Economics 2019 (Outside Delhi) SET I

Time allowed : 3 hours **Maximum marks : 80**

General Instructions :
(i) All question in both the sections are compulsory.
(ii) Marks for questions are indicated against each questions.
(iii) Question Nos. 1-4 and 13-16 are very short-answer questions carrying 1 marks each. They are required to be answered in one sentence each.
(iv) Question Nos. 5-6 and 17-18 are short-answer questions carrying 3 marks each. Answer to them should normally not exceed 60 words each.
(v) Question No. 7-9 and 19-21 are also short-answer questions carrying 4 marks ach. Answer to them should normally not exceed 70 words each.
(vi) Question Nos. 10-12 and 22-24 are long-answer questions carrying 6 marks each. Answer to them should normally not exceed 100 words each.
(vii) Answer should be brief and to the point and the above words limits should be adhered to as far as possible.

SECTION – A (MICROECONOMICS)

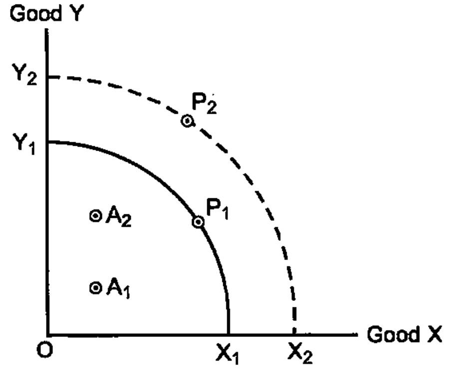
1. The Total Revenue earned by selling 20 units is ₹ 700. Marginal Revenue earned by selling 21st unit is ₹ 70. The value of Total Revenue earned by selling total 21 units will be.........(Choose the correct alternative) [1]

(a) ₹ 721 **(b) ₹ 630**

(c) ₹ 770 **(d) ₹ 720**

Answer : (c) ₹ 770

2. In the given figure X_1Y_1 and X_2Y_2 are Production Possibility Curves in two different periods T_1 and T_2 respectively for Good X and Good Y. A_1 and A_2 represent actual outputs and P_1 and P_2 represent potential outputs respectively in the two time periods. [1]



The change in actual output of Goods X and Y over the two periods would be represented by movement from .... (Fill up the blank)

(a) A_2 to P_2 **(b) A_1 to P_2**

(c) P_1 to A_2 **(d) A_1 to A_2**

OR

The Marginal Rate of Transformation (MRT) is constant. The Production Possibility Curve, so formed would be .... to the origin. (Fill up the blank)

Answer : (d) A_1 to A_2

OR

Straight line

3. Under imperfect competition, Average Revenue (AR) remains .... Marginal Revenue (MR). (Fill up the blank) [1]

OR

For a firm to be in equilibrium, Marginal Revenue (MR) and Marginal Cost (MC) must be .... and beyond that level of output Marginal Cost must be ...." (Fill up the blank)

Answer : Greater than

OR

Equal, rising

4. If the supply curve is a straight line parallel to the vertical axis (Y-axis), supply of the good is called as .... (Fill up the blank) [1]

(a) Unitary Elastic Supply
(b) Perfectly Elastic Supply
(c) Perfectly Inelastic Supply
(d) Perfectly Elastic Demand

Answer : (c) Perfectly Inelastic Supply

5. Distinguish between positive economics and normative economics, with suitable examples. [3]

Positive Economics	Normative Economics
1. A branch of economics based on data and facts is positive economics.	A branch of economic based on values, opinions and judgment is normative economics.
2. It can be verified with original data.	It cannot be verified with original data.
3. It clearly describes economic issue.	It provides solution for the economic issue, based on value.
4. E.g. western Railway has earned ₹ 517.41 crores by Selling scrap material in 2018-19	E.g. the government should promote social safety nets to take care of the poor population.

6. Explain the law of diminishing marginal utility, with the help of a hypothetical schedule. [3]

OR

Elaborate the law of demand, with the help of a hypothetical schedule.

Answer : According to the law of diminishing utility, as more and more units of commodity are consumed, the extra utility that we derive from it goes on declining. Total utility will continue to rise till the point of consumption when the marginal utility becomes zero. After this point, MU becomes negative which means now the good begins to harm consumer.

Assumption of Law of Disminishing Marginal Utility

1. Utility can be measured in numeric terms.
2. The consumption takes place in the stipulated time period (in continuation).
3. All the consumers are assumed to be rational.
4. Marginal utility of rupee is assumed to be constant.

Units consumed	MU (in utils)	TU (in utils)
1	12	12
2	9	21
3	5	26
4	0	26
5	(–) 2	24

The schedule indicates that as more and more units of commodity are consumed, the marginal utility derived from the consumption of each additional unit of the commodity tends to fall. With the consumption of successive units the marginal utility becomes zero and consequently become negative. The MU become zero at the consumption of 4th unit and become negative at the consumption of 5th unit.

OR

The law of demand explains the inverse relationship between the price and quantity demanded of a commodity. According to this law, 'other things remaining constant' (*cetris peribus*), price and quantity demanded of a commodity move in the opposite direction. When the price of the commodity increases, the quantity demanded falls and when the price decreases, the quantity demanded increases, provided factors other than price remain constant. More units of a commodity are purchased at a lower price because of a substitution effect and income effect.

Following are the assumptions of law of demand :

(a) No change in consumer's income.

(b) No change in the price of the related goods.

(c) No change in the consumer's taste, preferences and fashion.

(d) No expectation of change in the future prices of the goods.

(e) No change in the population.

Demand schedule

Price of sugar (₹ per kg)	20	40	50	70
Quantity	100	75	60	40

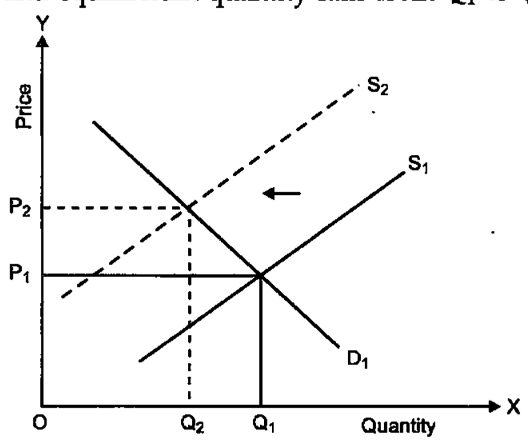
The demand schedule shows that the consumer will demand more sugar at lower price, other things being constant. When the price of sugar is ₹ 20 per kg the quantity demanded will be 100 kg but when price increase to ₹ 40 the demand decreases to 75 kg and 50 Kg so on. This shows that the price and demand are inversely related.

7. The market for a good is in equilibrium. How would an increase in an input price affect the equilibrium price and equilibrium quantity, keeping other factors constant ? Explain using a diagram. [4]

Answer : Input price refers to the money paid to the factors of production in return of their productive services. As the input price rises, the cost of production also rises and production levels falls. This leads to leftward shift in supply curve.

This leads to excess demand in the market. It leads to competition among buyers. Due to this, the price starts rising. As the price rises, demand contracts and supply expands. This will continue till there is no more excess demand.

Finally equilibrium prices rises from P_1 to P_2 and equilibrium quantity falls from Q_1 to Q_2.



8. (a) The coefficient of price elasticity of demand for Good X is (–) 0·2 . If there is a 5% increase in the price of the good, by what percentage will the quantity demanded for the good fall?

(b) Arrange the following coefficient of price

elasticity of demand in ascending order :
(–) 3.1, (–) 0.2, (–) 1.1 **[4]**

OR

How would the demand for a commodity be affected by a change in "tastes and preferences" of the consumers in favour of the commodity? Explain using a diagram.

Answer : (a)

$$Ed = \frac{\text{Percentage change in quanlity}}{\text{Percentage change in price}}$$

$$-0.2 = \frac{\text{Percentage change in Quantity}}{5\%}$$

Percentage change in Quantity demanded = –1%

Elasticity of demand is unitary elastic and the percentage fall in quantity demanded is 1%

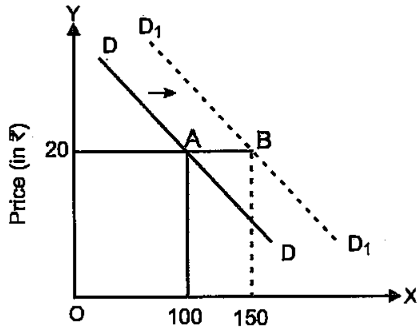
(b) Ascending order (–) 0.2, (–)1.1, (–)3.1.

OR

Taste and preference is one of the factors affecting individual demand. If the consumers in the market have started liking a particular commodity, the demand for that commodity will increase. On the other hand, if there is a disliking for a particular commodity or preference for a commodity is falling, demand will decrease.

So change in taste and preference of the commodity in the favour of the other commodity, will shift the demand curve towards right from DD to $D_1 D_1$.

Increase in demand



9. Which of the following statements are *true* or *false* ? Give valid reasons in support of your answer. **[4]**

(a) Average cost curve cuts Average variable cost curve, at its minimum level.

(b) Average product curve and Marginal product curve are 'U-shaped' curves.

(c) Under all market conditions, Average revenue and Marginal revenue are equal to each other.

(d) Total cost and Total variable cost curve are parallel curve to each other.

OR

Explain a firm's equilibrium under perfect competition, using a hypothetical schedule.

Answer : (a) False-Average cost and Average variable cost curves are U shaped curve. The vertical gap between Average cost and Average variable cost curves represent Average fixed cost. As we know with increase in output the vertical gap between Average cost and Average variable cost curves continuously decrease but never intersect.

(b) False, Average product curve and marginal product curve both rises and then tend to fall. Thus, the two curves are inverted 'U' shaped curve.

(c) False, only under perfect competition, AR and MR are equal to each other. Under Monopoly and monopolistic market, AR is greater than MR.

(d) True, TC and TVC curves are parallel to each other because vertical distance between the two curves is TFC which is constant at all levels of output.

