a level where the MU derived by the consumer becomes equal to the price of the commodity

i.e. $MU = Price$

If the MU derived by the consumer is greater than the price then consumer will try to consumer more units of the commodity in order to achieve maximum level of satisfaction as with the increase in the consumption the MU derived from the commodity will fall.

7. State the properties of Indifference curve. (3 Marks)

Ans. The Indifference curve has following properties-

- (1) Indifference curve slopes downwards from left to right because both goods are desirable and consumer prefers more goods to fewer goods.
- (2) Indifference curve are always convex to the point of origin.
- (3) Indifference curve cannot meet and never intersect each other.
- (4) Higher indifference curve represent higher level of satisfaction.

8. Give the assumptions of consumer equilibrium in case of one commodity. (3 Marks)

Ans. The concept of consumer equilibrium is based on following assumptions:-

- (a) A consumer should be a rational person. It means that he tries to maximize his satisfaction.
- (b) Utility can be measured in cardinal number system.
- (c) Consumption of the commodity should be a continuous process.
- (d) All the units of the commodity should be homogeneous.
- (e) There should be no change in taste or preference of the consumer during the consumption period.
- (g) The marginal utility of money is given and assumed to be constant. Which is possible when the income of the consumer and the price level of the commodity (commodities) remain constant?

9. State the methods which are used to measure elasticity of demand. Explain any one. (3 Marks)

Ans. The methods which are used to measure elasticity of demand are:-
(i) Percentage or proportionate method
(ii) Total outlay or total expenditure method
(iii) Point or geometric method.

Percentage or proportionate method
According to this method price elasticity of demand can be estimated as the negative of the ratio of the percentage change in quantity demanded and the percentage demand in price of the commodity..

$$E_d = (\quad - \quad) \% \text{ (or proportionate) change in quantity demanded}$$

% (or proportionate) change in price of the commodity
 In other words

$$E_d = \left(\frac{\Delta q}{Q} \times \frac{P}{\Delta p} \right)$$

Where

Δq = Change in quantity demanded
 Δp = Change in price of the commodity
 P = Original price or price before the change
 Q = Original demand or quantity demanded before the change.

10. If the price of the commodity increases, how will it affect the consumption behavior and why.

Ans. If the price of the commodity increases then the consumer will be ready to consume less units of the commodity, because in order to get maximum satisfaction $MU = Price$ of Good X. He will consume till the point where Marginal Utility derived is equal to the price paid for it. (Keeping in mind the law of diminishing marginal utility). As the price increases he will purchase less units of the commodity in order to equalize MU with price.

11. State the relationship between MU and TU on the basis of a utility schedule. (4 Marks)

Ans. Marginal utility represents the changes in total utility and hence any change in marginal utility will also represent the rate of change in total utility. The relationship between TU and MU can be explained with the help of following schedule.

Amount consumed	1	2	3	4	5	6
Marginal Utility	10	8	6	3	0	-2
Total Utility	10	18	24	27	27	25

From the given table it can be concluded :-

- (1) When MU decreases but remains positive, the TU also increases but at a diminishing rate. In the given schedule MU decreases from 1st unit till 5th unit and hence TU increases at a diminishing rate.
- (2) At 5th unit of consumption, MU becomes zero due to which TU becomes maximum and constant.
- (3) At 6 units of consumption, MU becomes negative and TU starts diminishing.

12. Starting from an initial situation of consumer's equilibrium suppose that marginal utility of a rupee increases. Will it increase or decrease the quantity demanded of the product? (4 Marks)

Ans. Suppose the price of one orange is RS 2 & the MU of money is 4 utils. The consumer's equilibrium will be

$$\frac{MU_x}{4} = 2$$

So $MU_x = 8$ which is at 6 oranges.

Now if MU of money increases to 5 the 6th orange will give utility worth $8/5 = 1.6$ which is less than price. Hence to remain in equilibrium the consumer has to reduce his consumption from 6

oranges to 5 oranges where the utility is 10. So again $\frac{MU_x}{MU_m} = \frac{5}{10} = 2$

13. A consumer spends Rs 100 on a commodity when its price is Rs 2 per unit and spends Rs 96 when its price is Rs 3 per unit. Calculate price elasticity of demand by total outlay method and by proportionate method. (4 Marks)

Ans. Total Outlay Method :- When the price of the commodity increases from Rs 2 to Rs 3 per unit, the total expenditure incurred by the consumer decreases from Rs 100 to Rs 96. According to total outlay method, when the total expenditure decreases with a rise in price then the commodity is said to have elastic or more than unit elastic demand.

Proportionate Method

PRICE	TOTAL EXPENDITURE	QUANTITY = T.E./P
2	100	50
3	96	32

Given

that

Original Price P = Rs 2 per unit

New Price P₁ = Rs 3 per unit

Change in price ΔP (P₁ - P) = Re 1

Original Quantity Q = 50 units

New Quantity Q₁ = 32 units.

Change in quantity ΔQ (Q₁ - Q) = (-) 18 units

We know that

$$E_d = \left(\frac{\Delta Q}{Q} \div \frac{\Delta p}{p} \right) \Delta qXP$$

Substituting values we get

$$E_d = \frac{18 \times 2}{150}$$

i.e. E_d = 0.72

14. State and explain the law of diminishing marginal utility. (6 Marks)

Ans. This law is the most logical explanation of consumer's behaviour. According to Prof. Marshall, this law states that whenever the units of a commodity consumed by the consumer are increased, keeping other factors constant, the marginal utility of the commodity goes on decreasing.

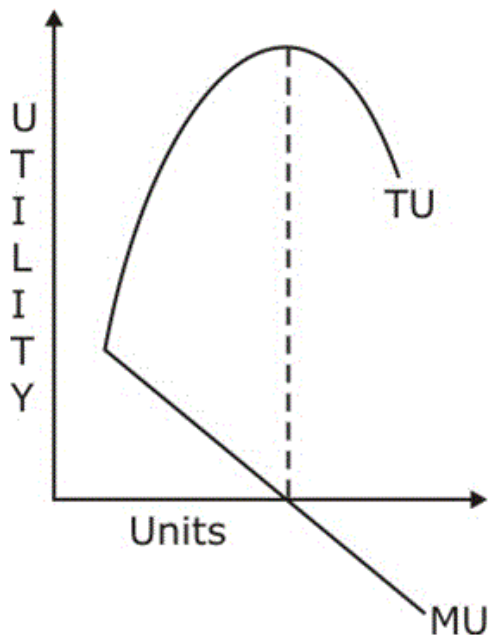
Assumptions : The law of diminishing marginal utility is based on the following assumptions:

(a) Units of the commodity under study should be homogeneous, i.e. units should be same in all respect.

(b) Consumption of the commodity should be a continuous process. There should be no timegap in consumption.

(c) There should be no change in tastes and preferences of the consumer during the consumption period.

Explanation : The law is based on the intensity of the desire of the consumer for a particular commodity. When the consumer does not have even a single unit of a commodity then the intensity of his desire is very high. As a result, Marginal Utility is high. But as soon as he consumes one unit of the commodity his intensity of desire diminishes. As a result of which the marginal utility or satisfaction from the second unit also falls. This process goes on till a level where the consumer becomes fully satisfied with the commodity. At this level the consumer does not derive any satisfaction from the additional unit of the commodity. This level of consumption is known as Zero Marginal Utility level or Saturation level. With further increase in units of the commodity consumed the marginal utility of the commodity becomes negative, i.e. instead of getting satisfaction, the consumer gets dissatisfaction from the additional unit of the commodity. This law can be explained with the help of following diagram :-



In the given diagram, the marginal utility of the commodity first decreases and then becomes zero. This level of output represents the level of saturation or zero marginal utility. After this level of consumption, if units are increased then marginal utility of the commodity becomes negative.

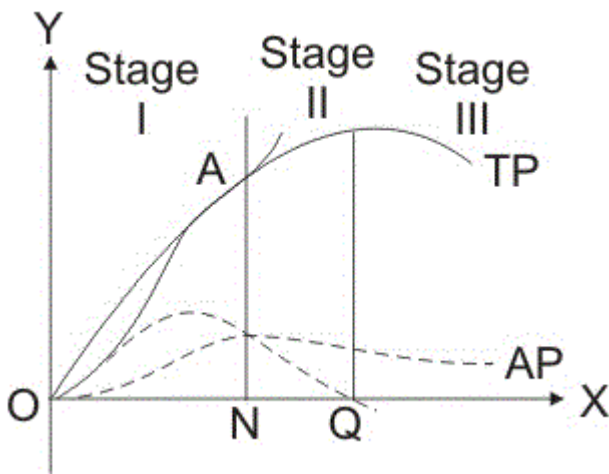
Total utility first increases then after reaching maximum point, it starts declining. When TU is

maximum MU is zero.

15. Explain the relationship between Total Product and Marginal Product at various stages of law of variable proportion. (4 Marks)

Ans. The relationship between total product and Marginal product in different stages of production may be discussed as under --

1. In the first stage, where law of increasing return operates, the total product and marginal product both are increases at an increasing rate.
2. In the second stage, where total product rises at diminishing rate. It means marginal product is falling when marginal product is Zero, the total product will be maximum.
3. In the third stage, which is the ultimate stage of Production, TP declines because MP is negative.



16. Suppose that a firm's total fixed cost is Rs. 100 and marginal cost schedule of a firm is following

Output (Unit)	1	2	3	4	5	6	7
Marginal Cost (Rs.)	10	20	30	40	50	60	70

(i) Is the MC curve is U - shaped?

(ii) Derive the AVC schedule? Will the AVC curve be U-shaped? (6 Marks)

Ans. (i) MC curve is not U-shaped in this situation

(ii) AVC curve will also not be U-shaped as per the AVC schedule given above

Output	MC	TFC	TVC	AVC
1	10	100	10	10
2	20	100	30	15
3	30	100	60	20

4	40	100	100	25
5	50	100	150	30
6	60	100	210	35
7	70	100	280	40

SECTION-B

[INTRODUCTORY MACRO ECONOMICS]

17. What is deficit financing ? (1 Mark)

Ans. Deficit financing means borrowing of the government from the Reserve Bank of India by creating new currency.

18. What is the safe level of fiscal deficit? (1 Mark)

Ans. In India, the safe level of fiscal deficit is considered to be 5% of the gross domestic product.

19. What is the basic difference between revenue expenditure and capital expenditure? (1 Mark)

Ans. Any expenditure, which neither creates an asset nor reduces a liability is categorised as revenue expenditure. For example, expenditure on law and order.

Any expenditure that creates an asset or reduces a liability is categorised as capital expenditure. For example, investment in shares.

20. What is Regressive tax? (1 Mark)

Ans. Regressive tax is that tax in which, tax decreases with increase in income. This tax system implies greater real burden of tax on poor people.

21. Give two examples of development expenditure? (1 Mark)

Ans. Development expenditure includes followings expenditures:
i. Plan expenditure on departmental enterprises of government like, railway, post and telegraph etc.
ii. Plan expenditure on non-departmental enterprises of government like Air India and Indian Airlines etc.

22. State the components of aggregate demand. Explain any one of them? (3 Marks)

Ans. Aggregate demand is the total demand for goods and services in an economy.

There are four components of aggregate demand:

(i) Private consumption demand (C)
(ii) Private investment demand (I)
(iii) Government demand for goods and services (G)

(iv) Net exports(E).

(i) Private consumption demand: It is the demand for goods and services for final consumption by households during a particular period in an economy.

23. Define average propensity to consume? Explain the concept with an example. (3 Marks)

Ans. Average propensity to consume is defined as the value of consumption at a particular level of national income. It is calculated by dividing total consumption expenditure by total income.

Symbolically, $APC = \frac{C}{Y}$

Where, C = Aggregate consumption
Y = Aggregate income

Suppose aggregate consumption is 80 and income is Rs 100.

The APC would be $80/100 = .80$

24. As a result of increase in investment by Rs. 20 crores, national income rises by Rs. 100 crores. Find MPC. (3 Marks)

Ans.

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

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

$$k = 5$$

$$5 = \frac{1}{1-MPC}$$

$$MPC = \frac{4}{5}$$

25. Complete the following table:

National Income (Rs.)	Consumption (Rs.)	Marginal propensity to consume (MPC)	Marginal propensity to save (MPS)
400	240		
500	320		
600	395		
700	465		

(3 Marks)

Ans.

National Income (Rs.)	Consumption (Rs.)	Marginal propensity to consume (MPC)	Marginal propensity to save (MPS)
400	240	-	-
500	320	.8	.2
600	395	.75	.25
700	465	.7	.3

Note: $MPC = \frac{\Delta C}{\Delta Y}$ and $MPC + MPS = 1$ or $1 - MPC = MPS$

26. In a situation of excess demand, what happens to output and prices in an economy? (3 Marks)

Ans. (i) In a situation of excess demand, the level of output remains constant because it is the situation of full employment and factors are already fully employed. However, in the long run output can be increased by increasing the productivity of labour.

(ii) Flow of goods and services remains constant owing to constant output. This creates pressure on demand of existing output. Excess pressure of demand on existing output causes price rise or inflation in the economy.

27. Explain briefly how open market operations are helpful in correcting the situation of deficient demand in the economy? (3 Marks)

Ans. When aggregate demand falls short of aggregate supply at full employment level, the situation is called deficient demand.

Through open market operations, i.e., buying of government securities, the central bank can control deficient demand. By buying government securities, the central bank will inject purchasing power into the economy, which will result in the expansion of credit. As a result, aggregate demand increases and the problem of deficient demand can be solved.

28. In an economy the actual level of income is Rs 400 crores, whereas the full employment level of income is Rs 800 crores. The MPC is .75. Calculate the increase in investment required to achieve the full employment level of income. (4 Marks)

Ans. Given,

Actual level of income = Rs 400 crores
Full employment level of income = Rs 800 crores.
MPC = .75

MPS = .25 (because $MPC + MPS = 1$)

$K = 1/MPS = 1/.25 = 4$

$$K = \Delta Y / \Delta I = 400 / \Delta I$$

$$4 = 400 / \Delta I = \Delta I = 400 / 4 = 100$$

Thus an increase of investment of Rs.100 is required to achieve full employment level of income.

29. Explain the concept of investment multiplier. Is there any relationship between multiplier and MPC? (4 Marks)

Ans. When investment increases by a certain amount, aggregate income increases by a multiple of that investment. Thus, investment multiplier is based on the change in income due to the change in investment. The change in income is determined by marginal propensity to consume.

There is a direct relationship between multiplier and marginal propensity to consume. The value of multiplier is determined by the value of MPC. Higher the marginal propensity to consume, greater will be the value of multiplier and vice versa.

30. Distinguish between APC and MPC. Can their value be greater than one? Give reasons. (6 Marks)

Ans. The ratio of total consumption expenditure to total income is called average propensity to consume.

$$\text{APC} = \frac{C}{Y} = \frac{\text{aggregate consumption}}{\text{aggregate income}}$$

Where, C = consumption, Y = income

Marginal propensity to consume can be defined as the ratio of change in consumption to change in income. It indicates that part of additional income which is spent on additional consumption.

$$\text{MPC} = \Delta C / \Delta Y$$

ΔC = Change in consumption

ΔY = Change in income

MPC = Marginal propensity to consume

The value of average propensity to consume may be greater than one if past savings are consumed in the current year or borrowings are taken into use for consumption in the current year. In such case consumption may be more than income and the value of APC will be greater than one.

Mpc is always greater than zero and less than one.

31. What are the objectives of a Government Budget ? (6 Marks)

Ans. General objectives of a government budget are as under :
 (i) **Economic growth:** To promote rapid economic growth so as to improve living standards of the people.

(ii) **Reduction of poverty and employment:** To eradicate mass poverty and unemployment by creating maximum employment opportunities and providing maximum social benefits to the poor. Social welfare is the single most objective of the government.

(iii) **Reallocation of Resources:** To reallocate resources with social and economic objectives.

(iv) **Reduction of inequalities:** To reduce inequalities of income and wealth through levying taxes and granting subsidies. More emphasis is laid on equitable distribution of wealth and income. Economic progress is not a sufficient goal. There should be equitable distribution of wealth in the economy.

(v) **Price stability:** To maintain price stability and to correct business cycles involving depression characterised by falling output and prices.

(vi) **Management of public enterprises:** To manage public enterprises which are of the nature of monopolies like railways, electricity etc.

32. Describe main objectives of budgetary policy. (6 Marks)

Ans. Objectives of budgetary policy are the following:

a) **Reallocation of resources:** Through budgetary policy government directs the allocation of resources in such a manner that there is a balance between the goal of profit maximisation and social welfare.

b) **Redistribution of income and wealth:** Government uses budgetary policy's taxation and subsidies instrument for equitable distribution of income and wealth in the economy, which is the principal objective of welfare state.

c) **Economic stability:** Budgetary policy is used as an important instrument to combat the situation of deflation and inflation. By doing it government tries to achieve economic stability. Economic stability stimulates the inducement to invest and it increases the rate of growth and development.

d) **Management of public enterprises:** Through budgetary policy government shows interest in increasing the rate of growth through public enterprises.

SECTION-A

[INTRODUCTORY MICRO ECONOMICS]

1. What do you mean by complementary good. Give two examples? (1 Mark)

Ans. It may be defined as the goods which are used together to satisfy a given want. The examples are pen and ink, car and petrol etc.

2. Why are goods demanded? (1 Mark)

Ans. We demand goods and services because they have the capacity to satisfy our wants. The capacity to satisfy human wants is called "Utility". Thus, we can state that goods are demanded because they possess utility.

3. Can a consumer go beyond the budget line? (1 Mark)

Ans. Consumer cannot go beyond the budget line as given his budget and prices of Good -1 and Good-2, any point beyond the budget line shows a non attainable combination or a non- feasible combination.

A consumer can only afford to buy combinations that fall along his budget line or inside it.

4. What does slope of IC show? (1 Mark)

Ans. Slope of IC shows the rate at which the consumer is willing to substitute one commodity for the other. It is called Marginal Rate of Substitution.

5. How is total utility derived from marginal utility. (1 Mark)

Ans. Total utility can be estimated as the sum total of all individual or marginal utilities.
 $TU = \sum MU$

6. Give the assumptions of consumer equilibrium in case of one commodity. (3 Marks)

Ans. The concept of consumer equilibrium is based on following assumptions:-

- (a) A consumer should be a rational person. It means that he tries to maximise his satisfaction.
- (b) Utility can be measured in cardinal number system.
- (c) Consumption of the commodity should be a continuous process.
- (d) All the units of the commodity should be homogeneous.
- (e) There should be no change in taste or preference of the consumer during the consumption period.
- (g) The marginal utility of money is given and assumed to be constant. Which is possible when the income of the consumer and the price level of the commodity (commodities) remains constant.

7. What is budget line? Give an example. (3 Marks)

Ans. The budget line represents all the commodities which a consumer can purchase with his entire money income. Let us have two commodities X and Y. Their respective prices are Rs P_1 and Rs P_2 . The entire income of the consumer is Rs 100. The budget line can be written as follows:

$$P_1X + P_2Y = 100$$

8. The marginal utility schedule of an individual "B" is given. Derive his total utility schedule.

Amount consumed	0	1	2	3	4	5	6	7
Marginal Utility	0	7	10	8	6	3	0	-2

(3 Marks)

Ans.

Total Utility	0	7	17	25	31	34	34	32
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Formula Used :- $TU = MU$

9. What is the logical explanation of "Law of Diminishing Marginal Utility"? (3 Marks)

Ans. Law of diminishing marginal utility states that "With every increase in units of the commodity consumed, the additional satisfaction decreases and hence marginal utility derived by the consumer decreases." This law is based on the concept of changes in intensity of desire of the consumer due to changes in level of consumption by the consumer.

Initially the intensity of desire for the commodity for the consumer is very high. Due to which, the marginal utility for the first unit of the commodity is also high. But as soon as the consumer consumes the first unit of the commodity his intensity of desire falls and hence the marginal utility also falls. This process continues till the level where the consumer does not have any desire left for the commodity. At this level the marginal utility for the commodity becomes zero.

Thus, with the decrease in the intensity of desire with every increase in consumption of the commodity, the marginal utility of the commodity also falls. This is stated by the law of diminishing marginal utility.

10. What determines tastes and preferences of consumers? (3 Marks)

Ans. Tastes and preferences of consumers are determined by three factors, as under:

- 1. Individual's likes and dislikes:** If one likes a particular good he/she will tend to buy it.
- 2. Fashion:** We are influenced by the emerging trends and fashion and prefers to buy things as per latest fashion.
- 3. Weather:** Tastes and preferences changes according to change in weather. In winter we prefer to have coffee, tea etc. whereas in summer we prefer cold coffee, ice cream, cold drinks etc. Thus, weather conditions affect our tastes and preferences.

11. State the relationship between MU and TU on the basis of a utility schedule. (4 Marks)

Ans. Marginal utility represents the changes in total utility and hence any change in marginal utility will also represent the rate of change in total utility. The relationship between TU and MU can be explained with the help of following schedule.

Amount consumed	1	2	3	4	5	6
Marginal Utility	10	8	6	3	0	-2
Total Utility	10	18	24	27	27	25

From the given table it can be concluded :-

- (1) When MU decreases but remains positive, the TU also increases but at a diminishing rate. In the given schedule MU decreases from 1st unit till 5th unit and hence TU increases at a diminishing rate.
- (2) At 5th unit of consumption, MU becomes zero due to which TU becomes maximum and constant.
- (3) At 6 units of consumption, MU becomes negative and TU starts diminishing.

12. State the law of Diminishing Marginal Utility. (4 Marks)

Ans. Law of diminishing marginal utility is the most logical explanation of consumer's behaviour. According to Prof. Marshall, this law states that , **“The additional benefit which a person derives from a given stock of a thing diminishes with every increase in the stock that he already has.”** Thus we can say that whenever the units of a commodity consumed by the consumer are increased, keeping other factors constant, the marginal utility of the commodity goes on decreasing. After a certain stage marginal utility derived becomes zero. If the consumer further consumes the commodity then marginal utility becomes negative.

Assumptions : The law of diminishing marginal utility is based on following assumptions:-

- (a) Units of the commodity under study should be in proper units, i.e. we should compare the marginal utility of cup of tea and not a spoonful.
- (b) Consumption of the commodity should be a continuous process. That is there should be no time interval in consumption. i.e. a second glass of water may give the same satisfaction or have the same marginal utility if it is consumed after 5 hours.
- (c) All the units of the commodity should be homogeneous.
- (d) There should be no change in taste or preference of the consumer during the consumption period.

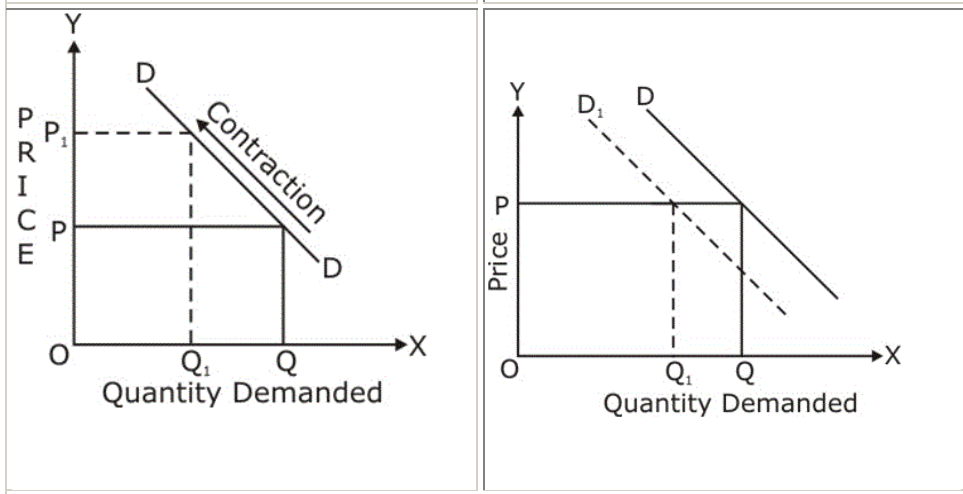
13. Differentiate between contraction in demand and decrease in demand. (4 Marks)

Ans.

CONTRACTION IN DEMAND	DECREASE IN DEMAND
Other things being equal, when the consumer is ready to purchase less quantity of the commodity at a higher price then, it is known as contraction in demand.	If due to change in factors other than the price of the commodity concerned, the consumer is ready to purchase less quantity at a given price then, it is termed as decrease in demand.

<p>It is caused due to an increase in price of the commodity, other factors remaining constant.</p>	<p>Factors responsible for decrease in demand are:</p> <ul style="list-style-type: none"> (i) Decrease in income and wealth of consumer (ii) Unfavourable change in consumer's tastes (iii) Expectation of lower prices in future (iv) Decrease in the price of substitute goods
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<p>It is represented by an upward movement along the demand curve</p>	<p>It is represented by a leftward shift in demand curve</p>
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14. Ramesh has RS 88 with him. He wants to purchase two commodities--- X & Y. the market price of both X & Y is RS 8 per. The following table presents the marginal utilities of the two commodities. Find out how many units of X & Y Ramesh should purchase to get maximum satisfaction.

Units of Commodity	Marinal Utility for Commodity	Marinal Utility for Commodity
1	80	40
2	72	36
3	64	24
4	56	20

5	48	16
6	40	12
7	32	8
8	24	4
9	16	0
10	8	0

(6 Marks)

Ans. In order to get maximum satisfaction he will have to spend his RS 88 in such a way to equalise the marginal utilities of X and Y per rupee.

