# INDIAN SCHOOL MUSCAT

## DEPARTMENT OF COMMERCE & HUMANITIES

# SOLVED AND UNSOLVED SAMPLE PAPERS

# FOR CBSE EXAMINATION - 2018


# INDIAN SCHOOL MUSCAT

**Class: 12** | **SOLVED AND UNSOLVED SAMPLE PAPERS FOR CBSE EXAMINATION - 2018** | **Marks: 80** **Time: 3 Hrs.**

**General Instructions**

1. All questions in both the sections are compulsory. However, there is internal choice in some questions.
2. Marks for questions are indicated against each.
3. Question Nos. **01 to 04** and **13 to 16** are very short answer questions /MCQ's of 1 mark each.
4. Question Nos. **05 to 06** and **17 to 18** are short answer questions of 3 marks each. These are to be answered in about 60 words each.
5. Question Nos. **07 to 09** and **19 to 21** are short answer questions of 4 marks each. These are to be answered in about 70 words each.
6. Question Nos. **10 to 12** and **22 to 24** are long answer questions of 6 marks each. These are to be answered in about 100 words each.
7. Answer should be brief and to the point and the above word limit be adhered to as far as possible.
8. There will be internal choice in questions of 3 marks, 4 marks and 6 marks in both sections (A and B). There are a total of 3internal choices in section A and 3 internal choices in section B.

# CBSE Sample Paper 2017-18 - Solved

**Section A**

1. Which of the following is a statement of normative nature in economics? (Choose the correct alternative) 1
   a) Economics is study of choices/alternatives.
   b) Government should be concerned with how to reduce unemployment
   c) According to an estimate, in spite of severe shortage, more than 10% of houses in Indian cities are lying vacant.
   d) Accommodation of Refugees is posing a big problem for the Europe

   **ANS: (b) Government should be concerned with how to reduce unemployment**

2. Define Marginal Physical Product. 1

   **ANS: Marginal Physical Product is the change in output produced by employing one additional unit of the variable input. It can be calculated as:**

   $$\mathbf{MPP} = \frac{\Delta\ \mathbf{TPP}}{\Delta\ \mathbf{Units\ of\ Variable\ factor}}$$

   **OR**

   $$\mathbf{MPP} = \mathbf{TPP_n} - \mathbf{TPP_{n-1}}$$

3. A firm is operating with a Total Variable Cost is ₹500 when 5 units of the given output are produced and the Total Fixed Costs are ₹200, what will be the Average Total Cost of producing 5 units of output? (Choose the correct alternative) 1
   a) ₹140
   b) ₹100
   c) ₹120
   d) ₹300

   **ANS: (a) ₹140**

4. In an imperfectly competitive market, if the Total Revenue is maximum, Marginal Revenue will be..... 1

**ANS: Zero**

5. State and discuss any two factors that will shift the Production Possibility Frontier (PPF) to the right. 3

**ANS: Two factors that may shift the Production Possibility Frontier of an economy away from**
**origin (to the right) are:**

a) **Increase in resources available to an economy (natural, physical or human resource). New resources may increase the output potential in an economy resulting in shift of PPF away from origin.**
b) **Improvement in technology, when technology improves the production potential increases, i.e. economy may be able to produce more output using existing resources efficiently.**

**OR**

Draft a hypothetical schedule for a straight line Production Possibility Curve.

**ANS:**

| Commodity A | Commodity B | MRT = $\frac{\Delta A}{\Delta B} = \frac{\text{Loss of Output}}{\text{Gain of Output}}$ |
|---|---|---|
| **15** | **0** | **5A: 1B** |
| **10** | **1** | **5A: 1B** |
| **5** | **2** | **5A: 1B** |
| **0** | **3** | **5A: 1B** |

**Since Marginal Rate of Transformation is constant, PPC will be a straight line.**

6. Giving reason, state the impact of each of following on demand curve of a normal good 'X' if 3

a) Price of its complementary good falls.
b) News reports claims that consumption of product X has harmful effect on human health.
c) iii) Income of consumer increases,

**ANS:**

a) **Demand of the good X will increases, hence demand curve of good X shifts towards right.**
b) **Demand of Good X may decrease as people may be inclined to consume less due to media reports of harmful effect of the good X, as a result, demand curve may shift towards left.**
c) **When income of consumer increases the disposable income increases and consumer is in a better position of spending more on the good X. Hence consumer may consume more of the commodity due to which the demand for the good increases and demand curve shifts away from origin.**

7. a) Arrange the following coefficients of price elasticity of demand in ascending order: 4
-0.87, -0.53, -3.1, -0.80
b) Comment upon the degree of elasticity of demand for commodity X, if the price of the commodity falls from ₹28 per unit to ₹23 per unit and its quantity demanded rises from 50 units to 100 units.

**ANS:**

a) **-0.53, -0.80, -0.87,- 3.1 (minus sign only represents the inverse relation between price and quantity demanded)**
b)

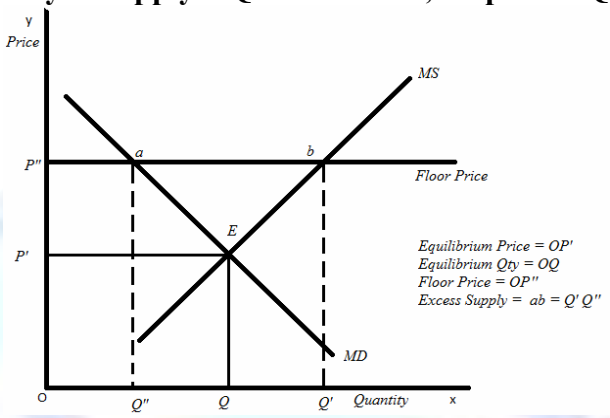
| Price (in₹) | Quantity (in units) |
|---|---|
| Original = 28 | Original = 50 |
| New = 23 | New = 100 |

$$\mathbf{Ed} = \frac{\textbf{Change in Quantity Demanded}}{\textbf{Change in Price}} \text{ X } \frac{\textbf{Original Price}}{\textbf{Original Quantity}}$$

$$\mathbf{Ed} = \frac{\Delta Q}{\Delta P} \text{ X } \frac{P}{Q} = \frac{50}{5} \text{ X } \frac{28}{20} = 5.6 \text{ (Relatively Elastic Demand)}$$

8. What is meant by Price Floor? Discuss in brief, any one consequence of imposition of floor price above equilibrium price with help of a diagram. 4

**ANS: A Floor price is the minimum price at which a commodity can be sold legally. Floor price if fixed above the equilibrium price, serves the purpose of welfare of the producers (say farmers). When price floor is fixed at P" quantity demanded will contract to OQ" but at this price, suppliers will be ready to supply OQ'. As a result, surplus of QQ" will emerge.**




**Imposition of floor prices above equilibrium price will have the following major implications:**

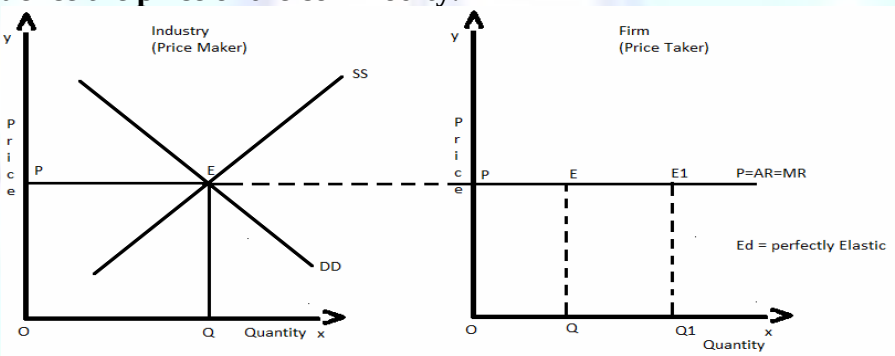
a) **Surpluses: The quantity actually brought and supplied will shrink as a direct consequence of price flooring, as a result, a part of producer's stock will remain unsold. As shown in the figure the surplus of Q'Q" arises.**

b) **Buffer Stock: In order to maintain the support price, the government may design some programmes to enable producers to dispose of their surplus stocks. One such programme can take the form of buffer stock. Government may purchase the surplus to store or sell it at subsidised prices. Subsidy is required to lower the price and make it competitive in the market. Government may also use it as aid and send it to other countries. (any one to be explained)**

**OR**

How is the price of a commodity determined in a perfectly competitive market? Explain with help of a diagram.

**ANS: Price of a commodity is determined by market demand and market supply of a commodity, (i.e. industry is the price maker). An individual producer/firm has no role in the determination of the price of the commodity (firm is a price taker). No individual seller or buyer can influence the price of the commodity.**




**DD and SS are Market demand and market supply curves intersecting at E. OQ quantity (Equilibrium Quantity) would be offered for sale and demanded by the buyers at OP price (Equilibrium Price) per unit. The industry is in equilibrium.**

9. Explain how the following factors affect the supply of the commodity (any two) 4

a) Price of factor inputs
b) State of technology
c) Government taxation Policy

**ANS: Supply of a commodity is affected by following factors:**

**(a) Price of factor Inputs: If factor input price increases, cost of production generally rises, accordingly producers are willing to supply less at the existing price as the profit probability decreases. This implies leftward shift in supply curve and vice-versa, keeping other factors constant.**

**(b)** **State of Technology: Improvement in technique of production raises productivity and generally lowers per unit cost of production, consequently the probability to earn more profit also increases and hence the producer is induced to supply more, as a result supply curve shifts towards right.**

**(c)** **Government Taxation Policy: If government increases taxes, it will affect the cost of production adversely and hence supply decreases. But if Government decreases the tax the cost of production will fall and the producer will be induced to increase the supply of the commodity, ceteris paribus.**

10. a) A consumer, Mr Aman is in state of equilibrium consuming two goods X and Y, with given prices Px and Py. What will happen if? 6

b) Identify which of the following is not true for the Indifference Curves theory. Give valid reasons for choice of your answer:

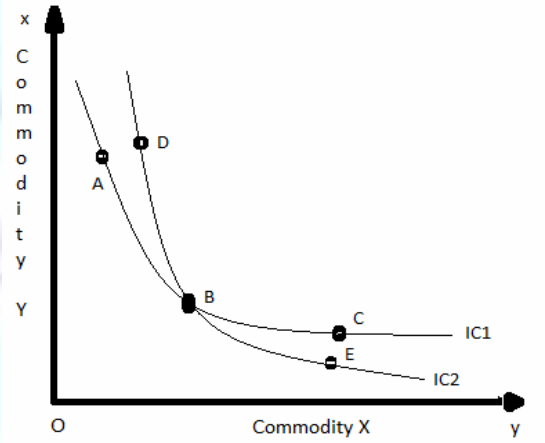
a. Lower indifference curve represents lower level of satisfaction.
b. Two indifference curves can intersect each other.
c. Indifference curve must be convex to origin at the point of tangency with the budget line at the consumer's equilibrium.
d. Indifference curves are drawn under the cardinal approach to consumer equilibrium.