OR

In a perfectly competitive market, a very large number of firms produce a homogeneous (or identical) product and sell it to a very large number of buyers at a fixed price. Not a single buyer or seller can influence the market price. They are price taker. There is free entry or exit of firms in this form of market. Of course, entry can take place only in the long-run. Here we assume that all firms in the industry are working under identical cost conditions. Identical cost conditions for the firms mean that Average Cost (*AC*) and Marginal Cost (*MC*) curves are indentical for all firms in the industry. In economics, short-run refers to that time period in which a firm can't alter its fixed factors and the size of the plant. The firm can change its output by changing variable factors of production. Both in the short-run and long-run, firm's objective is to maximize profit. The profit is given by the difference between Total Revenue (*TR*) and Total Cost (*TC*) *i.e.* profit = TR – TC. Now, profit maximising output quantity is reached when two conditions are satisfied.

(a) MR = MC

(b) Rate of change in MR < Rate of change in MC

In a perfectly competitive market P = AR = MR = constant. So, the profit maximising condition in a perfectly competitive market boil down to

(a) P = MC (or SMC)

(b) MC (or SMC) curve must be positively sloped

This can be clear with the help of a table given below :

Five Situations of Short-Run Equilibrium under

Perfectly Competitive Market

Situation	Equilibrium Price	Equilibrium Output	Equilibrium Point	Profit	Remarks
Situation-1	P_4	Q_4	E_4 (Where P > SAC)	Positive	Super Normal Profit
Situation-2	P_3	Q_3	E_3 (Where P = min SAC	Zero	Normal Profit Or zero Economic Profit (Break-Even Point)
Situation-3	P_2	Q_2	E_2 (Where AVC < P < SAC)	Negative	Loss
Situation-4	P_1	Q_1	E_1 (Where P = Min AVC)	Negative	Loss (Shut-down point)
Situation-5	P_0	Q_0	E_0 (Where P < AVC)	Negative	Loss (Totally stop the production)

10. Explain the meaning of the following features of the Oligopoly Market : [6]

(a) Non-Price Competition

(b) Few Sellers

Answer : (a) Non-price Competition : Oligopoly firm not only competes through price but also on the basis of non-price competition. Product variation and advertisement are the two main form of non price competition as they fear price war. Normally, the oligopoly firms do not respond to a rise in price by the rivals. However, they have to respond if a rival firm reduces the price of the product.

Implication : This results in price rigidity in the market.

(b) Few Sellers : Under Oligopoly, there are only few firms, producing a commodity. The product can be homogeneous or differentiated. These firms can influence the price and output by their actions.

Each firm produces significant portion of total output. There exists competition among different firms and each firm try to manipulate both price and volume of production. The number of buyer are large.

Implications : The number of firms is so small that an action by any firm is likely to affect the other firm. So every firm keeps a close watch on the actions of each other.

11. (a) What is meant by increasing retruns to a variable factor? [2+4]

(b) Discuss breifly, any two reasons for the decreasing returns to a variable factor.

Answer : (a) In short period, when other factors of production remains constant, if the proportionate change in Total Product is greater than the proportionate change in units of variable factor. If marginal product increases with the increase in units of a variable factors, then it is known as law of increasing returns to a variable factor.

(b) Causes of Decreasing Returns to Variable Factor :

(i) Decrease in level of efficiency : If we increase the units of variable factors too much with fixed factors of production (after optimum combination), then the factor proportion becomes more and more worse. Due to that, efficiency of both the factors decreases (because we are moving away from ideal combination). That's why AP and MP both decrease. Due to that AC and MC both increases

(ii) Imperfect substitute : At the point of optimum combination of means of production average and marginal productivity can be increased by substituting fixed factor (because at this point fixed factor is completely utilized). But the factors of production are not perfect substitutes, therefore it is not possible to replace fixed factor with other factor and that's why, if we have to increase the output at optimum combination then we have to increase the units of variable factor with the same units of fixed factors. As a result there will be over utilization of fixed factor, so AP and MP both decreases and AC and MC both increases. So ultimately decreasing return will apply.

12. Explain the following conditions : [3+3]

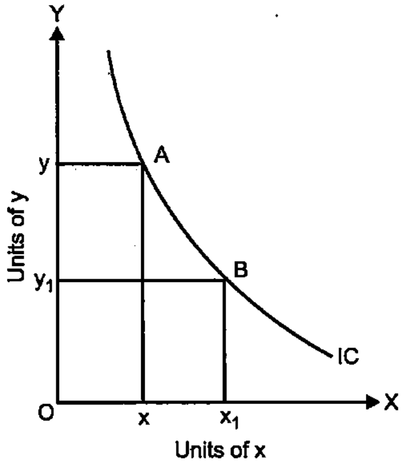
(a) Movement along the same indifference curve.

(b) Shift from a lower to a higher indifference curve.

OR

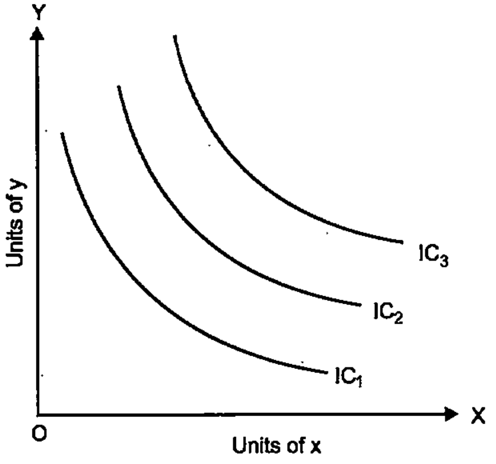
Explain the law of Equi-Marginal Utility.

Answer : (a) Movement along the same indifference curve : All the points along with the same indifference curve represents all those combination of two commodities which provides the same level of satisfaction to the consumer. Level of satisfaction remains constant whether we move upward or downward along the same indifference curve. In order to increase the consumption of one commodity the consumer has to sacrifice the consumption of the other and he moves up and down on the same indifference curve.



In the present diagram, combination A (OX + OY) provides the satisfaction equal to combination B (OX_1 + OY_1).

(b) Shift from lower to a higher indifference curve : Curves nearer to origin represent lower level of satisfaction and curves which are away from origin represent higher level of satisfaction. It means as we move away from origin, level of satisfaction continuously increases.



In the present diagram IC_2 represent higher level of satisfaction in comparison to IC_1 and in the same way IC_3 represent satisfaction more than IC_1 and IC_2 .

So if there are three indifferent curves in a single diagram then they will represent three different levels of satisfaction.

OR

Law of Equi-marginal utility states that a consumer allocates his expenditure on various commodities in such a manner that the utility derived from each additional unit of the rupee spent on each of the commodities is equal.

The ratio of the MU to price of X must be equal to the ratio of MU and price of Y.

$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y} = \text{..........................} = \frac{MU_n}{P_n}$$

This is known as a law of equi-marginal utility. It means the equality of the MU of the last rupee spent on each good. If Mu_x/P_x is greater than M_y/P_y, it means that MU from the last rupee spent on good X is greater than MU of the last rupee spent on good Y. This induces the consumer to transfer the expenditure from Y to X. The consumption of X rises and MU_x falls, and MU of Y rises. This act continues till MU_x/P_x and MU_y/P_y are equal.

Assumptions of Law of Equi Marginal Utility

1. Utility can be measured in numeric terms.
2. The consumption takes place in the stipulated time period (in continuation).
3. All the consumers are assumed to be rational.
4. Marginal utility of rupee is assumed to be constant.

For e.g. : A consumer consumers 2 commodities X and Y for ₹ 3/unit and ₹ 2/unit respectively. It is assumed that MU_R = ₹ 2

Units	MU_x	MU_y	MU_x/P_x	MU_y/P_y
1	18	16	6	8
2	15	12	5	6
3	9	8	3	4
4	6	4	2	2
5	3	1	1	0.5

Consumer will be at equilibrium, when he consumes 4 units of good X and 4 units of good Y.

SECTION B
(MACROECONOMICS)

13. Primary deficit in a government budget will be zero, when .... (Choose the correct alternative). **[1]**

(a) Revenue deficit is zero

(b) Net interest payments are zero

(c) Fiscal deficit is zero

(d) Fiscal deficit is equal to interest payment.

Answer : (d) Fiscal deficit is equal to interest payment.

14. In order to encourage investment in the economy, the Central Bank may .... (Choose the correct alternative) **[1]**

(a) Reduce Cash Reserve Ratio

(b) Increase Cash Reserve Ratio

(c) Sell Government securities in open market

(d) Increase Bank Rate

Answer : (a) Reduce Cash Reserve ratio.

15. What do you mean by a direct tax? **[1]**

OR

What do you mean by an indirect tax?

Answer : Direct tax refers to a compulsory payment to the government whose impact and incidence falls on same person. It is progressive in nature. Example-Income tax and Property tax.

OR

Indirect tax refers to a compulsory payment to the government whose impact and incidence falls on different persons. It is regressive in nature. Example– VAT, custom duty.

16. Define 'money multiplier'. [1]

Answer : When the primary cash deposits in the banking system leads to multiple expansion in the total deposits, it is called as money multiplier. It is inversely related to legal reserve ratio.

$$\text{Money multiplier} = \frac{\text{Total deposits}}{\text{Primary cash deposits}}$$

Or

$$\frac{1}{\text{Legal reserve ratio}}$$

17. Calculate change in final income, if Marginal Propensity to Consume (MPC) is 0·8 and change in initial invesment is ₹ 1,000 crores. [3]

Answer : MPC = 0.8 and change in initial investment = ₹ 1000 crores

$$\text{Multiplier} = \frac{1}{1-\text{MPC}} = \frac{1}{1-0.8} = 5$$

$$K = \frac{\text{Change in income} \quad (\Delta Y)}{\text{Change in investment} \ (\Delta I)}$$

$$5 = \frac{\text{Change in income} \, (\Delta Y)}{1000}$$

Change in income = ₹ 5000 crores.