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

(1) Ramesh purchases 8 units of X & 3 units of Y Since $P_x = P_y$ $MU_x = MU_y$

Total spending $(8 \times 8) + (3 \times 8) = (64 + 24) = \text{Rs } 88$

(2) At combination $X = 6$ and $Y = 1$ $MU_x = MU_y$, but total income is not spent because:

Total spending $(6 \times 8) + (1 \times 8) = (48 + 8) = \text{Rs } 56$

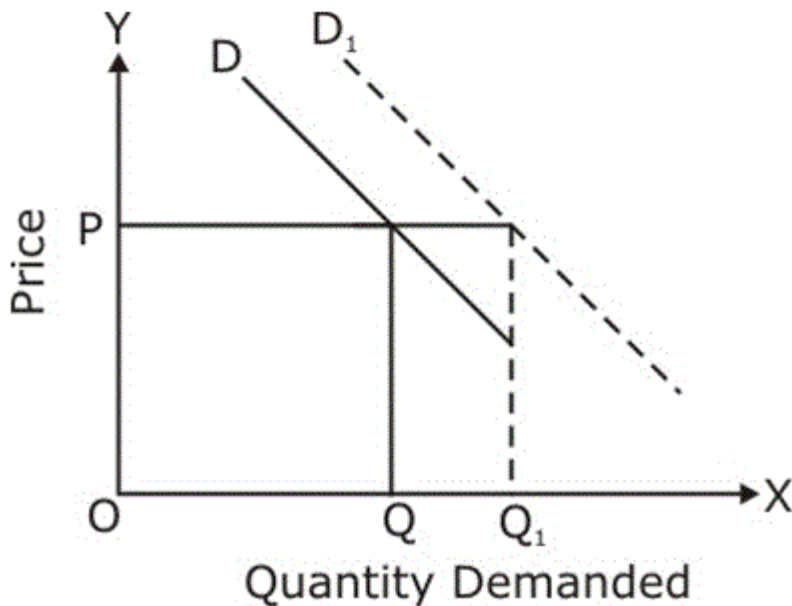
(3) At combination $X = 9$ and $Y = 5$ $MU_x = MU_y$, but this is not affordable in terms of consumer's income.

Total spending $(9 \times 8) + (5 \times 8) = (72 + 40) = \text{Rs } 112$ which he cannot afford to buy.

Thus the best combination where the consumer will get maximum satisfaction will be the first combination of 8X and 3Y.

15. Explain the factors responsible for a rightward shift in market demand curve of a commodity. (6 Marks)

Ans. A rightward shift in demand curve for the commodity represents that the consumer is ready to consume more quantity of the commodity at a given price. It is also termed as increase in demand and arises due to following factors :-



(i) Increase in the price of the substitute goods : When the price of substitute goods increases then these goods become relatively costlier as compared to other commodity. As a result the consumer changes his preference towards the cheaper commodity and is ready to consume more quantity of the commodity at a given price. For example, an increase in the price of tea will lead to an increase in demand for coffee.

(ii) Decrease in the price of the complementary goods : When the price of complementary goods decreases then, due to joint demand the consumer is ready to consume more quantity of the other commodity at a given price. For example, a decrease in price of petrol will lead to an increase in demand for cars.

(iii) Increase in the income and wealth of the consumer : Increase in income and wealth of the consumer leads to an increase in purchasing power of the consumer. As a result consumer will be ready to purchase more quantity of the commodity at a given price.

(iv) Favourable changes in consumer's tastes: If the consumer changes his tastes and preferences in favour of the commodity, then he will be ready to consume more units of the commodity at a given price.

(v) Increase in market size : If the market size of the commodity increases then the total number of consumers for the commodity will increase and hence, the market demand for the commodity will increase at a given price.

16. State and explain the law of diminishing marginal utility. (6 Marks)

Ans. This law is the most logical explanation of consumer's behaviour. According to Prof. Marshall, this law states that whenever the units of a commodity consumed by the consumer are increased, keeping other factors constant, the marginal utility of the commodity goes on decreasing.

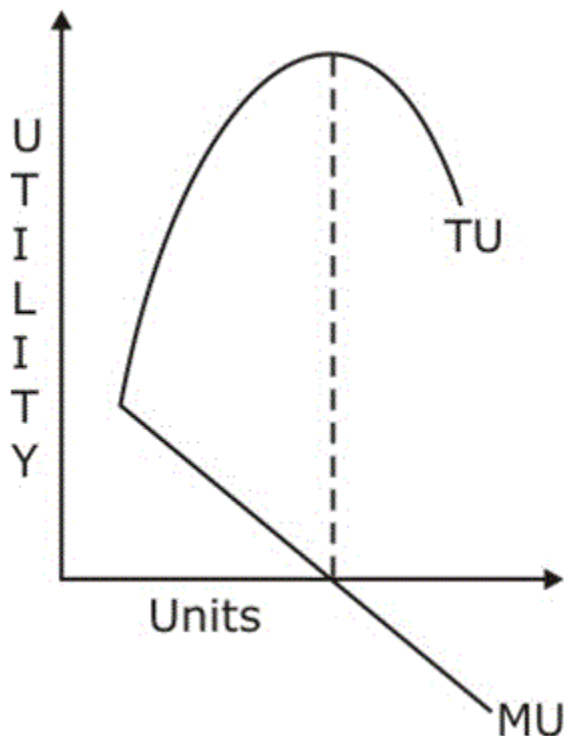
Assumptions : The law of diminishing marginal utility is based on the following assumptions:

(a) Units of the commodity under study should be homogeneous, i.e. units should be same in all respect.

(b) Consumption of the commodity should be a continuous process. There should be no timegap in consumption.

(c) There should be no change in tastes and preferences of the consumer during the consumption period.

Explanation : The law is based on the intensity of the desire of the consumer for a particular commodity. When the consumer does not have even a single unit of a commodity then the intensity of his desire is very high. As a result, Marginal Utility is high. But as soon as he consumes one unit of the commodity his intensity of desire diminishes. As a result of which the marginal utility or satisfaction from the second unit also falls. This process goes on till a level where the consumer becomes fully satisfied with the commodity. At this level the consumer does not derive any satisfaction from the additional unit of the commodity. This level of consumption is known as Zero Marginal Utility level or Saturation level. With further increase in units of the commodity consumed the marginal utility of the commodity becomes negative, i.e. instead of getting satisfaction, the consumer gets dissatisfaction from the additional unit of the commodity. This law can be explained with the help of following diagram :-



In the given diagram, the marginal utility of the commodity first decreases and then becomes zero. This level of output represents the level of saturation or zero marginal utility. After this level of consumption, if units are increased then marginal utility of the commodity becomes negative.

Total utility first increases then after reaching maximum point, it starts declining. When TU is maximum MU is zero.

SECTION-B

[INTRODUCTORY MACRO ECONOMICS]

17. What is wealth tax? (1 Mark)

Ans. Wealth tax is a direct tax because its liability to pay tax and burden of tax falls on the same person.

18. What is the basic difference between revenue expenditure and capital expenditure? (1 Mark)

Ans. Any expenditure, which neither creates an asset nor reduces a liability is categorised as revenue expenditure. For example, expenditure on law and order.

Any expenditure that creates an asset or reduces a liability is categorised as capital expenditure. For example, investment in shares.

19. What is escheat? (1 Mark)

Ans. Escheat means all the claims of the government on the property of a person who died without having any legal heirs or without leaving a will.

20. Give two examples of development expenditure? (1 Mark)

Ans. Development expenditure includes followings expenditures:
i. Plan expenditure on departmental enterprises of government like, railway, post and telegraph etc.
ii. Plan expenditure on non-departmental enterprises of government like Air India and Indian Airlines etc.

21. What are the main components of capital receipts? (1 Mark)

Ans. Main component of capital receipts are:

- a) Recovery of loans
- b) Borrowings and other liabilities
- c) Other receipts

22. What is fees? Explain the main features of fees. (3 Marks)

Ans. Fee is a payment to the government for services that it renders to the people. Main features of fee are the following:

- a) Fee is a compulsory payment. If a person wants to avail a service, he is required to pay fees for it.
- b) Fee provides specific benefits to the payer. It also implies general advantage.
- c) Fee is not a payment for commercial service. It is the payment for the administrative and judicial services provided to the people.

d) Amount of fee is equivalent to the cost of service provided.

23. Discuss the difference between progressive and regressive taxation. (3 Marks)

Ans. Progressive and regressive taxation system is very different from each other. The main difference between progressive and regressive tax system are following:

i. Progressive tax is that system of taxation in which rate of tax increases with increase in income but in case of regressive taxation rate of tax decreases with increase in income.

ii. In Progressive taxation system burden of tax is more on the rich and less on the poor, whereas in regressive taxation system real burden of tax is more on poor and less on the rich.

24. Distinguish between current account and capital account. (3 Marks)

Ans.

Current Account	Capital Account
1. It records economic transactions relating to goods and services and unilateral transfers.	1. Records capital transactions such as sale and purchase of assets.
2. Balance in current account has a direct influence on the level of income. It brings change in current level of income.	2. The capital account does not have a direct effect on the level of income. It brings change in the capital stock of a country.
3. Current account transactions are flow in nature.	3. Capital account transactions are stock in nature.

25. Give reasons why people desire to have foreign exchange. (3 Marks)

Ans. Some reasons why people desire to have foreign exchange are:

- (i) For importing goods and services from foreign countries
- (ii) For making transfer payments in the form of gifts, donations etc.
- (iii) For making investment abroad in financial and physical assets
- (iv) For speculating the value of exchange rate

26. State four categories in which balance of payment transactions are classified. Explain any one of them. (3 Marks)

Ans. The balance of transactions are classified into the following four categories:

- | | | |
|-------|-------------------|------------------------|
| (i) | Visible | transactions |
| (ii) | | Invisible transactions |
| (iii) | Unilateral | transfers |
| (iv) | Capital transfers | |

Capital transfers: It relates to capital receipts and capital payments. These includes sale of assets, borrowings, capital repayments etc. There relate to short and long term movements of capital between nations.

28. What are the three exchange rate systems that have been followed in the foreign exchange market? Define one of them. (4 Marks)

Ans. Three exchange rate systems that have been followed in the foreign exchange market are:

- (i) Fixed exchange rate system
- (ii) Flexible exchange rate system
- (iii) Managed floating

Managed Floating: Managed floating is a mixture of a flexible and fixed exchange rate system. The central banks intervene to buy and sell foreign currencies to moderate exchange rate movements whenever they feel that such actions are appropriate.

28. Distinguish between fixed and flexible exchange rate. (4 Marks)

Ans.

Fixed Exchange Rate	Flexible Exchange Rate
1. Fixed Exchange Rate is decided by the government and it remains unchanged.	1. Flexible Exchange Rate system is determined by demand and supply of foreign exchange.
2. The exchange rate may vary slightly.	2. Exchange rate keeps changing all the times.
3. Banks sell and purchase currencies at fixed prices to maintain fixed exchange rate	3. Determined freely without intervention of central bank.

29. Explain the meaning of plan and non-plan expenditure. (4 Marks)

Ans. Plan expenditure is that expenditure which is incurred by the government to fulfil its planned development programmes. It includes both the consumption as well as investment expenditure by the government or planning commission of country. Expenditure on agriculture, power and transport, communication, industry health and education are some notable example of plan expenditure.

Non-plan development expenditure is that expenditure of government, which are beyond the scope of its planned development. Any expenditure other than planned expenditure is treated as non-plan expenditure. It includes consumption as well as investment expenditure done by the government.

30) Show the differences between direct tax and indirect tax. (6 Marks)

Ans. Distinction between Direct Tax and Indirect Tax :

Direct Tax	Indirect Tax
(i) Direct tax is the tax in which the liability to pay the tax and the burden of the tax falls on the same person.	(i) Indirect tax is the tax in which the liability to pay the tax is on one person and the burden of the tax falls on some other person.
(ii) Direct tax is paid by the person on whom it is imposed. Hence, shifting of burden is not possible.	(ii) Indirect tax is paid by the consumers i.e., the person other than the person on whom it is imposed. Thus, shifting of burden is possible.
(iii) The burden of tax is more on rich people than the poor.	(iii) The burden of tax is more on poor people than the rich.
(iv) Impact and incidence of tax is on the same person.	(iv) Impact is on one person and incidence is on some other person.
(v) Examples are: (a) Income Tax (b) Wealth Tax (c) Gift Tax.	(v) Examples are: (a) Sales Tax (b) Excise Duty (c) Custom Duty

31. Explain the components of revenue receipts of the government. (6 Marks)

Ans. Revenue receipts are the receipts which neither create liabilities nor cause any reduction in assets. Revenue receipts of the government have two components:

i. **Tax Receipts:** Tax is a major source of revenue receipts of the governments. A tax is a legal compulsory payment imposed by the government on the people of the country. Tax can be classified as direct tax and indirect tax.

a) **Direct tax:** Direct tax is the tax which is levied on the property and income of the person and it is paid directly by the person on whom it is imposed. Income tax, wealth tax and corporation tax are some examples of direct tax.

b) **Indirect tax:** Indirect tax is levied on one person and it is paid by some other person. In case of indirect taxes the liability of payment of the tax to the government lies on the producer or seller while the actual burden falls on the buyer. Thus, the burden of indirect tax can be shifted. Sales tax, excise duties, custom duties are some examples of indirect tax.

ii. **Non-Tax Receipts:** Non-tax receipts include the income accruing to the government from sources other than tax. It includes:

a) **Commercial revenue:** It is the revenue received by the government in the form of prices paid for the government supplied commodities and services, like payment of postage, electricity, railway services etc.

b) **Interest and dividends** on investments made by the government.

c) **Administrating revenue** includes fee, license fees, fines and penalties, forfeiture of security or bonds and escheat etc.

32. Explain the meaning of fiscal deficit and its importance in economic development? (6 Marks)

Ans. Fiscal deficit is the excess of total expenditure (revenue + capital) over total receipts (revenue + capital other than borrowings). Fiscal deficit is equal to the total borrowings and other liabilities of the government.

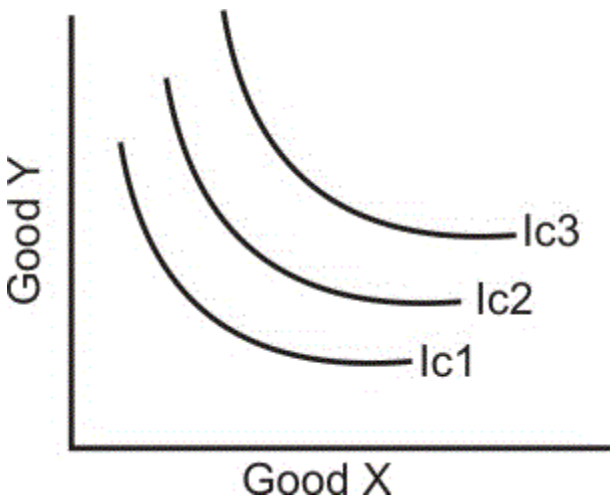
Fiscal deficit is the sign of increase in government expenditure. Government increases expenditure to increase the rate of development in the country. Government spend money for various development projects in the sectors which are lagging behind in the process of development. Government spend this money in the agriculture sector, rural development and various infrastructure schemes. Government spendings create employment opportunities in various fields. Fiscal deficit facilitate nations to escape from economic recession because increase in government expenditure increases aggregate demand in the market.

SECTION-A

[INTRODUCTORY MICRO ECONOMICS]

1. What is an indifference map? (1 Mark)

Ans. The consumer preferences for all the bundles can be represented by a family of indifference curves as given in the diagram. It is called indifference map. In other words a set of indifference curves is called indifference map.



2. Define normal goods. (1 Mark)

Ans. Normal goods are those goods whose demand generally increases with increase in income of the consumer.

3. What happens to budget set when both prices as well as income is doubled? (1 Mark)

Ans. In this situation, the budget set will remain the same because prices and income has changed in the same ratio.

4. What is monotonic preference? (1 Mark)

Ans. It means that a rational consumer always prefers a combination having more of both the commodities as it offers him a higher level of satisfaction.

5. Law of demand fails in case of a certain types of goods. What are these goods called? (1 Mark)

Ans. Giffen goods or inferior goods are the goods in case of which the law of demand fails.

6. If the MU derived from the commodity is greater than the price of the commodity then how it will affect the consumption behaviour of the consumer? (3 Marks)

Ans. The consumer can achieve the level of maximum satisfaction or consumer equilibrium at a level where the MU derived by the consumer becomes equal to the price of the commodity

i.e. $MU = Price$

If the MU derived by the consumer is greater than the price then consumer will try to consume more units of the commodity in order to achieve maximum level of satisfaction as with the increase in the consumption the MU derived from the commodity will fall.

7. State the properties of Indifference curve. (3 Marks)

Ans. The Indifference curve has following properties-

(1) Indifference curve slopes downwards from left to right because both goods are desirable and consumer prefers more goods to less goods.

(2) Indifference curves are always convex to the point of origin .

(3) Indifference curves cannot meet and never intersect each other.

(4) Higher indifference curve represent higher level of satisfaction.

8. Give the assumptions of consumer equilibrium in case of one commodity. (3 Marks)

Ans. The concept of consumer equilibrium is based on following assumptions:-

(a) A consumer should be a rational person. It means that he tries to maximise his satisfaction.

(b) Utility can be measured in cardinal number system.

(c) Consumption of the commodity should be a continuous process.

(d) All the units of the commodity should be homogeneous.

(e) There should be no change in taste or preference of the consumer during the consumption period.

(g) The marginal utility of money is given and assumed to be constant. Which is possible when the income of the consumer and the price level of the commodity (commodities) remains constant.

9. State the methods which are used to measure elasticity of demand. Explain any one. (3 Marks)

Ans. The methods which are used to measure elasticity of demand are :-
(i) Percentage or proportionate method
(ii) Total outlay or total expenditure method
(iii) Point or geometric method.

Percentage or proportionate method

According to this method price elasticity of demand can be estimated as the negative of the ratio of the percentage change in quantity demanded and the percentage change in price of the commodity..

$$E_d = \left(\frac{\% \text{ (or proportionate) change in quantity demanded}}{\% \text{ (or proportionate) change in price of the commodity}} \right)$$

In other words

$$E_d = \left(\frac{\Delta Q}{Q} \times \frac{P}{\Delta P} \right)$$

Where

$\frac{\Delta Q}{Q}$ = Change in quantity demanded
 $\frac{\Delta P}{P}$ = Change in price of the commodity
P = Original price or price before the change
Q = Original demand or quantity demanded before the change.

10. If the price of the commodity increases, how will it affect the consumption behaviour and why.

Ans. If the price of the commodity increases then the consumer will be ready to consume less units of the commodity, because in order to get maximum satisfaction $MU \text{ of Good X} = \text{Price of Good X}$. He will consume till the point where Marginal Utility derived is equal to the price paid for it. (keeping in mind the law of diminishing marginal utility). As the price increases he will purchase less units of the commodity in order to equalise MU with price.

11. State the relationship between MU and TU on the basis of a utility schedule. (4 Marks)

Ans. Marginal utility represents the changes in total utility and hence any change in marginal utility will also represent the rate of change in total utility. The relationship between TU and MU can be explained with the help of following schedule.

Amount consumed	1	2	3	4	5	6
Marginal Utility	10	8	6	3	0	-2
Total Utility	10	18	24	27	27	25

From the given table it can be concluded :-

- (1) When MU decreases but remains positive, the TU also increases but at a diminishing rate. In the given schedule MU decreases from 1st unit till 5th unit and hence TU increases at a diminishing rate.
- (2) At 5th unit of consumption, MU becomes zero due to which TU becomes maximum and constant.
- (3) At 6 units of consumption, MU becomes negative and TU starts diminishing.

12. Starting from an initial situation of consumer's equilibrium suppose that marginal utility of a rupee increases. Will it increase or decrease the quantity demanded of the product? (4 Marks)

Ans. Suppose the price of one orange is RS 2 & the MU of money is 4 utils. The consumer's equilibrium will be

$$\frac{MU_x}{4} = 2$$

So $MU_x = 8$ which is at 6 oranges.

Now if MU of money increases to 5 the 6th orange will give utility worth $8/5 = 1.6$ which is less than price. Hence to remain in equilibrium the consumer has to reduce his consumption from 6

oranges to 5 oranges where the utility is 10. So again $\frac{MU_x}{MU_m} = \frac{5}{10} = 2$

13. A consumer spends Rs 100 on a commodity when its price is Rs 2 per unit and spends Rs 96 when its price is Rs 3 per unit. Calculate price elasticity of demand by total outlay method and by proportionate method. (4 Marks)

Ans. Total Outlay Method :- When the price of the commodity increases from Rs 2 to Rs 3 per unit, the total expenditure incurred by the consumer decreases from Rs 100 to Rs 96. According to total outlay method, when the total expenditure decreases with a rise in price then the commodity is said to have elastic or more than unit elastic demand.

Proportionate Method

PRICE	TOTAL EXPENDITURE	QUANTITY = T.E./P
2	100	50
3	96	32

Given

Original Price P = Rs 2 per unit

that

New Price $P_1 = \text{Rs } 3$ per unit

Change in price $\Delta P (P_1 - P) = \text{Re } 1$

Original Quantity $Q = 50$ units

New Quantity $Q_1 = 32$ units.

Change in quantity $\Delta Q (Q_1 - Q) = (-) 18$ units
We know that

$$E_d = \frac{\Delta Q}{\Delta p Q} \left(\frac{-18}{50} \right) \frac{\Delta Q \times P}{\Delta p Q}$$

Substituting values we get

$$E_d = \frac{18 \times 2}{150}$$

i.e. $E_d = 0.72$

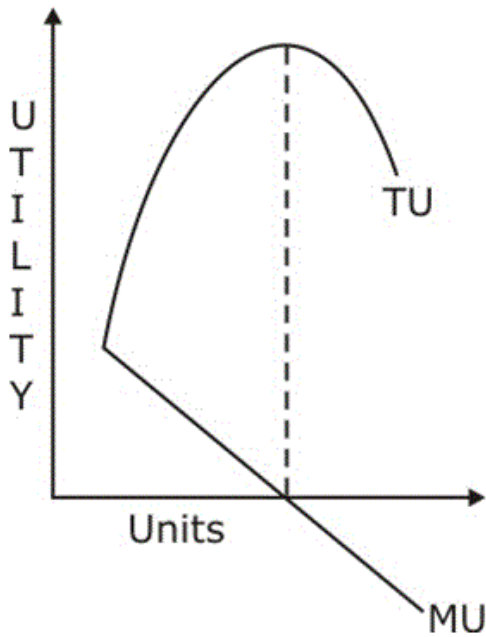
14. State and explain the law of diminishing marginal utility. (6 Marks)

Ans. This law is the most logical explanation of consumer's behaviour. According to Prof. Marshall, this law states that whenever the units of a commodity consumed by the consumer are increased, keeping other factors constant, the marginal utility of the commodity goes on decreasing.

Assumptions : The law of diminishing marginal utility is based on the following assumptions:

- (a) Units of the commodity under study should be homogeneous, i.e. units should be same in all respect.
- (b) Consumption of the commodity should be a continuous process. There should be no timegap in consumption.
- (c) There should be no change in tastes and preferences of the consumer during the consumption period.

Explanation : The law is based on the intensity of the desire of the consumer for a particular commodity. When the consumer does not have even a single unit of a commodity then the intensity of his desire is very high. As a result, Marginal Utility is high. But as soon as he consumes one unit of the commodity his intensity of desire diminishes. As a result of which the marginal utility or satisfaction from the second unit also falls. This process goes on till a level where the consumer becomes fully satisfied with the commodity. At this level the consumer does not derive any satisfaction from the additional unit of the commodity. This level of consumption is known as Zero Marginal Utility level or Saturation level. With further increase in units of the commodity consumed the marginal utility of the commodity becomes negative, i.e. instead of getting satisfaction, the consumer gets dissatisfaction from the additional unit of the commodity. This law can be explained with the help of following diagram :-



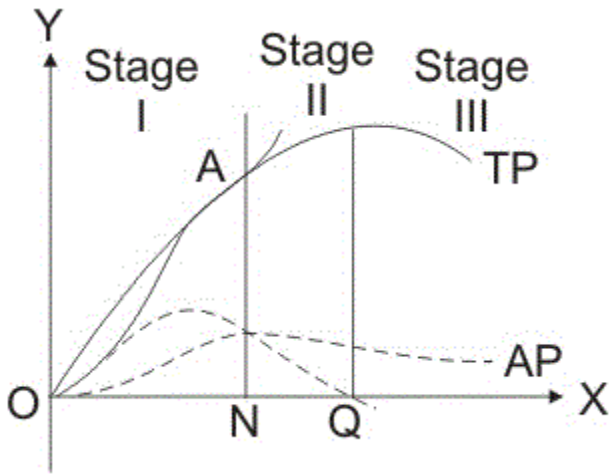
In the given diagram, the marginal utility of the commodity first decreases and then becomes zero. This level of output represents the level of saturation or zero marginal utility. After this level of consumption, if units are increased then marginal utility of the commodity becomes negative.

Total utility first increases then after reaching maximum point, it starts declining. When TU is maximum MU is zero.

15. Explain the relationship between Total Product and Marginal Product at various stages of law of variable proportion. (4 Marks)

Ans. The relationship between total product and Marginal product in different stages of production may be discussed as under --

1. In the first stage, where law of increasing return operates, the total product and marginal product both are increases at an increasing rate.
2. In the second stage, where total product rises at diminishing rate. It means marginal product is falling when marginal product is Zero, the total product will be maximum.
3. In the third stage, which is the ultimate stage of Production, TP declines because MP is negative.



16. Suppose that a firm's total fixed cost is Rs. 100 and marginal cost schedule of a firm is following

Output (Unit)	1	2	3	4	5	6	7
Marginal Cost (Rs.)	10	20	30	40	50	60	70

(i) Is the MC curve is U - shaped?

(ii) Derive the AVC schedule? Will the AVC curve be U-shaped? (6 Marks)

Ans. (i) MC curve is not U-shaped in this situation

(ii) AVC curve will also not be U-shaped as per the AVC schedule given above

Output	MC	TFC	TVC	AVC
1	10	100	10	10
2	20	100	30	15
3	30	100	60	20
4	40	100	100	25
5	50	100	150	30
6	60	100	210	35
7	70	100	280	40

SECTION-B

[INTRODUCTORY MACRO ECONOMICS]

17. What is deficit financing ? (1 Mark)

Ans. Deficit financing means borrowing of the government from the Reserve Bank of India by creating new currency.

18. What is the safe level of fiscal deficit? (1 Mark)

Ans. In India, the safe level of fiscal deficit is considered to be 5% of the gross domestic product.

19. What is the basic difference between revenue expenditure and capital expenditure? (1 Mark)

Ans. Any expenditure, which neither creates an asset nor reduces a liability is categorised as revenue expenditure. For example, expenditure on law and order.

Any expenditure that creates an asset or reduces a liability is categorised as capital expenditure. For example, investment in shares.