**ANS:**

**(a)** **If $\frac{MUx}{Px} > \frac{MUy}{Py}$, then it means that satisfaction derived from consumption of good X is greater than the satisfaction derived from consumption of Good Y. Mr Aman will reallocate his income by spending more on good X. Utility derived from X goes on diminishing and reverse preposition occurs for Good Y, this process will continue till $\frac{MUx}{Px} = \frac{MUy}{Py}$**

**(b)** **The second statement ' Two regular convex to origin indifference curves can intersect each other' is not true as the intersection of two regular indifference curves indicate one such point (point of intersection) which yields the similar satisfaction of two different indifference curves which is not possible. In the figure there are two indifference curves IC1 and IC2 intersecting each other, there is clear violation of assumption of monotonic preference.**

**As per figure satisfaction derived at point A = satisfaction derived at point C ( on IC1)**
**And satisfaction derived at point D = satisfaction derived at point E (on IC2)**
**At intersecting point B;**




**Satisfaction derived by consumer at points A, C and B is equal and**
**A = C = B (On IC1)**
**D = E = B (On IC2)**
**Consequently A = D (which is absurd)**
**Thus we can say that IC's can't intersect each other.**

**OR**

A consumer has total money income of ₹500 to be spent on two goods X and Y with prices of ₹50 and ₹10 per unit respectively. On the basis of the given information, answer the following questions:

a) Give the equation of the budget line for the consumer.
b) What is the value of slope of the budget line?
c) How many units can the consumer buy if he is to spend all his money income on good X?
d) How does the budget line change if there is a 50% fall in price of good Y?

**ANS:**

**Px Qx + Py Qy = M**

**50 Qx + 10 Qy = 500**

**Slope of Budget Line = (-) $\frac{Px}{Py}$ = (-) $\frac{50}{10}$ = (-) 5**

**If Qy= Zero, then**
**50Qx + 10Qy = 500**
**50Qx + 10(0) = 500**
**Qx = $\frac{500}{50}$= 10 units**
**Old Py = ₹10**
**New Py = ₹5**
**(50% of ₹10 = ₹5)**

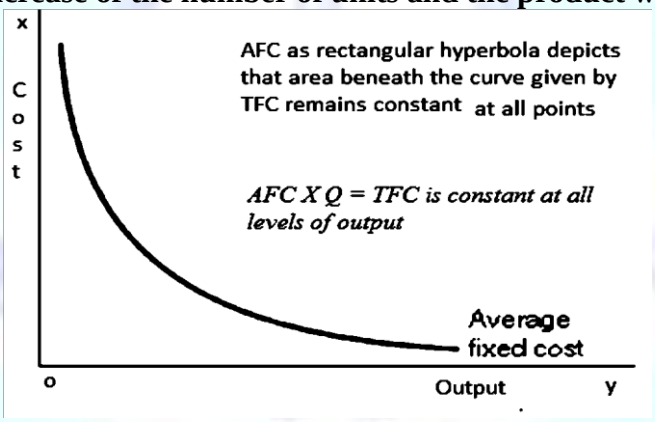
**If Py falls the consumer will be able to buy more of good Y in the same money income pushing the Y-intercept of the Budget Line away from origin, keeping the X-intercept constant, it rotates outwards and the equation will be 50Qx +5Qy = 500.**

11. a) Why is Total Variable Cost curve inverse S- shaped? 6
b) What is Average Fixed Cost of a firm? Why is an Average Fixed Cost Curve a rectangular Hyperbola? Explain with help of a diagram.

**ANS:**

**(a) Total Variable Cost is zero at zero level of output. It initially increases at decreasing rate and later it increases at increasing rate. TVC is an inversely S-shaped curve due to the Law of Variable Proportion.**

**(b) Per unit fixed cost is known as Average Fixed Cost. As the value of Total Fixed Cost doesn't vary at any level of output in short run and if it is divided by an incremental number the result would be diminishing with the same proportion as that of the proportion of increase of the number of units and the product will be same.**




**Since TFC remains same at different levels of output, AFC falls as the level of output is increased.**

**The AFC keeps on falling as the level of output increases. AFC can never become zero.**

12. Suppose the value of demand and supply curves of a Commodity-X is given by the following two equations simultaneously: 6

Qd = 200 –10p Qs = 50 + 15p

a) Find the equilibrium price and equilibrium quantity of commodity X.
b) Suppose that the price of a factor inputs used in producing the commodity has changed, resulting in the new supply curve given by the equation

Qs' = 100 + 15p

Analyse the new equilibrium price and new equilibrium quantity as against the original equilibrium

price and equilibrium quantity.

**ANS:**

**(a) We know that the equilibrium price and quantity are achieved at;**

**Qd = Qs**

**200- 10 p = 50 +15p**

**150 = 25p**

**Therefore, Equilibrium Price p = ₹6**

**And, Equilibrium Quantity q = 200 – (10) (6) = 140 units**

**(b) If the price of factor of production has changed, then under the new conditions;**

**Qd = Qs**

**200- 10p = 100 + 15p**

**25p = 100**

**Therefore, Equilibrium Price p = ₹4**

**And, Equilibrium Quantity q = 200 – (10)(4) = 160 units**

**Thus as the equilibrium price is decreasing the equilibrium quantity is increased.**

**Section B**

13. Define money supply? 1

**ANS: Money supply of a country is a stock of money in circulation at any point of time.**

14. State one fiscal measure that can be used to reduce the gap between rich and poor. 1

**ANS:**

**(a) Increasing the investment expenditure which will directly benefit the poor.**

**(b) Increasing the taxes on rich and using the same amount to benefit the poor.**

(any one or any other relevant measure)

15. Define the capital receipts of a government. 1

**ANS: All money mobilised by government that either creates a liability of repayment on Government or involves reduction in some of an asset by selling it off.**

16. From the following data calculate Fiscal Deficit 1

| S. No | Item | ₹ in Billions |
|---|---|---|
| 1 | Capital Receipt | 68 |
| 2 | Revenue Expenditure | 160 |
| 3 | Interest Payment | 20 |
| 4 | Borrowings | 32 |
| 5 | Tax Revenue | 50 |
| 6 | Non- Tax revenue | 10 |

**ANS: Fiscal Deficit = Borrowings = ₹32 Billion**

**Fiscal Deficit = Revenue Expenditure – (Tax Revenue + Non- Tax revenue + Capital Receipt)**

**= 160 – (50 + 10 + 68)**

**= 160 – 128**

**Fiscal Deficit = ₹32 Billion**

17. Estimate the value of ex-ante AD, when autonomous investment and consumption expenditure (A) is ₹ 50 crores, and MPS is 0.2 and level of income is ₹ 300 crores. 3

**ANS:**

**MPC = 1 – MPS** **MPC = 1 – 0.2**

**MPC = 0.8**

**AD = C+I**

**AD = A +bY**

**AD = 50 + 0.8 (300)**

**AD = ₹290 Crores**

**OR**

Calculate Multiplier when MPC is $\frac{4}{5}$ and $\frac{1}{2}$. From the calculations establish the relation between size of Multiplier and size of MPC?

**ANS:**

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

**When K=** $\frac{4}{5}$ **= 0.8 =** $\frac{1}{1-0.8} = \frac{1}{0.2}$ **= 5**

**When MPC =** $\frac{1}{2}$

**K=** $\frac{1}{2}$ **= 0.5 =** $\frac{1}{1-0.5} = \frac{1}{0.5}$ **= 2**

**Observing the same we may conclude that there exist positive or direct relation between MPC and Investment Multiplier.**

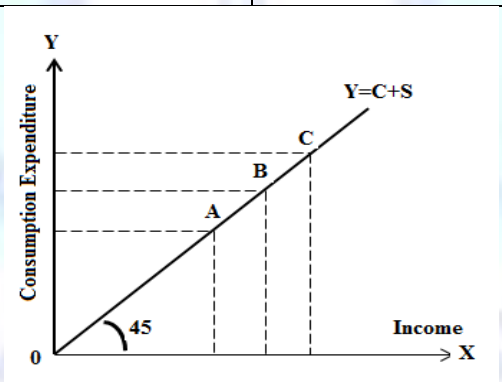
**Investment Multiplier coefficient measures the change in final income with respect to given change in the initial investment in the economy. It carries direct relation with rate of growth in an economy, i.e. higher the MPC more chance of growth exists in an economy. But, it is a two sided sword hence if investment falls in an economy the income may also fall.**

18. Discuss the significance of 45 degree line in Keynesian Economics. 3

**ANS: Aggregate Supply is obtained by adding consumption and saving schedules. The straight line obtained which will originate from point of origin will form a 45 degree angle there by establishing the relation of**

**Y = C+S**

| Level of Income (Y) | Consumption expenditure ( C ) | Saying (Y-C) | Y = AS = C+S |
|---|---|---|---|
| 0 | 200 | -200 | 0 |
| 100 | 250 | -150 | 100 |
| 200 | 300 | -100 | 200 |
| 300 | 350 | -50 | 300 |
| 400 | 400 | 0 | 400 |
| 500 | 450 | 50 | 500 |
| 600 | 500 | 100 | 600 |
| 700 | 550 | 150 | 700 |




**At all points on 45 degree line, Consumption is equal to Income. It helps under the Keynesian Economic analysis. Since the two variables (consumption/Aggregate Expenditure and Income) are measured in the same units, the 45-degree line has a slope of one and it bisects the 90- degree angle formed by the two axes.**

19. Elaborate 'economic growth' as objective of government budget. 4

**ANS: Economic Growth implies a sustainable increase in real GDP of an economy, i.e. an increase in volume of goods and services produced in an economy. Budget can be an effective tool to ensure the economic growth in a country.**

**(a) If the government provides tax rebates and other incentives for productive ventures and projects, it can stimulate savings and Investments in an economy.**

**(b) Spending on infrastructure of an economy enhances the production activity in**

**different sectors of an economy. Government expenditure is a major factor that generates demand for different types of goods and services in an economy which induces growth in private sector too.**

**However, before planning such expenditure, rebates and subsidies government should check the rate of inflation and tax rates. Also there may be the risk of debt trap if loans are too high to finance the expenditure.**

20. Use following information of an imaginary country: 4

| Year | 2014 – 2015 | 2015– 2016 | 2016 - 2017 |
|---|---|---|---|
| Nominal GDP | 6.5 | 8.4 | 9 |
| GDP deflator | 100 | 140 | 125 |

a) For which year is real GDP and nominal GDP same and why?

b) Calculate Real GDP for the given years. Is there any year for which Real GDP falls?

**ANS:**

**(a) For the year 2014-15 as it's the base year**

**(b) The Real GDP declined in the year 2015-2016. It could be due to high rate of inflation or price levels.**

| **Year** | **2014-2015** | **2015 - 2016** | **2016 – 2017** |
|---|---|---|---|
| **Nominal GDP** | 6.5 | 8.4 | 9 |
| **GDP Deflator** | 100 | 140 | 125 |
| **Real GDP =** $\frac{\text{Nominal GDP}}{\text{GDP Deflator}}$ **x 100** | 6.5 | 6 | 7.2 |

21. How will 'Reverse Repo Rate' and 'Open Market Operations' control excess money supply in an economy? 4

**ANS: Reverse Repo rate is the rate at which Central Bank borrows money funds commercial banks. Increase in Reverse Repo Rate induces banks to transfer more funds to Central Bank and reduces banks' ability to create credit.**

**Open Market Operations refers to buying and selling of government securities by Central Bank from/to public and commercial banks. Sale of such securities reduces the reserve of commercial banks and adversely affects bank's ability to create credit and hence decreases the money supply in the economy.**

**OR**

Illustrate with the help of a hypothetical numerical example the process of credit creation.