18. State the impact of "Excess Demand" under the Keynesian theory on employment, in an economy. [3]

OR

State the meaning of the following :

(a) Ex-Ante Savings

(b) Full Employment

(c) Autonomous Consumption

Answer : Excess demand is not a desired situation because it does not lead to any increase in level of aggregate supply as the economy is already working at full employment level. Excess demand has the following effect on output, employment and general price level.

(i) Effect on Output : Excess demand does not effect the level of output because economy is already working at full employment level and there is no ideal capacity in the economy.

(ii) Effect on Employment : There will be no change in the level of employment as the economy is already operating at full employment equilibrium and there is no involuntary unemployment.

(iii) Effect on General Price Level : Excess demand leads to rise in the general price level (known as inflation) as aggregate demand is more than aggregate supply.

OR

(a) Ex-ante saving : The saving which the firms or entrepreneur desire to make at different levels of income in an economy during a period is called ex-ante (planned savings).

(b) Full employment : Full employment refers to the situation when all the workers who are willing and able to work at prevailing wage rate are actually employed and there is no involuntary unemployment

(c) Autonomous consumption : When income is zero consumption is not zero because consumption can never be zero even at zero level of income, there are some basic needs which need to be fulfilled even at zero level of income and to fulfill those basic needs we use past savings. This consumption at zero level of income is termed as 'Autonomous consumption' and is denoted as $\bar{C}$.

19. Classify the following statement as revenue receipts or capital receipts. Give valid reasons in support of your answer. [4]

(a) Financial help from a multinational corporation for victims in a food affected area.

(b) Sale of shares of a Public Sector Undertaking (PSU) to a private company, Y Ltd.

(c) Dividends paid to the Government by the State Bank of India.

(d) Borrowings from International Monetary Fund (IMF).

Answer : (a) Financial help from a multinational company is a aid to the government so it is a revenue receipt as it does not create any liability and reduction in assets.

(b) It is a capital receipt. As sale of shares will reduce the assets of the PSU.

(c) Dividends paid to the government is a revenue receipt as it neither creates any liability nor reduces the assets.

(d) It is a capital receipt. It increases the liability of the government.

20. "Higher Gross Domestic Product (GDP) means greater per capita availability of goods in the economy." Do you agree with the given statement? Give valid reason in support of your answer. [4]

OR

Explain the meaning of Real Gross Domestic Product and Nominal Gross Domestic Product, using a numerical example.

Answer : I do not agree with the statement that "Higher gross domestic product (GDP) means greater per capita availability of goods in economy" as higher GDP does not mean high per head availability of goods and services.

(i) It depends upon the population of the country. If GDP is higher but population is equally high then per head availability of goods and services will be low.

(i) It also depends on the fact that whether the income is equally distributed or unequally distributed. If income is equally distributed then share of goods and services for each individual will be equal but if it is unequally distributed, the rich will take more share in comparison to a poor.

OR

Real GDP refers to the money value of all the final goods and services calculated at a base year price produced within the domestic territory in a given time period.

Nominal GDP refers to the money value of all the final goods and services calculated at a current year prices produced within the domestic territory in a given time period.

Commodities	Quantity in 2018	Prices in 2011	Prices in 2018	Real GDP	Nominal GDP
A	10	5	10	50	100
B	15	7	10	105	150
C	20	10	15	200	300
D	5	12	15	60	75
Total				415	725

In the above table real GDP is ₹ 415 for the year 2018 while nominal GDP is ₹ 725 for the same year. Such a difference in GDP is due to increase in prices from base year to current year.

Therefore, Real GDP is always considered as true indicator of economic growth.

21. Distinguish between 'Qualitative and Quantitative tools' of credit control as may be used by a Central Bank. [4]

Answer :

Quantitative Tools of Credit Control	Quatitative Tools of Credit Control
1. It regulates the volume of credit.	It regulates the flow of credit.
2. These are the general tools to control the credit.	These are the specific tools to control the credit.
3. It includes – Bank rate, CRR, SLR, open market operations etc.	It includes – margin requirements, moral suasion etc.

22. (a) Define "Trade Surplus" and "Trade Deficit".

(b) Discuss breifly the concept of managed floating system of foreign exchange rate determination. [3+3]

Answer : (a) Trade surplus refers to the excess of exports of goods over the imports of goods. Trade deficit refers to the excess of import of goods over the export of goods.

(b) Managed floating exchange rate system- It is a system in which foreign exchange rate is determined by the market forces and central bank influences the exchange rate through intervention in the foreign exchange market.

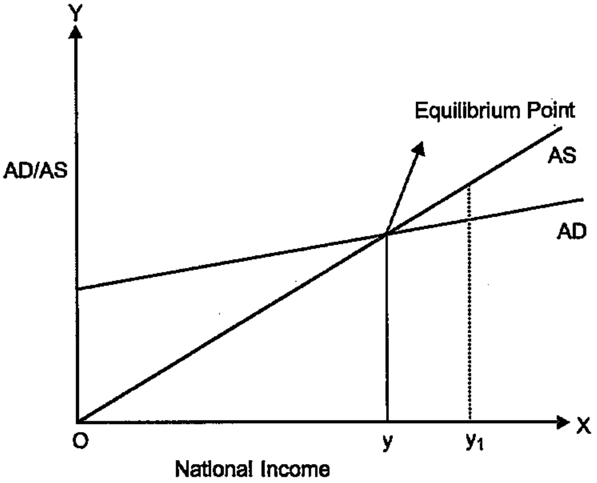
Central bank interferes to restrict the fluctuations in the exchange rate within limits. For this central bank maintains the reserve of foreign exchange to ensure that the exchange rate stays within the targeted value. It is also known as "Dirty floating".

23. Discuss the adjustment mechanism in the following situations : [6]

(a) Aggregate demand is lesser than Aggregate Supply.

(b) Ex-Ante Investments are greater than Ex-Ante Savings.

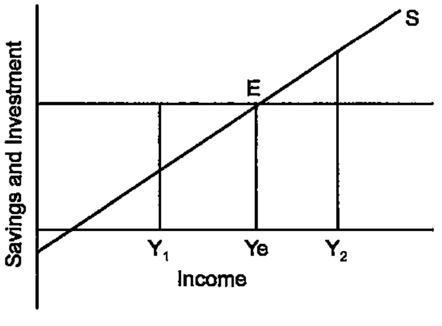
Answer : (a) At the income level above the equilibrium, the planned aggregate demand (AD) is less than the aggregate supply (AS). This implies that there is an excess availability of goods and services in an economy. This surplus in goods is added to the inventory stock of goods. The rise in the inventories above a desired level reduces the production which leads to the decrease in income and employment in the economy. This process continues till AD gets equal to AS.



(b) Adjustment Mechanism when planned investment is greater than planned savings :

(i) When planned (ex-ante) saving is more than planned investment. Suppose firms plan to invest ₹ 20,000 crores but households plan to save ₹ 25,000 crores, it shows consumption expenditure has decreased. Consequently, AD falls short of AS. Due to excess supply there will be stock piling of unsold goods, *i.e.*, unintended unplanned inventories will accumulate. At this, the producers will cut down employment and produce less. National income will fall and as a result planned saving will start falling until it becomes equal to planned investment. It is at this point equilibrium level of income is determined.

(ii) When planned (ex-ante) saving is less than planned investment. Suppose producers plan to invest ₹ 20,000 crores but households plan to save ₹ 15,000 crores, then AD (or consumption expenditure) is more than AS. Production will have to be increased to meet the excess demand. Consequently national income will increase leading to rise in saving until saving becomes equal to investment. It is here that equilibrium level of income is established because what the savers intend to save becomes equal to what the investors intend to invest. If planned saving and planned investment are equal, then output, income, employment and price level will be constant.



24. **Define the following :** **[6]**

(a) Value Addition

(b) Gross Domestic Product

(c) Flow Variables

(d) Income property and entrepreneurship

OR

Given the Following data, find the value of "Gross Domestic Capital Formation" and "Operating Surplus".

S.No.	Particulars	Amount (₹ is Crores)
(i)	National Income	22,100
(ii)	Wages and Salaries	12,000
(iii)	Private Final Consumption Expenditure	7,200
(iv)	Net Indirect Taxes	700
(v)	Gross Domestic Capital Formation	?
(vi)	Depreciation	500
(vii)	Government Final Consumption Expenditure	6,100
(viii)	Mixed Income of Self-Employed	4,800
(ix)	Operating Surplus	?
(x)	Net Exports	3,400
(xi)	Rent	1,200
(xii)	Net Factor Income from Abroad	(–) 150

Answer : (a) Value addition refers to the difference between the value of an output and the intermediate consumption.

(b) Gross domestic product refers to the money value of all the final goods and services produced within the domestic territory of a country during a accounting year.

(c) Flow variables are the measurable variables that are measured over a period of time. e.g., National income.

(d) Income from property and entrepreneurship is also called the operating surplus which is the sum up of rent, royalty, interest and profits.

OR

Gross Domestic Capital Formation = (i) – {(iii) + vii + x} + vi – xii + iv

GDCF = 22,100 – {7,200 + 6,100 + 3,400} + 500 (–150) + 700

GDCF = ₹ 6750 crores

Operating Surplus = National income – wages and Salaries – mixed income of self employed – net factor income from abroad = 22,100 – 12,000 – 4,800 – (–150)

= ₹ 5,450 crores

Economics 2019 (Outside Delhi) SET II

Time allowed : 3 hours **Maximum marks : 80**

Note : Except for the following questions, all the remaining questions have been asked in previous sets.