20. What is Regressive tax? (1 Mark)

Ans. Regressive tax is that tax in which, tax decreases with increase in income. This tax system implies greater real burden of tax on poor people.

21. Give two examples of development expenditure? (1 Mark)

Ans. Development expenditure includes followings expenditures:
i. Plan expenditure on departmental enterprises of government like, railway, post and telegraph etc.
ii. Plan expenditure on non-departmental enterprises of government like Air India and Indian Airlines etc.

22. State the components of aggregate demand. Explain any one of them? (3 Marks)

Ans. Aggregate demand is the total demand for goods and services in an economy.

There are four components of aggregate demand:
(i) Private consumption demand (C)
(ii) Private investment demand (I)
(iii) Government demand for goods and services (G)
(iv) Net exports(E).

(i) Private consumption demand: It is the demand for goods and services for final consumption by households during a particular period in an economy.

23. Define average propensity to consume? Explain the concept with an example. (3 Marks)

Ans. Average propensity to consume is defined as the value of consumption at a particular level of national income. It is calculated by dividing total consumption expenditure by total income.

Symbolically, $APC = \frac{C}{Y}$

Where, C = Aggregate consumption
Y = Aggregate income

Suppose aggregate consumption is 80 and income is Rs 100.

The APC would be $80/100 = .80$

24. As a result of increase in investment by Rs. 20 crores, national income rises by Rs. 100 crores. Find MPC. (3 Marks)

Ans.

$$k = \frac{\Delta Y}{\Delta I}$$
$$= \frac{100}{20}$$
$$k = 5$$
$$5 = \frac{1}{1-MPC}$$
$$MPC = \frac{4}{5}$$

25. Complete the following table:

National Income (Rs.)	Consumption (Rs.)	Marginal propensity to consume (MPC)	Marginal propensity to save (MPS)
400	240		
500	320		
600	395		
700	465		

(3 Marks)

Ans.

National Income (Rs.)	Consumption (Rs.)	Marginal propensity to consume (MPC)	Marginal propensity to save (MPS)
400	240	-	-
500	320	.8	.2
600	395	.75	.25
700	465	.7	.3

Note: $MPC = \frac{\Delta C}{\Delta Y}$ and $MPC + MPS = 1$ or $1 - MPC = MPS$

26. In a situation of excess demand, what happens to output and prices in an economy? (3 Marks)

Ans. (i) In a situation of excess demand, the level of output remains constant because it is the situation of full employment and factors are already fully employed. However, in the long run output can be increased by increasing the productivity of labour.

(ii) Flow of goods and services remains constant owing to constant output. This creates pressure on demand of existing output. Excess pressure of demand on existing output causes price rise or inflation in the economy.

27. Explain briefly how open market operations are helpful in correcting the situation of deficient demand in the economy? (3 Marks)

Ans. When aggregate demand falls short of aggregate supply at full employment level, the situation is called deficient demand.

Through open market operations, i.e., buying of government securities, the central bank can control deficient demand. By buying government securities, the central bank will inject purchasing power into the economy, which will result in the expansion of credit. As a result, aggregate demand increases and the problem of deficient demand can be solved.

28. In an economy the actual level of income is Rs 400 crores, whereas the full employment level of income is Rs 800 crores. The MPC is .75. Calculate the increase in investment required to achieve the full employment level of income. (4 Marks)

Ans. Given,

Actual level of income = Rs 400 crores
Full employment level of income = Rs 800 crores.
MPC = .75

MPS = .25 (because MPC + MPS = 1)

$K = 1/MPS = 1/.25 = 4$

$K = \Delta Y / \Delta I = 400 / \Delta I$

$4 = 400 / \Delta I = \Delta I = 400 / 4 = 100$

Thus an increase of investment of Rs.100 is required to achieve full employment level of income.

29. Explain the concept of investment multiplier. Is there any relationship between multiplier and MPC? (4 Marks)

Ans. When investment increases by a certain amount, aggregate income increases by a multiple of that investment. Thus, investment multiplier is based on the change in income due to the change in investment. The change in income is determined by marginal propensity to consume.

There is a direct relationship between multiplier and marginal propensity to consume. The value of multiplier is determined by the value of MPC. Higher the marginal propensity to consume, greater will be the value of multiplier and vice versa.

30. Distinguish between APC and MPC. Can their value be greater than one? Give reasons. (6 Marks)

Ans. The ratio of total consumption expenditure to total income is called average propensity to consume.

$$APC = \frac{C}{Y} = \frac{\text{aggregate consumption}}{\text{aggregate income}}$$

Marginal propensity to consume can be defined as the ratio of change in consumption to change in income. It indicates that part of additional income which is spent on additional consumption.

$$MPC = \Delta C / \Delta Y$$

ΔC = Change in consumption

ΔY = Change in income

MPC = Marginal propensity to consume

The value of average propensity to consume may be greater than one if past savings are consumed in the current year or borrowings are taken into use for consumption in the current year. In such case consumption may be more than income and the value of APC will be greater than one.

Mpc is always greater than zero and less than one.

31. What are the objectives of a Government Budget ? (6 Marks)

Ans. General objectives of a government budget are as under :

(i) **Economic growth:** To promote rapid economic growth so as to improve living standards of the people.

(ii) **Reduction of poverty and employment:** To eradicate mass poverty and unemployment by creating maximum employment opportunities and providing maximum social benefits to the poor. Social welfare is the single most objective of the government.

(iii) **Reallocation of Resources:** To reallocate resources with social and economic objectives.

(iv) **Reduction of inequalities:** To reduce inequalities of income and wealth through levying taxes and granting subsidies. More emphasis is laid on equitable distribution of wealth and income. Economic progress is not a sufficient goal. There should be equitable distribution of wealth in the economy.

(v) **Price stability:** To maintain price stability and to correct business cycles involving depression characterised by falling output and prices.

(vi) **Management of public enterprises:** To manage public enterprises which are of the nature of monopolies like railways, electricity etc.

32. Describe main objectives of budgetary policy. (6 Marks)

Ans. Objectives of budgetary policy are the following:

a) **Reallocation of resources:** Through budgetary policy government directs the allocation of resources in such a manner that there is a balance between the goal of profit maximisation and social welfare.

b) **Redistribution of income and wealth:** Government use budgetary policy's taxation and subsidies instrument for equitable distribution of income and wealth in the economy, which is the principal objective of welfare state.

c) **Economic stability:** Budgetary policy is used as an important instrument to combat the situation of deflation and inflation. By doing it government tries to achieve economic stability. Economic stability stimulates the inducement to invest and it increases the rate of growth and development.

d) **Management of public enterprises:** Through budgetary policy government shows interest in increasing the rate of growth through public enterprises.

SECTION-A

[INTRODUCTORY MICRO ECONOMICS]

1. What do you mean by an inferior good ? (1 Mark)

Ans. Inferior goods are those low quality goods whose demand generally decreases with increase in income of the consumer.

2. What happens to budget set when both prices as well as income is doubled? (1 Mark)

Ans. In this situation, the budget set will remain the same because prices and income has changed in the same ratio.

3. Law of demand fails in case of a certain types of goods. What are these goods called? (1 Mark)

Ans. Giffen goods or inferior goods are the goods in case of which the law of demand fails.

4. How is total utility derived from marginal utility. (1 Mark)

Ans. Total utility can be estimated as the sum total of all individual or marginal utilities.
 $TU = \sum MU$

5. What is meant by the term equilibrium. (1 Mark)

Ans. Equilibrium is represented as the level of complete balance between various factors, i.e. it represents the level of best position achieved.

6. “With increase in consumption of the commodity, the additional satisfaction or marginal utility decreases.” Give reasons. (3 Mark)

Ans. Law of diminishing marginal utility states that “with increase in consumption of the commodity, the additional satisfaction or marginal utility decreases.” This law explains the consumption behaviour of an individual. When the consumer consumes first unit of the commodity, he will get high utility because his intensity of desire is high. When he consumes the second unit, he will get lesser satisfaction in comparison to the first one. Thus the marginal utility or satisfaction from the second unit will decrease. The third unit will give him further lesser satisfaction. This process goes on till the level where the consumer becomes fully satisfied. At this level, he does not derive any satisfaction from the additional unit of the commodity due to which the MU becomes zero. With further consumption, the marginal utility derived becomes negative, i.e. instead of getting satisfaction, the consumer gets dissatisfaction from the additional unit of the commodity. Thus, with increase in consumption of the commodity, the additional satisfaction or marginal utility decreases.

7. If the MU derived by the consumer is greater than the price of the commodity then how it will affect the consumption behaviour of the consumer? (3 Mark)

Ans. If the MU derived by the consumer is greater than the price of the commodity then the consumer will be ready to consume more units of the commodity. He will consume till the point where MU is equal to the price in order to get maximum satisfaction.

8. How the consumer equilibrium is affected by an increase in income of the consumer?

Ans. An increase in income of the consumer will lead to the rightward shift in the budget line, Hence, consumer's equilibrium will shift towards the right i.e., the consumer will be able to consume more units of the commodity. He will be able to choose the combination of two goods on the higher indifference curve.

9. Explain the law of demand with the help of a hypothetical demand schedule. (3 Marks)

Ans. Law of demand represents the functional relationship between price and quantity demanded of the commodity. According to this law, other things being constant (remaining the same), demand for a commodity will be more when price of the commodity is less and it will be less when prices are more. In other words, other things being constant, price and demand for a commodity are inversely related. It can be explained with the help of following schedule :

PRICE	QUANTITY DEMANDED
4	10
6	5

In the given schedule, when the price of the commodity increases from Rs 4 per unit to Rs 6 per unit the quantity demanded falls from 10 units to 5 units.

10. What is Economics all about? (3 Marks)

Ans. Economics is a social science which studies individuals and organizations engaged in the production, distribution and consumption of goods and services.

It is considered a social science. It is different from material sciences like Chemistry, Physics or Biology.

It deals with people as individuals or groups.

Consumption in economics means using of goods and services, for e.g. consuming food, using services of teachers etc. Production means transformation of inputs into outputs by adding utility to it.

Distribution means sharing of produced output among different consumers.

Same person can be a consumer when he is using a good or service and he can also be a producer when he is engaged in production.

11. Explain the concept of total utility and marginal utility with the help of an example. (4 Marks)

Ans. Total Utility :- Total utility is defined as the total psychological satisfaction derived from the given stock of the commodity consumed. It can be estimated as the sum total of marginal utilities derived from the commodity.

$$TU = \sum MU$$

Marginal Utility :- Marginal utility is defined as the utility derived from the additional unit of the commodity consumed. It can be estimated as the change in TU due to change in one unit of the commodity consumed.

$$MU_n = TU_n - TU_{n-1}$$

For example if the first unit of the commodity gives a satisfaction of 20 utils and the second unit of the commodity gives us 15 utils of satisfaction. Hence the total utility derived from 2 commodities will be 35 utils and the marginal utility for 2nd unit will 15 utils.

12. State the condition of consumer's equilibrium in case of single commodity. (4 Marks)

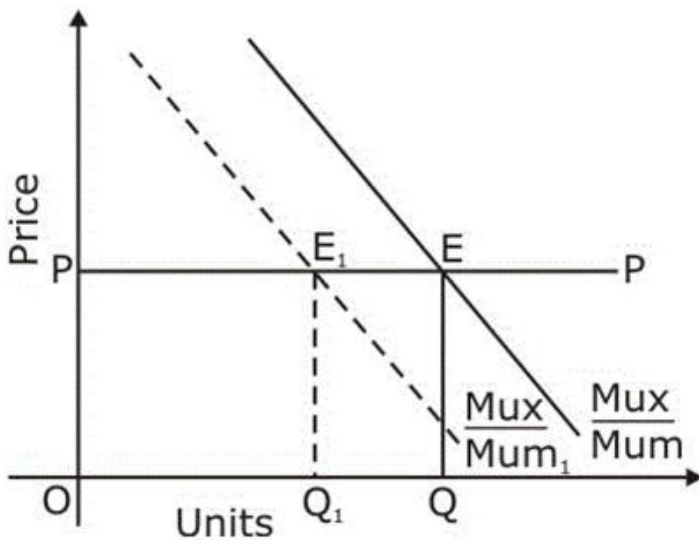
Ans. Consumer equilibrium is determined at a level where the marginal utility derived by the consumer in terms of money becomes equal to the price of the commodity,

i.e.

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

The consumer while purchasing a commodity compares the price with its expected utility. He will buy only when the benefit derived in the form of utility is greater than or at least equal to price. For this, the MU of a good is first converted in terms of money by dividing MU of good with MU of a rupee.

MU of a rupee is the extra utility derived when an additional rupee is spent on other available goods in general. Consumer's equilibrium in purchase of a single good is attained when MU in terms of money is equal to price as shown below:



In the given diagram, when the MU of money increases from MU_m to MU_{m1} then it leads to a leftward shift in consumer equilibrium from E to E1 and the consumer becomes ready to purchase lesser quantity Q_1 of the given commodity at a given price.

13. What is marginal opportunity cost? What is its effect on the shape of the PPC? (4 Marks)

Ans. Marginal opportunity cost of producing a given commodity is defined as the sacrifice made in terms of another commodity in order to increase the production of the given commodity by one unit. For example, if production of commodity Y is decreased by 12 units in order to increase the production of commodity X by 1 unit then, the marginal opportunity cost of producing that individual unit of X will be 12 units of commodity Y.

The resources available in the economy are not equally efficient in all productive activities. When the resources are withdrawn from one commodity (Y) in order to increase the production of another commodity (X) then the withdrawal is done in increasing order of efficiency in Y i.e. the resources which are least efficient in production of Y are withdrawn first. Due to this difference in efficiency the marginal opportunity cost increases with increase in production of commodity X and hence the PPC is concave to the origin.

14. Explain the condition of consumer's equilibrium in case of one commodity. (6 Mark)

Ans. Consumer equilibrium in case of a single commodity will be achieved when:

Marginal utility in terms of Money = Price

i.e., $\frac{MU}{MU \text{ of a rupee}}$ of a product = Price of product

While purchasing a commodity a consumer always compares its price with its expected benefit (utility). He will buy a commodity only when the benefit derived in the form of utility in terms of money

is greater than or at least equal to its price. Since MU of a good (expressed in utils) cannot be compared with its price (expressed in Rs) so, MU is first converted in terms of money through the formula

$$\frac{\text{MU}}{\text{MU of a rupee}} \text{ of } a \text{ product}$$

Suppose a consumer gets marginal utility from consumption of successive oranges as shown in the following table. The price of an orange is Rupee one per piece. How many oranges will he consume if MU of a rupee is 2 utils.

Number of Oranges	MU (Utils)	MU in terms of money	Price of Orange	Gain
0	-	-	0	-
1	10	5 (10/2)	1	4
2	8	4 (8/2)	1	3
3	5	2.5 (5/2)	1	1.5
4	2	1 (2/2)	1	0
5	1	.5 (1/2)	1	-.5
6	0	0 (0/2)	1	-

As we can see from the table above that the consumer gets 10 utils from consumption of first orange. Alternatively we can say that he obtains utility worth Rs 5 (10/2) as marginal utility of a rupee is 2 utils. It also means that he gets utility worth rupees 5 whereas he sacrifices utility of Rs 1, as price, thereby gaining Rs 4 (5-1). So he will buy the first orange. He will keep buying till the fourth unit giving him utility worth Rs1, so as such it's a no loss and no gain situation but beyond 4th unit he will incur losses MU in terms of money is less than the price sacrificed for it.

So, the consumer will be in equilibrium at 4th orange. Thus he will purchase 4 units of oranges.

15. "With increase in price of the commodity the household expenditure will always increase". Defend or refute, giving reasons. (6 Mark)

Ans. The effect of increase in price of the commodity on the total expenditure incurred by the consumer on the commodity depends on the price elasticity of demand for the commodity.

(i) ELASTIC DEMAND

When the demand for the commodity is elastic or more than unit elastic then an increase in price of the commodity will lead to a decrease in quantity demanded by a greater proportion due to which the total expenditure also decreases i.e. the total expenditure falls due to increase in price of the commodity.

Price	Quantity demanded	Total expenditure = P X Q
-------	-------------------	---------------------------

10	100	1000
12	50	600

In the given schedule when the price of the commodity increases by Rs. 2 per unit from Rs. 10 to Rs. 12 then the total expenditure falls from Rs. 1000 to Rs. 600 which represents elastic demand.

(ii) INELASTIC DEMAND

When the demand for the commodity is elastic or more than unit elastic then an increase in price of the commodity will lead to a decrease in quantity demanded by a lesser proportion due to which the total expenditure also increases, i.e. the total expenditure rises due to increase in price of the commodity.

Price	Quantity demanded	Total expenditure = P X Q
10	100	1000
15	850	1200

In the given schedule when the price of the commodity increases by Rs. 5 per unit from Rs. 10 to Rs. 15 then the total expenditure increases from Rs. 1000 to Rs. 1200 which represents elastic demand.

(iii) UNIT ELASTIC DEMAND

When the demand for the commodity is unit elastic then an increase in price of the commodity will lead to a decrease in quantity demanded in an equal proportion due to which the total expenditure remains constant.

Price	Quantity demanded	Total expenditure = P X Q
10	120	1200
12	100	1200

In the given schedule when the price of the commodity increases by Rs. 2 per unit from Rs. 10 to Rs. 12 then the total expenditure remains constant at Rs. 1200

Conclusion :- Hence we can say that when the price of the commodity increases then the total expenditure may increase, may decrease or may remain constant depending on the price elasticity of demand for the commodity.

16. Price elasticity of demand is unity and household demands 60 units of it when its price is Rs.5 per unit. At what price will the household demand 54 unit of the commodity. (6 Mark)

Ans. Given

Elasticity of demand = $E_D = \frac{\Delta Q}{Q} \times \frac{P}{\Delta P}$ = 1 unit per unit
 Original Price, P = Rs. 5
 Change in price, ΔP = ?
 Original quantity demanded, Q = 60 units
 New quantity demanded, Q_1 = 54 units

Change in quantity demanded, Δq = 6 units

We know that, $E_D = \frac{\Delta q}{Q} \times \frac{P}{\Delta p}$

i.e. $E_D \times Q = \frac{\Delta q}{\Delta p} \times P$
 $1 \times 60 = \frac{6}{\Delta p} \times 5$
 $\Delta p = \frac{6 \times 5}{1 \times 60} = \text{Rs. } 0.50$

New Price = $P + \Delta p = 5 + 0.50 = \text{Rs. } 5.50$

The consumer will consume 54 units when the price of the commodity is Rs. 5.50 per unit

SECTION-B

[INTRODUCTORY MACRO ECONOMICS]

17. What does balance of payments account of a county record? (1 Mark)

Ans. Balance of payments account records a country's transactions with the rest of the world in a particular year.

18. What is foreign exchange? (1 Mark)

Ans. Currency which is used for making international payments is called **Foreign Exchange**.

19. Name two components of balance of payment. (1 Mark)

Ans. Two components of balance of payment are:

- (i) Current account
- (ii) Capital account

20. Suppose \$10 is exchanged for Rs 500. What is the exchange rate for Indian currency? (1 Mark)

Ans. \$1 = 500/10
 = Rs 50

Therefore, exchange rate is \$1 = Rs 50

21. Define Balance of payment. (1 Mark)

Ans. A systematic record of all economic transactions between the residence of a country and the residence of foreign countries during a period of time.

22. Explain the components of (i) Current Account and (ii) Capital Account. (3 Marks)

Ans. (i) The components of current account are:

- (a) Export and import of goods
- (b) Export and import of services
- (c) Unilateral transfers.

(ii) Various forms of components of capital account are :

- (a) Private transactions
- (b) Purchases and repurchases of foreign currency from IMF
- (c) Foreign investment

23. What are included in invisible items? (3 Marks)

Ans. Invisible items include the followings:

- (i) Receipts and payments for services such as banking, travel etc.
- (ii) Receipts and payments of income on foreign investment
- (iii) Receipts and payments of gifts, grants etc.
- (iv) Government's current expenditure in foreign countries such as expenditure on embassies etc.

24. BOT shows a deficit of Rs.5,000 crores and value of imports are Rs.9,000 crores. What is the value of exports? (3 Marks)

Ans. We can calculate the value of exports as follows:

$$\text{BOT} = \text{Value of exports} - \text{Value of imports}$$

$$5,000 = \text{Value of exports} - 9,000$$

$$\text{Value of exports} = 9,000 - 5,000$$

$$= 4,000 \text{ crores}$$

25. What are the features of tax? (3 Marks)

- Ans.** Main features of tax are the following:
- a) Tax is a compulsory payment.
 - b) Tax is spent for public welfare.
 - c) It gives no proportionate return.
 - d) Payment of tax is personal responsibility.
 - e) It is levied according to the legal procedure.

26. Describe significance of primary deficit. (3 Marks)

Ans. Primary deficit is the difference between fiscal deficit and interest payment.

Significance – Primary deficit shows borrowing requirement of government to meet her expenditure exclusive of interest payment. High primary deficit reflects fiscal irresponsibility of the government. A large primary deficit implies a large amount of borrowings. It creates a large burden of interest payments in the future because of fresh loan required to cover present deficit. Large primary deficit may also lead to the inflationary pressure in the economy.

27. Describe the sources of income of government. (4 Marks)

Ans. Source of Income of the government is budget receipts. Budget receipts are money receipts of the government from all sources during the fiscal year. Budget receipts can be further classified as:

Revenue Receipts: Revenue receipts are money receipts of the government which neither creates liability nor leads to reduction in assets. Money is collected from tax receipts and non-tax receipts.

Capital Receipts: Capital receipts are those monetary receipts which either create liability for the government or cause reduction in assets of the government. Money is collected from recovery of loans, borrowings and other receipts.

28. Show the differences between revenue expenditure and capital expenditure. (4 Marks)

Ans. Following are the differences between revenue expenditure and capital expenditure :

S. No.	Revenue Expenditure	Capital Expenditure
(i)	It does not result into creation of assets.	It results into creation of assets.
(ii)	It is financed out of revenue receipts.	It is financed out of the capital receipts.
(iii)	It includes items such as interest, payments, maintenance of general, social, economic and defence services; subsidies and grants to states and union territories and grants to foreign governments.	It includes expenditure on capital accounts of general, economic, social and defence services; loans to state and union territories for financing plan projects; and loans to foreign governments.

29. Government of India increases the public expenditure to save Indian economy from the impact of global recession. Increase in the public expenditure helps Indian economy to perform well in spite of worldwide economic slowdown. Describe the various types of public expenditure. (4 Marks)

Ans. Public expenditure is classified into various types as :

(a) Development Expenditure: Development expenditure relates to growth and development activities of the government. It includes education, health, rural development etc. This also includes loans given by the government to Non- departmental enterprises for development.

(b) Non-Development Expenditure: Non-developmental expenditure of the government is related to non-development activities of the government. It includes expenditure on defence, interest on loans etc.

(c) Plan Expenditure: Plan expenditure is that expenditure which is incurred by the government to fulfil its planned development programmes. It includes consumption and investment expenditure by the government or planning commission of the country. For example, expenditure on agriculture, power and transport etc.

(d) Non-Plan Expenditure : Non-plan expenditure is that expenditure of the government, which is beyond the scope of its planned development. Any expenditure other than planned expenditure is treated as non-plan expenditure. It includes consumption as well as investment expenditure by the government.

30. What are the objectives of a Government Budget ? (6 Marks)

Ans. General objectives of a government budget are as under :

(i) Economic growth: To promote rapid economic growth so as to improve living standards of the people.

(ii) Reduction of poverty and employment: To eradicate mass poverty and unemployment by creating maximum employment opportunities and providing maximum social benefits to the poor. Social welfare is the single most objective of the government.

(iii) Reallocation of Resources: To reallocate resources with social and economic objectives.

(iv) Reduction of inequalities: To reduce inequalities of income and wealth through levying taxes and granting subsidies. More emphasis is laid on equitable distribution of wealth and income. Economic progress is not a sufficient goal. There should be equitable distribution of wealth in the economy.

(v) Price stability: To maintain price stability and to correct business cycles involving depression characterised by falling output and prices.

(vi) Management of public enterprises: To manage public enterprises which are of the nature of monopolies like railways, electricity etc.

31. Discuss about development and non-developmental expenditure of the government. (6 Marks)

Ans. Development expenditure relates to growth and development activities of the government. It includes education, health, rural development etc. Development expenditure includes:
- Plan expenditure on departmental enterprises of the government like railways and post and telegraph.

- Plan expenditure on non-departmental enterprises of the government like Air India and Indian Airlines.
- Loan by the government to non-departmental enterprises for the purpose of development.

Non-developmental expenditure of the government relates to non-development activities of the government. Non-development expenditure includes:

- Expenditure on defence
- Expenditure on interest payment by the government and expenditure on tax collection
- Loan for non-development purposes
- Subsidies on food and coarse cloth for the benefit of poorer section of the society

The principal difference between development and non-developmental expenditure is that while development expenditure directly adds to the flow of goods and services in the economy, non-developmental expenditure does not.

32. Explain the meaning of fiscal deficit and its importance in economic development? (6 Marks)

Ans. Fiscal deficit is the excess of total expenditure (revenue + capital) over total receipts (revenue + capital other than borrowings). Fiscal deficit is equal to the total borrowings and other liabilities of the government.

Fiscal deficit is the sign of increase in government expenditure. Government increases expenditure to increase the rate of development in the country. Government spend money for various development projects in the sectors which are lagging behind in the process of development. Government spend this money in the agriculture sector, rural development and various infrastructure schemes. Government spendings create employment opportunities in various fields. Fiscal deficit facilitate nations to escape from economic recession because increase in government expenditure increases aggregate demand in the market.

SECTION-A

[INTRODUCTORY MICRO ECONOMICS]

1. Is perfect competition a reality or myth? (1 Mark)

Ans. Perfect competition is rarely found in reality. Thus, it is considered a myth.

2. Give any two basis for market classification. (1 Mark)

Ans. Two basis for market classification are:

- a) Number of buyers and sellers
- b) Nature of the commodity

3. Is market confined only to the shopping complex? Give support to your answer with a brief explanation.

Ans. Market is not confined to shopping complex only. In economics it refers to a special mechanism or an arrangement that facilitates the sale and purchase of goods. This arrangement could be through telephonic communication or even through electronic mail.