**ANS: The credit creation by commercial banks is determined by amount of initial deposit and the legal reserve ratio.**

**Suppose customer deposits ₹1000 in bank. Bank has to pay interest on this amount for which bank should lend this money to someone. A part of the amount is to be retained with bank to meet its customer's obligations. Say, if LRR is 20%, the banks will keep 20% of deposits as reserves and will lend remaining 80% i.e. ₹800. Those who borrow will spend this money and same ₹800 will come back to banks in form of deposits. This raises the total deposits to ₹1,800 now. Banks again keep 20% of ₹800 as reserve and lend ₹640 to those who needs. This will further raise the deposits with banks. In this way deposits will go on increasing @ 80% of the last deposit. The number of times the total deposit will become, is determined by money multiplier i.e. 1/LRR = 1/0.2 = 5 times.**

**Total deposits will be Initial Deposits X Money Multiplier = ₹1000 X 5 = ₹5,000**

22. a) Define Externality. 6

b) Find National Income from following using expenditure method

| | | (₹ in crores) |
|---|---|---|
| 1 | Current transfers from rest of the world | 50 |
| 2 | Net Indirect taxes | 100 |
| 3 | Net Exports | (-) 25 |
| 4 | Rent | 90 |
| 5 | Private Final Consumption Expenditure | 900 |

| | | |
|---|---|---|
| 6 | Net Domestic Capital Formation | 200 |
| 7 | Compensation of Employees | 500 |
| 8 | Net Factor Income from Abroad | (-) 10 |
| 9 | Government Final Consumption Expenditure | 400 |
| 10 | Profit | 220 |
| 11 | Mixed Income of Self Employed | 400 |
| 12 | Interest | 230 |

**ANS:**

**(a) Externality occurs when the actions of consumers or producers give rise to negative or positive side effects on third party who are not part of these actions, and whose interests are not taken into consideration. E.g. :- introduction of metro rail on one hand has increased the prices of property but has also saved the time and money of general public and has provided safe means of transport**

**(b) National Income by Expenditure Method = Private Final Consumption Expenditure + Government Final Consumption Expenditure + Net Domestic Capital Formation + Net Exports + NFIA - NIT**

**National Income by Expenditure Method = v + ix + vi + iii + viii - ii**

**National Income by Expenditure Method = 900 + 400 + 200 + (-25 ) + (-10) - 100**

**National Income by Expenditure Method = ₹1365 crores**

**OR**

Will the following factor income be included in domestic factor income of India? Give reasons for your answer:-

a) Compensation of employees to the resident of Japan working in Indian embassy in Japan.
b) Payment of fees to a Chartered Accountant by a firm
c) Rent received by an Indian resident from Russian embassy in India.
d) Compensation given by insurance company to an injured worker.

**ANS:**

**(a) Yes it will be included as its part of Factor Income earned in domestic territory of the country.**

**(b) Payment of fees to a Chartered Accountant is an intermediate expenditure for the firm. Hence it is to be deducted from the value of output of the firm to obtain value added. Hence it is not included in domestic factor income of India**

**(c) No, as rent received by Indian resident from Russian embassy will be part of Factor Income received from abroad as Russian Embassy is not part of domestic territory of the country.**

**(d) No, as compensation is given by insurance company to employee and not by employer.**

23. State whether the following statements are true or false. Give valid reasons for your answers. 6

a) Unplanned inventories accumulate when planned investment is less than planned saving.
b) Deflationary gap exists when aggregate demand is greater than aggregate supply at full employment level.
c) Average propensity to save can never be negative.

**ANS:**

**(a) True, as planned savings are more causing the Marginal Propensity to Consume to reduce thus Aggregate Demand will fall and producers will have accumulation of inventory.**

**(b) False, Inflationary Gap exists when actual Aggregate Demand is more than Aggregate Supply corresponding to full employment level of output in the economy.**

**(c) False, at income levels which are lower than break-even point, Average propensity to save can be negative as there will be dissaving in the economy.**

24. a) 'Devaluation and Depreciation of currency are one and the same thing'. Do you agree? How do they affect the exports of a country? 6

b) What is meant by 'official reserve transactions'? Discuss their importance in Balance of Payments.

**ANS:**

**(a) Depreciation and Devaluation both imply a fall in external value of a currency; however the term depreciation is used under the floating exchange rate system that is when the exchange rate system is determined by the combined market forces of demand and supply. A currency loses or gains value because of fluctuations in demand and supply.**

**The term devaluation is used in a system of fixed exchange rates. In this system, the exchange value of a currency is decided by the government. Devaluation of currency is the deliberate action of the government.**

**Depreciation and devaluation of a currency normally encourages exports from a country, as exports become cheaper for the foreign nationals and foreign currency can now buy more of domestic goods, i.e. the international competitiveness of the goods and services of such a nation gets better.**

**(b) The transactions carried on by monetary authorities of a country, which causes changes in official reserves are termed as official reserve transactions**

**Autonomous receipts and autonomous payments give rise to either deficit or surplus on balance of payments. The central bank may finance a deficit by :**

**i. reducing reserves of foreign currency**

**ii. by borrowing from the IMF or monetary authorities**

**This will be shown as decrease in reserves. The central bank may use surplus to purchase foreign securities, foreign currency, gold etc. which may result in increase in reserves of the nation.**

## SOLVED PAPER - 1

**Section A**

1. In phase I of the law of variable proportions. total product: (Choose the correct alternative) 1

(a) Falls
(b) Becomes negative
(c) Increases at an increasing rate
(d) Decreases at a diminishing rate

**ANS: (C) Increases at an increasing rate**

2. Which of the following costs can never be zero? (Choose the correct alternative) 1

(a) Total variable cost
(b) Average fixed cost
(c) Average variable cost
(d) None of the above

**ANS: (B) Average Fixed Cost**

3. In an imperfectly competitive market, if the Total Revenue is maximum, Marginal Revenue will be..... 1

**ANS: Marginal Revenue = Zero**

4. Non-price competition is the main characteristic of: (Choose the correct alternative) 1

(a) Oligopoly
(b) Monopoly
(c) Perfect competition
(d) Monopolistic competition

**ANS: (A) Oligopoly**

5. A consumer has total money income of ₹500 to be spent on two goods X and Y with prices of ₹50 and ₹10 per unit respectively. On the basis of the given information, answer the following questions: 3

e) Give the equation of the budget line for the consumer.
f) What is the value of slope of the budget line?
g) How many units can the consumer buy if he is to spend all his money income on good X?

How does the budget line change if there is a 50% fall in price of good Y?

**OR**

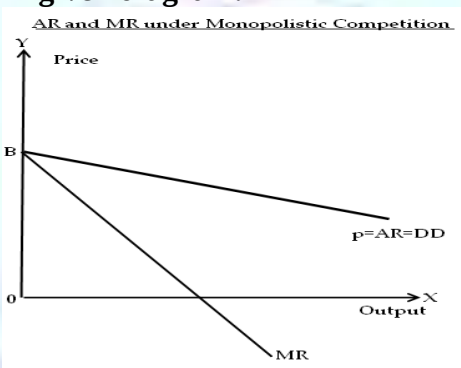
A good is an inferior good for one and at the same time a normal, good for another consumer. Do you agree? Explain.

**ANS: Yes, I agree with the given statement that a good is an inferior. good for one and at the same time, a normal good for another consumer because whether a good is inferior or normal depends upon the income level of the concerned consumer.**

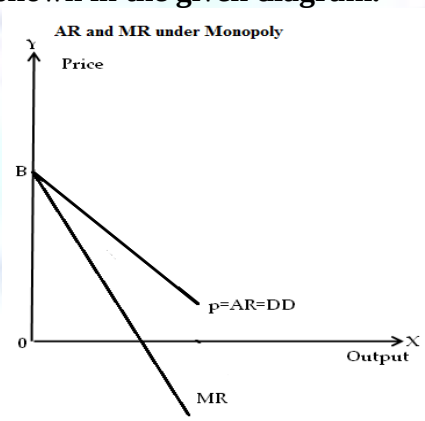
**A good can be an inferior good for a person from a higher income group whereas the same good can be a normal good for a person from a lower income group. For example, toned milk may be a normal good for some but some may consider it inferior as compared to full cream milk. Thus, a good being considered as inferior or normal depends upon the income level of the consumer.**

6. AR curves under both monopolistic competition and monopoly are downward sloping but under one market, it is steeper and under one market, it is flatter. Why is there such a distinction between the two? Explain. (use diagram) 3

**ANS: AR curve is downward sloping under both monopolistic and monopoly markets because in order to sell more units of output, the firm has to reduce its price. Under monopolistic competition, there are very close substitutes of the good available to the consumer. Therefore, demand is t, highly elastic (1.e. more than 1) which leads to a flatter demand (AR) curve as shown in given diagram.**



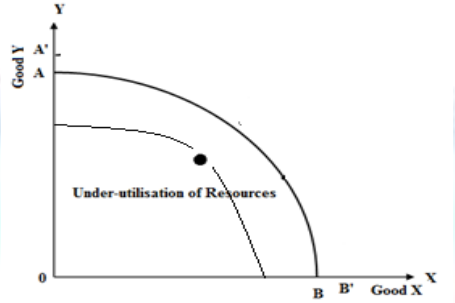

**Under monopoly, there are no close substitutes available for the good. Therefore, it is very easy for the monopolist to charge a higher price for its good and the consumers have no choice but to buy it. The demand here is highly elastic (1.e, less than 1) which leads to a steeper demand (AR) curve as shown in the given diagram.**




7. Economic slowdown in some parts of the world has adversely affected the demand for Indian exports. What will be its effect on the production possibilities frontier of India? Explain 4

**ANS: PPF shows what an economy can produce with the help of its resources. Economic**

**slowdown will reduce the demand for exports and may ultimately bring down the output but this will not affect PPF. Assuming that the country's actual production is somewhere on the PPF. Economic slowdown may result in the economy producing at a point somewhere below the PPF which will indicate underutilisation of resources and actual output, being less than the potential output. This has been shown in the given diagram.**




8. A consumer buys l0 units of a commodity at a price of ₹10 per unit. He incurs an expenditure of ₹ 200 on buying 20 units. Calculate price elasticity of demand by the percentage method, Comment upon the shape of the demand curve based on this information. (Use diagram) 4

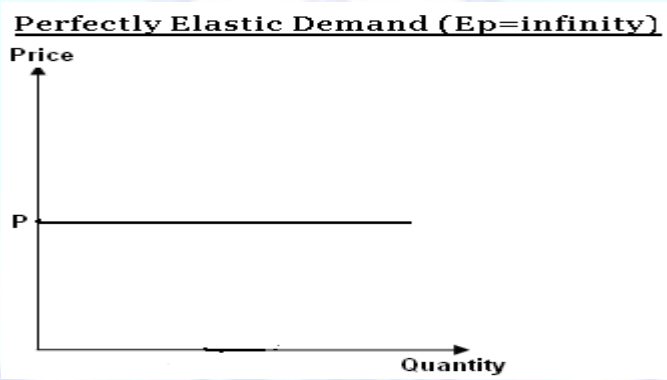
**ANS:**

| Price (₹) | Quantity | Expenditure (₹) |
|---|---|---|
| **10** | **10** | |
| **Price** $= \frac{\text{Expenditure}}{\text{Quantity}} = \frac{200}{20} = 10$ | **20** | **200** |

P = 10, Q = 10, ΔP = (10 – 10) = 0, ΔQ = (20 – 10) = 10

**Price Elasticity** $= \frac{\Delta Q}{\Delta P} \text{ X } \frac{P}{Q} = \frac{10}{0} \text{ X } \frac{10}{10} = \infty$ **(infinity)**

**Price elasticity of demand is infinity. This means percentage change in quantity demanded is infinite with any percentage change in price. The demand curve will be a straight line parallel to the horizontal X – axis**




**OR**

A 10% fall in the price of good X leads to a 20% rise in the demand for good X. A 4% rise in the price of good Y leads to a 12% fall in the demand for good Y. Calculate the price elasticity of demand of goods X and Y.