SECTION-A
(MICRO ECONOMICS)

6. Differentiate between Microeconomics and Macroeconomics, with suitable examples. [3]

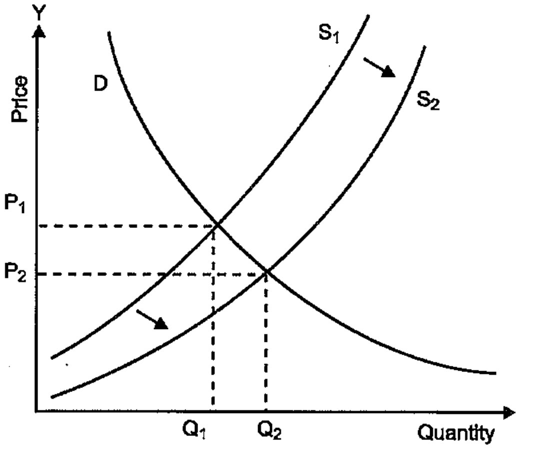
Answer :

Basis	Micro Economics	Macro Economics
1. Degree of aggregation	Microeconomics studies the behaviour of the individual units of an economy like a firm or an industry.	Macroeconomics deals with the aggregate units of an economy such as national income, total employment, and general price level.
2. Objective	It studies the principle problems, concerning the optimum allocation of resources.	It studies the principle problems and policies relating to the employment of the resources.
3. Instruments	Its main instruments are demand and supply.	Its main instruments are aggregate demand and aggregate supply.

8. The market for a good is in equilibrium. Explain, using a diagram, how a decrease in input price would affect the equilibrium price and equilibrium quantity, keeping other factors constant. [4]

Answer : Input prices refer to the money paid for factors of production in return of their productive services. As the input price falls, the cost of production also falls and production level rises due to high profit margins. This leads to a rightward shift in the supply curve in figure given below.

This condition leads to an excess supply in the market. It also leads to the competition among the sellers due to which the price of the product starts falling. As the price of the product falls, demand expands and supply contracts. This continues till there is no more excess supply. Finally, equilibrium prices fall from P_1 to P_2 and equilibrium quantity rises from Q_1 to Q_2.



10. (a) Explain the meaning of the 'Price Discrimination" feature under the monoply form of market. [3 + 3]

(b) Compare the nature of demand curves under monopoly and monopolistic competition.

Answer : (a) The art of selling the same product at different prices to different buyers is known as price discrimination. When the monopolists adopt the policy of price discrimination, it is known as discriminating monopoly. Price discrimination may take place under the following situations :

(i) When elasticity of demand for a product is different in different markets, the monopolists will charge higher when demand is inelastic and lower when demand is elastic.

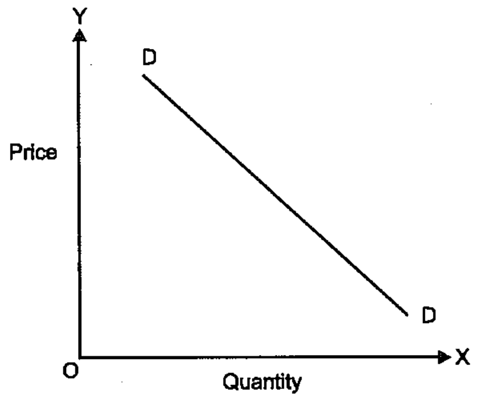
(ii) When the buyers of one part of the market do not know the prices are lower in other part of the market.

(iii) When Government permits price discrimination.

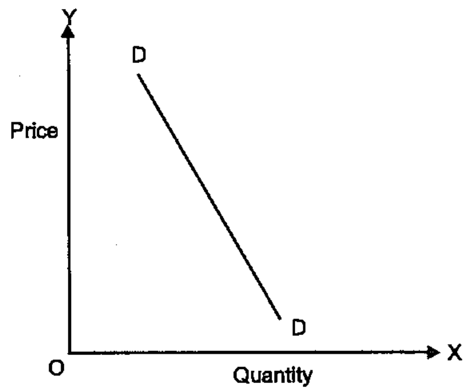
(b) Demand curve under monopolistic competition and monopoly

Both the markets face downward sloping

demand curves. However, demand curve under monopolistic competition is more elastic as compared to the demand curve under monopoly. This happens because differentiated products under monopolistic competition are close substitutes of one another whereas there are no close substitutes in case of monopoly.



Monoposlistic Competition



Monopoly

SECTION B
(MACROECONOMICS)

17. Estimate the change in initital investment if Marginal Propensity to Save (MPS) is 0·10 and change in final income is ₹ 15,000 crores.

Answer :

MPS = 0.10

Change in Income = ₹ 15,000 crore

Multiplier (K) = 1/MPS

= 1/0.10

= 10

K = Change in income ΔY/ change in investment ΔI.

10 = 15,000 change in investment

Change in investment = ₹ 1500 crores.

19. Discuss briefly the following functions of a Central Bank : **[4]**

(i) Banker's bank

(ii) Lender of last resort

Answer : (i) Banker's Bank : As a banker to the banks, the Central Bank holds surplus cash reserves of commercial banks. It also lends to commercial banks when they are in needs of funds - Central Bank also provides a large number of routine banking functions to the commercial banks. It also act as a supervisor and regulator the banking system.

OR

(ii) Lender of last resort : In case the commercial bank, fails to meet its financial requirement from other sources, it can approach to the Central Bank as a last resort for loans and advances. Central Bank helps these banks by discounting approved securities and bills of exchange or providing loans against their securities. By providing temporary financial help, Central Bank saves the financial structure of the country from collapsing. The direct lending to the commercial bank by the Central Bank is referred to as 'lender of the last resort, function of the Central Bank'.

22. (a) Distinguish between appreciation of home currency and depreciation of home currency. **[4+1+1]**

(b) What is a meant by "current account surplus"?

(c) State any one source of supply of foreign currency for a country.

Answer : (a)

Appreciation of home currency	Depreciation of home currency
1. It refers to the rise in the value of domestic currency with respect to foreign currency.	1. It refers to the fall in the value of domestic currency with respect to foreign currency.
2. It leads to fall in exports and rise in imports.	2. It leads to fall in imports and rise in exports.
3. It is due to fall in demand or rise in the supply of foreign currency.	3. It is due to rise in demand or fall in the supply of foreign currency.
4. It corrects the situation of BOP (Balance of payment) surplus automatically.	4. It corrects the situation of BOP (Balance of Payments, deficit automatically.

(b) Current Account in BOP is in suplus when the total receipts on account of total export of goods and services are greater than payments on account of import of goods and services.

(c) Export of goods and services is one of the source of supply of foreign currency.

●●

Economics 2019 (Outside Delhi) SET III

Time allowed : 3 hours **Maximum marks : 80**

Note : Except for the following questions, all the remaining questions have been asked in previous sets.

5. **Discuss briefly the concept of normative economics, with suitable example. [3]**

Answer : Normative economics focuses on the ideological, opinion-oriented, prescriptive value of judgements and "what should be" statement aimed towards economic development, investment project, and scenarios. Its goal is to summarize people's desirability (or the lack thereof) to various economic developments, situations, and programs by asking or quoting what should happen or what ought to be.

Normative economics is subjective and the value –based, originating from personal perspectives, feelings, or opinions involved in the decision making process. Normative economics statements are rigid and prescriptive in nature. They often sound political or authoritarian, which is why this economic branch is also called "what should be" or "what ought to be" economics.

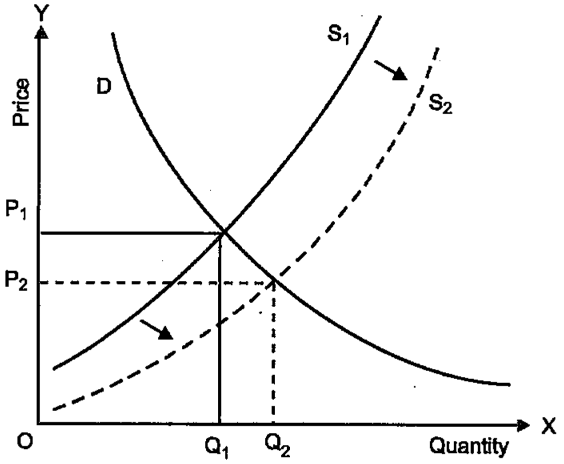
An example of a normative economic statement is : "The government should provide basic healthcare to all citizens." As you can deduce from this statement, it is value-based, rooted in personal perspective, and satisfies the requirement of what "should" be.

9. **The market for a good is in equilibrium. Explain, using a diagram, how an improvement in technology for producing the goods would effect the equilibrium price and equilibrium quantity, keeping other factors constant. [4]**

Answer : Updated technology helps to increase the production in less time and cost. Due to this, the expected profit margin of a producer increases and he produces more output. Hence, the supply of the commodity rises and the supply curve shifts towards right.

This leads to an excess supply in the market. It increases the competition among the sellers. Due to this, the prices starts falling. As the price falls, demand expands and supply contracts. This continues till there is more excess supply in the market.

Finally, equilibrium prices falls from P_1 to P_2 and equilibrium quantity rises from Q_1 to Q_2.

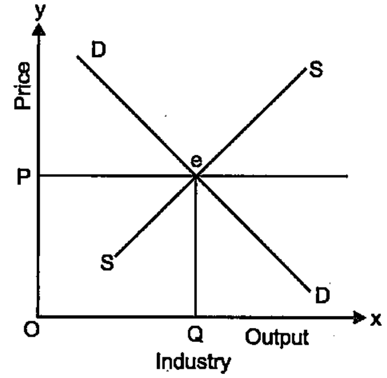


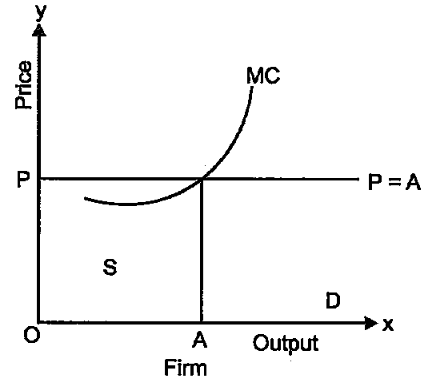
11. **(a) "A firm under perfect competition is a price taker, whereas a firm under monopoly is a price maker". Defend or refute the given statement with valid reasons.**

(b) What is meant by "product differentiation"? Explain with example.

Answer: (a) The given statment is true. Equilibrium price in a perfect market is determined by the industry not by a individual firm. The price is determined by the intersection of demand and supply of an industry which is accepted by all the firms, thus, an individual firm is a price taker while industry is a price maker in this case.

Price-Determination under Perfect Competition





On the other hand, in monopoly market, the firm is a price maker as it has full control over supply of its commodity because :

(i) There is no competition in the market

(ii) There are barriers in the entry of new firms in the monopoly market.