4. Define oligopoly? (1 Mark)

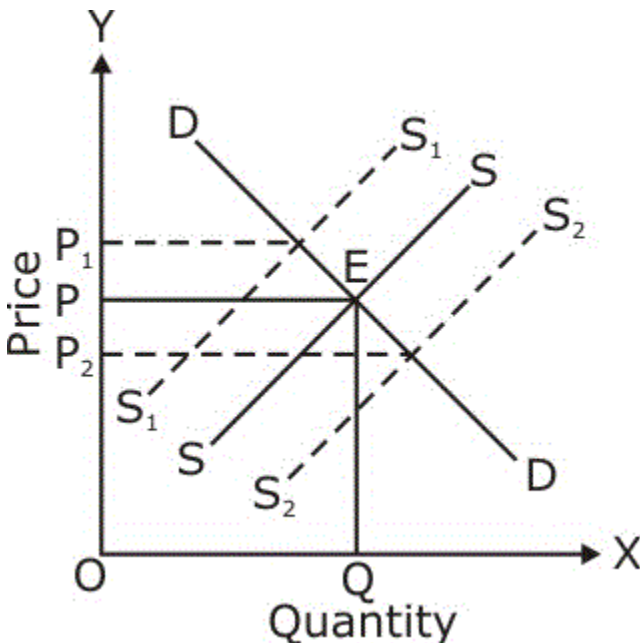
Ans. 'Oligo' means few and 'poly' means seller. Oligopoly refers to a market form in which there are few big sellers selling close substitute goods to large number of buyers.

5. In which market form do firms sell homogenous goods? (1 Mark)

Ans. Under perfect competition, firms sell homogeneous goods having no close substitutes.

6. How does a change in supply influence the equilibrium price? (4 Marks)

Ans. When demand of a commodity remains constant and there is an increase in supply, the equilibrium price will decrease similarly if there is decrease in supply, the equilibrium price will increase.



7. Define perfect competition. (3 Marks)

Ans. Perfect competition is a market situation in which there are a large number of buyers and sellers. Buyers and sellers operate freely and the commodity is sold at a uniform price. Industry is the price maker and the firm is the price taker. No close substitutes of the commodity are available. Besides, there is no restriction on entry and exit of firms.

8. What is the significance of homogeneous product in a perfectly competitive market? (3 Marks)

Ans. Homogeneous product means identical product in terms of size, shape, weight, price, packing and everything. In a perfectly competitive market firms sell completely identical products. Sellers can

charge only one price otherwise no one will buy from a firm selling at higher price. Thus only one price prevails in the market which is fixed on the basis of demand and supply of the product.

9. What is the significance of large number of firms or sellers? (3 Marks)

Ans. Its significance lies in the fact whether or not a buyer or seller by his own independent action influences the price of the commodity in the market. Degree of influence on price depends upon the share of buyer's demand in total market demand or share of seller's supply in total market supply. In the long run firms can have only normal profit if large number of buyers and sellers exist.

10. Can you think of any behavioral assumptions on part of the buyer or seller in a perfectly competitive market? (3 Marks)

Ans. In a perfect market situation, we assume that the seller's aim is to maximize their profits. They will sell as long as the price allows them to stay in the market. We also assume that buyers aim to maximize their utility and will buy the commodity till utility is equal to price. Thus, under perfect competition the price of the commodity is governed on the basis of demand and supply in the market.

11. "If a product price increases, a family's spending on the product has to increase." Defend or refute. (4 Marks)

Ans. I Refute the given statement because the effect of change in price of the commodity on the total expenditure incurred by the family on the commodity depends on the elasticity of demand for the commodity. It can be explained as follows;

(i) Elastic demand : When the demand for product is elastic or more than unit elastic then it would represent that a small price change will lead to a large change in quantity demanded. Hence when price of a commodity having elastic demand increases, quantity demanded decreases in a greater proportion as a result the total expenditure also decreases.

(ii) Unit Elastic demand : When the demand for product is unit elastic, then it would represent that a price change will lead to a change in quantity demanded in equal proportion. Hence we can say that when price of a commodity having unit elastic demand increases, quantity demand decreases in an equal proportion as a result the total expenditure remains constant.

(iii) Inelastic demand : When the demand for product is inelastic or less than unit elastic then it would represent that a large price change will require a relatively smaller change in quantity demanded. Thus, the total expenditure must change in the same direction in which the price changes. Hence we can say that when price of a commodity having inelastic demand increases, quantity demand decreases in a lesser proportion as a result the total expenditure also increases.

Conclusion :- An increase in price of the commodity may lead to an increase or decrease or no change in total expenditure incurred on the commodity depending on the price elasticity of demand for the commodity.

12. A consumer spends Rs 100 on a commodity when its price is Rs 2 per unit and spends Rs 96 when its price is Rs 3 per unit. Calculate price elasticity of demand by total outlay method and by proportionate method. (4 Marks)

Ans. Total Outlay Method :- When the price of the commodity increases from Rs 2 to Rs 3 per unit, the total expenditure incurred by the consumer decreases from Rs 100 to Rs 96. According to total outlay method, when the total expenditure decreases with a rise in price then the commodity is said to have elastic or more than unit elastic demand.

Proportionate Method

PRICE	TOTAL EXPENDITURE	QUANTITY = T.E./P
2	100	50
3	96	32

Given that

Original Price P = Rs 2 per unit

New Price P₁ = Rs 3 per unit

Change in price ΔP (P₁ – P) = Re 1

Original Quantity Q = 50 units

New Quantity Q₁ = 32 units.

Change in quantity ΔQ (Q₁ – Q) = (-) 18 units

We know that

$$E_d = \left(\frac{\Delta Q}{Q} \right) \times \left(\frac{P}{\Delta P} \right)$$

Substituting values we get

$$E_d = \frac{18 \times 2}{150}$$

i.e. E_d = 0.72

13. How the behaviour of the consumer is affected by an increase in the price of commodity? (4 Marks)

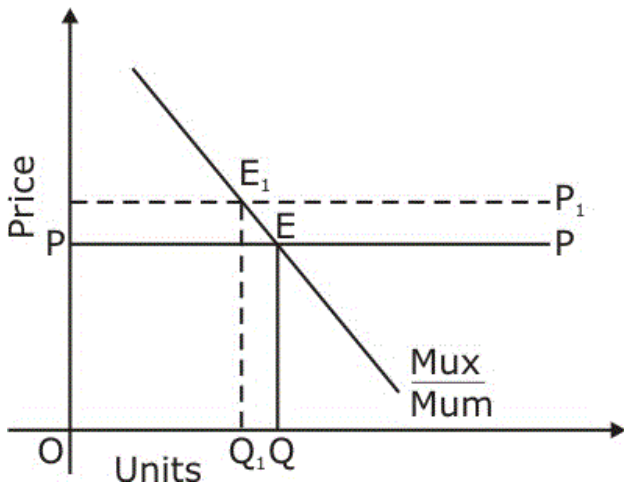
Ans. Consumer equilibrium is determined at a level where the marginal utility derived by the consumer in terms of money becomes equal to the price of the commodity,

i.e.

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

If the price of the commodity increases then in order to attain the level of maximum satisfaction, the consumer will have to reduce the value of MU_x/MU_m. Since MU_m is assumed to be constant, the

value of MU_x/MU_y can be increased only by decreasing the quantity of the commodity consumed (law of diminishing marginal utility). Thus an increase in price of the commodity will lead to a leftward shift in consumer equilibrium and the consumer will become ready to consume lesser quantity of the commodity at a given price. It can be explained with the help of following diagram.



In the given diagram, when the price of the commodity increases from OP to OP_1 then it leads to a leftward shift in consumer equilibrium from E to E_1 and the consumer becomes ready to purchase lesser quantity Q_1 of the given commodity at a given price.

14. Ramesh has RS 88 with him. He wants to purchase two commodities--- X & Y. the market price of both X & Y is RS 8 per. The following table presents the marginal utilities of the two commodities. Find out how many units of X & Y Ramesh should purchase to get maximum satisfaction.

Units of Commodity	Marinal Utility for Commodity	Marinal Utility for Commodity
1	80	40
2	72	36
3	64	24
4	56	20
5	48	16
6	40	12
7	32	8
8	24	4
9	16	0

10

8

0

(6 Marks)

Ans. In order to get maximum satisfaction he will have to spend his RS 88 in such a way to equalise the marginal utilities of X and Y per rupee.

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

(1) Ramesh purchases 8 units of X & 3 units of Y Since $P_x = P_y$ $MU_x = MU_y$

Total spending $(8 \times 8) + (3 \times 8) = (64 + 24) = \text{Rs } 88$

(2) At combination $X = 6$ and $Y = 1$ $MU_x = MU_y$, but total income is not spent because:

Total spending $(6 \times 8) + (1 \times 8) = (48 + 8) = \text{Rs } 56$

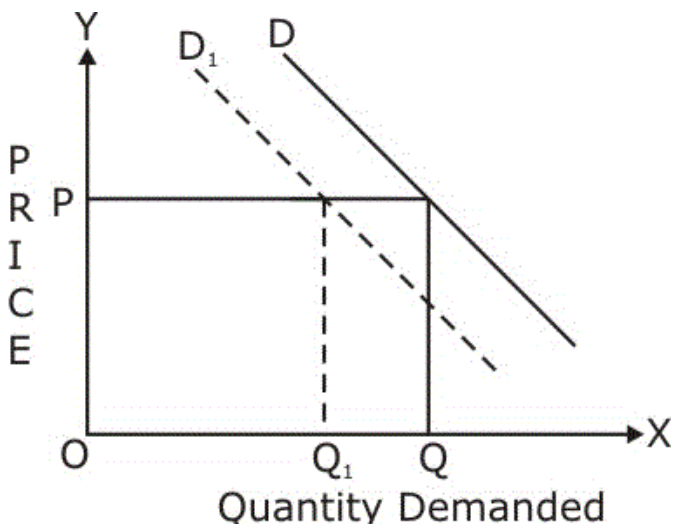
(3) At combination $X = 9$ and $Y = 5$ $MU_x = MU_y$, but this is not affordable in terms of consumer's income.

Total spending $(9 \times 8) + (5 \times 8) = (72 + 40) = \text{Rs } 112$ which he cannot afford to buy.

Thus the best combination where the consumer will get maximum satisfaction will be the first combination of 8X and 3Y.

15. Explain the factors responsible for a leftward shift in market demand curve of a commodity. (6 Marks)

Ans. A leftward shift in demand curve for the commodity represents that the consumer is ready to consume lesser quantity of the commodity at a given price. It is also termed as decrease in demand and it arises due to following factors :-



(i) Decrease in the price of the substitute goods: When the price of substitute goods decreases then these goods become relatively cheaper as compared to the other good and hence the consumer changes his preference towards the substitute goods and is ready to consume lesser quantity of the other commodity at a given price. For example, an increase in price of tea will lead to an increase in demand for coffee.

(ii) Increase in the price of the complementary goods: When the price of complementary goods increases then due to joint demand the consumer is ready to consume lesser quantity of both the goods at a given price. For example, an increase in price of butter will reduce the demand for bread.

(iii) Decrease in the income and wealth of the consumer: Decrease in income and wealth of the consumer leads to a decrease in purchasing power of the consumer. As a result the consumer is ready to purchase lesser quantity of the commodity at a given price.

(iv) Favorable changes in the consumer's tastes: If the consumer changes his tastes and preferences against the commodity then he is ready to consume lesser units of the commodity at a given price.

(v) Decrease in market size : If the market size of the commodity decreases then the total number of consumers for the commodity will decrease and hence the market demand for the commodity will decrease at a given price.

16. How the price elasticity of demand is measured with the help of total expenditure method? (6 Marks)

Ans. Total outlay or total expenditure means the total amount of money spent by the consumer on buying a given quantity of commodity. In total outlay method elasticity of demand is measured by comparing total expenditure on the commodity before and after the price-change. In this method the response of total expenditure to a given change in price determines the elasticity of demand. There may be three possibilities:

(i) Elasticity of demand will be greater than unity ($E_d > 1$) the total expenditure increases with the fall in price and decreases with rise in price. Here price and total expenditure move in the opposite direction.

Px Dx Total Outlay Elasticity of Demand

(Rs.) (Units) (Rs.)

10 100 10 X 100 = 1000 Greater than unity

8 150 8 X 150 = 1200 ($E_d > 1$)

(ii) Elasticity of demand will be equal to unity ($E_d = 1$) the total expenditure remains the same with the fall or rise in price.

Px Dx Total Outlay Elasticity of Demand (Rs.) (Units) (Rs.)

10 100 10 X 100 = 1000 Equal to unity
 5 200 5 X 200 = 1000 (Ed = 1)

(iii) Elasticity of demand will be less than unity (Ed < 1) The total expenditure decreases with the fall in price and increases with rise in price. Here price and total expenditure move in the same direction.

Px (Rs.)	Dx	Total	Outlay (Units)	Elasticity	of	Demand (Rs.)
10	100	10	X	100	=	1000
6	150	6	X	150	=	900
(Ed < 1)						

SECTION-B

[INTRODUCTORY MACRO ECONOMICS]

17. Define surplus budget. (1 Mark)

Ans. A surplus budget is a budget in which estimated government receipts are more than the estimated government expenditure.

18. What is fiscal discipline? (1 Mark)

Ans. Fiscal discipline means having control over expenditures of the government, given the quantum of revenues.

19. What is meant by fiscal year in India? (1 Mark)

Ans. Fiscal year in India is from 1st April to 31st March.

20. Define development expenditure? (1 Mark)

Ans. Development expenditure relates to that expenditure which spends on growth and development activities of the government.

21. What is progressive tax? (1 Mark)

Ans. Progressive tax is that tax in which tax increases with increase in income. This tax system implies greater real burden on rich people than on poor.

22. Define tax and non-tax revenue. (3 Marks)

Ans. Tax revenue may be defined as receipts from all kinds of taxes imposed by the government such as, income tax, sales tax, custom duty etc.

Non-tax revenue may be defined as receipts of the government from the sources other than taxes such as interest, profits, dividends, fees, fines, penalties, external grant etc.

23. What do you understand by plan expenditure? (3 Marks)

Ans. Plan expenditure is that public expenditure which represents current and investment outlays that arises due to plan proposals on various projects and programmes. In other words, the provision of expenditure every year according to plan proposals is known as plan expenditure. Items of plan expenditure are, expenditure on electricity generation, irrigation and rural development, construction of roads bridges etc.

24. What is meant by commercial revenue? (3 Marks)

Ans. Commercial revenue means revenue received by the government in the form of prices paid for government supplied commodities and services i.e., revenues derived from the government from their own production units called public enterprises. For instance nationalised banks, Industrial Finance Corporation of India, LIC etc.

25. What is fees? Explain the main features of fees. (3 Marks)

Ans. Fee is a payment to the government for services that it renders to the people. Main features of fee are the following:

- a) Fee is a compulsory payment. If a person wants to avail a service, he is required to pay fees for it.
- b) Fee provides specific benefits to the payer. It also implies general advantage.
- c) Fee is not a payment for commercial service. It is the payment for the administrative and judicial services provided to the people.
- d) Amount of fee is equivalent to the cost of service provided.

26. Describe significance of primary deficit. (3 Marks)

Ans. Primary deficit is the difference between fiscal deficit and interest payment.

Significance – Primary deficit shows borrowing requirement of government to meet her expenditure exclusive of interest payment. High primary deficit reflects fiscal irresponsibility of the government. A large primary deficit implies a large amount of borrowings. It creates a large burden of interest payments in the future because of fresh loan required to cover present deficit. Large primary deficit may also lead to the inflationary pressure in the economy.

27. Discuss about regressive method of taxation, and mention the causes of its non-implementation in India. (4 Marks)

Ans. Regressive tax is that tax in which tax rate decreases when income increases. This method of taxation implies real burden of tax on the poor people and less burden on the rich people. This tax is not considered equitable.

Indian government has not chosen this method for taxation because most of the population of India is living below poverty line. Poor people are not able to pay any type of tax. This method of taxation is not able to provide equal distribution of resources among all the citizens of the country.

28. Describe the sources of income of government. (4 Marks)

Ans. Source of Income of the government is budget receipts. Budget receipts are money receipts of the government from all sources during the fiscal year. Budget receipts can be further classified as:

Revenue Receipts: Revenue receipts are money receipts of the government which neither creates liability nor leads to reduction in assets. Money is collected from tax receipts and non-tax receipts.

Capital Receipts: Capital receipts are those monetary receipts which either create liability for the government or cause reduction in assets of the government. Money is collected from recovery of loans, borrowings and other receipts.

29. Explain the concept of equilibrium. (4 Marks)

Ans. Equilibrium between aggregate demand and aggregate supply occurs when at a particular price level aggregate demand equals aggregate supply. At equilibrium the total output of goods and services produced equals the total demand for those goods and services. The price at which aggregate demand equals aggregate supply is known as the equilibrium price. Equilibrium can occur in two cases:

i) Full employment equilibrium: Full employment equilibrium is that equilibrium where all resources are employed fully.

ii) Under employment equilibrium: Under employment equilibrium is that equilibrium where all resources are not employed fully. Some resources are unemployed.

30. Explain the concept of multiplier with an example. (6 Marks)

Ans. The concept of investment multiplier was propounded by Prof. J.M. Keynes. Investment multiplier is the ratio of change in income due to a given change in investment. It measures the change in national income as a result of change in investment. The value of multiplier varies from unity to infinity. It is denoted by K.

Symbolically, $k = \frac{\Delta Y}{\Delta I}$

ΔY = Change in income and
 ΔI = Change in investment

Example:

Suppose ΔI = Rs 50 crores and ΔY = Rs. 200 crores

Therefore, $k = \frac{\Delta Y}{\Delta I}$

=
= 4

Thus, the value of the multiplier is 4

31. Distinguish between marginal propensity to consume and marginal propensity to save. What is the relationship between the two? (6 Marks)

Ans. Marginal propensity to consume is the ratio of change in consumption to change in income.

Symbolically, $MPC = \frac{\Delta C}{\Delta Y}$

The value of MPC is always between 0 and 1.

Marginal propensity to save is the ratio of change in savings to change in income.

Symbolically, $MPS = \frac{\Delta S}{\Delta Y}$

The value of MPS also lies between 0 and 1. The value of MPS depends on the value of MPC.

Relationship:

The relationship between MPC and MPS is that the sum of these two is always equal to 1. Symbolically, $MPC + MPS = 1$.

The equation implies that $MPC = 1 - MPS$ and $MPS = 1 - MPC$

32. Explain the various types of public expenditure. (6 Marks)

Ans. Public expenditure is classified in various types as follows:

a) Development Expenditure: Development expenditure relates to growth and development activities of the government. It includes education, health, rural development etc. This also includes loans given by the government to non-departmental enterprises for development.

b) Non-development Expenditure: Non-developmental expenditure of the government is related to non-development activities of the government. It includes expenditure on defence, interest of loans etc.

c) Plan Expenditure: Plan expenditure is that expenditure which is incurred by the government to fulfil its planned development programmes. It includes consumption and investment expenditure by the government or by the Planning Commission of the country. For example, expenditure on agriculture, power, transport etc.

d) Non-plan Development: Non-plan development expenditure is that expenditure of the government, which is beyond the scope of its planned development. Any expenditure other than planned expenditure is treated as non-plan expenditure. It includes consumption as well as investment expenditure incurred by the government.

SECTION-A

[INTRODUCTORY MICRO ECONOMICS]

1. Give any two characteristics of economic resources. (1 Mark)

Ans. Two characteristics are:

- (i) Resources are limited or scarce in relation to their demand.
- (ii) Resources can be put to diverse uses.

2. What is the problem of “How to Produce” ? (1 Mark)

Ans. How to produce may be defined as the problem of choice between different techniques of production i.e. labour intensive technique or capital intensive techniques so that the available scarce resources can be used efficiently.

3. Define Economics. (1 Mark)

Ans. Economics is a social science, which studies economic activities of human beings concerned with allocation of resources with optimum efficiency.

4. What do you mean by scarcity? (1 Mark)

Ans. Scarcity means limited supply of goods and services in relation to their demand.

5. What are the main factors of production? (1 Mark)

Ans. Land, labour, capital and entrepreneurship are the four main factors of production that helps in the production process.

6. How does PPC depict the basic problems of an economy? (3 Marks)

Ans. The central problems of an economy can be shown with the help of PPC as follows:

1. Problem of allocation of resources: When the given resources are fully employed, combination of two goods lie anywhere on the PPC. Any point on PPC indicates full and efficient utilisation of resources and helps in solving the problem of what to produce, how to produce and for whom to produce.

2. Problem of fuller utilization of resources: Any point inside the PPC shows that resources are inefficiently utilized or resources are underutilised. Whereas, any point on the PPC indicates full utilisation of resources.

3. Problem of growth of resources: When the economy makes advancement in technology, PPC shifts to the right indicating the possibility of producing more of both the goods. This indicates growth of resources.

7. Explain with examples how the problem of choice is faced by individuals and societies? (3 Marks)

Ans. Problem of choice arises due to unlimited human wants, scarcity of resources and alternative uses of resources. It is a universal problem of decision making or problem of choice arising at all levels of the economy.

An individual has to make a choice between various ways of allocating the available resources. For example an individual has to choose between consumption expenditure and investment expenditure. Similarly, the government has to choose between civil goods (sugar, rice, cycles etc.) or defence / military goods (guns, bombs, tanks etc.).

PPC helps in solving the economic problem of what to produce, how to produce and for whom to produce.

8. Define opportunity cost and explain it with the help of an example. (3 Marks)

Ans. The opportunity cost of any commodity is defined as the cost of next best alternative, which has been sacrificed for producing the given commodity. The concept of opportunity cost is derived from the diverse or alternate uses of the resources available in the economy. If the resources are used for the production of one alternative then, the benefit of the given resource from other alternative is sacrificed. This sacrifice of withdrawing the given resources in alternative activity, in order to carry out a given activity, is termed as opportunity cost.

For example, on a piece of land a farmer can produce 50 kg. of wheat by using a given quantity of inputs. He can also produce 40 kg of rice with the same amount of resources. Here the opportunity cost of 50 kg of wheat is 40 kg of rice. The concept of opportunity cost applies not only to an individual firm, but equally to the entire economy.

9. What is marginal opportunity cost? What is its effect on the shape of the PPC? (3 Marks)

Ans. Marginal opportunity cost of producing a given commodity is defined as the sacrifice made in terms of another commodity in order to increase the production of the given commodity by one unit. For example, if production of commodity Y is decreased by 12 units in order to increase the production of commodity X by 1 unit then, the marginal opportunity cost of producing that individual unit of X will be 12 units of commodity Y.

The resources available in the economy are not equally efficient in all productive activities. When the resources are withdrawn from one commodity (Y) in order to increase the production of another commodity (X) then the withdrawal is done in increasing order of efficiency in Y i.e. the resources which are least efficient in production of Y are withdrawn first. Due to this difference in efficiency the marginal opportunity cost increases with increase in production of commodity X and hence the PPC is concave to the origin.

10. What do you understand by “Growth of Resources”? (3 Marks)

Ans. Growth of resources represents the increase in productive capacity of the economy due to an increase in the quantity of available resources in the economy. It can be achieved by :-

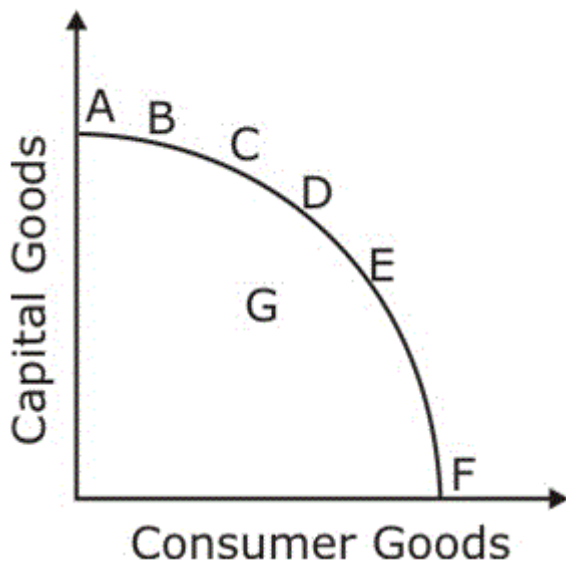
- Increase in the quantity of the available resources or development of new and better substitutes.
- Improvement in technology used in the production process thereby, improving the efficiency of human resources through training and development of resources.

Growth of resources leads to a rightward shift in production possibility curve which represents an increase in productive capacity of the economy. This means that the economy is able to produce more of both the goods without sacrificing the production of another good.

11. Massive unemployment leads to a leftward shift in PPC. Defend or refute. (4 Marks)

Ans. A production possibility curve represents the maximum productive capacity in the economy as it is based on fuller and efficient utilization of resources. PPC will shift towards left only due to destruction of resources which causes a decrease in productive capacity in the economy.

However unemployment of resources does not affect the productive capacity in the economy. It represents under utilisation of resources and hence in case of massive unemployment the actual production combination will lie inside the production possibility curve, i.e., point G.



12. Explain the problem of 'what to produce' as faced by an economy. (4 Marks)

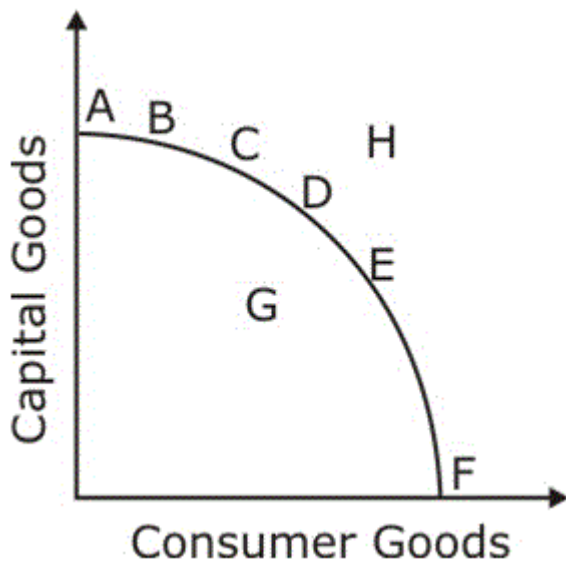
Ans. It may be defined as the problem of choice between different commodities that can be produced from the scarce resources on the basis of social and economic objectives.