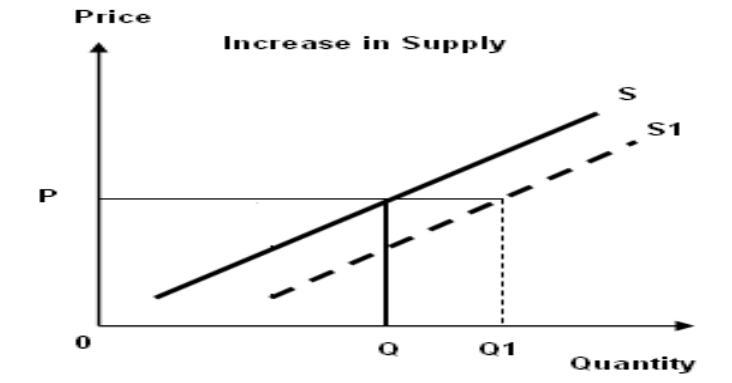
**ANS:**

| Good X | | Good Y | |
|---|---|---|---|
| **Price (₹)** | **Quantity** | **Price (₹)** | **Quantity** |
| **10%** | **20%** | **4%** | **12%** |
| **Ep** $= \frac{\text{\% change in quantity demanded}}{\text{\% change in price}} = \frac{20\%}{10\%} = 2$ **Ep = 2** | | **Ep** $= \frac{\text{\% change in quantity demanded}}{\text{\% change in price}} = \frac{12\%}{4\%} = 3$ **Ep = 3** | |

9. What is meant by 'change in supply'? How does a cost saving technological progress affect market price and the supply of a commodity? Use diagram. 4

**ANS: When supply changes due to changes in factors other than the own price of the commodity, it results in a shift of the supply curve, it is referred to as a "change in supply".**

**Any cost saving or innovative method that uses factors of production to produce more units of output is technological progress. It will lower the firm's marginal cost of output and shift the marginal cost curve rightwards. Therefore, at any given market price, the firm supplies more units of output.**




10. Explain the concepts of Marginal Rate of Substitution and Budget line equation, with the help of numerical examples. 6

**ANS: Marginal Rate of Substitution (MRS) of X for Y is defined as the amount of good Y the consumer is willing to give up to consume an additional unit of good X, while leaving total utility unchanged.**

**For example: A consumer consumes two goods Apple and Banana, the substitution of consumer from one combination of Apple and Banana to another combination of Apple and Banana shows marginal rate of substitution as follows:**

| Combination | Apple (A) | Banana (B) | $MRS_{AB}$ |
|---|---|---|---|
| P | 1 | 15 | - |
| Q | 2 | 10 | 5B:1A |
| R | 3 | 6 | 4B:1A |
| S | 4 | 3 | 3B:1A |
| T | 5 | 1 | 2B:1A |

**Budget Line of a consumer is defined as all possible combinations of the two goods that a consumer can buy, given income and prices. It is mathematically expressed as $XP_1 + YP_2 = M$**

**For example: A consumer consumes two goods X and Y and has an income of ₹10. Both goods X and Y are priced at ₹2 and are available in integer units. Bundles that cost exactly ₹10 or are equal to consumers budget line are: (0,5), (1,4), (2, 3), (3,2), (4, 1), (5,0)**

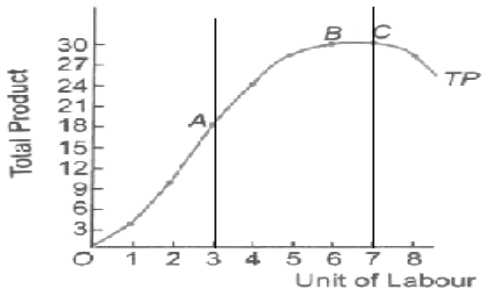
11. What does the law of variable proportions show? State the behaviour of total product according to this law. (Use schedule and diagram). 6

**ANS: Law of variable proportion states that when total output or production of a commodity is increased by adding units of a variable input, while the quantities of other inputs are held constant, the increase in total production, after some point, diminishes.**

**Total Product (TP) is defined as the total quantity of goods and services produced by a firm with the given inputs during a specified period of time.**

**In the law of variable proportion, TP curve starts from the origin, increases at an increasing rate (up to point A) , reaches a maximum (at point C) and finally decreases at an increasing rate**

| Shape of TP Curve |
|---|
| TP rises at an increasing rate(from origin till point A) |
| TP rises at a decreasing rate (from point A to C) |
| TP falls (beyond point C) |

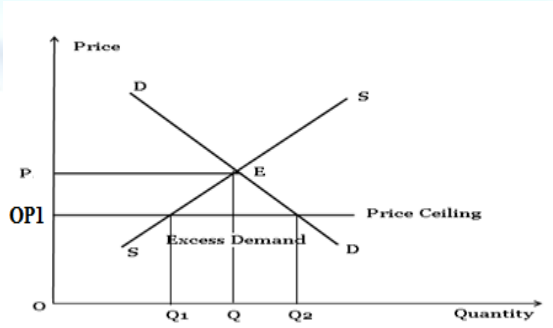



| Fixed Factor (Units of Land) | Variable Factor (Units of labour) | Total Product (TP) | Phase of production |
|---|---|---|---|
| 1 acre | 0 | 0 | Increasing Returns |
| 1 acre | 1 | 4 | |
| 1 acre | 2 | 10 | |
| 1 acre | 3 | 18 | |
| 1 acre | 4 | 24 | Diminishing Returns |
| 1 acre | 5 | 28 | |
| 1 acre | 6 | 30 | |
| 1 acre | 7 | 30 | |
| 1 acre | 8 | 28 | Negative Returns |

12. Suppose the market determined rent for apartments is too high for common people to afford. If the government comes forward to help those seeking apartments on rent by imposing control on rent, what impact will it have on the market for apartments? 6

**ANS: If the government comes forward and imposes control on the maximum rent to be charged for apartments, it will have to be below equilibrium price (i.e. price ceiling) as shown in the given diagram. In the diagram, OP1 is the price fixed by the government which is lower than equilibrium price (OP). This leads to a shortage of apartments as depicted by line gap Q1Q2. The impact of rent control on the market for apartments are as follows:**

a) **There will be a shortage (excess demand) and supplied for apartments i.e. every person who desires to have an apartment will not be able to get the apartments on rent.**
b) **Since all consumers will not get the apartments, some of them will be willing to pay higher rent for the apartments. As a result, there will be black marketing of apartments on rent.**
c) **The builders may provide low quality houses because lower market prices will force them to cut down their cost of production which in turn may lead to inferior quality houses.**

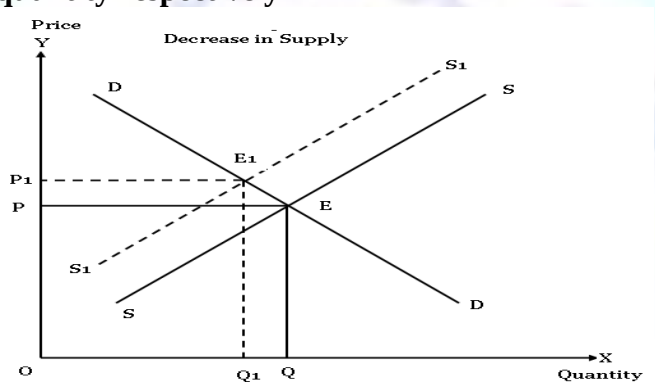


**OR**

The market for motorcycles is in equilibrium. Suppose the price of steel parts (used in motorcycles) increases. Explain the effect of rise in the price of steel parts on the equilibrium price and quantity of motorcycles. (Use diagram)

**ANS: The market for motorcycles is in equilibrium at point E where the original demand curve DD and original supply curve SS intersect. OP and OQ are the original equilibrium price and equilibrium quantity respectively.**

**Since steel parts are the inputs used in the production of motorcycles. Therefore, with the rise in the price of inputs, the cost of production for the producer will also rise which will lead to decreasing profit margins for him. Thus, it will finally result in a decrease in supply. Now when the prices of steel parts rise, the supply for motorcycles decrease i.e. there is a leftwards shift in the supply curve from SS to S1S1, as shown in the diagram. S1S1, intersects DD at point E, which is the new equilibrium point and at this point, OP1 and OQ1, are the new equilibrium price and quantity respectively**




**Conclusions:**

a) **Equilibrium price of motorcycles rises.**
b) **Equilibrium quantity of motorcycles falls.**

**Section B**

13. Goods produced for the satisfaction of wants are called: (Choose the correct alternative) 1
    (a) Capital goods
    (b) Intermediate goods
    (c) Consumption goods
    (d) Producer goods

    **ANS: Consumption goods**

14. What is the income of an individual after payment of direct taxes called? 1

    Disposable Income

15. Balance of trade is equal to: (Choose the correct alternative) 1
    (a) X-M
    (b) X+M
    (a) Both (a) and (b)
    (c) None of the above

    **ANS: X – M**

16. Balance of payment deficit is based on: (Choose the correct alternative) 1
    (a) Capital account transactions
    (b) Autonomous transactions
    (c) Current account transactions
    (d) Accommodating transactions

    **ANS: (B) Autonomous transactions**

17. During a given year, nominal national income increased by 1.4% whereas real national income increased by only 6%. Population increased by 2%. What has caused the difference between nominal income and real income? What is the real per capital income? 3

    **ANS: Nominal income is affected by changes in both price and quantity whereas real income**

**is affected only by change in quantity.**
**Increase in nominal income = 1.4%**
**This 14% includes increase in price as well as increase in quantity.**
**Increase in quantity is represented by the increase in real income i.e. 6%.**
**Increase in Price = 14% (-) 6%**
**= 8% (it is the difference between nominal and real income)**
**Now, Rise in real per capita income = Rise in real national income (-) Rise in population**
**= 6% - 2% = 4%**
**Real per capita income = 4%**

18. What is the difference between revenue expenditure and capital expenditure? 3

**ANS:**

**(a) Revenue Expenditure. An expenditure which does not result in creation of assets or reduction of liability is treated as revenue expenditure. Such expenditures are incurred for the normal running of government departments and maintenance of services. For example: salaries, pensions, interest payments, subsidies, grants, etc.**

**(b) Capital Expenditure. An expenditure which leads to creation of assets or reduction in liabilities is treated as capital expenditure. For example, expenditure on purchasing land, building, shares, etc. It includes loans granted to the State and Union Territories, foreign governments, public enterprises and other parties. Repayment of loans is also capital expenditure because it reduces the liabilities of the government.**

**OR**

**What is the difference between direct tax and indirect tax?**

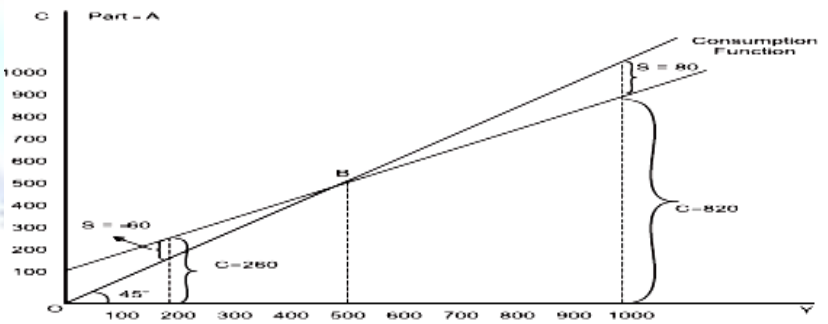
**ANS:**

**(a) Direct Tax. When the liability to pay a tax and the burden of that tax fall on the same person, it is called a direct tax. For example, income tax is a direct tax because the liability of paying this tax is of the person on whose income it is levied and its burden also falls on him. The burden of this tax cannot be shifted on to others. Some other examples of direct tax are gift tax, wealth tax, corporation tax, etc.**

(b) **Indirect Tax. When the liability to pay a tax and the burden of that tax can be on different persons, it is called an indirect tax. For example, sales tax is an indirect tax because the liability to pay sales tax is that of the shopkeeper but he shifts the burden of this tax on the customers. Some other examples are entertainment tax, tax on services, excise duty, etc.**