Therefore, monopolist can influence the market price by varying its supply. It can increase the price by supplying less and reduce the price by supplying more.

(b) Product Differentiation : Under this market products of different firms are not homogeneous but are close substitutes of each other. Products are differentiated from one another in terms of brand name, colour, shape, quality, type etc. Due to product differentiation, firms here enjoy control over prices and have its own price policy.

For example, there are number of toothpastes available in the market like Colgate, Closeup, Pepsodent etc.

Implications : Buyers of the products differentiate between the same kind of products produced by different firms. Therefore, they are also ready to pay different prices for the same product produced by different firms. This gives power to the firm to influence price of the product.

18. Estimate the change in final income if Marginal Propensity to Consume (MPC) is 0·75 and change in initital investment is ₹ 2,000 crores. [3]

Answer : MPC = 0.75

Change in investment = ₹ 2000 crore

$$\text{Multiplier} = \frac{1}{1-\text{MPC}}$$

$$= \frac{1}{1-0.75}$$

$$= 4$$

K = Change in income ΔY/Change in investment ΔI

$$\Rightarrow 4 = \frac{\text{Change in income } \Delta Y}{2000}$$

Change in income = ₹ 8000 crore

20. Discuss briefly the "credit controller" function of Central Bank. [4]

Answer : Central Bank as a credit controller: It is the most important function of Central Bank. By controlling the credit effectively, Central Bank establishes stability not only in the internal price level but also in the foreign exchange rate and full employment.

This function helps to meet some definite objectives such as price stability, economic growth, exchange rate stability etc. These objectives are achieved by regulating money supply. It includes two types of measures :

(a) **Quantitative measures :** It includes Bank rate, Repo rate, Open Market Operations (OMO), CRR, SLR etc.

(b) **Qualitative measures :** It includes moral suasion, margin requirement, direct actions etc.

24. (a) Distinguish between 'Trade Deficit" and 'Current Account Deficit'. [3+3]

(b) Discuss breifly the concept of flexible exchange rate system of foreign exchange rate determination.

Answer : (a)

Trade Deficit	Current Account Deficit
1. Trade deficit refers to the excess of import of goods over the export of goods.	Current account deficit refers to the excess of current account payments over current account receipts.
2. It is a narrower term.	It is a broader term.
3. It does not include services and unilateral transfers.	It includes services and unilateral transfers.

(b) Flexible exchange rate is a system where the value of one currency in terms of another is free to fluctuate and establish the equilibrium level through the forces of demand and supply. It can be better understood with the following merits and demerits of the flexible exchange rate :

(i) **Merits :**

(a) No need to maintain reserves of foreign currency.

(b) Automatic adjustment in balance of payments (BOP) is possible.

(c) No dependence on external sources.

(ii) **Demerits :**

(a) It creates unstable conditions and uncertainty.

(b) Increased speculation with a destabilizing effect.

(c) Gives rise to inflation in the economy.

●●

Economics 2019 (Delhi) SET I

Time allowed : 3 hours Maximum marks : 80

SECTION – A
(MICRO ECONOMICS)

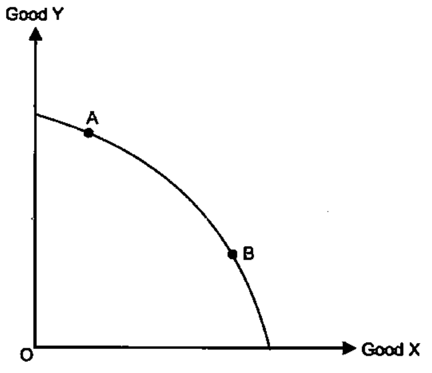
1. In the given figure, the movement on the production possibility curve from point A to point B shows_________. (Choose the correct alternative) [1]

(a) Growth of all the resources in the economy.

(b) Underutilisation of resources.

(c) Production of more units of Good X and less units of Good Y.

(d) Production of more units of Good Y and less unit of good X.



Answer :

(c) Production of more units of Good X and less units of Good Y.

2. Average fixed cost curve__________. (Choose the correct alternative) [1]

(a) is a straight line parallel to X-axis.

(b) is a straight line parallel to Y-axis.

(c) falls, as more units are produced.

(d) rises, as more units are produced.

OR

Which of the following formula is correct for calculating marginal cost? (Choose the correct alternative)

(a) $MC_N = TFC_n — TFC_{N-1}$

(b) $MC_N = AC_N — AC_{N-1}$

(c) $MC_N = AVC_N — AVC_{n-1}$

(d) $MC_N = TC_n — TC_{N-1}$

Answer :

(c) Falls, as more units are produced.

OR

(d) $MC_N = TC_n - TC_{N-1}$

3. The average product curve in the input-output plane, will be _________. (Choose the correct alternative) [1]

(a) as 'S' shaped curve

(b) an inverse 'S' shaped curve

(c) an 'U' shaped curve

(d) an inverse 'U' shaped curve

Answer :

(d) an inverse 'U' shaped curve.

4. If the market supply of a commodity X changes due to improvement in technology, the market supply curve will__________. (Fill up the blank) [1]

OR

If the market supply of a commodity X changes due to rise in price of a factor input, the market supply curve will___________. (Fill up the blank)

Answer : If the market supply of a commodity X changes due to improvement in technology, the market supply curve will shift in rightward direction.

OR

If the market supply of a commodity X changes due to rise in price of a factor input, the market supply curve will shift in leftward direction.

5. Identify and discuss the nature of the following newspaper reports in terms of positive or normative economic analysis : [1]

(i) "India jumped 23 points in the World Bank's ease of doing business index to 77th place, highest in 2 years."- *The Economic Times*

(ii) "Government should further liberalise the business rules." – *The Economic Times*

Answer :

(i) The above statement comes under the positive economics since positive economics describes facts which can be verified by actual data and above statement can be easily verified by available data.

(ii) The statement comes under normative economics since it describes opinions and how the problems of economy should be solved. The above statement is like a solution to solve the aforesaid problem.

6. Distinguish between substitute goods and complementary goods, with examples. [3]

OR

Distinguish between normal goods and inferior goods, with examples.

Answer :

Basis	Substitute Goods	Complementary Goods
Meaning	These are those goods which can be easily used in place of other or these are replaceable goods.	These are those goods which are demanded together to satisfy a want or these goods cannot be replaced with one another.

Types of demand	Substitute goods are competitive in nature.	Complementary goods are demanded jointly.
Relation	The demand of one good varies directly with the price of its substitute.	The demand for one good varies indirectly or inversely with the price of its complementary good.
Examples	Tea and coffee, coke and pepsi	Car and petrol bread and butter

OR

	Normal Good	Inferior Good
Meaning	It refers to those goods whose demand increases with increase in income or vice-versa.	It refers to those goods whose demand decreases with the increase in income or vice-versa.
Relation with income	There is direct relation between income and demand for a normal good. Thus income effect is positive.	There is indirect or inverse relation between income and demand for an inferior good. Thus income effect is negative.
Examples	Pure milk, rice etc.	Toned milk and coarse cereals etc.

7. **Discuss briefly, using a hypothetical schedule, the relation between marginal utility and total utility.** **[4]**

OR

Discuss briefly, using a hypothetical schedule, the concept of diminishing marginal rate of substitution.

Answer :

The relationship between marginal utility and total utility can be explained with the help of following table :

Units of consumption	MU (Utils)	TU (Utils)
1	10	10
2	8	18
3	6	24
4	4	28
5	2	30
6	0	30
7	-2	28

The following relationship is observed by the above schedule-

(i) TU increases as long as MU is more than zero. (upto 5 units of consumption)

(ii) When MU diminishes, TU increases at a diminishing rate.

(iii) TU is maximum where MU is zero. This happens when 6 units are consumed.

(iv) TU starts declining when MU becomes negative. It happens after 6 units of consumption.

OR

Concept of Diminishing Marginal rate of substitution :

(i) The assumption of diminishing marginal rate of substitution states that the consumer will be willing to sacrifice lesser units of good Y, so as to gain additional unit of good X.

(ii) Diminishing marginal rate of substitution is the reason behind convexity of indifference curve to the origin.

The following table shows different combination of good X and good Y which provide same level of satisfaction to the consumer.

Combination	Good X (units)	Good Y (units)	$MRS_{xy} = \frac{\Delta Y}{\Delta Q}$
A	1	21	–
B	2	15	6Y : 1X
C	3	10	5Y : 1X
D	4	6	4Y : 1X
E	5	3	3Y : 1X

The above schedule shows that for each additional unit of good X, consumer is willing to sacrifice lesser and lesser units of good Y. For example, for 2nd unit of X, he is willing to sacrifice 6 units of Y. For 3rd unit of X, he is willing to sacrifice 5 units of Y and so on.

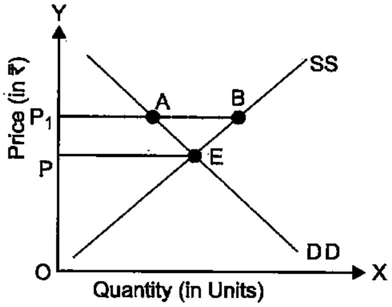
8. **Complete the following cost schedule :** **[4]**

Quantity (in Units)	0	1	2	3	4
Total cost (in ₹)	200	.....	.....	.....	490
Total variable cost (in ₹)	0	.....	180	.....	.....
Average variable cost (in ₹)	—	100	......	80	......

Answer. TFC = 200

Quantity	0	1	2	3	4
Total cost in (₹)	200	300	380	440	490
Total variable cost in (₹)	0	100	180	240	290
Average variable cost (₹)	-		90	80	72.5

9. In the given diagram, OP is the market determined price and OP_1 is the price fixed by the government. **[1, 3]**



(a) Identify whether the diagram represents, price ceiling or price flooring.

(b) Discuss the likely behaviour of the market in the given condition.

OR

Suppose the demand and supply equations of a commodity X in a perfectly competitive market are given by :

$Q_d = 1700 - 2P$

$Q_s = 1300 + 3P$

Calculate the value of equilibrium price and equilibrium quantity of the commodity X.