For example, an economy has to make a choice between consumer goods and capital goods. If the economy is developed then it may prefer to use more of its resources in the production of consumer goods. On the other hand, if the economy is developing then it may produce more of capital goods which will help it in further development.

There are two aspects of this problem. First, what should be produced, and second, in what quantity it should be produced. The first problem is the problem of choice of goods and the second problem is the problem of quantity of goods. An economy needs to produce many goods, but all these cannot be produced with the available limited resources. Therefore, an economy has to choose what goods should be produced and in what quantity.

13. Explain the concept of Production possibility curve. (4 Marks)

Ans. Production possibility curve may be defined as a curve which represents various possible combinations of two commodities that can be produced with fuller utilisation of given resources in an economy. It is also known as the production frontier because it represents the maximum quantity of two commodities that can be produced with the help of a given resource. No economy can operate outside the production possibility curve. In order to simplify the study, production possibility curve is made on the assumptions of scarce resources, fuller and efficient utilization of resources and difference in efficiency of resources in different productive activities. It can be explained with the help of the following diagram:



In the given diagram curve AF represents the production possibility curve between consumer goods and capital goods. Points A, B, C, D, E and F, represent various combinations that an economy can produce from given scarce resources. The production combination H which lies outside the PPC cannot be achieved from the given amount of resources and state of technology. If the resources are unemployed or under-utilised then the production combination will be inside the PPC as represented by point G.

14. What is an economic problem and why does it arise? (6 Marks)

Ans. Economic problem is defined as the problem of decision making or problem of choice in order to allocate the available resources efficiently in producing commodities to satisfy human wants. Economic problem arises because of the following three factors:

1. Human wants are unlimited
2. Resources are scarce or limited
3. Resources have diverse uses

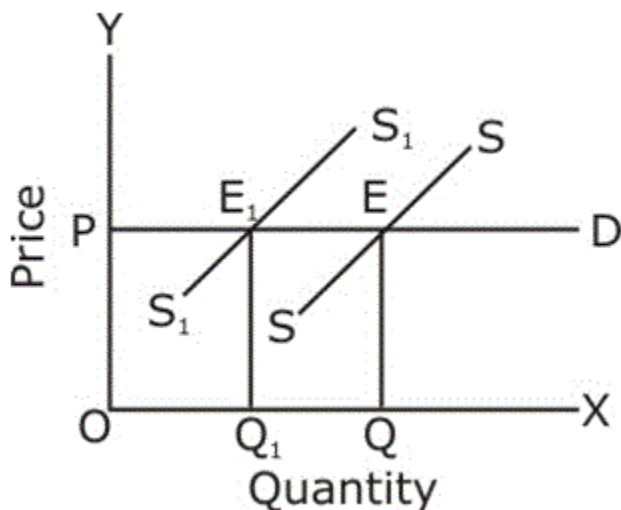
Due to above three factors the problem of decision making or problem of choice arises in the economy which is also termed as central problem or economic problem. Following are the three economic problems:

- What to produce (and in what quantity)?: It is defined as the problem of choice between different commodities that can be produced from the given scarce resources. The choice made is on the basis of various social and economic factors. For example an economy has to make a choice between consumer goods and capital goods. Another aspect of this problem is to decide on the quantity of the commodity that should be produced.
- How to produce?: It is defined as the problem of choice between different techniques of production that can be used in the production of different commodities, so that the given resources are utilised to their maximum efficiency. For example, an economy has to make a choice between labour intensive and capital intensive techniques of production.
- For whom to produce?

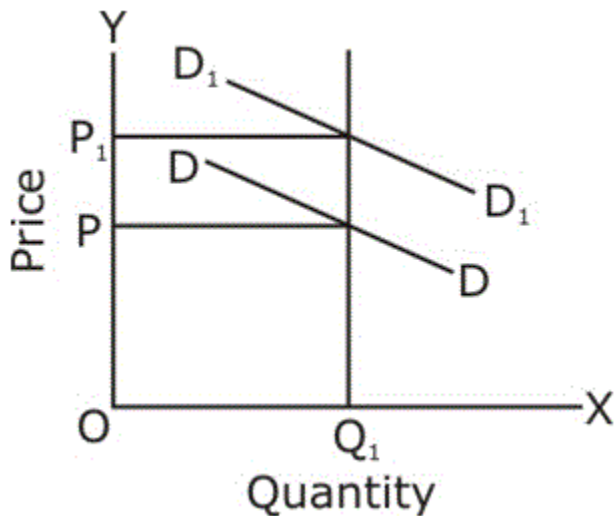
It is defined as the problem of choice between different ways of functional and physical distribution of output between different sectors and individuals in the economy. For example, an economy has to make a choice between equal and unequal distribution of income.

15. Show with the help of a diagram, the effect as equilibrium price and quantity when :
(1) Demand is perfectly elastic and supply decreases.
(2) Supply is perfectly inelastic and demand increases. (6 Marks)

Ans. (1) There will be no change in price if demand is perfectly elastic and supply decreases. When supply decreases from SS to S_1S_1 , the price remains constant at OP , but quantity decreases from OQ to OQ_1 .



(2) When supply is perfectly inelastic and demand increases, the price of the commodity will increase and quantity will remain constant. In the diagram when demand increases from DD to D_1D_1 the price also increases from OP to OP_1 but quantity remains the same at OQ .



16. Explain any *three* factors affecting price elasticity of demand. (6 Marks)

Ans. Elasticity of demand is the responsiveness to the change in demand due to change in price. Various factors that affect the elasticity of demand are as follows

(i) Availability of substitute goods :- The demand for commodities having a large number of close substitutes will be more elastic because even a very small increase in price will make consumers switch to other products in a big way, i.e., the consumers may change their preference to the substitute goods. On the other hand, if there are no close substitutes, the demand is likely to be inelastic.

For example, commodities like sugar, which do not have close substitutes will have inelastic demand whereas the demand for a particular brand of cosmetic say powder, which has large number of substitutes available, will have elastic demand.

(ii) Proportion of total expenditure spent on the product :- Elasticity of demand will be less with regard to those goods on which consumer spends a very small part of his total expenditure. e.g. salt, matchbox etc. On the other hand, if large part of income is spent on a particular commodity, demand will be more sensitive to change in price and the demand is likely to be more than unit elastic.

(iii) Habits, tastes and Preferences of the consumer :- Some products which are not essentials for some individuals are essential for others. This is because of habits of the consumer in which he may develop a taste or preference for the commodity in consumption. For example, for a consumer who has developed a particular taste for Revelon Cosmetics, the demand for that particular product will be relatively inelastic.

SECTION-B

[INTRODUCTORY MACRO ECONOMICS]

17. What do you mean by Foreign Exchange Market? (1 Mark)

Ans. A market that facilitates the trading of the currencies of different countries is known as Foreign Exchange Market.

18. What do you mean by BOT or Balance Of Trade? (1 Mark)

Ans. BOT or Balance of trade refers to the difference between export of goods and the imports of goods. When the export of goods is more than the import of goods the BOT is favourable. If imports are more than exports then it is unfavourable.

19. What do you mean by balance of trade? (1 Mark)

Ans. Balance of trade implies the difference between the exports and imports of a country in a particular year.

20. Why is supply curve in case of foreign exchange upward sloping? (1 Mark)

Ans. With the rise in exchange rate, supply of foreign exchange increases and with fall in the exchange rate, supply of foreign exchange decreases. Hence, supply curve of foreign exchange slopes upward.

21. List one item of current and capital account of balance of payment accounts. (1 Mark)

Ans. One item of current account is Export and Import of goods.

One item of capital account is Foreign Direct Investment.

22. What are included in invisible items? (3 Marks)

Ans. Invisible items include the followings:

- (i) Receipts and payments for services such as banking, travel etc.
- (ii) Receipts and payments of income on foreign investment
- (iii) Receipts and payments of gifts, grants etc.
- (iv) Government's current expenditure in foreign countries such as expenditure on embassies etc.

23. Explain the components of (i) Current Account and (ii) Capital Account. (3 Marks)

Ans. (i) The components of current account are:

- (a) Export and import of goods
- (b) Export and import of services
- (c) Unilateral transfers.

(ii) Various forms of components of capital account are :

- (a) Private transactions
- (b) Purchases and repurchases of foreign currency from IMF
- (c) Foreign investment

24. What is revenue budget? (3 Marks)

Ans. Revenue budget is a statement of the government's estimated revenue receipts and revenue expenditure met through these revenues for a period of one financial year. Revenue receipts are recurring or repetitive in nature.

Budget are of three types:

- a) Balanced budget
- b) Surplus budget
- c) Deficit budget

25. What do you understand by plan expenditure? (3 Marks)

Ans. Plan expenditure is that public expenditure which represents current and investment outlays that arises due to plan proposals on various projects and programmes. In other words, the provision of expenditure every year according to plan proposals is known as plan expenditure. Items of plan expenditure are, expenditure on electricity generation, irrigation and rural development, construction of roads bridges etc.

26. What are the sources of financing deficit in the budget? (3 Marks)

Ans. There are three sources by which the government can finance its deficit. These are:

- (a) Borrowings from public and foreign government.
- (b) Withdrawing from its cash balances with RBI.
- (c) Borrowings from the RBI.

27. Define fiscal deficit. How is fiscal deficit met? (4 Marks)

Ans. Fiscal deficit is defined as the excess of total expenditure over total receipts reduced by borrowings. Fiscal deficit does not take into account the borrowings. In terms of formula,

Fiscal deficit = Total budget expenditure - Total budget receipts net of borrowings.

OR
Fiscal deficit is the difference between the government's total expenditure and its total receipts excluding borrowings.

Fiscal deficit is met by the following two measures:

- a) Borrowing: Fiscal deficit can be met by borrowing from domestic sources and external sources both.
- b) Deficit financing: Fiscal deficit can be met by borrowing from the RBI which is the sole authority of issuing currency notes.

28. Define tax and its features. Why should a person have to pay tax to the government? (4 Marks)

Ans. Tax is a compulsory payment made by an individual, household or a firm to the government. Taxpayer can't expect any service or benefit from the government in return. Features of tax are the following:

- a) Tax is a compulsory payment
- b) It is spent for public welfare.
- c) It is levied according to legal procedure.
- d) Payment of taxes is personal responsibility.
- e) No proportionate relation between tax and benefits
- f) Non-payment of tax is liable for legal action.

A person has to pay the income tax when his annual income crosses the income tax exemption limit. Similarly, a person has to pay indirect tax while purchasing goods and services. Government spends the collected money for various development works and for public welfare schemes.

29. Describe the sources of income of government. (4 Marks)

Ans. Source of Income of the government is budget receipts. Budget receipts are money receipts of the government from all sources during the fiscal year. Budget receipts can be further classified as:

Revenue Receipts: Revenue receipts are money receipts of the government which neither creates liability nor leads to reduction in assets. Money is collected from tax receipts and non-tax receipts.

Capital Receipts: Capital receipts are those monetary receipts which either create liability for the government or cause reduction in assets of the government. Money is collected from recovery of loans, borrowings and other receipts.

30. Explain the determination of equilibrium level of income with the help of a diagram. (6 Marks)

Ans. Equilibrium level of income is determined at a point when aggregate demand is equal to aggregate supply.

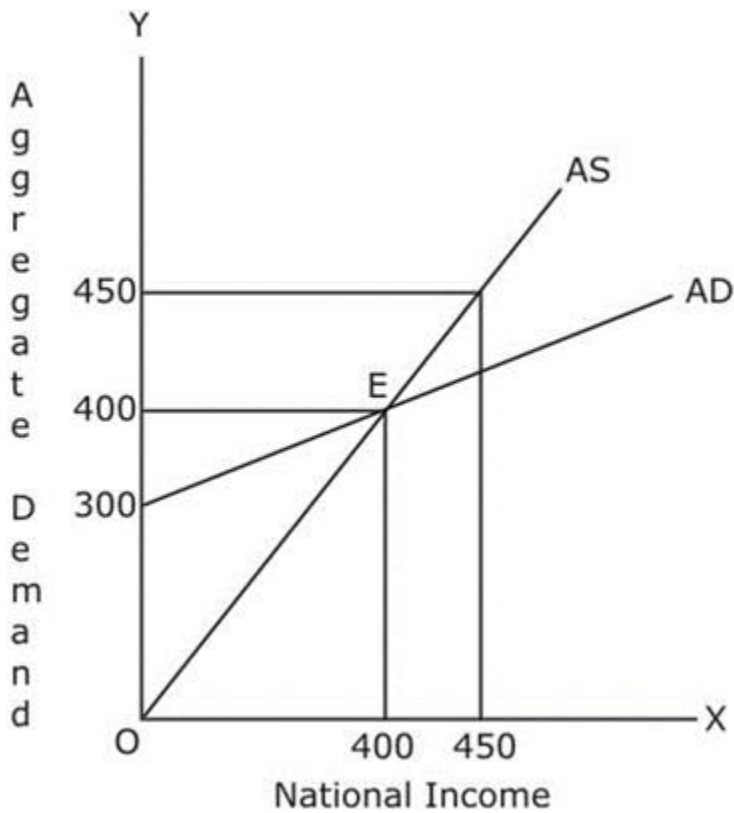
Aggregate demand is the total expenditure on goods and services in an economy. It consists of consumption and investment expenditure.

Aggregate supply refers to total production of goods and services in an economy. The equilibrium level of income is determined at a point where $AD = AS$.

Determination of equilibrium level of income: Hypothetical Schedule of AD-AS Approach

National Income (Y)	Consumption (C)	Investment (I)	Aggregate Demand (AD)	AD = AS
0	200	100	300	
300	250	100	350	

400	300	100	400	Equilibrium
500	350	100	450	



The above table and the diagram shows that the equilibrium level of income is Rs 400 crores because at this level of income (E)

$$AD(400) = AS(400).$$

31. Distinguish between marginal propensity to consume and marginal propensity to save. What is the relationship between the two? (6 Marks)

Ans. Marginal propensity to consume is the ratio of change in consumption to change in income.

Symbolically,
$$MPC = \frac{\Delta C}{\Delta Y}$$

The value of MPC is always between 0 and 1.

Marginal propensity to save is the ratio of change in savings to change in income.

Symbolically,
$$MPS = \frac{\Delta S}{\Delta Y}$$

The value of MPS also lies between 0 and 1. The value of MPS depends on the value of MPC.

Relationship:

The relationship between MPC and MPS is that the sum of these two is always equal to 1. Symbolically, $MPC + MPS = 1$.

The equation implies that $MPC = 1 - MPS$ and $MPS = 1 - MPC$

32. Explain the concept of multiplier with an example. (6 Marks)

Ans. The concept of investment multiplier was propounded by Prof. J.M. Keynes. Investment multiplier is the ratio of change in income due to a given change in investment. It measures the change in national income as a result of change in investment. The value of multiplier varies from unity to infinity. It is denoted by K.

Symbolically, $k = \frac{\Delta Y}{\Delta I}$

ΔY = Change in income and
 ΔI = Change in investment

Example:

Suppose $\Delta I = \text{Rs } 50$ crores and $\Delta Y = \text{Rs. } 200$ crores

Therefore, $k = \frac{\Delta Y}{\Delta I}$

= 200/50
= 4

Thus, the value of the multiplier is 4

SECTION-A

[INTRODUCTORY MICRO ECONOMICS]

1. Is perfect competition a reality or myth? (1 Mark)

Ans. Perfect competition is rarely found in reality. Thus, it is considered a myth.

2. What is meant by Patent Right? (1 Mark)

Ans. Patent Right is the official recognition of the innovators of a new product or technology.

3. Give any two basis for market classification. (1 Mark)

Ans. Two basis for market classification are:

- a) Number of buyers and sellers
b) Nature of the commodity

4. State one merit of monopoly. (1 Mark)

Ans. Under monopoly market, there is the possibility of high level of research and development because diverse abilities of different firms are combined.

5. Give one main feature of oligopoly? (1 Mark)

Ans. There is high degree of interdependence among the firms. Price and output policy of one firm affects the price and output policy of rival firms.

6. Mention three characteristics of perfect competition. (3 Marks)

Ans. The following are the three main characteristics of perfect competition :-

(i) Large number of buyers and sellers : In a perfectly competitive market there are large number of buyers and sellers. Every buyer or seller purchase or sale only a insignificant portion of the total output. Buyers and sellers both do not have any type of union.

(ii) Homogeneous Product : Goods which are sold in the market are completely identical in all respect.

(iii) Free entry and exit of firms: In this type of market, there is no restriction for firm on entry and exit. Any firm can enter into the market and can leave the market at any time without any restriction.

7. What are the various factors determining perfect market? (3 Marks)

Ans. Factors determining the forms of Market are :

1. Number of buyers and Sellers: The first important feature of perfect competition is that there are large number of buyers and sellers. The number of sellers is so large that an individual seller produces a small portion of the total output of the market. Similarly, the number of buyers is so large that an individual buyer cannot influence the market.

2. Nature of the product: The product sold under perfect competition is homogeneous. No close substitutes of the product are available.

3. Entry and Exist of Firm: Under perfect market the entry and exit of a new firm is free from restriction. Firms are free to enter or leave the industry any time.

8. 'A monopoly firm is a price maker', how? (3 Marks)

Ans. Monopoly is a market situation where there is a single firm selling the commodity. There are no close substitutes available of the commodity sold by the monopolist. A monopoly firm is a price maker

as it has the power to influence the price of a commodity as well as the output. Main motive of the monopolist is to earn maximum profit.

9. Define:

- a) **Equilibrium price**
 b) **Equilibrium quantity (3 Marks)**

Ans. (a) Equilibrium price : Equilibrium price is the price at which the quantity demanded of a good or service is equal to the quantity supplied. It is the price at the point where demand curve intersects the supply curve.

(b) Equilibrium quantity : It is the quantity where quantity demanded is equal to quantity supplied. It is the point of equilibrium where demand curve intersects the supply curve.

10. What happens when demand and supply curves do not intersect each other? (3 Marks)

Ans. In a non-viable industry, a situation may arise when there are prospective consumers and producers of a commodity but still it is not produced. It happens when the price at which producers are ready to produce is so high that the consumers are not willing to buy even a single unit of the commodity. Thus, a non-viable industry is one whose demand and supply curves do not intersect each other at any positive quantity. It is an industry in which costs are too high for any positive output to be produced. This type of industry is called a non-viable industry.

11. What are the factors determining market structure? (4 Marks)

Ans. A market structure refers to a number of firms operating in the industry, nature of competition between them and the nature of the product. The factors determining market structure are:

- (1) Number of buyers and sellers
- (2) Nature of commodity
- (3) Mobility of goods and factors
- (4) Perfect knowledge

12. Market demand and supply schedule of apples (per day) are given below :

Price (per Kg.)	9	5	7	3	1
Qd (in Kg.)	4	6	8	10	12
Qs (in Kg.)	14	10	8	5	3

Determine:

- 1. **Equilibrium price and equilibrium quantity**
- 2. **Excess demand at Rs 5 per Kg.**
- 3. **Excess supply at Rs 9 per Kg. (4 Marks)**

Ans. 1. At equilibrium quantity, $Q_d = Q_s = 8$
 Equilibrium price = 7

2.Excess demand at Rs 5 per Kg = $10 - 6 = 4$

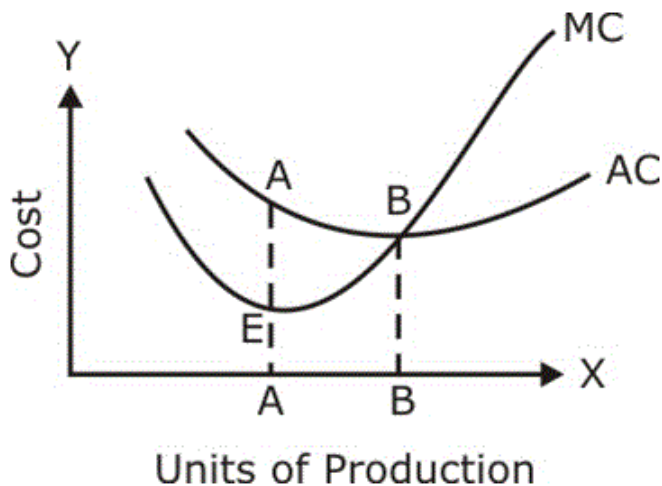
3.Excess supply at Rs 9 per Kg = $14 - 4 = 10$

13. How is new equilibrium reached when supply and demand curve tends to shift? (4 Marks)

Ans. In case of shift in supply and demand curve, the new equilibrium is struck through the process of extension and contraction of demand and supply. Increase or decrease in demand will either cause situation of excess demand or deficient demand in relation to supply of the commodity. In case of excess demand price tends to rise. Similarly, in case of deficient demand price tends to fall. This process continues till the new price is reached where demand is equal to supply.

14. Explain the relationship between marginal cost and average cost with the help of cost schedule and diagram. (6 Marks)

Ans. The relationship between marginal cost and average cost can be discussed as under
1) Marginal cost is less than average cost when average cost falls due to increase in output.
2) Marginal cost is equal to average cost when average cost is minimum. In this situation marginal cost curve intersects average cost curve at its minimum point.
3) Marginal cost is more than average cost when average cost rises.



Cost Schedule

Output	Total cost	Marginal cost	Average cost
1	10	10	10
3	24	6	8
5	30	2	6
6	36	6	6
7	49	13	7
10	100	19	10

15. Explain the relationship between average variable, cost average cost and average fixed cost with the help of a cost schedule and diagram. (6 Marks)

Ans. Average variable cost- It is the per unit variable cost of producing a commodity. It is obtained by dividing total variable cost by total number of units of commodity produced.

$$AVC = \frac{TVC}{TQ}$$

Average fixed cost – It is per unit fixed cost of producing a commodity.

$$AFC = \frac{TFC}{TQ}$$

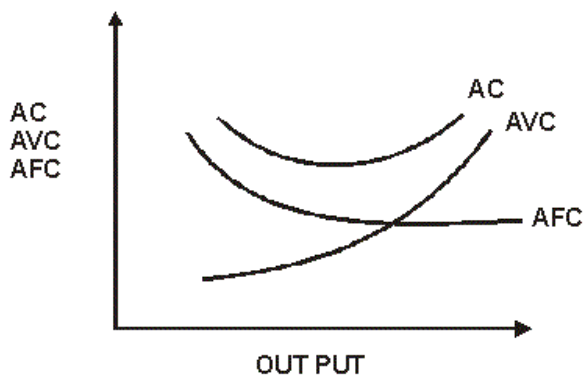
Average cost = It is sum of average Fixed cost and average variable cost

$$AC = AFC + AVC$$

$$AC = \frac{TC}{TQ}$$

TQ = No of units produced

Output	TFC	TVC	TC	AFC	AVC	AC
1	20	5	25	20	5	25
2	20	9	29	10	4.5	14.5
3	20	12	32	6.6	4	10.6
4	20	16	36	5	4	9
5	20	21	41	4	4.2	8.2



16. Ramesh has RS 88 with him. He wants to purchase two commodities--- X & Y. the market price of both X & Y is RS 8 per. The following table presents the marginal utilities of the two commodities. Find out how many units of X & Y Ramesh should purchase to get maximum satisfaction.

Units of Commodity	Marinal Utility for Commodity	Marinal Utility for Commodity
--------------------	-------------------------------	-------------------------------

1	80	40
2	72	36
3	64	24
4	56	20
5	48	16
6	40	12
7	32	8
8	24	4
9	16	0
10	8	0

(6 Marks)

Ans. In order to get maximum satisfaction he will have to spend his RS 88 in such a way to equalise the marginal utilities of X and Y per rupee.

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

(1) Ramesh purchases 8 units of X & 3 units of Y Since $P_x = P_y$ $MU_x = MU_y$

Total spending $(8 \times 8) + (3 \times 8) = (64 + 24) = \text{Rs } 88$

(2) At combination $X = 6$ and $Y = 1$ $MU_x = MU_y$, but total income is not spent because:

Total spending $(6 \times 8) + (1 \times 8) = (48 + 8) = \text{Rs } 56$

(3) At combination $X = 9$ and $Y = 5$ $MU_x = MU_y$, but this is not affordable in terms of consumer's income.

Total spending $(9 \times 8) + (5 \times 8) = (72 + 40) = \text{Rs } 112$ which he cannot afford to buy.

Thus the best combination where the consumer will get maximum satisfaction will be the first combination of 8X and 3Y.

SECTION-B

[INTRODUCTORY MACRO ECONOMICS]

17. What does balance of payments account of a country record? (1 Mark)

Ans. Balance of payments account records a country's transactions with the rest of the world in a particular year.

18. What is foreign exchange? (1 Mark)

Ans. Currency which is used for making international payments is called **Foreign Exchange**.

19. Define Balance of payment. (1 Mark)

Ans. A systematic record of all economic transactions between the residence of a country and the residence of foreign countries during a period of time.

20. List one item of current and capital account of balance of payment accounts. (1 Mark)

Ans. One item of current account is Export and Import of goods.

One item of capital account is Foreign Direct Investment.

21. Suppose \$10 is exchanged for Rs 500. What is the exchange rate for Indian currency? (1 Mark)

Ans. \$1 = 500/10

= Rs 50

Therefore, exchange rate is \$1 = Rs 50

22. Describe the causes for disequilibrium in BOP. (3 Marks)

Ans. The causes for disequilibrium in BOP are :

- (i) Large imports due to large scale development expenditure
- (ii) High domestic prices
- (iii) New sources of supply and new substitutes
- (iv) Political instability
- (v) Changes in taste, fashion and preferences

23. Give reasons why people desire to have foreign exchange. (3 Marks)

Ans. Some reasons why people desire to have foreign exchange are:

- (i) For importing goods and services from foreign countries
- (ii) For making transfer payments in the form of gifts, donations etc.
- (iii) For making investment abroad in financial and physical assets
- (iv) For speculating the value of exchange rate

24. What are included in invisible items? (3 Marks)

Ans. Invisible items include the followings:

- (i) Receipts and payments for services such as banking, travel etc.
- (ii) Receipts and payments of income on foreign investment
- (iii) Receipts and payments of gifts, grants etc.
- (iv) Government's current expenditure in foreign countries such as expenditure on embassies etc.

25. Distinguish between current account and capital account. (3 Marks)

Ans.