19. Explain the relationship between income, consumption and APC using a schedule and diagram. 4

**ANS: At any particular level of income, the ratio of consumption to income is called the Average Propensity to Consume (APC). APC continuously declines as income. This means that as income increases, the proportion of income saved increases and the proportion of income consumed decreases**




**(a) At point B (Break-even point) Savings=0 or Consumption equals income (C =Y).**

**(b) Before points B consumption function lies above the 45o line (C>Y), therefore, savings is negative (Dissaving).**

**(c) After point B, consumption function lies below the 45o line (C<Y), therefore, savings is positive.**

20. Give two reasons which led to an inflationary gap in the economy and state its two effects. 4

**ANS: When AD for a level of output is Greater than the equilibrium level OR when the C + I line lies above the 45o line, it means consumers and firms together buy more goods than firms produce (also known as Excess Demand).**

**(a) This leads to an unplanned undesired decrease in inventories of goods.**

**(b) Firms would respond to this unplanned inventory decrease by increasing employment and output.**

**OR**

**Give two reasons which led to a deflationary gap in the economy and state its two effects.**

**When consumers and firms together buy less goods than firm When AD for a level of output is Less than the equilibrium level OR when the C + I line lies below the 45o line, it means s produce (also known as Deficient Demand).**

**(a) This leads to an unplanned undesired increase in inventories of unsold goods.**

**(b) Firms would respond to this unplanned inventory increase by decreasing employment and output.**

21. Explain briefly the qualitative methods which a central bank may adopt for controlling the volume of credit. 4

**ANS:**

1) **Imposing margin requirement on secured loans: A margin is the difference between the amount of the loan and market value of the security offered by the borrower against the loan. Changing the margin requirements, the Central Bank can change the amount of loans made against securities by the banks. High margin requirements discourage speculative activities and divert resources from unproductive speculative activities to productive investments.**
2) **Moral Suasion: This is a combination of persuasion and pressure that the Central Bank applies on the other banks in order to get them to fall in line with its policy. This is exercised through discussions, letters, speeches and hints to banks. The Central Bank frequently announces its policy position and urges the banks to fall in line. Moral suasion can be used both for quantitative as well as qualitative credit control.**
3) **Selective Credit Controls (SCCs): These can be applied in both a positive as well as a negative manner. Application in a positive manner would mean using measures to channel credit to particular sectors, usually the priority sectors. Application in a negative manner would mean using measures to restrict the flow of credit to particular sectors.**

22. (1) Find (a) Fiscal deficit, and (b) Primary deficit from the following information: 6

| | | |
|---|---|---|
| 1. | Revenue expenditure | 70,000 |
| 2. | Borrowings | 15,000 |
| 3. | Revenue receipts | 50,000 |
| 4. | Interest payments | 25% of revenue deficit |

(2) Categorise the following government receipts into revenue receipts and capital receipts. Give reasons:

(a) Borrowings from the public
(b) Profits of PSUs
(c) Receipts from the sale of shares of PSUs

**ANS: Fiscal deficit = Borrowings**
**= ₹15,000 crores**
**Revenue deficit = Revenue expenditure - Revenue receipts**
**= ₹70,000 (-)₹50,000**
**= ₹20,000 crores**
**Primary deficit = Fiscal deficit (-) Interest payments**
**= ₹15,000 (-) 25% of 20,000**
**= ₹15,000 (-)₹5,000**
**= ₹10,000 crores**

**(a) Borrowings from the public are a capital receipt because it results in the creation of liability.**

**(b) Profits of PSUs are a revenue receipt because it neither creates liability nor reduces assets.**

**(c) Receipts from the sale of shares in PSUs are a capital receipt because it results in the reduction of assets.**

**OR**

Given the consumption function C = 100 + 0.75Y and the autonomous investment expenditure as 1,100, calculate:

(a) Equilibrium level of income
(b) Consumption at the equilibrium level of income
(c) Investment multiplier

**Given: C = 100 + 0.75Y and I = ₹1,100**

**At equilibrium**

**(a)** **Y = C + I**
**OR Y = $\bar{C}$ + by + I**
**Y = 100 + 0.75Y + 1,100**
**Y – 0.75 Y = 1200 (Let Y = 1)**
**0.25Y = 1200**
**Y = $\frac{1200}{0.25} = 4,800$**
**Y = 4, 4800**

**(b)** **Y = C + I**
**4, 800 = C + 1, 100**
**C = 4, 800 – 1, 100**
**C = 3, 700**
**MPC = 0.75**

**(c)** **K = $\frac{1}{1-MPC} = \frac{1}{1-0.75} = \frac{1}{0.25}$ K = 4**

23. How will you treat the following while estimating the national income of India? Give reasons to your answer. 6

(a) Imputed rent of self-occupied houses
(b) Interest received on debentures
(c) Sale of debentures
(d) Dividend received by a foreigner from investment in shares of an company

**ANS:**

**(a) Included: The owners of houses are using the productive services of their houses.**
**(b) Not Included: It is a transfer payment. No productive activity is done.**
**(c) Not Included: It is only a financial transaction. It is a transfer of ownership title.**
**(d) Included: It is factor paid to abroad. It is paid for the productive services of capital.**

24. Calculate (a) GNPmp and (b) Net National Disposable Income from the following information: 6

| | | ₹ crores |
|---|---|---|
| 1. | Compensation of employees | 4, 000 |
| 2. | Rent | 800 |
| 3. | Profits | 1, 500 |
| 4. | Undistributed earnings | 400 |
| 5. | Mixed income of the self-employed | 1, 800 |
| 6. | Net imports | 30 |
| 7. | Net investment | 900 |
| 8. | Gross domestic fixed capital formation | 1,000 |
| 9. | Inventory investment | 50 |
| 10. | Interest | 900 |

| | | |
|---|---|---|
| 11. | Net indirect taxes | 500 |
| 12. | Net current transfer from ROW | 60 |
| 13. | Net factor income to abroad | (-) 80 |

**Ans: GNPmp = Compensation of employees + Rent + Interest + Profits + Mixed income of the self-employed + Consumption of fixed capital + Net indirect taxes - Net factor income to abroad**
**= 4, 000 + 800 + 900 + 1, 500 + 1, 800 + (1, 000 + 50 – 900) + 500 – (-) 80**
**= 4, 000 + 800 + 900 + 1, 500 + 1, 800 + 150 + 500 + 80**
**= ₹9, 730**
**Net National Disposable Income = GNPmp - Consumption of fixed capital + Net current transfer from ROW**
**= 9, 730 - (1, 000 + 50 – 900) + 60**
**= 9, 730 – 150 + 60**
**= ₹9, 640**

## SOLVED PAPER - 2

**SECTION A**

1. A firm is able to sell any quantity of a good at a given price. The firms Marginal Revenue will be: (Choose the correct alternative) 1
   (a) Greater than Average Revenue
   (b) Less than Average Revenue
   (c) Equal to Average Revenue
   (d) Zero
   **Ans.: Equal to Average Revenue**
2. If it is given that the Total Variable Cost for producing 15 units of output is ₹ 3000 and for 16 units is ₹ 3500. Find the value of Marginal cost. 1
   **Ans.: ₹ 500**
3. Define Marginal Rate of Transformation. 1
   **Ans.: It is the rate at which amount of one good is sacrificed to produce one more unit of other good. It is the ratio of number of units of a good sacrificed)**
4. What causes an upward movement along a supply curve of a commodity? 1
   **Ans.: A rise in price of a commodity causes an upwards movement along a supply curve.**
5. At a given market price of a good a consumer buys 120 units, when price falls by 50 percent he buys 150 units. Calculate price elasticity of demand. 3
   **Ans.: Elasticity of Demand= % change in quantity demand/percentage change in price**
   **25/50 =1/2 = 0.5**
6. Why does an economic problem arise? Explain the problem of how to produce? 3
   **Ans.: An economic problem arises due to scarcity of resources having alternative uses in relation to unlimited wants.**
   **The problem of how to produce means that what technique of production should be employed to produce a good. Generally, the techniques of production are classified into labour intensive and capital intensive. Labour intensive technique use more units of labour than capital. Capital intensive technique uses more capital than labour. The aim is maximum output with minimum cost**.

   **OR**

   Explain by giving reason, why production possibilities curve is concave.
   **Ans.: A production possibility curve is concave to the origin because of increasing marginal opportunity cost or marginal rate of transformation. The increasing marginal rate of transformation means that for additional unit of a good the sacrifice of other good goes on increasing. Since the sacrifice of other good goes on increasing, production possibility curve**

**would be concave to the origin. This behaviour is based on the assumption that all resources are not equally efficient in the production of all goods.**

7. Explain the effect of the following on the supply of a commodity. 4

**ANS:**

**(i) Fall in the price of factor inputs: When the price of factor inputs decreases, the cost of production decreases. Thus it becomes more profitable to produce the commodity and so its supply will increase and hence, supply curve will shift to the right.**

(ii) **Rise in the price of substitute goods. When the price of substitute good rise, it becomes relatively more profitable to produce these goods in comparison to the given good. This results in diversion of resources from the production of given good to other goods. So, the supply of the given good decreases and the supply curve shift leftward.**

8 A consumer consumes only two goods X and Y. At consumption level of these two goods, he finds that the ratio of marginal utility of price in case of X is higher than in case of Y. Explain the reactions of the consumer. 4

**ANS: A consumer attains equilibrium in case of two commodities when the ratio of marginal utility two goods and their prices are equal. i.e. per rupee Mux=per rupee MUy**

**Mux/Px = MUy/Py i.e. per rupee x = per rupee MUy**

**If MUx/Px is not equal to MUy/Py, then the consumer is not in equilibrium.**

**If Mux/Px is greater than MUy/Py, then per rupee Mux is greater than per rupee MUy. He will buy more of X and less of Y. this will reduce Mux and increase MUy. These changes will continue till Mux/Px= MUy/Py and he will be in equilibrium.**

9. What is minimum price ceiling? Explain its implications. 4

**ANS: Minimum price ceiling can also be referred to as 'price floor'. It means the minimum price fixed by the government for a commodity in the market to protect the interest of the producers. The government in most countries fixes price floor for agricultural products, food grains in particular. The implication of price floor is that leads to excess supply in the market. The government buys this excess supply to be stored in the form of buffer stocks and be used at the time of shortage.**

**OR**

Explain 'black marketing' as a consequence of price ceiling.

**ANS: Price ceiling means maximum price of a commodity that the seller can charge from the buyers. Often the government fixes this price much below the equilibrium price of a commodity. So that it becomes within the reach of the poor sections of the society. It is resorted to protect the interest of the consumers.**

**However it leads to excess demand and black marketing. Black marketing is a situation in which controlled commodity is sold at a price higher than the price fixed by the government. This situation arises because of:**

**(a) Presence of such consumers who are willing to pay more than the ceiling price**

**(b) Presence of excessive influential and wealthy consumers in large numbers.**

10. Explain the implication of the following features of perfect competition. 6

**ANS:**

(a) **Large number of buyers and sellers: A perfectly competitive market is dominated by very large number of buyers and sellers of a commodity. It means that there is no such buyer or seller in the market whose purchase or sale is so large as to impact the total sale or purchase in the market. Each buyer/seller has only a fractional share in the market demand/supply. Each buyer or seller has to accept the price as it is in the market. Therefore it is said that a firm under perfect competition is a price taker not a price maker.**

(b) **Freedom of Entry and Exit of a firm: A firm can enter or exit the industry any time. In order to analyses the implication of the feature we need to focus on short period and long period situation. Because of free entry and exit, a firm in the long run earns only**

**normal profit. In case extra normal profits are earned, new firms will leave join the industry. Market supply will increase; price will fall, in case of extra normal losses, some of the existing firms will leave the industry. Market supply will decrease, market price will increase. Hence there will be neither supernormal profit or loss in the long run**

11. Complete the following table: 6

| Output(units) | Marginal Cost (₹) | Average variable cost (₹) | Total cost (₹) | Average Fixed Cost (₹) |
|---|---|---|---|---|
| 1 | 60 | -- | 120 | -- |
| 2 | -- | -- | 174 | -- |
| 3 | -- | 54 | -- | -- |
| 4 | 54 | -- | -- | 15 |
| 5 | -- | 57 | 345 | -- |

**ANS:**
**Marginal Cost : 54 , 54,54, 69**
**Average Variable cost: 60, 57, 54**
**Total Cost : 222, 276**
**Average fixed cost : 60, 30, 20, 15, 12**

12. Define demand. Explain the factors influencing individual households demand for a commodity in the market. 6

**ANS:** Demand means the quantity of a commodity that consumers wish to purchase in the market in a given period of time and at various prices.