Answer: (a) The diagram represent the condition of price floor.

(b) The government fixes the prices of several goods higher than their equilibrium price to protect the interests of certain category of producers.

A price floor will only impact the market if it is greater than the free-market equilibrium price. If the floor price is greater than the economic price, the immediate result will be a surplus in supply. A price floor will also lead to a more inefficient market and a decreased total economic surplus. Economic surplus, is the sum of consumer and producer surplus. An effective price floor will raise the price of good hence decreased consumer surplus but increased surplus for producers.

OR

$Q_d = 1700 - 2P$

$Q_s = 1300 + 3P$

For calculating equilibrium price and quantity, put the above equation equal to each other or equilibrium is established when $Q_d = Q_s$

$1700 - 2P = 1300 + 3P$

$1700 - 1300 = 3P + 2P$

$400 = 5P \Rightarrow$

$$P = \frac{400}{5} = 80$$

$$P = ₹\,80$$

Now put the value of price in any of the above equation

$Q_d = 1700 - 2P$ Or $Q_s = 1300 + 3P$

$= 1700 - 2 \times 80$ $= 1300 + 3 \times 80$

$= 1700 - 160$ $= 1300 + 240$

$= 1540$ $= 1540$

So equilibrium price = ₹ 80

Equilibrium quantity = 1540 units.

10. (a) Define price elasticity of demand.

(b) If the price of a commodity rises by 40% and its quantity demanded falls from 150 units to 120 units, calculate coefficient of price elasticity of demand for the commodity. **[2,4]**

Answer : (a) Price elasticity of demand is a measure of degree of responsiveness of the demand for a good to change in its price or it is defined as the percentage change in demand for the good divided by the percentage change in its price.

$$e_p = \frac{\text{Percentage change in demand for the good}}{\text{Percentage change in the price of the good}}$$

(b) Percentage change in price of commodity X = 40%

Initial Qty (Q) = 150

New Qty (Q_1) = 120

Change in Qty demanded = 150 – 120

(ΔQ) = 30

Percentage change in Qty demanded = $\frac{\Delta Q}{Q} \times 100$

$= \frac{30}{15} \times 2$

$= 20\%$

Coefficient of price elasticity of demand

$$= \frac{\text{Percentage change in Qty demanded}}{\text{Percentage change in price}}$$

$Ed = \frac{20}{40}$

$Ed = 0.5$

11. What is meant by "diminishing returns to a factor"? Discuss any two reasons for the operation of diminishing returns to a factor. [6]

Answer :

The law of diminishing returns to a factor states that when additional units of a variable factor are applied, other factors are remaining constant, the total product increases at a diminishing rate or marginal product diminishes.

Two main reasons for the operation of diminishing returns to a factor are:

(i) Over-utilisation of the fixed factor : As we keep on increasing the variable factor along with the fixed factor eventually a position comes when the fixed factor has its limits and starts yielding diminishing return.

(ii) Improper coordination between Fixed and Variable factors : After a certain level of employment, the production process becomes too crowded with variable input and factor proportion tends to become less and less suitable for the production.

12. Elaborate three features of monopoly form of market. [6]

OR

Distinguish between perfect competition and monopolistic competition on the basis of following:

(a) Number of sellers

(b) Nature of product

(c) Selling cost

Answer : Monopoly is a market situation in which there is a single seller, with no close substitutes for commodity, it produces and there are barriers to entry. Three main features of monopoly form of market are :

(1) Single seller- There is a single producer of a commodity therefore the difference between firm and industry disappears. the firm has full control over supply of the commodity.

(2) No close substitutes– : The product offered by a monopolist has no close substitute. So, the monopoly firm has no fear of competition from new or existing rivals.

(3) Restriction on entry - There exist strong barriers to entry of new firm under monopoly. As a result, a monopoly firm can manipulate the market and earn abnormal profits in the long run too.

OR

Distinction between perfect competition and monopolistic competition.

Basis	Perfect Competition	Monopolistic Competition
1. Number of sellers	There are large number of sellers.	There are also a large number of sellers but less than perfect competition.
2. Nature of product	Homogenous products are sold under this market situation.	Products are different but are close substitutes of one another or product differentiations is there.
3. Selling Cost	There is no scope for selling cost.	Huge amount of money is spent on advertisement etc.

SECTION-B
(MACRO ECONOMICS)

13. Give any two examples of flow concept. [1]

Answer : Two examples of flow concept are National income, Investment.

14. Define the term 'tax'. [1]

Answer : Tax is the compulsory financial charge imposed on an individual through government.

15. Suppose in a hypothetical economy, the income rises from ₹ 5,000 crores to ₹ 6,000 crores. As a result, the consumption expenditure rises from ₹ 4,000 crores to ₹ 4,600 crores. Marginal propensity to consume in such a case would be________. (Choose the correct alternative) [1]

(a) 0.8

(b) 0.4

(c) 0.2

(d) 0.6

Answer : (d)

Initial income = ₹ 5,000 crores

New income = ₹ 6,000 crores

Change in income (ΔY) = 6000 – 5000 = ₹ 1,000 crore

Initial consumption = ₹ 4,000 crore

New consumption = ₹ 4,600 crore

Change in consumption (ΔC) = 4600 – 4000 = ₹ 600 crore

Marginal propensity to consume

$$(MPC) = \frac{\Delta C}{DY} \quad \frac{\text{Change in Consumption}}{\text{Change in income}}$$

$$= \frac{600}{1000}$$

$$= 0.6$$

16. What is a meant by primary deficit? [1]

OR

What is meant by fiscal deficit?

Answer : Primary deficit is the difference between fiscal deficit and interest payments. made by goverment.

Primary deficit = Fiscal deficit – Interest payments

OR

Fiscal deficit refers to the excess of total expenditure over the sum of revenue receipts and total capital receipts excluding borrowings.

17. Define the problem of double counting in the computation of national income. State any two approaches to correct the problem of double counting. [3]

OR

"Gross Domestic Product (GDP) does not give us a clear indication of economic welfare of a country." Defend or refute the given statement with valid reason.

Answer : Double Counting - Double counting means counting of the value of the same product more than once in calculating the national income.

Two ways of avoiding double counting :

(i) Take the value of final goods only : According to this method, the value of intermediate goods is not considered. Only the value of final goods should be added to determine the national income.

(ii) Adopt value added method : According to this method, sum total of the value added by each production unit should be taken in the computation of national income.

OR

The given statement is completely true that GDP does not give us a clear indication of economic welfare of a country. GDP is a measure of economy's production or it can be considered a component of welfare. A higher GDP means more production of goods and services in an economy during a given year. Therefore, a higher GDP also means that more goods and services were available to the people of the country during the year. But it does not indicate that the people were better off during the year. In other words, a higher GDP may not necessarily mean higher welfare of the people.

18. If in an economy :

Change in initial investments (ΔI) = ₹ 500 crores

Marginal Propensity to Save (MPS) = 0.2 [3]

Find the value of the following :

(a) Investment multiplier (k)

(b) Change in final income (ΔY)

Answer : Change in initial investment (ΔI) = ₹ 500 crores

Marginal propensity to save (MPS) = 0.2

(a) Investment multiplier (K) = $\frac{1}{MPS}$

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

$$K = \frac{10}{2}$$

$$K = 5$$

(b) Change in final income (ΔY)

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

$$\Delta Y = K \times \Delta I$$

$$= 5 \times 500$$

= ₹ 2500 crores.

19. How are capital receipts different from revenue receipts ? Discuss briefly. [4]

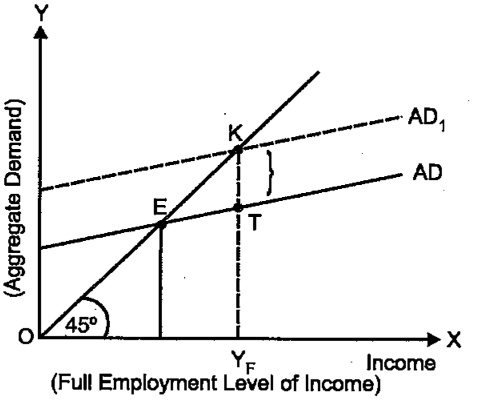
Answer :

Basis	Capital Receipt	Revenues Receipt
1. Meaning	These are those receipt of government with either lead to increase in its liablities or reduction in its assets.	Revenue receipt neither create any liability nor reduce any asset of the government.
2. Nature	They are irregular and non-recurring in nature.	These receipts are regular and recurring in nature.
3. Obligation	There can be future obligation to return the amount along with interest in certain capital receipts like borrowing.	There is no future obligation to return the amount received.
4. Examples	Borrowings, receipt from disinvestment etc.	Income tax, Profit of PSU, dividends, fee and fine etc.

20. State and discuss the components of Aggregate Demand in a two sector economy. [4]

OR

In the given figure, what does the gap "KT" represent? State any two fiscal measures to correct the situations.



Answer : Aggregate demand refers to demand for all goods and services in the economy during a given period of time. The components of Aggregate demand in a two sector econmony are :

(i) Consumption Expenditure (c) It is that portion of the income which is spend on purchase of

goods and services by the consumers in an economy during the accounting period.
(ii) Investment Expenditure (I) — The addition to the stock of physical capital and change in inventories of a firm in an economy.

OR

The vertical gap 'K T' represents 'Deficient Demand.
The fiscal measures to correct deficient demand are—
(i) Reduction in taxes— The revenue Policy of the government is expressed in term of taxes. During deflation the government will impose the lower amount of taxes so that the purchasing power of people be increase. To control deficient demand government have to increase liquidity in the economy.
(ii) Increase in government expenditure : Government has to invest huge amount on the public works like roads, buildings etc. thereby increasing the money income of the people and their demand for goods and services.