Current Account	Capital Account
1. It records economic transactions relating to goods and services and unilateral transfers.	1. Records capital transactions such as sale and purchase of assets.
2. Balance in current account has a direct influence on the level of income. It brings change in current level of income.	2. The capital account does not have a direct effect on the level of income. It brings change in the capital stock of a country.
3. Current account transactions are flow in nature.	3. Capital account transactions are stock in nature.

26. BOT shows a deficit of Rs.5,000 crores and value of imports are Rs.9,000 crores. What is the value of exports? (3 Marks)

Ans. We can calculate the value of exports as follows:

$$\text{BOT} = \text{Value of exports} - \text{Value of imports}$$

$$5,000 = \text{Value of exports} - 9,000$$

$$\text{Value of exports} = 9,000 - 5,000$$

$$= 4,000 \text{ crores}$$

27. What are the sources of supply of foreign exchange ? (4 Marks)

Ans. The supply of foreign exchange comes by:

- (i) Exporting of goods and services by domestic exporters.
- (ii) Transfer payments in the form of gifts, donations, cash remittances by families etc.

- (iii) Foreigners who invest and lend in the home currency.
- (iv) Income receipts in the form of profits, dividends interest, compensation of employees etc.

28. What is meant by foreign exchange rate? Give three reasons why people desire to have foreign exchange. (4 Marks)

Ans. Foreign exchange rate is the rate at which one currency of a country can be converted into another currency.

Three reasons why people desire to have foreign exchange are:

- (i) For making payments of imports of goods and services by the domestic residence of the country.
- (ii) For making transfer payments in the form of gifts, donations etc.
- (iii) For making investments and lending abroad by the domestic residents.

29. Define monetary and fiscal policy. Mention any two instruments of each. (4 Marks)

Ans. Monetary Policy: It is the policy of the central bank to control money supply and credit in an economy. It helps in controlling the deficient demand and excess demand by expanding or restricting the availability of credit respectively.

Instruments: (i) Cash Reserve Ratio (ii) Open Market Operation.

Fiscal policy: Fiscal policy involves revenue and expenditure policy of the government. It is practised by changing the levels of taxation and expenditure in order to influence aggregated demand and therefore level of economic activity.

Instruments: (i) Expenditure Policy (ii) Revenue Policy.

30. Find out the size of multiplier:

- (i) If the size of multiplier is 4, find out the value of MPS.
- (ii) If $APC = .75$, calculate the value of APC.
- (iii) If the value of MPS is .5, (6 Marks)

Ans. (i) We know that, $k = \frac{1}{MPS}$

By putting the value of k in the above formula, we get

$$4 = \frac{1}{MPS}$$

$$4 \text{ MPS} = 1$$

$$MPS = \frac{1}{4}$$

(ii) We know that, $APC + APS = 1$
 By putting value of APS in the above formula, we get
 $APC + .75 = 1$
 $APC = 1 - .75$
 $APC = .25$

(iii) We know that, $k = \frac{1}{MPS}$

By putting value of MPS in the above formula, we get

$$k = \frac{1}{0.25}$$

$$= \frac{10}{5}$$

$$= 2$$

31. Distinguish between marginal propensity to consume and marginal propensity to save. What is the relationship between the two? (6 Marks)

Ans. Marginal propensity to consume is the ratio of change in consumption to change in income.

Symbolically, $MPC = \frac{\Delta C}{\Delta Y}$

The value of MPC is always between 0 and 1.

Marginal propensity to save is the ratio of change in savings to change in income.

Symbolically, $MPS = \frac{\Delta S}{\Delta Y}$

The value of MPS also lies between 0 and 1. The value of MPS depends on the value of MPC.

Relationship:

The relationship between MPC and MPS is that the sum of these two is always equal to 1. Symbolically, $MPC + MPS = 1$.

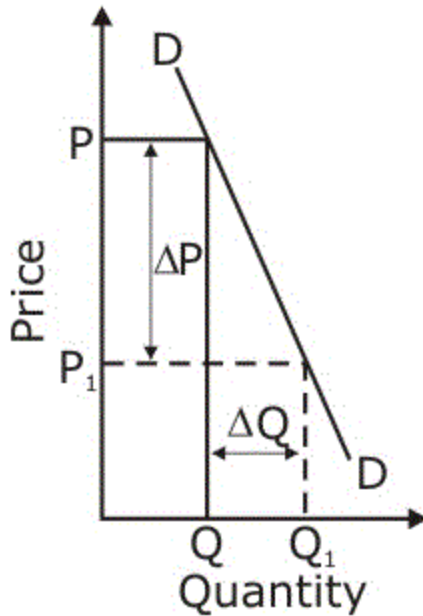
The equation implies that $MPC = 1 - MPS$ and $MPS = 1 - MPC$

32. Discuss following degrees of price elasticity of demand:

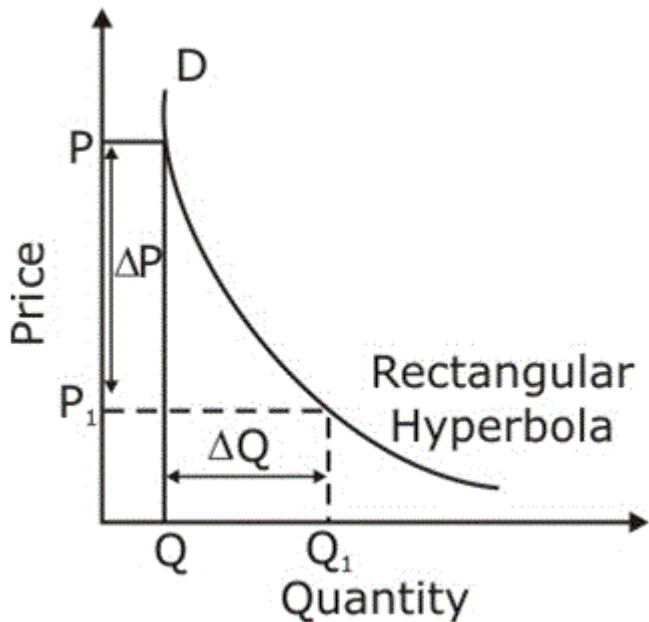
- (1) Less than unit elastic demand
 (2) Unit elastic demand
 (3) More than unit elastic demand (6 Marks)

Ans. The degree of responsiveness of quantity demanded to the change in price may differ and accordingly, elasticity of demand also differs in case of different commodities as follows:

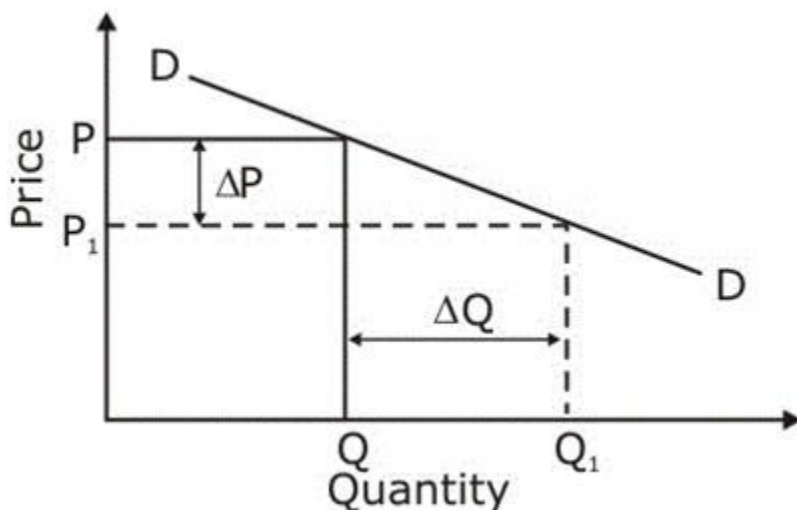
(i) Inelastic or less than unit elastic demand:- If proportionate change in demand is less than the proportionate change in price of the commodity then, the demand for the commodity is said to be inelastic or less than unit elastic Here the elasticity of demand is less than 1. It can be explained with the help of following demand curve.



(ii) Unit Elastic Demand :- If proportionate change in demand is equal to the proportionate change in price of the commodity then the demand for the commodity is said to be unit elastic For instance, 20% change in the price of the commodity results in 20% change in demand. The shape of demand curve having unitary elastic demand will be rectangular hyperbola. It can be explained with the help of following demand curve.



(iii) **Elastic or More Than Unit Elastic** :-When the proportionate or percentage change in demand is more than the proportionate or percentage change in price, it is said to be elastic or more than unit elastic demand. Here the elasticity of demand is greater than one. It can be explained with the help of the following demand curve.



SECTION-A

[INTRODUCTORY MICRO ECONOMICS]

1. Why does a PPC slope downwards from left to right? (1 Mark)

Ans. PPC slope downwards from left to right because more of one commodity can be produced only with less production of another commodity or by shifting resources from the production of one commodity to another commodity.

2. Define marginal rate of transformation. (1 Mark)

Ans. Marginal rate of transformation is defined as the rate at which one commodity is sacrificed in order to increase the production of another commodity.

3. Define opportunity cost of producing a commodity. (1 Mark)

Ans. Opportunity cost of producing a commodity is defined as the next best alternative commodity that have been sacrificed in order to produce the given commodity.

4. What is the root cause of central problems? (1 Mark)

Ans. Scarcity of resources is the root cause of all central problems leading to the problem of choice.

5. Problem of unemployment, illiteracy etc. are studied under which branch of economics. (1 Mark)

Ans. Macroeconomics deals with the economy as a whole and studies the problems of unemployment, illiteracy etc.

6. What are the various factors determining perfect market? (3 Marks)

Ans. Factors determining the forms of Market are :

1. Number of buyers and Sellers: The first important feature of perfect competition is that there are large number of buyers and sellers. The number of sellers is so large that an individual seller produces a small portion of the total output of the market. Similarly, the number of buyers is so large that an individual buyer cannot influence the market.

2. Nature of the product: The product sold under perfect competition is homogeneous. No close substitutes of the product are available.

3. Entry and Exist of Firm: Under perfect market the entry and exit of a new firm is free from restriction. Firms are free to enter or leave the industry any time.

7. Mention three characteristics of perfect competition. (3 Marks)

Ans. The following are the three main characteristics of perfect competition :-

(i) Large number of buyers and sellers : In a perfectly competitive market there are large number of buyers and sellers. Every buyer or seller purchase or sale only a insignificant portion of the total output. Buyers and sellers both do not have any type of union.

(ii) Homogeneous Product : Goods which are sold in the market are completely identical in all respect.

(iii) Free entry and exit of firms: In this type of market, there is no restriction for firm on entry and exit. Any firm can enter into the market and can leave the market at any time without any restriction.

8. Define:

- a) **Equilibrium** **price**
- b) **Equilibrium quantity (3 Marks)**

Ans. (a) Equilibrium price : Equilibrium price is the price at which the quantity demanded of a good or service is equal to the quantity supplied. It is the price at the point where demand curve intersects the supply curve.

(b) Equilibrium quantity : It is the quantity where quantity demanded is equal to quantity supplied. It is the point of equilibrium where demand curve intersects the supply curve.

9. What is meant by the term equilibrium? (3 Marks)

Ans. Equilibrium is defined as a situation where the demand of all consumers and supply of all firms in the market match with each other. The aggregate quantity that all firms wish to sell equals the quantity that all consumers in the market wish to buy. In other words, market supply equals market demand. The price at which the commodity is sold in the market is known as equilibrium price.

10. Define oligopoly. (3 Marks)

Ans. An oligopoly is a market form in which a market is dominated by a small number of sellers because there are few participants. In this type of market, each firm is aware of the actions of the others. Oligopoly markets are characterised by interactivity. The decisions of one firm influence the decisions of other firms. In other words, oligopoly market is a structure with just a few firms controlling a high percentage of total sales, such as car manufacturing.

11. How does a change in supply influence the equilibrium price? (4 Marks)

Ans. When demand of a commodity remains constant and there is an increase in supply, the equilibrium price will decrease similarly if there is a decrease in supply, the equilibrium price will increase.

$$\text{Mode} = L_1 + \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times i$$

$$L_1 = 3000 \quad f_0 = 12 \quad i = 500$$

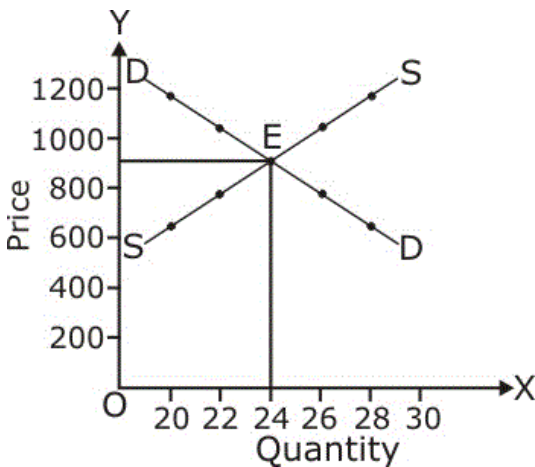
$$f_1 = 15 \quad f_2 = 15$$

$$\begin{aligned} M_0 &= 3000 + \frac{15 - 12}{2(15) - 15} \times 500 \\ &= 3500 \end{aligned}$$

12. How is equilibrium price determined under perfect competition? Explain with the help of a diagram. (4 Marks)

Ans. Equilibrium price is the price which is determined at the point of equilibrium. Equilibrium is the point where demand and supply of a commodity are equal. In other words, equilibrium price is determined at the point where demand and supply curve intersect each other. It can be explained by following schedule and diagram.

Price of wheat (in quintals)	Quantity demanded	Supply (in Quintals)	Remarks
700	28	20	Demand is more than supply
800	26	22	(excess demand)
900	24	24	Equilibrium Price
1000	22	26	Supply is more than demand
1100	20	28	(excess supply)



13. What are the factors determining market structure? (4 Marks)

Ans. A market structure refers to a number of firms operating in the industry, nature of competition between them and the nature of the product. The factors determining market structure are:

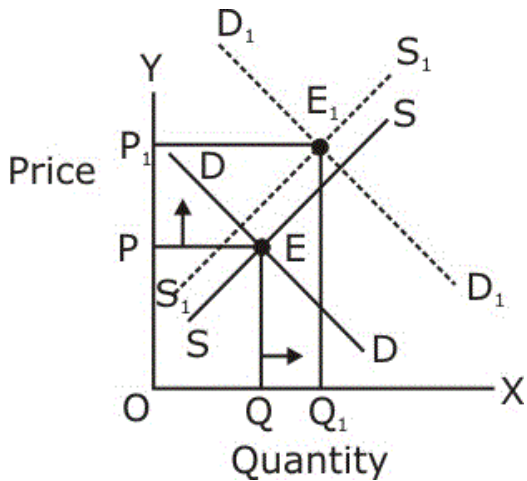
- (1) Number of buyers and sellers
- (2) Nature of commodity
- (3) Mobility of goods and factors
- (4) Perfect knowledge

14. Suppose the demand of T-shirts increases and at the same time the supply of T-shirts decreases because of decrease in price of garment. How will it affect the price and quantity sold of T-shirts? Explain with the help of diagram. (6 Marks)

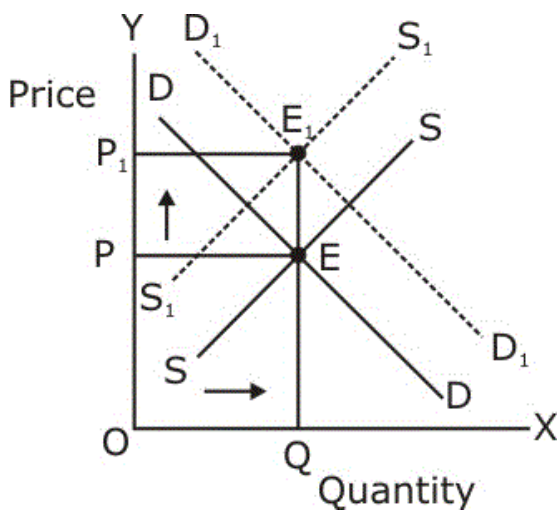
Ans. When demand for T-shirts increases, the demand curve of T-shirt shifts upward. As a result of a decrease in the price of garment, the supply of T-shirt decreases and consequently the supply curve of T-shirt shift leftwards. When the demand of T-shirt increases and supply of T-shirt decreases, the equilibrium price increases but equilibrium quantity may increase, may not increase or may remain constant.

There may be three situations:

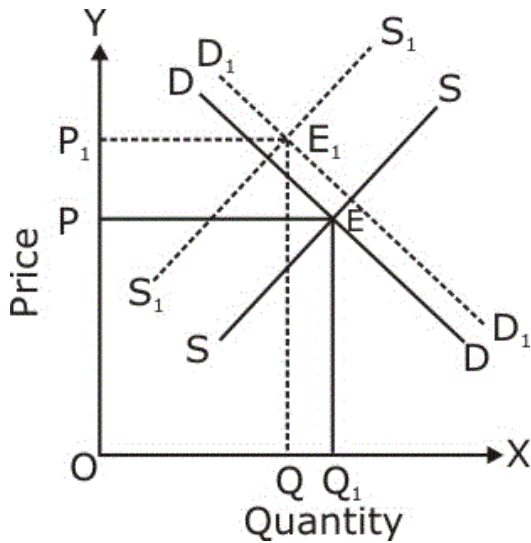
i) When increase in demand is more than decrease in supply, both the equilibrium price and quantity will rise. (Fig 1.)



ii) When increase in demand is equal to decrease in supply, then the equilibrium price will rise but the quantity sold will remain the same (Fig 2.)



iii) When increase in demand is less than decrease in supply, then the equilibrium price will rise but the quality sold of T-shirts will fall (Fig 3)



15. Mr. Suraj can sell 3 gold bangles at a price of Rs.1200 each. If he sells 4th bangle, his total revenue will be Rs.4650. At what price he can sell 4th bangle?

Ans. Total revenue from sale of 3 bangles = Rs. 1200 x 3 = Rs.3600.

Marginal revenue from 4th bangle is = Rs.1050 (4650-3600)

Total revenue from the sale of all 4 bangles = Rs.(3600 + 1050)

= Rs.4650

Therefore, price at which 4th bangle can be sold = Rs.1050

16. The following table shows the total cost schedule of a competitive firm. It is given that the price of a good is Rs 10. Calculate the profit at each level of output . Find the profit minimizing level of output. (6 Marks)

Ans.

Quantity Sold	TC (Rs.)	Price	TR	Profit
0	5	10	0	-5
1	15	10	10	-5
2	22	10	20	-2
3	27	10	30	3
4	31	10	40	9
5	38	10	50	12
6	49	10	60	11

7	63	10	70	7
8	81	10	80	-1
9	101	10	90	-11
10	123	10	100	-23

Profit minimizing level of output = 5 units

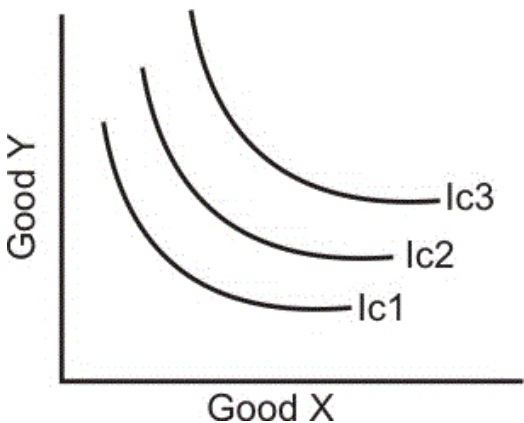
TR - TC = 12

SECTION-B

[INTRODUCTORY MACRO ECONOMICS]

17. What is an indifference map? (1 Mark)

Ans. The consumer preferences for all the bundles can be represented by a family of indifference curves as given in the diagram. It is called indifference map. In other words a set of indifference curves is called indifference map.



18. What do you mean by complementary good. Give two examples? (1 Mark)

Ans. It may be defined as the goods which are used together to satisfy a given want. The examples are pen and ink, car and petrol etc.

19. Define normal goods. (1 Mark)

Ans. Normal goods are those goods whose demand generally increases with increase in income of the consumer.

20. What does slope of IC show? (1 Mark)

Ans. Slope of IC shows the rate at which the consumer is willing to substitute one commodity for the other. It is called Marginal Rate of Substitution.

21. What is meant by the term equilibrium. (1 Mark)

Ans. Equilibrium is represented as the level of complete balance between various factors, i.e. it represents the level of best position achieved.

22. State four categories in which balance of payment transactions are classified. Explain any one of them. (3 Marks)

Ans. The balance of transactions are classified into the following four categories:

- | | | |
|-------|-------------------|------------------------|
| (i) | Visible | transactions |
| (ii) | | Invisible transactions |
| (iii) | Unilateral | transfers |
| (iv) | Capital transfers | |

Capital transfers: It relates to capital receipts and capital payments. These includes sale of assets, borrowings, capital repayments etc. There relate to short and long term movements of capital between nations.

23. BOT shows a deficit of Rs.5,000 crores and value of imports are Rs.9,000 crores. What is the value of exports? (3 Marks)

Ans. We can calculate the value of exports as follows:

$$\text{BOT} = \text{Value of exports} - \text{Value of imports}$$

$$5,000 = \text{Value of exports} - 9,000$$

$$\text{Value of exports} = 9,000 - 5,000$$

$$= 4,000 \text{ crores}$$

24. Describe the causes for disequilibrium in BOP. (3 Marks)

Ans. The causes for disequilibrium in BOP are :

- (i) Large imports due to large scale development expenditure
- (ii) High domestic prices
- (iii) New sources of supply and new substitutes
- (iv) Political instability
- (v) Changes in taste, fashion and preferences

25. Explain the components of (i) Current Account and (ii) Capital Account. (3 Marks)

Ans. (i) The components of current account are:

- (a) Export and import of goods

- (b) Export and import of services
- (c) Unilateral transfers.

(ii) Various forms of components of capital account are :

- (a) Private transactions
- (b) Purchases and repurchases of foreign currency from IMF
- (c) Foreign investment

26. What are included in invisible items? (3 Marks)

Ans. Invisible items include the followings:

- (i) Receipts and payments for services such as banking, travel etc.
- (ii) Receipts and payments of income on foreign investment
- (iii) Receipts and payments of gifts, grants etc.
- (iv) Government's current expenditure in foreign countries such as expenditure on embassies etc.

27. What are the three exchange rate systems that have been followed in the foreign exchange market? Define one of them. (4 Marks)

Ans. Three exchange rate systems that have been followed in the foreign exchange market are:

- (i) Fixed exchange rate system
- (ii) Flexible exchange rate system
- (iii) Managed floating

Managed Floating: Managed floating is a mixture of a flexible and fixed exchange rate system. The central banks intervene to buy and sell foreign currencies to moderate exchange rate movements whenever they feel that such actions are appropriate.

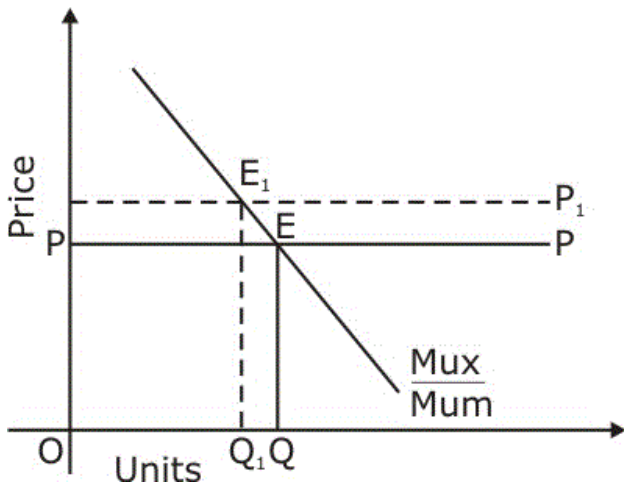
28. How the behaviour of the consumer is affected by an increase in the price of commodity? (4 Marks)

Ans. Consumer equilibrium is determined at a level where the marginal utility derived by the consumer in terms of money becomes equal to the price of the commodity,

i.e.

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

If the price of the commodity increases then in order to attain the level of maximum satisfaction, the consumer will have to reduce the value of MU_x/MU_m . Since MU_m is assumed to be constant, the value of MU_x/MU_m can be increased only by decreasing the quantity of the commodity consumed (law of diminishing marginal utility). Thus an increase in price of the commodity will lead to a leftward shift in consumer equilibrium and the consumer will become ready to consume lesser quantity of the commodity at a given price. It can be explained with the help of following diagram.

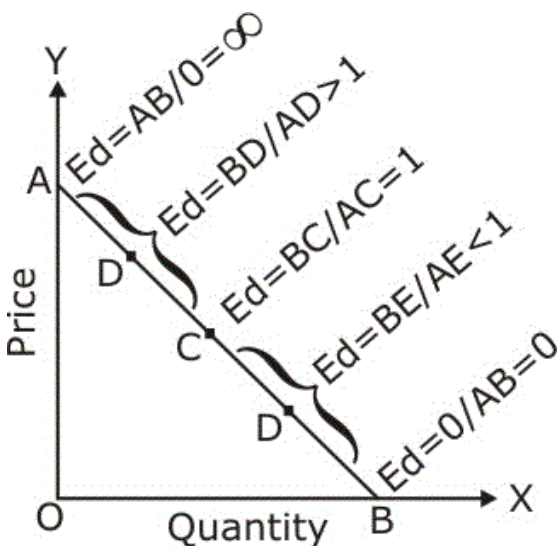


In the given diagram, when the price of the commodity increases from OP to OP_1 , then it leads to a leftward shift in consumer equilibrium from E to E_1 and the consumer becomes ready to purchase lesser quantity Q_1 of the given commodity at a given price.

29. Define elasticity of demand. How it is measured with the help of point method? (4 Marks)

Ans. Elasticity of demand is the responsiveness to change in demand due to change in price. Along the same demand curve elasticity may be different at different points. Elasticity can be measured with the help of geometrical method or point method. To find out the elasticity of demand through this method we first expand the straight line demand curve to the x-axis and y-axis. The point at which we want to calculate elasticity of demand divides curve into two parts; lower segment and upper segment. Elasticity is calculated in the following way:

$$E_d = \frac{\text{Lower Segment}}{\text{Upper Segment}}$$



Elasticities at different points will be as follows:

- (i) At mid point of the curve elasticity of demand will be equal to unity ($E_d = 1$).
- (ii) At any point above mid-point, the elasticity will be greater than one ($E_d > 1$).