Factors affecting individual household demand are:

1) **Own price of the commodity: when the price of a commodity rises in the market, its demand contracts and with a fall in price, its demand expands.**
2) **Price of related goods: Demand for a commodity is also influenced by change in price of related goods. These are of two types:**

(a) **Substitute goods: These are the goods which can be substituted for each other such as tea and coffee. In such cases increase in price of one, causes increase in demand for the other and decrease in the price of one, causes decrease in the demand for the other.**

(b) **Complementary goods: These goods are demanded together. Pen and ink, car and petrol. In case of complementary goods, a fall in the price of one causes increase in the demand for the other and a rise in the price of one causes decrease in the demand for the other.**

3) **Income of the consumer: Change in the income of the consumer also influences his demand for different goods. The demand for normal goods tends to increase with increase in income and decrease with decrease in income. The demand for inferior goods like coarse grain etc. tends to decrease with increase in income and increase with decrease in income.**

**OR**

What is Indifference curve? What are the properties of Indifference curve?

**ANS: An Indifference curve is the curve which represents all those combinations of two commodities, which give the same level of satisfaction to a consumer.**

**(i) Indifference curves slope downwards from left to right because to increase the consumption of one good, the consumption of the other good has to be reduced.**

**(ii) Indifference cure is always convex to the origin because marginal rate of substitution tends to fall.**

**(iii) Indifference curves can never touch or intersect each other because the same combination of two goods cannot give two different levels of satisfaction.**

**SECTION – B**

13. What is ex-ante aggregate demand? 1

**ANS: Ex-ante aggregate demand means the planned expenditure on purchase of goods and services in an economy.**

14. Define Money supply. 1

**ANS: Money supply refers to the stock of money in circulation among the public at a particular point of time. It consists of currency and coins with public and demand deposits of commercial banks.**

15. Give the meaning of autonomous consumption. 1

**ANS: The consumption expenditure at zero level of income is called autonomous consumption.**

16. Define Statutory Liquidity Ratio. 1

**ANS: It is the ratio of deposits which commercial banks are required to keep with themselves.**

17. What is foreign exchange rate? State two sources of demand of foreign exchange. 3

**ANS: Foreign exchange rate refers to the rate at which the currency of one country is exchanged with the currency of another country.**

**Following are the two sources of demand of foreign exchange:**

**(i) To purchase goods and services from other countries by domestic residents**

**(ii) To invest and purchase financial assets in some other country.**

**OR**

Explain the relation between Foreign Exchange rate and supply of foreign exchange.

**ANS: There is a direct relation between foreign exchange rate and supply of foreign exchange. Higher the exchange rate, higher the supply of foreign exchange and lower the exchange rate, lower the supply of foreign exchange. Graphically the supply curve of foreign exchange is upward sloping signifying the direct relation between foreign exchange rate and supply of foreign exchange.**

18. What is Balance of Payments? State the components of capital account of balance of payments. 3

**ANS: Balance of payment is record of economic transactions that take place between one country and the rest of the world during one year. It takes into account the exchange of both visible and invisible items.**

**(i) External assistance**

**(ii) Commercial borrowing including borrowing from IMF**

**(iii) Non-residents deposits**

(iv) **Foreign investments in the form of portfolio investment and foreign direct investment**

19. Explain the role of the following in correcting deficient demand in an economy. 4

**ANS:**

(i) Open Market operation:

**Ans.: For correcting deficient demand in the economy, central bank purchase government securities in the open market. By buying government securities, the central bank will pay the price of the securities to the sellers, commercial banks. As a result the lending capacity of the commercial bank will go up and they will expand credit for investment by businessmen. Aggregate demand will increase which will help to correct deficient demand.**

(ii) Bank Rate:

**Ans.: It is the rate at which central bank lends to the commercial bank. In a situation of deficient demand the central bank decreases the bank rate. As a result the interest rate for lending also decreases. Investment is stimulated which brings about increase in aggregate demand and help in correcting deficient demand.**

**OR**

Explain the meaning of investment multiplier. What can be its minimum value and why?

**ANS: Investment multiplier is defined as the ratio of change in income to change in**

**investment.**
**Multiplier K = Change in Income/ change in Investment.**
**The value of multiplier is determined by Marginal Propensity to consume. It is directly related with MPC.**
**K=1/1-MPC**
**Minimum value of multiplier is 1 as the minimum value of MPC is zero, so the minimum value of k will be one.**

20. How will you treat the following while estimating National Income of India? 4

**ANS:**

(i) Dividend received by an Indian from his investment in shares of a foreign company.
**Ans.: It is included in National income of India as it is factor income received from abroad.**

(ii) Profits earned by a branch of an Indian bank in Canada,
**Ans.: It is income received from abroad; hence it is included in the national income of India.**

21. Explain the banker to the government function of the central bank. 4

**ANS: The central bank act as a banker to the government in various ways:**
**It accepts and makes payment for the government and carries out exchange, remittance and other banking operations.**
**It provides short term loans to the government. It provides foreign exchange resources to the government to repay external debt. It manages public debt. It advices the government on all financial matters.**

In an economy, Consumption Function (C) =1000 + 0.5Y, Investment (I) = ₹ 2000. Calculate

22 (i) Equilibrium level of Income (Y) 6
(ii) Saving at equilibrium level of Income (S)
(iii) Average Propensity to consume at equilibrium level of income.

**ANS: (i) C = 1000+0.5Y , I =2000 and Y=C+I**
**Y=1000+0.5+2000**
**0.5Y=1000+2000**
**0.5Y=3000 Y=3000/0.5=6000**
**(ii) S = Y-C C= 1000+0.5x6000 = 4000**
**S= 6000-4000 = 2000**
**Average Propensity to consume = Consumption/Income = 4000/6000=0.67**

23 Distinguish between : 6

**ANS:**

**(i) Capital Expenditure and Revenue Expenditure**
**Capital expenditure is that expenditure which leads to creation of an asset or reduction in liabilities. Such expenditure is financed out of borrowing from the public and foreign bodies.**
**Example: construction of roads, bridges, grant of loans etc.**
**Revenue Expenditure is that expenditure of the government which does not result in creation of any assets or reduction in liability. It is financed out of revenue receipts.**
**Examples: Expenditure on payment of salary, pension etc.**

**(ii) Fiscal deficit and primary deficit:**
**Fiscal deficit is defined as the excess of all expenditure over total receipts net of borrowings.**
**Fiscal deficit= Total budget expenditure – Total budget receipts net of borrowings.**
**(i) Primary Deficit: It is the excess of fiscal deficit over interest payments on public debt.**
**Primary deficit= Fiscal deficit – Interest payments.**
**Fiscal deficit is a wider concept than primary deficit.**

**OR**

Define Revenue deficit. Briefly explain the implications of Revenue deficit and measures to reduce

revenue deficit.

**ANS: Revenue deficit refers to the excess of revenue expenditure of the government over its revenue receipts.**

**Revenue deficit = Total Revenue Expenditure-Total Revenue Receipts.**

**Implications:**

**(i) Revenue deficit indicates dis-savings on government account because the government has to make up uncovered gap.**

**(ii) Revenue deficit implies that the government has to cover this uncovered gap by drawing upon capital receipts either through borrowing or through sale of its assets.**

**(iii) Since government is using capital receipts to meet consumption expenditure of the government which leads to an inflationary situation in the economy.**

**Measures to reduce revenue deficit:**

**(i) Government should reduce its unproductive or unnecessary expenditure.**

(ii) **Government should increase its receipts from various sources of tax and non-tax revenue.**

24. From the following data calculate Gross National Product at Factor Cost by (a) Income Method and (b) Expenditure Method: 6

| | **Items** | ₹ (in crores) |
|---|---|---|
| 1. | Government final consumption expenditure | 500 |
| 2. | Net Indirect Taxes | 80 |
| 3. | Net Domestic capital formation | 200 |
| 4. | Profits | 400 |
| 5. | Net current transfers from Rest of the World | (-) 80 |
| 6. | Rent | 250 |
| 7. | Consumption of fixed capital | 60 |
| 8. | Private final consumption expenditure | 1000 |
| 9. | Interest | 150 |
| 10. | Net Export | (-) 20 |
| 11. | Net Factor income from abroad | (-)10 |
| 12. | Compensation of employees | 800 |

**ANS: Income Method**

**NDPFC + Net factor Income from abroad +Depreciation**

**= (Compensation of employees + Rent + Interests + Profits) + Net factor Income from abroad +Depreciation**

**= (800 + 250 + 150 + 400) + (-)10 + 60**

**= 1600 + (-)10 + 60**

**= ₹ 1650cr**

**Expenditure Method**

**GNP Fc = GDPMp – Net Indirect Taxes + Net factor Income from abroad**

**= (Private final consumption expenditure + Government final consumption expenditure + Net Domestic capital formation + Consumption of fixed capital + Net Export) – Net Indirect Taxes + Net factor Income from abroad**

**= (1000 + 500 + 200 + 60 + (-) 20) -80 + (-)10**

**= 1740 – 80 + (-)10**

**= ₹1650 crores.**

# SOLVED PAPER - 3

## SECTION A

1. How does the nature of the product under monopoly and monopolistic market differ from each other? 1

   **ANS: Under monopoly firm produces a unique product which has no close substitute. Under monopolistic competition firms produce goods which are close substitutes.**

2. What makes the Average Revenue curve coincides with Marginal Revenue curve under conditions of perfect competition? 1

   **ANS: Under perfect competition market price is constant and firm sell all the units at the same price.**

3. What can you say about Average Product and Marginal Product when Average Product reaches maximum and constant? 1

   **ANS: When AP reaches maximum and constant MP=AP**

4. If a firm's production department data says that the total product of 8 units of labour and 10 units of labour is 1500 units and 1700 units respectively, marginal product of $10^{th}$ unit of labour will be: (Choose the correct alternative) 1

   a) 100 units
   b) 150 units
   c) 200 units
   d) 250 units

   **ANS: (B) 150 units**

5. Define price elasticity of demand. For a commodity $\Delta P/P$ =-0.2, and price elasticity of demand for the good is -0.6. Find percentage change in quantity demanded. 3

   **ANS:**
   **% change in price is -20%. Ed=-0.6**
   **Ed= %change in quantity / %change in price**
   **-0.6=%change in quantity / -20%**
   **%change in quantity=-20x-0.6=12%**

6. Using appropriate schedule, briefly explain the determination of market equilibrium. 3

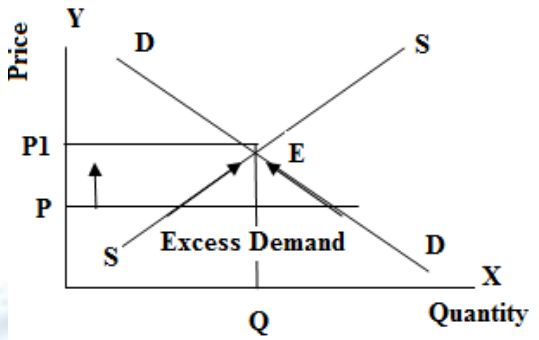
   **ANS: Market equilibrium is a situation at which market demand is equal to market supply. Market demand is inversely related to price. Consumers want to maximize their satisfaction. Consumers demand more at a lower price and less at a higher price**
   **Market supply is directly related to price Sellers wants to maximize their profits. They sell more at a higher price and less at a lower price**

| Market Price | Demand | Supply | |
|---|---|---|---|
| 5 | 10 | 50 | |
| 4 | 20 | 40 | |
| 3 | 30 | 30 | Equilibrium |
| 2 | 40 | 20 | |
| 1 | 50 | 10 | |

**OR**

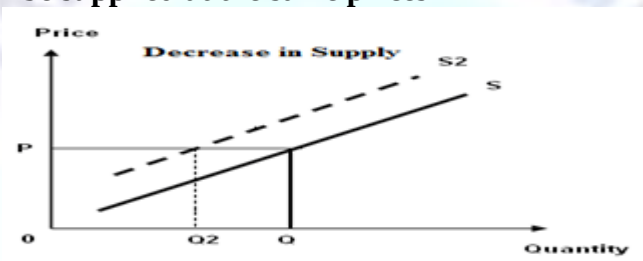
If market price below the equilibrium price, what are the likely adjustment that can take place? Explain with diagram.