21. **Discuss the working of the adjustment mechanism in the following situations : [4]**
(a) Aggregate demand is greater than Aggregate supply.
(b) Ex Ante Investment are lesser than Ex Ante Savings.
Answer : (a) Aggregate demand is greater than Aggregate supply. :
When AD>AS, it means that buyers are planning to buy more goods and services than producers are planning to produce. As a result, inventories start falling and come below the desired level. To bring back the inventories at the desired level producers expand production. This raises the income level which keeps on rising till the AD and AS once again become equal.
(b) Ex-Ante Investments are lesser than Ex-Ante Savings :
When planned savings are more than planned investment, it means that household are not consuming as much as firms expected them to do so. This will lead to build up of undesired inventory. To clear the undesired rise in inventory, firms reduces its production, which also means fall in income and hence saving reduces till planned savings and planned investments are equal.

22. **(a) Define "Trade surplus". How is it different from "Current account surplus"? [3, 3]**
(b) "Indian Rupee (₹) plunged to all time low of ₹ 74.48 against the US Dollar ($)". –*The Economic Times*
In the light of the above report, discuss the impact of the situation on Indian Imports.
Answer : (a) Trade surplus refers to excess of value of exports of visible items over the value of import of visible items in the balance of payment account of a country. Current account surplus refers to excess of receipts from value of export of visible items, invisible items and unilateral transfers over payment of value of import of visible items, invisible items and unilateral transfers. It is a broader concept as compared to trade surplus.
(b) "Indian rupee (₹) plunged to all time low of ₹ 74.48 against the US Dollar ($)"
The above statement indicates the depreciation of Indian currency against the foreign currency dollar ($). Depreciation means the fall in the value of rupee in terms of foreign currency. More rupees are now required to buy a unit of foreign currency. This will make foreign goods costlier to India. As a result, imports are likely to fall.

23. **(a) State any two components of M_1 measure of money supply. [2, 4]**
(b) Elaborate any two instruments of Credit Control, as exercised by the Reserve Bank of India.

OR

Define Credit Multiplier. What role does it play in determining the credit creation power of the banking system? Use a numerical illustration to explain. [6]
Answer : (a) Two components of M_1 measure of money supply :
$M_1 = C + OD + DD$
Where
C = Currency held by the public
OD = Other deposits
DD = Demand deposits held by commercial banks
OD is the other deposits with the RBI. These are the demand deposits held by the RBI of all economic units except the government and banks. It includes demand deposits of public financial institutions (like IDBI, etc.), foreign Central Banks and government, IMF, World Bank etc. DD is demand deposits which means those deposits which can be withdrawn at any time by the account holders. Current account deposits are included is demand deposits.
(b) Two instruments of Credit Control are—
(i) Bank Rate Policy : The bank rate is the rate at which the Central Bank lends money to commercial banks. Through changes in bank rate, the Central Bank affects the money supply in the economy.
When credit is to be expanded the Central Bank reduces the bank rate. A low bank rate encourages the banks to keep small proportion of their deposits as reserves, since borrowing from Central Bank is now less costly than before.

As a result banks use greater proportion of their funds for giving at loan to borrowers or investors. Thus, money supply increases. The bank rate is lowered during deflation. The reverse occurs during inflation and RBI control credit in the economy.

(ii) Open Market Operations–It refers to the buying and selling of government securities by the Central Bank from/to the public and banks. When Central Bank buys government securities, it adds to cash balances of the economy. If cash balances are increased in the economy, there will be more deposits with commercial banks and hence, more flow of credit and when Central Bank sells government securities it withdraws cash balances from the economy. When cash balances are reduced deposits with commercial banks decreases hence, flow of credit will decrease.

OR

Credit multiplier measures the amount of money that the banks are able to create in the form of deposits with every initial deposits. The credit creation of the commercial bank depends on credit mutiplier as it is inversly related to LRR. Higher the credit multiplier, higher will be the total credit created and vice versa.

Numerical example–Suppose the amount of initial deposit is ₹ 1000 and LRR is 10%. The banks will keep 10% *i.e.* ₹ 100 as reserve and lend the remaining ₹ 900 to borrowers. The borrowers will spend this money. It is assumed that ₹ 900 comes back to the banks. Bank again keep 10% ₹ 900, *i.e.* ₹ 90 as reserve and lend ₹ 810. This will further raise, the amount of deposits with the banks. In this way, deposits go on increasing number of times and the total deposit will be determined by the money multiplier.

Money multiplier $= \frac{1}{\text{LRR}} = \frac{1}{0.10} = 10$

The total deposit will be = Initial deposit × money multiplier

$= 1000 \times 10$

$=$ ₹ 10,000

24. Given the following data, find the missing value of Government Final Consumption Expenditure' and Mixed Income of Self Employed'. **[6]**

S.No.	Particulars	Amount (in ₹ crores)
(i)	National Income	71,000
(ii)	Gross Domestic Capital Formation	10,000
(iii)	Government Final Consumption Expenditure	?
(iv)	Mixed Income of Self-Employed	?
(v)	Net Factor Income from Abroad	1,000
(vi)	Net Indirect Taxes	2,000
(vii)	Profits	1,200
(viii)	Wages and Salaries	15,000
(ix)	Net Exports	5,000
(x)	Private Final Consumption Expenditure	40,000
(xi)	Consumption of Fixed Capital	3,000
(xii)	Operating Surplus	30,000

Answer : Mixed income of self employed = (i) – [(viii) + (xii) + (v)]

$= 71{,}000 - [15{,}000 + 30{,}000 + 1000]$

$=$ ₹ 2,500 crores

Government final consumption expenditure = (i) – [(x) + (ii) + (v) + (ix)] + (vi) + (xi)

$= 71{,}000 - (40{,}000 + 10{,}000 + 1000 + 5000] + 2{,}000 + 3000$

$=$ ₹ 20,000 crores.

●●

Economics 2019 (Delhi) SET II

Time allowed : 3 hours **Maximum marks : 80**

Note : Except for the following questions, all the remaining questions have been asked in previous sets.

6. Good X and Good Y are substitute goods. If price of Good X increases, discuss briefly its likely impact on the demand for Good Y. **[3]**

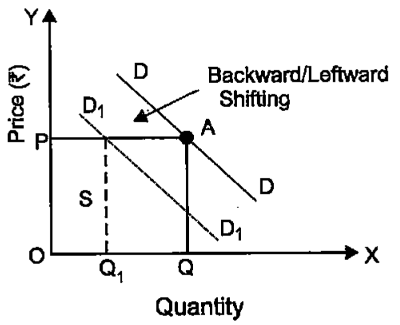
OR

If the income of a consumer increases, discuss briefly its likely impact on the demand for an inferior good, Good X.

Answer : If the good X and Y are substitutes, a rise in price of X will result in a rightward shifting in demand curve of Y because now good Y become cheaper in comparison of good X. As a result, demand for good Y will increase and consumer will substitute good Y over good X.

OR

As income increases the demand for an inferior good falls. The consumer buys less of inferior goods and prefer to buy superior substitutes. Hence there will be leftward shifting of demand curve in case of inferior goods.



9. Explain the law of diminishing marginal utility using a hypothetical schedule. [4]

OR

What is a budget line? Why the budget line is left to right downward sloping?

Answer : Law of Diminishing Marginal Utility- Law of Diminishing Marginal Utility states that keeping other factors constant, as more and more units of a commodity are consumed, the additional utility that we derive from it goes on declining.

Numerical example :

Units of Orange	Total Utility (Utils)	Marginal Utility (Utils)
1	10	10
2	18	8
3	24	6
4	28	4
5	30	2
6	30	0
7	28	-2
8	24	-4

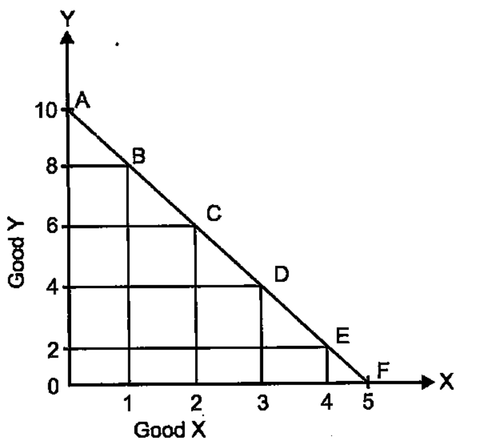
It is clear from the above table that the consumer gets marginal utility equal to 10 utils from the I[st] unit of orange, 8 utils from 2[nd], 6 utils from 3[rd] and so on. The marginal utility falls because of decline in the intensity of desire. A stage comes when marginal utility become zero. This is called the Point of satiety. At this point TU is maximum. If the consumer goes beyond the point, utility becomes negative.

OR

Budget line : Budget line is a locus of different combination of two goods, which the consumer consumes and which cost the consumer exactly equal to his income.

Let us consider, a consumer who has only a fixed amount of money equal to ₹ 50 to spend. Further suppose that he spends his money income on two commodities X and Y, whose market prices are ₹ 10 per unit and ₹ 5 per unit respectively.

Combi-nations	Consumption (units)		Total Expenditure $P \times Q_x + P_y \cdot Q_y$
	Good 'x'	Good 'y'	
A	0	10	$10 \times 0 + 5 \times 10 =$ 50
B	1	8	$10 \times 1 + 5 \times 8 = 50$
C	2	6	$10 \times 2 + 5 \times 6 = 50$
D	3	4	$10 \times 3 + 5 \times 4 = 50$
E	4	2	$10 \times 4 + 5 \times 2 = 50$
F	5	0	$10 \times 5 + 5 \times 0 =$ 50



By the above schedule and diagram that total expenditure remains same hence to purchase more of another commodity consumer needs to sacrifice other so the budget line moves from left to right or downward sloping.

11. Elaborate three main features of oligopoly form of market. [6]

OR

Distinguish between monopoly and monopolistic competition on the basis of the following :

(a) Number of Sellers

(b) Name of the Products

(c) Selling cost

Answer : Oligopoly Market– Oligopoly is a market where there are few large firms competing with each other. The competing firms are few in number but each one is large enough so as to be able to control the total industrial output.

Three main features are :

(1) Number of seller or few firms–The number of firms are very less in a oligopoly. By small number means that every seller controls a large share of total market supply and by his activities, he influences other seller's activities and price of the commodity.