(iii) At the point where demand curve meets y-axis, the elasticity will be infinity ($E_d = \infty$)

(iv) At any point below mid-point, the elasticity will be less than one ($E_d < 1$).

(v) At the point where demand curve meets the x-axis, the elasticity will be zero ($E_d = 0$).

30. What is meant by demand? Explain the determinants of demand. (6 Marks)

Ans. Demand of a commodity refers to the quantity demanded of the commodity which the consumer is willing to buy at a given price within a given period of time.

The following are the factors affecting demand or determinants of demand

a) Price of the commodity : Price of the commodity is the most important factor affecting demand. Other things remaining constant, price and demand for a commodity are inversely related. i.e. the consumer is willing to purchase more quantity of a commodity at a lower price and vice-versa.

b) Price of Related Goods : Demand for a commodity is also affected by changes in the price of its related goods. There are two types of related goods :

i) **Substitute Goods:** The goods which can be used in place of one another to satisfy a given want without any difficulty are called substitute goods. When the price of substitute goods of the commodity increases then the consumer will be ready to purchase more quantity of the commodity at a given price, i.e., an increase in price of substitute goods lead to an increase in quantity demanded for the commodity at a given price.

ii) **Complementary goods:** The goods which are used together to satisfy a given human want are called complementary goods. When the price of complementary goods for a commodity is increased then due to joint demand it will lead to a decrease in quantity demanded for the commodity also.

c) Income of the consumer : Income of the consumer affects the ability or purchasing power of the consumer to consume a commodity. The effect of change in income of the consumer on the quantity demanded depends on the nature of the commodity.

The effect on demand due to income of a consumer may be studied under the following three categories of goods :

i) **Necessities :** Necessities are those commodities for which the quantity demanded for the commodity is not affected by any change in level of income of the consumer. For eg. Salt, medicine etc.

ii) **Inferior goods :** Inferior goods are those goods which are of low quality and are generally demanded by poor people. Their demand generally decreases with the increase in income of the consumer and vice-versa.

iii) **Normal goods :** Normal goods are the goods whose demand generally increases with increase in income of the consumer.

d) Tastes and preferences of the consumer : Tastes, preferences and habits of the consumer also affects the demand for the commodity. Other things remaining constant, if there is a favourable change in any of these factors then the demand for the commodity goes up.

31. Ramesh has RS 88 with him. He wants to purchase two commodities--- X & Y. the market price of both X & Y is RS 8 per. The following table presents the marginal utilities of the two commodities. Find out how many units of X & Y Ramesh should purchase to get maximum satisfaction.

Units of Commodity	Marinal Utility for Commodity	Marinal Utility for Commodity
1	80	40
2	72	36
3	64	24
4	56	20
5	48	16
6	40	12
7	32	8
8	24	4
9	16	0
10	8	0

(6 Marks)

Ans. In order to get maximum satisfaction he will have to spend his RS 88 in such a way to equalise the marginal utilities of X and Y per rupee.

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

(1) Ramesh purchases 8 units of X & 3 units of Y Since $P_x = P_y$ $MU_x = MU_y$

Total spending $(8 \times 8) + (3 \times 8) = (64 + 24) = \text{Rs } 88$

(2) At combination $X = 6$ and $Y = 1$ $MU_x = MU_y$, but total income is not spent because:

Total spending $(6 \times 8) + (1 \times 8) = (48 + 8) = \text{RS } 56$

(3) At combination $X = 9$ and $Y = 5$ $MU_x = MU_y$, but this is not affordable in terms of consumer's income.

Total spending $(9 \times 8) + (5 \times 8) = (72 + 40) = \text{Rs } 112$ which he cannot afford to buy.

Thus the best combination where the consumer will get maximum satisfaction will be the first combination of $8X$ and $3Y$.

32. Why does demand curve slope downward to the right? (6 Marks)

Ans. Generally a demand curve slopes downward to the right or it is negatively sloped because of:

(1) Law of diminishing marginal utility: Law of diminishing marginal utility states that with successive increase in consumption of the units of a commodity, every additional unit of that commodity gives lesser satisfaction or lesser marginal utility to the consumer. Since consumer is a rational person he always tries to maximise his satisfaction from given money. He can do it by equalising the marginal utility of the commodity with its price. The consumer equilibrium is attained when the marginal utility of the commodity is equal to the marginal utility of money. Initially when the units of the commodity consumed are less, the consumer gets higher satisfaction from the commodity. As a result he is ready to pay higher prices for the commodity. But as the units of the commodity increases the satisfaction received by the consumer from each additional utility goes on decreasing as a result of which he is ready to pay less for the higher units of the commodity. Thus as price increases the demand decreases.

(2) Income effect: A change in quantity demanded as a result of change in real income due to change in price of the commodity is called income effect. A fall in price increases the real income of the consumer and he will be able to buy more. Similarly a rise in price decreases the real income of the consumer.

(3) Substitution effect: It refers to substituting a cheaper commodity for the relatively expensive commodity. For example, a rise in price of tea will increase the demand for coffee, though the price of coffee has not changed. Thus people will buy more of coffee than tea. This explains that a commodity is demanded less when its price goes up. This leads to a downward sloping demand curve.

SECTION-A

[INTRODUCTORY MICRO ECONOMICS]

1. What is the relationship between AR and MR under perfect competition? (1 Mark)

Ans. Under perfect competition $AR = MR$ because one price prevails in the market.

2. Define variable cost. (1 Mark)

Ans. Costs incurred on the variable factors of production are known as variable costs. Variable cost varies with the level of output. It is zero at zero output.

3. What is the difference between ATC and AVC? (1 Mark)

Ans. ATC is average total cost and AVC is average variable cost. ATC is derived by adding AFC to AVC. Therefore, AVC is a part of ATC.

4. What is meant by perfectly inelastic supply? (1 Mark)

Ans. Supply is said to be perfectly inelastic when there is no change in supply due to a change in price of the good. In this case, elasticity of supply is zero.

5. Classify the following in to fixed and variable cost.

- a) **Cost of raw materials**
b) **Wages of permanent staff (1 Mark)**

Ans. (a) Variable cost

(b) Fixed Cost

6. The total utility schedule of an individual “A” is given. Derive his marginal utility schedule.

Amount consumed	0	1	2	3	4	5	6
Total Utility	0	10	25	38	48	55	61

(3 Marks)

Ans.

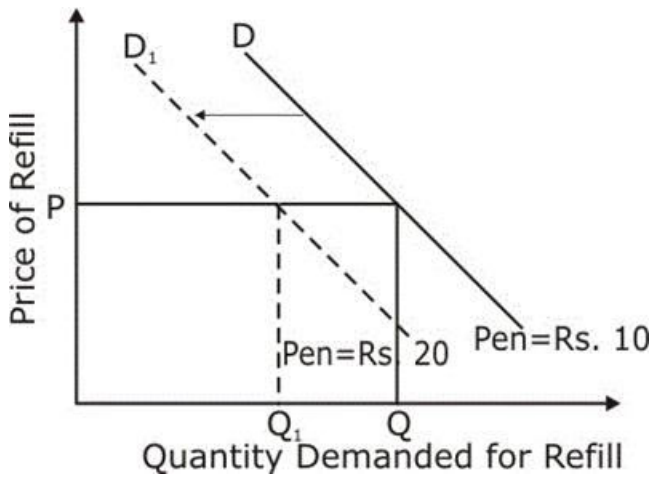
Marginal Utility	0	10	15	13	10	7	6
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Formula Used. $MU_n = TU_n - TU_{n-1}$

7. How the demand for a commodity is affected by an increase in price of its complementary good? (3 Marks)

Ans. Complementary goods are those which are used together to satisfy a given human want e.g. Pen and refill. When the price of pen increases then it leads to a decrease in demand for refill. The consumer will be ready to purchase lesser quantity of the commodity (refill) at a given price which is represented by a leftward shift in demand curve for the commodity (refill). It can be explained with the help of following diagram.

In the given diagram DD represents the demand curve for refill. When the price of its complementary good, pen, increases then the demand curve shifts towards left and the quantity demanded for refill falls from OQ to OQ1.



8. Explain Price elasticity of demand. (3 Marks)

Ans. Elasticity of demand represents the quantitative effect of change in price of the commodity on its quantity demanded. It is defined as the "degree of responsiveness of quantity demanded for the commodity to any change in price of the commodity". It can be estimated as the ratio of percentage or proportionate change in quantity demanded to the percentage or proportionate change in price of the commodity. i.e.

$$E_d = \frac{\% \text{ change in } QD}{\% \text{ change in price}}$$

$$= \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

where E_d = coefficient of price elasticity of demand

ΔP = change in price ; ΔQ = change in quantity demanded

P = Original price and Q = Original quantity

9. What is budget line? Give an example. (3 Marks)

Ans. The budget line represents all the commodities which a consumer can purchase with his entire money income. Let us have two commodities X and Y. Their respective prices are Rs P_1 and Rs P_2 . The entire income of the consumer is Rs 100. The budget line can be written as follows:

$$P_1X + P_2Y = 100$$

10. Define Production Function. (3 Marks)

Ans. The Production function represents the technological relationship between physical input and output of a product. In other words it shows that with a given state of technology and during a particular period of time. How much we can produce with the given inputs. Symbolically, production function can be written as follows

$$Q = f (f_1, f_2, f_3, \dots, f_4)$$

f1 f2 f3 are factors of production.

Generally Land, Labour, Capital and Entrepreneur are the factors of production used in the production process.

11. A firm is producing 20 units. At this level of out put, the ATC and AVC are respectively equal to Rs. 40 and Rs. 37 Find out the total fixed cost of the firm. (4 Marks)

Ans. $ATC = AFC + AVC$

$AFC = ATC - AVC$

$= 40 - 37 = 3$

$TFC = AFC \times \text{Total No of units}$

$= 3 \times 20 = 60$

12. Calculate (i) Total fixed cost (ii) Total variable cost (iii) Margina cost (iv) average cost from the following data.

Out put (Unit)	0	1	2	3	4	5	6
Total cost (Rs)	60	90	100	105	115	135	180

(4 Marks)

Ans.

Units of output	Total cost	TFC	TVC	MC	AC
0	60	60	-	-	-
1	90	60	30	30	90
2	100	60	40	10	50
3	105	60	45	5	35
4	115	60	55	10	28.7
5	135	60	75	20	27
6	180	60	120	45	30

13. Explain the law of variable Proportion. Or

What is meant by returns to a factor? State three phases of law of variable proportions. (4 Marks)

Ans. When more and more units of a variable factor are applied with fixed factors to increase the production, it is said to be laws of returns to factor. In such a situation total product, marginal product and average product passes through three stages as givenin the diagram.

First Stage – It is the stage in which total product, average product and marginal product increases due to increase in return to factor in the beginning.

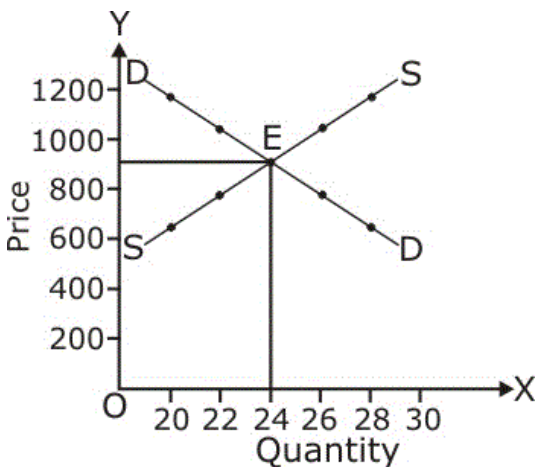
Second Stage – Total Product is rising but at a diminishing rate marginal product and average product is falling. In this case total product is maximum where marginal product is zero.

Third Stage – when total product diminishes as a result of that marginal product is negative. It means total product, marginal product and average product all are falling.

14. How is equilibrium price determined under perfect competition? Explain with the help of a diagram. (6 Marks)

Ans. Equilibrium price is the price which is determined at the point of equilibrium. Equilibrium is the point where demand and supply of a commodity are equal. In other words, equilibrium price is determined at the point where demand and supply curve intersect each other. It can be explained by following schedule and diagram.

Price of wheat (in quintals)	Quantity demanded	Supply (in Quintals)	Remarks
700	28	20	Demand is more than supply
800	26	22	(excess demand)
900	24	24	Equilibrium Price
1000	22	26	Supply is more than demand
1100	20	28	(excess supply)



15. Explain the relationship between average variable, cost average cost and average fixed cost with the help of a cost schedule and diagram. (6 Marks)

Ans. Average variable cost- It is the per unit variable cost of producing a commodity. It is obtained by dividing total variable cost by total number of units of commodity produced.

$$AVC = \frac{TVC}{TQ}$$

Average fixed cost – It is per unit fixed cost of producing a commodity.

$$AFC = \frac{TFC}{TQ}$$

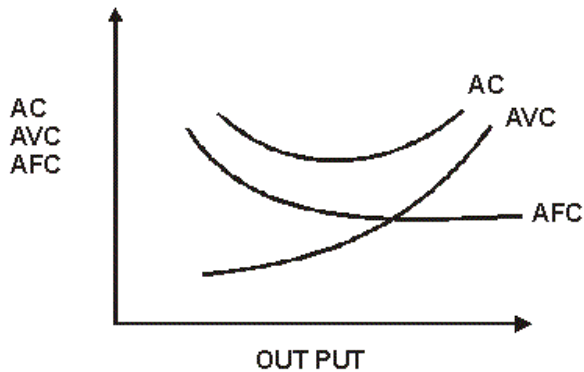
Average cost = It is sum of average Fixed cost and average variable cost

$$AC = AFC + AVC$$

$$AC = \frac{TC}{TQ}$$

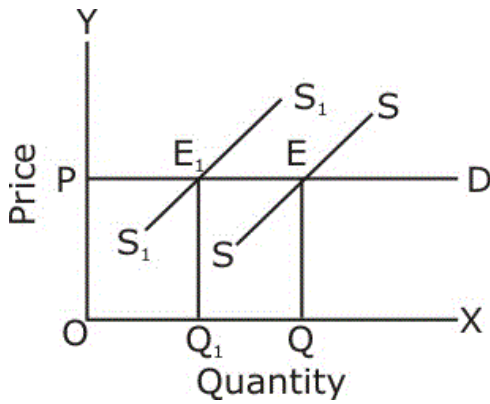
TQ = No of units produced

Output	TFC	TVC	TC	AFC	AVC	AC
1	20	5	25	20	5	25
2	20	9	29	10	4.5	14.5
3	20	12	32	6.6	4	10.6
4	20	16	36	5	4	9
5	20	21	41	4	4.2	8.2

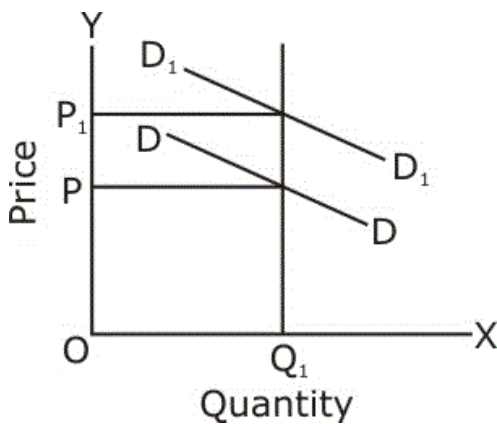


16. Show with the help of a diagram, the effect as equilibrium price and quantity when :
- (1) Demand is perfectly elastic and supply decreases.
 - (2) Supply is perfectly inelastic and demand increases. (6 Marks)

Ans. (1) There will be no change in price if demand is perfectly elastic and supply decreases. When supply decreases from SS to S1S1, the price remains constant at OP, but quantity decreases from OQ to OQ1.



(2) When supply is perfectly inelastic and demand increases, the price of the commodity will increase and quantity will remain constant. In the diagram when demand increases from DD to D₁D₁ the price also increases from OP to OP₁ but quantity remains the same at OQ.



SECTION-B

[INTRODUCTORY MACRO ECONOMICS]

17. Name the India's Central Bank. (1 Mark)

Ans. India's Central Bank is the Reserve Bank of India.

18. Explain the function of collection and publication of data. (1 Mark)

Ans. Central Bank has also been entrusted with the tasks of collection and compilation of statistical information, relating to banking and other financial sectors of economy.

19. Define average propensity to save? (1 Mark)

Ans. Average propensity to save is the ratio of total saving and total income i.e., the average rate of saving in proportion to the income.

Symbolically, $APS = S/Y$.

20. What do you mean by monetary policy? (1 Mark)

Ans. It is the policy of the central bank to control money supply and credit in an economy. It helps in controlling the deficient and excess demand by restricting the availability of credit.

21. What do you mean by full employment? (1 Mark)

Ans. Full employment refers to a situation where all the available resources in the economy are fully employed or utilised.

22. Explain the concept of induced investment. (3 Marks)

Ans. Induced investment is that investment which is income elastic. It is positively related to the level of income in an economy. If national income goes up, investment also goes up. According to Keynes, induced investment is determined by marginal efficiency of capital. Following are the features of induced investment:

- a) It is income elastic.
- b) It is generally done in the private sector.
- c) It depends upon the level of income.
- d) It is reflected by a upward rising curve to the right.

23. What are the features of tax? (3 Marks)

Ans. Main features of tax are the following:

- a) Tax is a compulsory payment.
- b) Tax is spent for public welfare.
- c) It gives no proportionate return.
- d) Payment of tax is personal responsibility.
- e) It is levied according to the legal procedure.

24. Explain briefly how open market operations are helpful in correcting the situation of deficient demand in the economy? (3 Marks)

Ans. When aggregate demand falls short of aggregate supply at full employment level, the situation is called deficient demand.

Through open market operations, i.e., buying of government securities, the central bank can control deficient demand. By buying government securities, the central bank will inject purchasing power into the economy, which will result in the expansion of credit. As a result, aggregate demand increases and the problem of deficient demand can be solved.

25. Describe significance of primary deficit. (3 Marks)

Ans. Primary deficit is the difference between fiscal deficit and interest payment.

Significance – Primary deficit shows borrowing requirement of government to meet her expenditure exclusive of interest payment. High primary deficit reflects fiscal irresponsibility of the government. A large primary deficit implies a large amount of borrowings. It creates a large burden of interest payments in the future because of fresh loan required to cover present deficit. Large primary deficit may also lead to the inflationary pressure in the economy.

26. Complete the following table:

National Income (Rs.)	Consumption (Rs.)	Marginal propensity to consume (MPC)	Marginal propensity to save (MPS)
400	240		
500	320		
600	395		
700	465		

(3 Marks)

Ans.

National Income (Rs.)	Consumption (Rs.)	Marginal propensity to consume (MPC)	Marginal propensity to save (MPS)
400	240	-	-
500	320	.8	.2
600	395	.75	.25
700	465	.7	.3

Note: $MPC = \frac{\Delta C}{\Delta Y}$ and $MPC + MPS = 1$ or $1 - MPC = MPS$

27. Define monetary and fiscal policy. Mention any two instruments of each. (4 Marks)

Ans. Monetary Policy: It is the policy of the central bank to control money supply and credit in an economy. It helps in controlling the deficient demand and excess demand by expanding or restricting the availability of credit respectively.

Instruments: (i) Cash Reserve Ratio (ii) Open Market Operation.

Fiscal policy: Fiscal policy involves revenue and expenditure policy of the government. It is practised by changing the levels of taxation and expenditure in order to influence aggregated demand and therefore level of economic activity.

Instruments: (i) Expenditure Policy (ii) Revenue Policy.

28. Prove that $MPC + MPS = 1$. (4 Marks)

Ans. We know that,

$$MPS = \frac{\Delta S}{\Delta Y}, MPC = \frac{\Delta C}{\Delta Y} \text{ and } \Delta Y = \Delta C + \Delta S$$

[Since increase in income leads to increase in consumption and saving]

$$MPC + MPS = \frac{\Delta C}{\Delta Y} + \frac{\Delta S}{\Delta Y}$$

$$\begin{aligned} \text{So that,} &= \frac{\Delta C + \Delta S}{\Delta Y} \\ &= \frac{\Delta Y}{\Delta Y} \\ &= 1 \end{aligned}$$

29. Write a short note on the behaviour of aggregate demand. (4 Marks)

Ans. Aggregate demand refers to the total demand for goods and services in an economy in a particular year. Four components of aggregate demand are private consumption demand, private investment demand, government demand for goods and services and net exports. But for the sake of simplicity, aggregate demand is denoted in terms of consumption demand and investment demand. Symbolically,

$$AD = C + I$$

Following are the features of aggregate demand:

- i) Aggregate demand depends upon the level of income. The greater the income, greater will be the aggregate demand.
- ii) At zero level of income, there is always some minimum level of aggregate demand because consumption is never zero.
- iii) As income rises, demand also increases but after a particular level of income, people start saving a part of their income. So the expenditure tends to lag behind the increasing income.

30. From the following data calculate value added by firm X and by Firm Y

Closing Stock of Firm X	20
Closing Stock of firm X	15
Opening stock of Firm X	10
Opening stock of firm X	5
Sales By firm X	300
Purchases by firm X from firm Y	100
Purchases by firm Y from firm X	80
Sales By firm Y	

	250
Import of Raw Material by firm X	50
Exports by firm Y	30

(6 Marks)

Ans. Value of Output of Firm X

Sales + Closing Stock - opening stock

$$= 300 + (200 - 5)$$

$$= \text{Rs } 315 \text{ lakhs}$$

Value Added by firm X

Value of output - Purchases from firm Y - Imports

$$= 315 - 100 - 50$$

$$= 165 \text{ lakhs}$$

Value of output of firm Y

= Sales + Closing stock - opening stock + exports

$$= 250 + 15 - 10 + 30$$

Value added by firm Y

= Value of output - Purchases from firm X

$$= 285 - 80$$

$$= \text{Rs } 205 \text{ Lakhs}$$

31. Explain the value added method of estimating national income. (6 Marks)

Ans. Following are the steps involved in estimating gross domestic product by value added Method:
Identification of producing enterprises and their classification: In the first stage the enterprises are identified and classified into 3 stages, primary, secondary and tertiary.

s Primary sector included agriculture and allied activities forestry, fishing mining and quarrying

s Secondary includes manufacturing activities

s Tertiary includes services like banking, insurance, transport, communication etc.

Estimation of Net Value added

The second step is the estimation of Net Value added .This requires the information of value of output

The following items are deducted from the value of output

- (1) Value of intermediate consumption
- (2) Consumption of fixed capital
- (3) Net indirect taxes

Estimation of Net Factor income from abroad

The final step is the estimation of net factor income from abroad and add it to the net domestic product at factor cost in order to get NNP at factor cost.

32. Find NDP_{FC} from the following information.

(i)	Gross domestic fixed investment	10,000
(ii)	Inventory investment	5,000
(iii)	Depreciation	2,000
(iv)	Indirect taxes	1,000
(v)	Subsidies	2,000
(vi)	Consumption expenditure	20,000
(vii)	Residential construction investment	6,000

(6 Marks)

Ans. N.D.P at FC = Gross domestic fixed investment + Inventory investment – Depreciation – indirect taxes + subsidies + consumption expenditure

$$= 10,000 + 5,000 - 2,000 - 1,000 + 2,000 + 20,000 = \text{Rs. } 34,000$$

SECTION-A

[INTRODUCTORY MICRO ECONOMICS]

1. What is the relationship between AR and MR under perfect competition? (1 Mark)

Ans. Under perfect competition $AR=MR$ because one price prevails in the market.

2. Define variable cost. (1 Mark)

Ans. Costs incurred on the variable factors of production are known as variable costs. Variable cost varies with the level of output. It is zero at zero output.

3. What is the difference between ATC and AVC? (1 Mark)

Ans. ATC is average total cost and AVC is average variable cost. ATC is derived by adding AFC to AVC. Therefore, AVC is a part of ATC.

4. What is meant by perfectly inelastic supply? (1 Mark)

Ans. Supply is said to be perfectly inelastic when there is no change in supply due to a change in price of the good. In this case, elasticity of supply is zero.

5. Classify the following in to fixed and variable cost.

- a) **Cost of raw materials**
b) **Wages of permanent staff (1 Mark)**

Ans. (a) Variable cost

(b) Fixed Cost

6. Why is the PPC concave to the origin? (3 Marks)

Ans. Production possibilities curve is based on the assumption of increasing marginal rate of transformation (MRT). Due to this, PPC is always concave to the origin. The slope of PPC represents the marginal rate of transformation between two commodities i.e. the rate or ratio at which one commodity is sacrificed in order to increase the production of another commodity by one unit. Increasing MRT states that the rate of sacrifice of one good in order to increase the production of another good increases with production of every additional unit of the latter commodity. Due to this, the production possibility curve is always concave to the origin.

7. Explain with examples how the problem of choice is faced by individuals and societies? (3 Marks)

Ans. Problem of choice arises due to unlimited human wants, scarcity of resources and alternative uses of resources. It is a universal problem of decision making or problem of choice arising at all levels of the economy.

An individual has to make a choice between various ways of allocating the available resources. For example an individual has to choose between consumption expenditure and investment expenditure. Similarly, the government has to choose between civil goods (sugar, rice, cycles etc.) or defence / military goods (guns, bombs, tanks etc.).

PPC helps in solving the economic problem of what to produce, how to produce and for whom to produce.

8. Suppose an economy produces two goods i.e, war planes and buses. The following table summarizes the production possibilities. Calculate the marginal rate of transformation from production of war planes to the production of buses.(3 Marks)

Production Possibilities	Buses (in crores)	War-planes (in lakhs)
A	0	15
B	1	14
C	2	12
D	3	9
E	4	5
F	5	0

Ans.

Production Possibilities	Buses (in crores)	War-planes (in lakhs)	Marginal rate of transformation from war planes to buses
A	0	15	-
B	1	14	1 : 1
C	2	12	1 : 2
D	3	9	1 : 3
E	4	5	1 : 4
F	5	0	1 : 5

9. A student passes his MBBS examination. Give some hypothetical choices he can have and also state the opportunity cost of the choice he makes. (3 Marks)

Ans. Opportunity cost is defined as the cost of next best alternative sacrificed in order to carry out a given activity.