**ANS: If market price is below equilibrium, Quantity demanded is more than the quantity supplied. It creates an excess demand. Excess demand will push up the market price. When price rises supply expands and demand contract. This process will continue till the equilibrium is reached where quantity demanded is equal to quantity supplied and the excess demand is wiped out.**

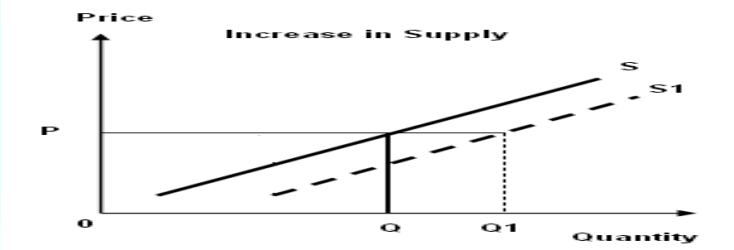



7. Consider market supply of cotton cloth. How does it change under the following situations: 4
   a) Price of raw cotton increases due to poor harvest.
   b) Introduction of new cost effective technology of production.

**ANS: A. Raw cotton is the input for cotton cloth. If price of raw cotton increases the input cost. Marginal cost increases. MC shift up to left. Supply curve will shift to left. Supply decreases. Less only can be supplied at the same prices**

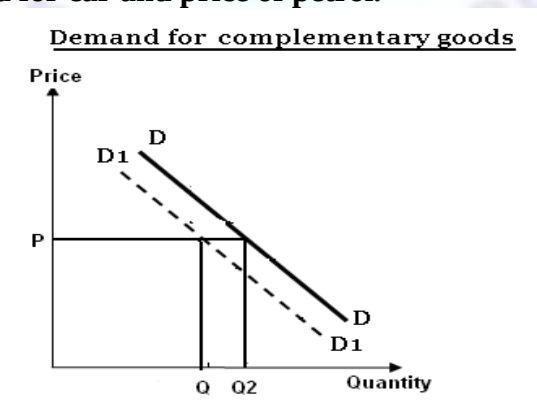



**B. Improvement in technology of production reduces marginal cost of production. Marginal cost curve shift down to right. Supply curve shift to right. Supply increases. More can be supplied at the same price**



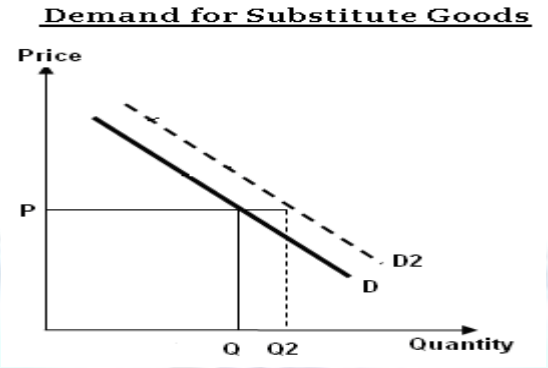

8 Explain the effect on demand for a good under the following situation. 4
   a) When price of its complementary good increases
   b) When price of its substitute decreases.

**ANS: A good is said to be complementary to B if an increase in price of good B decreases the demand for good A. Complementary goods are those goods which are demanded together to satisfy one want. Demand for good will decrease if price of complementary goods increases and vice versa. E.g. demand for car and price of petrol.**




**Good A is substitute of good B. A decrease in price of good A increases the demand for good A. These are used one in place of the other and provide the same satisfaction and can be used with same ease. Demand for a good will shift to right (increase) if price of its substitute rise**

**and demand for a commodity will shift to left (decrease) if the price of its substitute decreases. E.g. demand for tea and price of coffee.**




9. Define a production possibility curve. Draw a production possibility curve for each of the following situation. 4
   a) When Marginal opportunity cost is diminishing
   b) When Marginal opportunity cost is increasing
   c) When marginal opportunity cost is constant.

**ANS: It shows various combinations of two goods that can be produced with available technologies and with given resources, which are fully efficiently utilized**
**When MOC is diminishing PPC is concave to the origin**
**When MOC is increasing PPC is convex to the origin**
**When MOC is constant PPC is straight line.**

**OR**

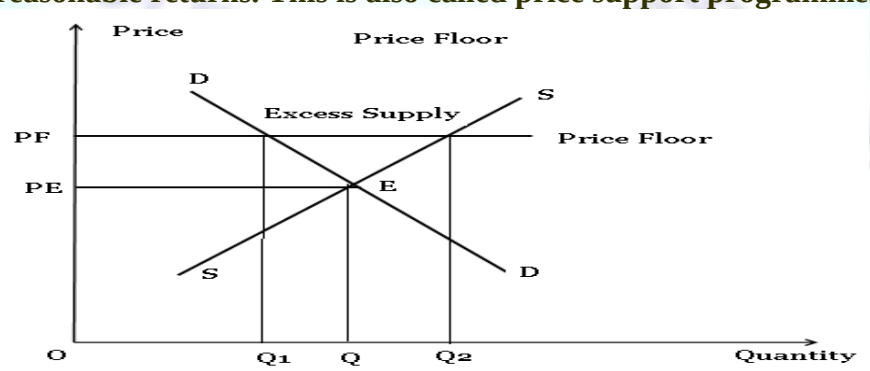
Define economic problem. How these problems are solved in different economic systems?

**ANS: Economic problems: Problems of making choices in the presence of scarcity of resources.**

**a) In a centrally planned economy, government or central planning authorities plan all important activities of the economy. All decisions related to production, exchange and consumption of goods and services are made by the government.**
**b) In a market economy (capitalist economy) all economic activities are organised through market. Free interaction of market forces of demand and supply will solve the economic problems.**
c) **In a mixed economy, some important decisions are made by the government in the public sector while economic activities are by and large conducted through the market in the private sector.**

10. Define price floor. What is the common purpose of fixing of floor price by the government? Explain the likely consequences of this nature of intervention by the government. 6

**ANS: It is the minimum price fixed by the government on certain good. Government fixes the minimum price in order to prevent the price falling from certain level so that the producers are assured of reasonable returns. This is also called price support programme.**




**PE is equilibrium price at which demand=supply. If this price is too low for the producers so that they incur loss, government fixes a price floor or support price PF. It has the following consequences.**

**a) Surplus production: - At a higher price, producers produce more but demand falls.**

**This creates a surplus production equal to Q1Q2.**

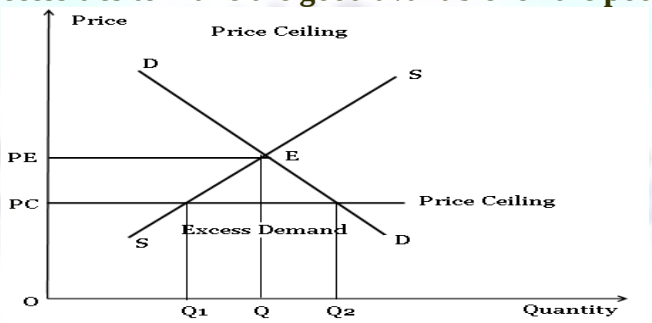
b) **Buffer Stock: - In order to keep the support price government has to procure this surplus at the floor price. This lead to creation of buffer stock**

c) **Problem of subsidies: - Government buys the goods at the support price and sells at a lower price in the market. This price difference becomes subsidies. Government has to incur this cost of subsidies.**

**OR**

Define price ceiling. What is the common purpose of fixing of ceiling price by the government? Explain the likely consequences of this nature of intervention by the government.

**ANS: Price ceiling: - It is maximum allowable price for a good or service by the government. The government imposes an upper limit on price of a good is called a price ceiling. It is generally imposed on necessities to make the good available for the poor section also.**




**PE is the equilibrium price at which DD=SS. If this price is too high for the poor section of the population, government fixes a ceiling price PC. It has the following effects.**

a) **Shortage At a lower price m PC demand increases to Q2, but supply falls to Q1. This will create a shortage of Q1 Q2 for the good ion the market.**

b) **Ration coupons: - In order to ensure the availability of the good equally to all government has to adopt rationing by giving a fixed quantity of the good to everyone. Each consumer has to stand in a long queue to buy goods.**

c) **Black marketing: - Some consumers are willing to pay a higher price. This may create black marketing.**

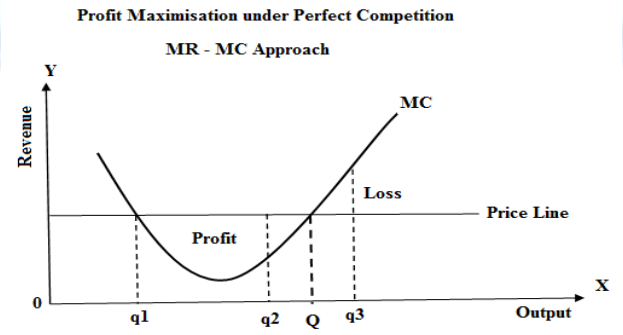
11. Briefly explain the marginal cost and marginal revenue approach of producer equilibrium under conditions of perfect competition. Use diagram. 6

**ANS: In perfect competition Market Price is constant so that it is equal to Marginal revenue. Market price becomes addition to total revenue from an additional unit of output produced.**

**If Market price is more than the marginal cost, addition to total revenue is more the addition to total cost when firm increases the output. Firms can increase profits by increasing output. Firm cannot be at equilibrium because it wants to increase the output.**

**If market price is less than the marginal cost, addition to total cost is more than the addition to total revenue by increasing the output. Profit falls by increasing the output. On the other hand if the firm reduces the output, decrease in total cost is more than the decrease in revenue. Firm can increase the profits by reducing the output Firm cannot be at equilibrium because it wants to reduce the output.**

**This means that firm can make maximum profit when market price is equal to marginal cost and firm is at equilibrium when it produces a level of output when market price is equal to marginal cost.**



**At q2 output Price is more than the MC. Firm increases Output. By increasing the output to Q. Increase in Total Revenue q2 Q is more than the increase in total cost. Firm's gross profit will increase by an area ABE.**

**At q3 level of output MC is more than Price. Firm will reduce the level of output. By reducing the output, decrease in total cost is more than decrease in total revenue (q3 Q). Firm can increase the profit by reducing the output.**

At output Q, MC=Price, firm gets maximum profits and is at equilibrium.