(2) Interdependence – It is another important feature of oligopoly market situation. There is interdependence of the firms in decision making. This is because when the number of competitors is few, any change in price, output, product etc. by a firm will have a direct effect on its rival firm.

(3) Nature of the Product – The product in such market situation may be homogenous or heterogeneous. If it is homogenous then it is perfect oligopoly or pure oligopoly if there is product differentiation it is imperfect oligopoly.

(4) Selling cost–Huge selling cost is applied under this market situation to attract the customers to the product.

OR

Basis	Monopoly	Monopolistic Competition
Number of sellers	There is only a single seller in the market hence covering the whole market for its product.	There exists large number of sellers in the market hence every seller covers a specific portion of market for its product.
Nature of the product	The product is unique with no close substitute.	There exists product differentiation and each product has it's close substitute.
Selling cost	Monopoly firms need not to spend on the advertisements etc. since their product is unique.	Huge amount of money is spent on advertisement to promote the sale of the product.

SECTION-B (MACROECONOMICS)

17. If in an economy :

Change in initial investment (ΔI) = ₹ 700 crores

Marginal Propensity to Save (MPS) = 0.2

Find the values of the following :

(a) Investment Multiplier (k)

(b) Change in final income (ΔY)

Answer. (a) Change in initial investment (ΔI) = ₹ 700 crores

Marginal propensity to save (MPS) = 0.2

Investment multiplier (k) = $\frac{1}{MPS}$

$= \frac{10}{2}$

K= 5

(b) Change in final income (ΔY)

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

$\Delta Y = K \times \Delta I$

$= 5 \times 700$

= ₹ 3500 crores.

20. How are capital expenditure different from Revenue expenditore ? Discuss briefly.

Answer : Revenue expenditure is that expenditure of the government that neither creates any asset nor reduces any liability. For example, expenditure on salaries, Pensions, interest payment etc. whereas capital expenditure is that expenditure of the government that either creates assets or reduces liabilities. For example expenditure on construction of roads, repayment of loans etc.

23. Given the following data, find the missing value of 'Private Final Consumption Expenditure and 'Operating Surplus'. [6]

S.No.	Particulars	Amount (₹)
(i)	National Income	50,000
(ii)	Net Indirect Taxes	1,000
(iii)	Private Final Consumption Expenditure	?
(iv)	Gross Domestic Capital Formation	17,000
(v)	Profits	1,000
(vi)	Government Final Consumption Expenditure	12,500
(vii)	Wages and Salaries	20,000
(viii)	Consumption of Fixed Capital	700
(ix)	Mixed Income of self-employed	13,000
(x)	Operating surplus	
(xi)	Net factor Income from Abroad	500
(xii)	Net Exports	2,000

Answer : Operating surplus = (i) – [(vii) + (ix) + (xi)]

= 50,000 – (20,000 + 13,000 + 500)

= ₹ 16,500 crores.

Private final consumption expenditure = (i) – [(iv) + (vi) + (xi) + (xii)] + (viii) + (ii)

= 50,000 – (17,000 + 12500 + 2000 + 500) + 700 + 1000

= ₹ 19,700 crores

●●

Economics 2019 (Delhi) SET III

Time allowed : 3 hours **Maximum marks : 80**

Note : Except for the following questions, all the remaining questions have been asked in previous sets.

SECTION-A

5. **Good X and Good Y are complementary goods. If price of Good X increases, discuss briefly its likely impact on the demand for Good Y.** [3]

OR

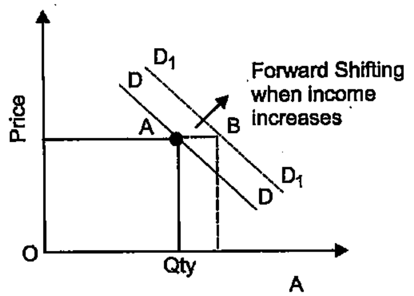
If the income of a consumer increases, discuss briefly its likely impact on the demand for a normal good, Good X.

Answer : Goods X and goods Y are complementary goods which are jointly demanded therefore if the price of good X increases the demand for good Y will decrease. This is due to the inverse relationship between the price of the given good and demand for it.

OR

If the income of a consumer increases, demand for a commodity rises. The consumer starts buying more good than before hence rightward shifting of demand curve will take place in this case.

In the graph, original demand curve is DD but when income increases the demand for normal good increases and curve shifts from DD to D_1D_1.



A

7. **Explain the law of equi-marginal utility.** [4]

OR

State and discuss the conditions of consumer's equilibrium under ordinal approach.

Answer. Law of equi-Marginal Utility : The law was presented by an economist H.H. Gorsen. According to this law "A person can get maximum utility with his given income when it is spent on different commodities in such a way that the marginal utility of money spent on each item is equal".

Assumptions of the law :

1) There is no change in the prices of the goods.

2) The income of consumer is fixed.

3) The marginal utility of money is constant.

4) Consumer is normal person so he tries to seek maximum satisfaction.

Explanation with schedule and diagram :

Suppose consumer has six dollars that he want to spend on apples and bananas in order to obtain maximum total utility. The following table shows marginal utility (MU) of spending additional dollars of income on apples and bananas :

Money (Units)	MU of apples	MU of Bananas
1	10	8
2	9	7
3	8	6
4	7	5
5	6	4
6	5	3

The above schedule shows that consumer can spend six dollars in different ways :

1) \$1 on apples and \$5 on bananas. The TU he get is : [(10) + (8 + 7 + 6 + 5 + 4)] = 40 utils

2) \$2 on apples and \$4 on bananas. The TU he get is : [(10+9) + (8 + 7 + 6 + 5)] = 45 utils

3) \$3 on apples and \$3 on bananas. The TU he get is : [(10+9+8) + (8 + 7 + 6)] = 48 utils

4) \$4 on apples and \$2 on bananas. The TU he get is : [(10 + 9 +8 + 7) + (8 + 7)] = 49 utils

5) \$5 on apples and \$1 on bananas. The TU he get is : [(10 + 9 + 8 + 7 + 6) + (8)] = 48 utils

TU for consumer is 49 utils that is highest obtainable with expenditure of \$4 on apples and \$2 on bananas. Here the condition, MU of apple = MU of banana *i.e.* 7 = 7 is also satisfied.

OR

Condition of consumer's equilibrium under ordinal approach :

Suppose a consumer consumes only two commodities X and Y and prices are P_x and P_y respectively.

Conditions of equilibrium

A consumer will be in equilibrium when the following two conditions are satisfied.

Condition-1 A consumer gets maximum satisfaction when ratios of MU of the commodities to their respective prices are equal. It implies that, consumer spends his income in such a way that utility gained from the last rupee spent on each commodity is equal.

Condition-2 The law of diminishing marginal utility must operate. If MU does not fall, consumer will never stop its consumption of that good.

10. Elaborate three main features of monopolistic competition form of market. [6]

Answer : Monopolistic competition is market structure that has some features of Perfect competition and some features of monopoly. It refers to a market situation wherein there are large number of small firms/sellers selling differentiated but closely related products.

Features of monopolistic competition :

(i) Large number of seller : Large number of sellers selling closely related but differentiated products. Each firm acts independently and has limited share of the market which leads to limited degree of monopoly over price of the product.

(ii) Product differentiation- Products are differentiated on the basis of brand name, color, size etc. These differentiated products are close substitute of each other. Since a group of buyers prefers the product of a particular producer, that producer enjoys some monopoly in the market.

(iii) Freedom of entry and exit to firms - There exist no barriers to entry or exit, as a result firms earn only normal profits in the long run.

OR

18. If in an economy : [3]

Change in initial Investment (ΔI) = ₹ 1,200 crores

Marginal Propensity to Save (MPS) = 0.2

Find the values of :

(a) Investment Multiplier (k)

(b) Change in final income (ΔY)

Answer : Change in initial investment (ΔI) = ₹ 1200 crores

Marginal propensity to save (MPS) = 0.2

(a) Investment multiplier (k) = $\frac{1}{MPS} = \frac{10}{2} = 5$

(b) Change in final income (ΔY) = ?

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

$\Delta Y = K \times \Delta I$

$= 5 \times 1200 =$ ₹ 6000 crores

21. (a) How are tax receipts different from non-tax receipts? Discuss briefly. [3, 1]

(b) State any two items of revenue expenditure in a Govenment budget.

Answer : (a) Difference between tax receipt and non-tax receipts :

Basis	Tax Receipts	Non-Tax Receipts
Meaning	Tax revenue includes receipts from all types of taxes.	Non tax revenue is the revenue of the government from sources other than taxes.
Nature	A tax is a legal and compulsory payment imposed by the government.	It is not a compulsory payment.
Benefit	No direct benefit is received in exchange of tax paid	It is a paid in lieu of the benefit or services received.
Examples	Income tax, wealth tax, GST etc.	Fees, fines, licence fee etc.

(b) Two items of revenue expenditure in the government budget are payment of wages and salaries and expenditure on education, health services, pensions, subsidies etc.

22. Given the following data, find the missing values of 'Gross Domestic Capital Formation' and 'Wages and Salaries'. [6]

S.No.	Particular	Amount (in Cr. ₹)
(i)	Mixed Income of Self Employed	3,500
(ii)	Net Indirect Taxes	300
(iii)	Wages & Salaries	?
(iv)	Government final Consumption Expenditure	14,000
(v)	Net Exports	3,000
(vi)	Consumption of Fixed Capital	300
(vii)	Net Factor income from Abroad	700
(viii)	Operating Surplus	12,000
(ix)	National Income	30,000
(x)	Profits	500
(xi)	Gross Domestic Capital Formation	?
(xiii)	Private Final Consumption Expenditure	11,000

Wages and salaries = (ix)-[(i) + (viii) + (vii)]

= 30,000 – (3,500 + 12,000 + 700)

= ₹ 13,800 crores

Gross domestic capital formation = (ix) – [(iv) + (v) + (vii) + (xii)] + (ii) + (vi)

= 30000 – (14000 + 3000 + 700 + 11000) + 300 + 300

= ₹ 1900 crores

●●