A student who has passed MBBS has the following choices:

- He can join as a doctor in the government hospital for Rs 10,000
- He can start his own clinic and earn Rs 15,000
- He can join a private hospital and earn Rs 20,000.

From the given choices he will select to join a private hospital and earn Rs 20,000. Here the next best alternative available for him is to start his own clinic and earn Rs 15,000. Hence, the opportunity cost of joining a private hospital will be starting his own clinic.

10. What are the two aspects of the problem of "for whom to produce"? Explain. (3 Marks)

Ans. Two aspects of the problem are:

(1) Personal distribution: It is related to how production should be distributed among different individuals and households. It is also related to the problem of inequality in the distribution of income.

(2) Functional distribution: It is related to how the output should be distributed among different factors of production. It is not related to the problem of inequality of income.

11. Differentiate between Microeconomics and Macroeconomics. (4 Marks)

Ans.

MICRO ECONOMICS	MACRO ECONOMICS
1. It studies individual units.	1. It studies aggregates.
2. It relates to price determination, consumer's equilibrium, distribution etc.	2. It relates to national income, general price level etc.
3. This method of study is called partial equilibrium analysis because individual units are studied in it.	3. It is called general equilibrium analysis because it studies the entire economy.
4. It is also known as ' price theory '.	4. It is also known as ' income theory '.

12. How is new equilibrium reached when supply and demand curve tends to shift? (4 Marks)

Ans. In case of shift in supply and demand curve, the new equilibrium is struck through the process of extension and contraction of demand and supply. Increase or decrease in demand will either cause situation of excess demand or deficient demand in relation to supply of the commodity. In case of excess demand price tends to rise. Similarly, in case of deficient demand price tends to fall. This process continues till the new price is reached where demand is equal to supply.

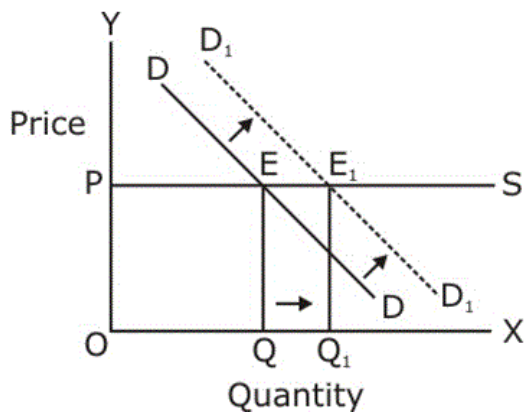
13. How Monopoly is different from monopolistic competition? (4 Marks)

Ans. Difference between monopolistic competition and monopoly:

Basis	Monopoly	Monopolistic competition
Number of sellers	There is a single seller of a product	There are large number of sellers selling a product
Availability of substitute	No close substitutes are available	Differentiated products but are close substitutes of each other.
Barriers	Strong barriers in entry of new firms in the market	There are no barriers in entry of new firms in the market

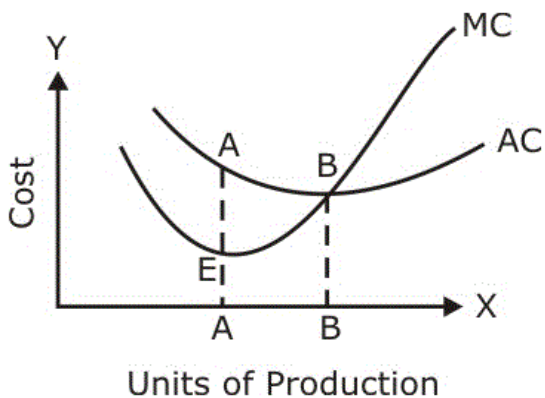
14. Show with the help of diagram, the effect on equilibrium price, when demand increases and supply is perfectly elastic. (4 Marks)

Ans. When demand increases and supply is perfectly elastic, there will be no change in price but the quantity demanded increases. In the diagram, when demand increases from DD to D_1D_1 the price remains unchanged at OP and the quantity demanded increases from OQ to OQ_1 .



15. Explain the relationship between marginal cost and average cost with the help of cost schedule and diagram. (6 Marks)

Ans. The relationship between marginal cost and average cost can be discussed as under
 1) Marginal cost is less than average cost when average cost falls due to increase in output.
 2) Marginal cost is equal to average cost when average cost is minimum. In this situation marginal cost curve intersect average cost curve at its minimum point.
 3) Marginal cost is more than average cost when average cost rises.



Cost Schedule

Output	Total cost	Marginal cost	Average cost
1	10	10	10
3	24	6	8
5	30	2	6
6	36	6	6
7	49	13	7
10	100	19	10

16. The following table shows the total cost schedule of a competitive firm. It is given that the price of a good is Rs 10. Calculate the profit at each level of output . Find the profit minimizing level of output. (6 Marks)

Ans.

Quantity Sold	TC (RS)	Price	TR	Profit
0	5	10	0	-5
1	15	10	10	-5
2	22	10	20	-2
3	27	10	30	3
4	31	10	40	9
5	38	10	50	12
6	49	10	60	11
7	63	10	70	7
8	81	10	80	-1
9	101	10	90	-11
10	123	10	100	-23

Profit minimizing level of output = **5 units**

TR - TC = 12

SECTION-B

[INTRODUCTORY MACRO ECONOMICS]

17. What is the basic characteristic of money ? (1 Mark)

Ans. The basic characteristic of money is general acceptability.

18. What is legal tender money ? (1 Mark)

Ans. Legal tender money is the money which every individual is bound to accept in exchange of goods and services or in discharge of debts.

19. Two types of banks exists in every country Central bank and commercial banks. What are Commercial Banks? (1 Mark)

Ans. A commercial bank is a financial institution, which performs the functions of accepting deposits from the general public and giving loans for investment, with the aim of earning profit.

20. What is meant by High Powered Money? (1 Mark)

Ans. Total liability of the monetary authority of the country, RBI, is called the monetary base or high powered money. It is the money created or produced by RBI and government of India.

21. What is barter exchange ? (1 Mark)

Ans. Direct exchange of goods against goods without use of money is called barter exchange.

22. Mention the types of loans and advances made by banks. (3 Marks)

Ans. The types of loans and advances made by banks are :

- (i) Cash credit
- (ii) Demand Loans
- (iii) Short-term loans
- (iv) Overdraft

23. What is banking? (3 Marks)

Ans. Banking is defined as 'accepting for purpose of lending or investments of deposit of money from the public repayable on demand or otherwise and withdrawable by cheque, draft, order or otherwise.

24. How can you define money on the basis of its functions performed? (3 Marks)

Ans. Money performs various functions. Accordingly, money is defined as "**money is what money does**". It means anything, which is generally accepted in payment and is generally used as a medium of exchange is called money. If a goods is generally accepted in payment, and generally used as a medium of payment, it should be treated as money.

Functions of money are reflected as, Money is a matter of functions four, a medium, a measure, a standard, a store. Thus, money acts as common medium of exchange, a common measure of value, as standard of deferred payments and a store of value.

25. How does Central bank act as a controller of credit and money supply? (3 Marks)

Ans. It is an important function of central bank to control credit and money supply through its monetary policy. Central bank has a monopoly of issuing notes and thereby, it can control the volume of currency in the economy. It controls money supply and credit by adopting quantitative measures and qualitative measures like, controlling the interest rate on deposits and loans, controlling the statutory liquidity ratio, buying and selling securities etc.

26. How is money a dynamic factor? (3 Marks)

Ans. Money is a dynamic factor because:

1. It has facilitated exchange beyond limits
2. It has facilitated accumulation of wealth for purpose of investment

3. It has facilitated flow of capital from one place to the other place, and from one country to another country.

Thus, money is a dynamic factor because it helps economic stability, and promotes the process of growth and development.

27. What do you mean by Cash Reserve Ratio(CRR)? (4 Marks)

Ans. Every commercial bank, under law, has to deposit with Central bank a minimum percentage of its demand and its deposits. This percentage is called as CRR. A high CRR means more reserves and less loans. By changing CRR, Central bank controls the lending capacity and credit availability of banks. Recently, RBI has raised CRR from 5.5% to 6% w.e.f. March 3, 2007 in order to control inflation. In case of deflation, RBI decreases the CRR.

28. Coins, notes, credit cards are various forms of money. Some are considered pure money whereas some are considered near money. What is meant by money and near money? (4 Marks)

Ans. Money is anything, which is used as a medium of exchange, and has a legal sanction of the government. It possesses 100% liquidity. Everybody is legally bound to accept it. For instance, money in India consists of coins and paper notes.

Near money is close substitute of money rather than cash and currency. It is as good as money, but it is not real money because it is not legally sanctioned. Assets, which are close substitute of money, are considered near money. Examples of near money are bonds, equity, shares, NSC, commercial bills etc. Near money cannot buy goods and services like money, but it can be converted into ready money easily within a short period of time.

Credit card is another example of near money. In case of purchases made through credit cards, the payments are not made immediately, rather they are deducted from the bank account of the purchaser later on by the bank.

29. What are the measures of money supply? (4 Marks)

Ans. In India there are four concepts of money supply. Reserve Bank of India uses four alternative measures of money supply called as **M₁, M₂, M₃ and M₄**. Each measure is briefly explained below:

(i) $M_1 = C + DD + OD$: Here C denotes currency held by public. DD stands for demand deposits in banks (inter bank deposits are not included) and OD stands for other deposits with RBI. Demand deposits are deposits which can be withdrawn at any time on demand by account holders.

(ii) $M_2 = M_1$ (detailed above) + Savings deposits with Post Office Saving Banks.

(iii) $M_3 = M_1 +$ Net Time deposits of Banks

(iv) $M_4 = M_3 +$ total deposits with Post Office Saving Organisation (excluding NSC)

30. Why do countries around the world keep records of all international economic transactions? (6 Marks)

Ans. The record of all economic transactions of a country with rest of the world is known as balance of payments account is useful for a number of reasons:

(i) BOP of a country is one of the important indicators for international trade, which significantly affects the economic policies of a government. It provides useful information to the government regarding flow of goods and services and assets.

(ii) It enables the government to design an appropriate economic policy such as trade policy, fiscal policy etc.

(iii) The balance of payments will significantly influence the nature and types of regulation of exports and imports.

31. Mention three merits and demerits of fixed exchange rate. (6 Marks)

Ans. (i) Fixed exchange rate creates certainty about future exchange rate and hence, helps to promote international trade.

(ii) There is no fear of speculative activities. Speculative activities are controlled by monetary authorities.

(iii) Fixed exchange rate promotes international investments. It encourages long-term capital flows.

Demerits: (i) Large reserve of foreign exchange is required to be maintained by the country.

(ii) Fluctuations in international commodity prices often compel countries to bring changes in exchange rates. Thus, it is not possible to have fixed exchange rates.

(iii) Owing to huge reserve of foreign exchange under fixed exchange rate, it restricts the movement of capital across different parts of the world. Accordingly, international growth process suffers.

32. Show the difference between balance of trade and balance of payment. (6 Marks)

Ans. The difference between Balance of Trade and Balance of Payment is given below :

Balance of Trade	Balance of Payment
(i) It records only merchandise (i.e. goods) transactions.	(i) It records transactions relating to both goods and services.
(ii) It does not record transactions of capital nature.	(ii) It records transactions of capital nature.
(iii) It is a narrow concept because it is only one part of BOP account.	(iii) It is a wider concept because it includes balance of trade, balance of services, balance of unrequited

	transfers and balance of capital transactions.
(iv) It may be favourable, unfavourable or in equilibrium.	(iv) It always remains in balance in accounting sense because receipt side is always made to be equal to payment side.

SECTION-A

[INTRODUCTORY MICRO ECONOMICS]

1. Name the India's Central Bank. (1 Mark)

Ans. India's Central Bank is the Reserve Bank of India.

2. What is banking? (1 Mark)

Ans. Banking is defined as 'accepting for purpose of lending or investments of deposit of money from the public repayable on demand or otherwise and withdrawal by cheque, draft, order or otherwise.'

3. Name the components of aggregate demand. (1 Mark)

Ans. The four components of aggregate demand are:
 (i) Private consumption demand
 (ii) Private investment demand
 (iii) Government demand for goods and services
 (iv) Net exports

4. What do you mean by marginal propensity to save? (1 Mark)

Ans. It is the change in saving due to the change in income.

Symbolically, $MPS = \frac{\Delta S}{\Delta Y}$

5. What is real national income? (1 Mark)

Ans. The national income at constant prices is called real national income.

6. Explain why there is a need for a separate theory of macroeconomics. (3 Marks)

Ans. As microeconomics fails to study the aggregate of economy like National Income, employment level, general price level. So a need of separate branch of economicsaroused .Macroeconomics is required to know the functioning of economy. Economic policies can only be formed by knowing the health of economy so it is very useful for economic growth.

7. What do you mean by external trade? (3 Marks)

Ans. If the countries sell goods internationally or to the rest of the world then it is called exports. If the economy purchases goods from the international market or from rest of the world then it is called imports. Capital can flow in between different countries.

8. BOT shows a deficit of Rs.5,000 crores and value of imports are Rs.9,000 crores. What is the value of exports? (3 Marks)

Ans. We can calculate the value of exports as follows:

$$\text{BOT} = \text{Value of exports} - \text{Value of imports}$$

$$5,000 = \text{Value of exports} - 9,000$$

$$\text{Value of exports} = 9,000 - 5,000$$

$$= 4,000 \text{ crores}$$

9. What are included in invisible items? (3 Marks)

Ans. Invisible items include the followings:

- (i) Receipts and payments for services such as banking, travel etc.
- (ii) Receipts and payments of income on foreign investment
- (iii) Receipts and payments of gifts, grants etc.
- (iv) Government's current expenditure in foreign countries such as expenditure on embassies etc.

10. State four categories in which balance of payment transactions are classified. Explain any one of them. (3 Marks)

Ans. The balance of transactions are classified into the following four categories:

- (i) Visible transactions
- (ii) Invisible transactions
- (iii) Unilateral transfers
- (iv) Capital transfers

Capital transfers: It relates to capital receipts and capital payments. These includes sale of assets, borrowings, capital repayments etc. There relate to short and long term movements of capital between nations.

11. What are the three exchange rate systems that have been followed in the foreign exchange market? Define one of them. (4 Marks)

Ans. Three exchange rate systems that have been followed in the foreign exchange market are:

- (i) Fixed exchange rate system
- (ii) Flexible exchange rate system
- (iii) Managed floating

Managed Floating: Managed floating is a mixture of a flexible and fixed exchange rate system. The central banks intervene to buy and sell foreign currencies to moderate exchange rate movements whenever they feel that such actions are appropriate.

12. What are the sources of supply of foreign exchange ? (4 Marks)

Ans. The supply of foreign exchange comes by:

- (i) Exporting of goods and services by domestic exporters.
- (ii) Transfer payments in the form of gifts, donations, cash remittances by families etc.
- (iii) Foreigners who invest and lend in the home currency.
- (iv) Income receipts in the form of profits, dividends interest, compensation of employees etc.

13. What is meant by net factor income from abroad? Explain its components. (4 Marks)

Ans. Net factor income from abroad may be defined as the income received from abroad for rendering factor services abroad and income paid for the factor services rendered by non residents in the domestic territory of a country. The components of net factor income from abroad are:

- (1) **Net compensation of the employees:** It is equal to the difference between the compensation of employees received by resident workers that are living and employed abroad and similar payments made to non resident workers.
- (2) **Net Income from property and entrepreneurship:** It is equal to the difference between the net income received by way of interest, rent and profits by the residents and similar payments made to the rest of the world.
- (3) **Net Retained earning from abroad:** It is equal to the difference between retained earning of the foreign countries in the country and retained companies located abroad.

National income = Domestic Factor + Net Factor income from abroad

14. From the following data relating to a firm (a) estimate the net value added at market prices (b) show that net value added at factor cost is equal to the sum of factor incomes : (6 Marks)

Purchase of Raw materials and other	600
-------------------------------------	-----

inputs				200
Increase	in	Stocks		1800
Domestic		Sales		100
Imports	of	raw	material	200
Exports				75
Depreciation	of	fixed	capital	600
Salaries	and	wages		450
Interest		payments		75
Rent				150
Dividends				80
Undistributed		Profit		20
Corporate	profit	tax		50
Indirect Taxes				

Ans. Net Value added at market price=

Domestic Sales+ Increase in stocks+ Exports- Purchase of raw materials and other inputs –Imports of Raw materials-Depreciation of fixed capital

$$= 1800 + 200 + 200 - 600 - 100 - 75$$

$$= 1425 \text{ thousand}$$

Net Value Added At Factor Cost

= Net Value added at market prices- Indirect Taxes

$$= 1425 - 50$$

$$= 1375 \text{ thousands}$$

Factor Income

= Salaries and wages+Interest +Rent+Dividends+Undistributed Profits+Corporate Profit Tax

$$= 600 + 450 + 75 + 150 + 80 + 20$$

$$= 1375 \text{ thousands}$$

15. Mention three merits and demerits of fixed exchange rate. (6 Marks)

Ans. (i) Fixed exchange rate creates certainty about future exchange rate and hence, helps to promote international trade.

(ii) There is no fear of speculative activities. Speculative activities are controlled by monetary authorities.

(iii) Fixed exchange rate promotes international investments. It encourages long-term capital flows.

Demerits: (i) Large reserve of foreign exchange is required to be maintained by the country.

(ii) Fluctuations in international commodity prices often compel countries to bring changes in exchange rates. Thus, it is not possible to have fixed exchange rates.

(iii) Owing to huge reserve of foreign exchange under fixed exchange rate, it restricts the movement of capital across different parts of the world. Accordingly, international growth process suffers.

16. Introduction of money has made transactions much easier. Explain the functions of money. (6 Marks)

Ans. Following are the various functions of money:

Money as the medium of exchange: Medium of exchange is the basic or primary function of money. Money acts as a medium of exchange or as a medium of payments.

Money as a unit of account: Money serves as unit of account or a measure of value. Money is the measuring rod, i.e. it is the unit in terms of which, the values of other commodities and services are measured and expressed.

Money as the standard of Deferred Payments: The use of money as the standard of deferred or delayed payments immensely simplifies borrowings and lending operations and thereby, facilitates the formation of capital markets and the work of financial intermediaries like stock exchange, Investment Trusts and banks.

Money as a store of value: Money can store value of goods in liquid form. by spending it, we can purchase any commodity in future.

SECTION-B

[INTRODUCTORY MACRO ECONOMICS]

17. What is the relationship between AR and MR under perfect competition? (1 Mark)

Ans. Under perfect competition $AR = MR$ because one price prevails in the market.

18. Define variable cost. (1 Mark)

Ans. Costs incurred on the variable factors of production are known as variable costs. Variable cost varies with the level of output. It is zero at zero output.

19. What is meant by perfectly inelastic supply? (1 Mark)

Ans. Supply is said to be perfectly inelastic when there is no change in supply due to a change in price of the good. In this case, elasticity of supply is zero.

20. How is price elasticity of supply derived? (1 Mark)

Ans. Price elasticity refers to the responsiveness of quantity supplied of a good to a change in its price. It is derived by dividing percentage change in quantity supplied by percentage change in its price.

21. Can average cost fall when marginal cost is rising? (1 Mark)

Ans. Yes, average cost can fall when MC is rising because MC cuts AC at its lowest point. When MC rises it is above AC.

22. Explain the concept of marginal cost with the help of an example. (3 Marks)

Ans. Marginal cost is the addition to the total cost by using an additional unit of a commodity, for example ,cost of 10 kg sugar is Rs 200 while cost of 11 kg sugar is Rs 220. Therefore, the marginal cost is Rs 20 (220-200).

(Q.23)From the following data calculate average variable cost at the given level of output

Output (Unit)	1	2	3	4
Marginal Cost (Rs)	40	30	35	39

(3 Marks)

Ans.

Output	Marginal Cost	TVC	AVC
1	40	40	40
2	30	70	35
3	35	105	35
4	39	144	36

24. State three reasons of leftward shift of supply curve. (3 Marks)

Ans. There are following three reasons of leftward shift of supply curve-

- (i) **Rise in the cost of factors of Production** – When the cost of factor of production goes up, the cost of production will rise. As a result, the higher cost of production will supply less factor inputs. Therefore the supply curve will shift to the left.
- (ii) **Uses of Less Improved Technology**- Due to uses of backward technology the unit cost of production will increase and supply will decrease as a result of that supply curve shift to the left.
- (iii) **Price of related goods** -The supply of a commodity also depends upon the price of related goods. It may be two types (a) substitute goods (b) Complementary goods. If the market price of related commodity rises, the producer will produce the related or substitute good . Therefore the supply curve shift to the left.

25. 'A monopoly firm is a price maker', how? (3 Marks)

Ans. Monopoly is a market situation where there is a single firm selling the commodity. There are no close substitutes available of the commodity sold by the monopolist. A monopoly firm is a price maker

as it has the power to influence the price of a commodity as well as the output. Main motive of the monopolist is to earn maximum profit.

26. Define market. (3 Marks)

Ans. A market in economics refers to whole of region in which buyers and sellers of a commodity are in close contact to effect sale and purchase of the commodity. Essential ingredients of the market are :

- (1) Commodities and services are bought and sold
- (2) Area having communication between buyers and sellers.
- (3) Close contact between buyers and sellers.

27. What are the features of perfectly competitive market structure? (4 Marks)

Ans. Features of perfectly competitive market structure are:

- 1. There exist a very large number of firms and consumers of the commodity. The output sold by each firm is very small compared to the total output of all the firms combined, and similarly, the amount purchased by each consumer is extremely small in comparison to the quantity purchased by all consumers together.
- 2. Firms are free to enter or leave the industry. The output produced by each firm in the industry is indistinguishable from the others and the output of any other industry cannot substitute this output.
- 3. Consumers and firms have perfect knowledge of the output, inputs and their prices.

28. Market demand and supply schedule of apples (per day) are given below :

Price (per Kg.)	9	5	7	3	1
Qd (in Kg.)	4	6	8	10	12
Qs (in Kg.)	14	10	8	5	3

Determine

- 1. **Equilibrium price and equilibrium quantity**
- 2. **Excess demand at Rs 5 per Kg.**
- 3. **Excess supply at Rs 9 per Kg. (4 Marks)**

Ans. 1. At equilibrium quantity, $Q_d = Q_s = 8$
 2. Equilibrium price = 7 2. Excess demand at Rs 5 per Kg = $10 - 6 = 4$
 3. Excess supply at Rs 9 per Kg = $14 - 4 = 10$

29. Explain with examples how the problem of choice is faced by individuals and societies? (3 Marks)

Ans. Problem of choice arises due to unlimited human wants, scarcity of resources and alternative uses of resources. It is a universal problem of decision making or problem of choice arising at all levels of the economy.

An individual has to make a choice between various ways of allocating the available resources. For example an individual has to choose between consumption expenditure and investment expenditure. Similarly, the government has to choose between civil goods (sugar, rice, cycles etc.) or defence / military goods (guns, bombs, tanks etc.).

PPC helps in solving the economic problem of what to produce, how to produce and for whom to produce.

30. What is an economic problem and why does it arise? (6 Marks)

Ans. Economic problem is defined as the problem of decision making or problem of choice in order to allocate the available resources efficiently in producing commodities to satisfy human wants. Economic problem arises because of the following three factors:

1. Human wants are unlimited
2. Resources are scarce or limited
3. Resources have diverse uses

Due to above three factors the problem of decision making or problem of choice arises in the economy which is also termed as central problem or economic problem. Following are the three economic problems:

- What to produce (and in what quantity)?: It is defined as the problem of choice between different commodities that can be produced from the given scarce resources. The choice made is on the basis of various social and economic factors. For example an economy has to make a choice between consumer goods and capital goods. Another aspect of this problem is to decide on the quantity of the commodity that should be produced.
- How to produce?: It is defined as the problem of choice between different techniques of production that can be used in the production of different commodities, so that the given resources are utilised to their maximum efficiency. For example, an economy has to make a choice between labour intensive and capital intensive techniques of production.
- For whom to produce?

It is defined as the problem of choice between different ways of functional and physical distribution of output between different sectors and individuals in the economy. For example, an economy has to make a choice between equal and unequal distribution of income.

31. What is the effect of demand shift on equilibrium price and quantity? (6 Marks)

Ans. Here the initial equilibrium price is E, where the market demand curve DD and the market supply curve SS intersect each other, so that, OQ and OP are the equilibrium quantity and price respectively.

RIGHTWARD SHIFT OF DEMAND CURVE: This is indicated with the help of diagram (a). OP is the original price and OQ is the original quantity. Equilibrium is at point E. When the demand curve shifts

rightward the new equilibrium will be at point E' and the equilibrium price will increase to OP' and equilibrium quantity will increase to OQ'.

LEFTWARD SHIFT OF DEMAND CURVE : This is indicated with the help of diagram (b). OP is the original price and OQ is the original quantity. Equilibrium is at point E. When the supply curve shifts leftward the new equilibrium will be at point E' and the equilibrium price will decrease to OP' and equilibrium quantity will decrease to OQ'.

32. Explain any three factors affecting price elasticity of demand. (6 Marks)

Ans. Elasticity of demand is the responsiveness to the change in demand due to change in price. Various factors that affect the elasticity of demand are as follows

(i) Availability of substitute goods :- The demand for commodities having a large number of close substitutes will be more elastic because even a very small increase in price will make consumers switch to other products in a big way, i.e., the consumers may change their preference to the substitute goods. On the other hand, if there are no close substitutes, the demand is likely to be inelastic.

For example, commodities like sugar, which do not have close substitutes will have inelastic demand whereas the demand for a particular brand of cosmetic say powder, which has large number of substitutes available, will have elastic demand.

(ii) Proportion of total expenditure spent on the product :- Elasticity of demand will be less with regard to those goods on which consumer spends a very small part of his total expenditure. e.g. salt, matchbox etc. On the other hand, if large part of income is spent on a particular commodity, demand will be more sensitive to change in price and the demand is likely to be more than unit elastic.

(iii) Habits, tastes and Preferences of the consumer :- Some products which are not essentials for some individuals are essential for others. This is because of habits of the consumer in which he may develop a taste or preference for the commodity in consumption. For example, for a consumer who has developed a particular taste for Revlon Cosmetics, the demand for that particular product will be relatively inelastic.