12. A consumer is in a state of equilibrium consuming two goods X and Y, with given price $P_x$ and $P_y$ respectively. Explain what will happen if: 6
    a) $MU_x/P_x$ is greater than $MU_y/P_y$
    b) $P_y$ falls

**ANS: A consumer is in a state of equilibrium consuming two goods X and Y, with given price $P_x$ and $P_y$ respectively.**

**If $MU_x/P_x$ is greater than $MU_y/P_y$ .**

**Consumer is at equilibrium when ratio between MU and Price of goods are equal in each case. MUx/Px must be equal to MUy/Py.**

**If MUx/Px>MUy/Py, consumer should buy more units of X so that MUx will come down and consumer should buy less units of Y so that MUy will increase till MUx/Px becomes equal to MUy/Py.**

**If Py falls MUy/Py will increase and become more than MUx/Px. Consumer should buy more units of Y and less units of X in such a way that MUx/Py becomes equal to MUy/Py**

## SECTION B

13. What is deficit financing? 1

**ANS: Financing the deficit in government budget through borrowing from the central bank by on the surety of government bond and securities is called deficit financing.**

14. What happens to exports when Foreign exchange rate rises? 1

**ANS: Export will increase**

15. Which one of the following is a revenue receipt and why? (Choose the correct alternative) 1
    a) Receipts from disinvestment
    b) Sale of government bonds
    c) Provident fund deposits
    d) Dividends from public sector undertakings.

**ANS: (D) Dividend from public sector undertakings. It does not create any liability or reduce assets.**

16. How is revenue budget different from capital budget? 1

**ANS: Revenue budget includes receipts and expenditure that do not influence assets and liabilities. Capital budget is the account of assets and liabilities of the government**

17. How are the following treated in National Income? 3
    a) Rent received by the resident of the country for the building rented out for American embassy.
    b) Wages and salaries received resident employees working in the branch of a foreign bank
    c) Money received by an individual from his relative working in a foreign country.

**ANS:**

**Included because it is factor income from abroad.**

**Included because it is a factor income**

**Not included. It is transfer payment received.**

18. Complete the following table 3

| Income ₹ | Consumption ₹ | MPC | APS |
|---|---|---|---|
| 500 | 100 | -- | -- |
| 600 | -- | 0.5 | -- |
| 700 | -- | 0.5 | -- |
| 800 | -- | 0.5 | -- |
| 900 | -- | 0.5 | -- |

**ANS:**

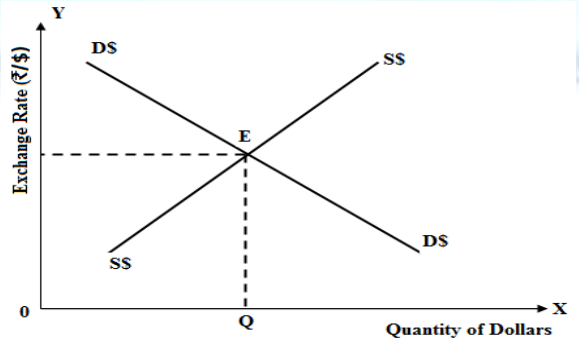
| **Income ₹** | **Consumption ₹** | **MPC** | **APS** |
|---|---|---|---|
| **500** | **100** | **--** | **0.8** |
| **600** | **150** | **0.5** | **0.75** |
| **700** | **200** | **0.5** | **0.71** |
| **800** | **250** | **0.5** | **0.69** |
| **900** | **300** | **0.5** | **0.67** |

19. Calculate autonomous consumption from the following assuming the economy is at equilibrium. 4
National income= ₹1250 crores
Marginal propensity to save=0.2
Investment expenditure = ₹150 crores
**ANS: Y=₹1250; b=1-0.2=0.8; I=150; Let C*=Autonomous consumption**
**Y= C*+bY+I; 1250=C*+0.8x1250+150; ₹1250 - ₹1150 = 100. C*= ₹100**

**OR**

Calculate equilibrium level of income using Savings and Investment approach from the following information.
Autonomous consumption = ₹200
Marginal Propensity to Consume = 0.8
Investment Expenditure = ₹500
**At equilibrium**
**S=I; -C*+MPS x Y = I ; -200+0.2 x Y=500; 0.2Y=700; Y= ₹3500**

20. Define exchange rate. How is demand for foreign exchange related to rate of exchange? Explain using diagram. 4
**ANS: It is the price of one currency in terms of another. It is the rate at which exports and Imports of a nation is valued at a given point of time.**
**The demand curve for the exchange market is negatively sloped. This means that less foreign exchange is demanded as the exchange rate increases. This is caused by the rise in the price of foreign exchange which increases the rupee cost of foreign goods, which makes them more expensive.**
**Supply curve for the exchange market is positively sloped. This means that supply of foreign exchange increases as the exchange rate increases. This makes home country goods become cheaper to foreigner since rupee is depreciating in value. Consequently, the demand for our exports increases as exchange rate increases. The increased demand for exports will result into increased supply of foreign exchange. Thus, the supply of foreign exchange increases the exchange rate increases.**



**The demand and supply curves intersect to determine the equilibrium exchange rate (EReq) and the equilibrium quantity (Qeq) of foreign currency US $.**

21. Define fiscal deficit. How is it calculated? What are its implications? 4

**ANS: Fiscal Deficit:- Fiscal Deficit is the difference between government's total expenditure and its total receipts excluding borrowings**

**Gross Fiscal Deficit = Total Expenditure—(Revenue Receipts +Non debt creating capital receipts)**

**Gross fiscal deficit will be equal to Net borrowing at home + Borrowing from RBI + Borrowing from abroad.**

**Implications of fiscal deficit are-**

a) **It indicates the total borrowing requirements of the government**
b) **It indicates how far government is living beyond its means.**
c) **It creates large burden of interest payment in future, which may further increase the revenue deficit.**
d) **Fiscal deficit is inflationary in nature because it increases money supply.**

22. What does excess demand and deficient demand mean? Explain any two measures of each of fiscal policy and monetary policy that you can suggest to correct excess demand in an economy? 6

**ANS: If aggregate demand for a level of output is less than the full employment level, then a situation of deficient demand exists**

**If AD for a level of output is less more than the full employment level, then excess demand exists**

a. **Fiscal Policy measures to correct Deficient Demand: Fiscal policy is the taxation and expenditure policy of the government. When there is deficient demand, aggregate demand should increase to the extent of deflationary gap. For this two fiscal policy measures are suggested.**
   a) **Increasing the level of government expenditure:- An increasing the government expenditure equal to the amount of deflationary gap can push up the AD. Economy can restore the full employment equilibrium**
   b) **Reduction of Taxation: A reduction in taxes will increase the disposable income of the people. As a result consumption demand increased to the extent of MPC times of increase in disposable income. This increases AD.**

**Thus, a mix of increasing government expenditure and reduction of taxation can solve the problem of deficient demand.**

**b. Monetary Policy to correct Deficient Demand:-Monetary policy is the policy of the central Bank of a country by changing the money supply and credit. The aim of the monetary policy is to cause an increase or decrease in investment expenditure by firms. It can be done in two step manner**

a) **Increase in availability of credit: - This can be done by reducing the cash reserve ratio. This gives commercial banks greater ability and more resources to expand credit.**
b) **Lower interest rate: - This can be done by increasing money supply and by reducing Bank Rate. This increases the demand for investible fund.**

**Increased availability of credit and reduction of interest rate will increase the investment in the economy. Therefore, that AD demand can be pushed up to solve the problem of deficient demand.**

**Fiscal Policy measures to correct excess demand: Two important fiscal policy measures are**

a) **Reducing Government Expenditure- Government expenditure is a part of AD. Reduction in government expenditure equal to the inflationary gap will bring down the AD back to full employment level.**
b) **Increasing Tax rate:- Increasing taxes will reduce the disposable income of the people Consumption expenditure decreases. Ad falls to eliminate inflationary gap.**

**Monetary Policy to correct inflationary Gap:-It operates through a reduction of investment demand by firms. It is possible by-**

a) **Increasing rate of interest: - At higher rate of interest investment demand will**

**decrease.**

b) **Reducing availability of credit by increasing cash reserve ratio and by raising Bank Rate.**

**OR**

Define equilibrium level of income. Will the economy be always at full employment equilibrium? Explain.

**ANS: The equilibrium level of income, output and employment is solely determined by AD. The economy will be in full employment equilibrium if AD is equal to full employment level of output. However, AD demand need not be always equal to the full employment level of output**

**If AD is for an amount of output less than the full employment level of output, then deficient demand arises. This leads to under employment equilibrium. This leads to deflationary gap.**

**If AD is for a level of output more than the full employment level of output, then it is known as excess demand. This leads to inflationary gap.**

23. How does central Bank control money supply and credit creation using the measures of: 6

a) Open market operation

b) Reserve Ratio Requirements

**ANS:**

**(a) Open market operation: Buying and selling of government bonds and securities in the open market on behalf of the government to control money supply and credit creation. When central bank sells government bonds, money from the economy and banks will flow to the hands of central bank. Money supply decreases. Banks have less resources to create credit.**

**When central bank purchases bonds and securities money flows into the economy and to the banking system. Money supply increases. Banks have more resources to create credit.**

**(b) Reserve Ratio Requirement: Commercial banks have to keep certain percentage of their deposit liabilities in the form of cash and other designated liquid assets. There are two types of reserve that commercial banks have to keep**

**i. Cash Reserve ratio: It is that part of deposit liabilities that commercial bank have to keep as cash and designated liquid assets with themselves to meet the demand of depositors.**

**ii. Statutory liquidity ratio: It is that part of deposit liabilities that commercial banks have to keep as cash with the central bank**

**If these reserves are increased commercial banks have less resource to created credit. Money supply and credit creation will decrease. If these reserve are reduced commercials banks will have more resources to create credit. Credit creation and money supply will increase.**

24. Compute Private final consumption expenditure and Factor income from abroad. 6

| | | ₹ crores |
|---|---|---|
| 1. | Gross National Product at market prices | 6000 |
| 2. | Net factor income from abroad | (-)50 |
| 3. | Net exports | 500 |
| 4. | Private income | 3000 |
| 5. | Government final consumption expenditure | 1400 |
| 6. | Corporation tax | 700 |
| 7 | Gross domestic fixed capital formation | 1550 |
| 8. | Net retained earnings of private enterprises | 500 |
| 9. | Changes in stock | 600 |
| 10. | Factor income paid to abroad | 200 |
| 11. | Net indirect taxes | 500 |
| 12. | Net current transfer from abroad | 150 |
| 13. | National debt Interest | 500 |

| | | |
|---|---|---|
| 14. | Direct taxes paid by the households | 300 |

**ANS: Private final consumption expenditure = GNPmp - Net factor income from abroad - Government final consumption expenditure - Gross domestic capital formation - Net exports**
**6000-(-50)-1400-(1550+600)-50**
**₹ 2000 cr.**
**Net Factor income from abroad = Factor income received –factor income paid**
**(-)50 = X - 200;**
**X= ₹150 cr**

## SOLVED PAPER – 4

**Section A**

1. What is the effect of a rise in income of the consumer, with prices of goods X and Y remaining unchanged, upon the budget line? 1
**ANS: A rise in income, with prices remaining unchanged, will shift the budget line parallel upwards or rightwards.**
2. Keeping the welfare of the masses in mind, the government should be very considerate in fixing the prices of life saving drugs, as their price elasticity of demand is;(Choose the correct alternative) 1
   (a) zero
   (b) 1
   (c) Less than 1
   (d) More than 1
**ANS: (A) Zero**
3. Which of the point can be referred to as a "point of satiety"? ;(Choose the correct alternative) 1
   (a) MU is negative
   (b) MU is zero
   (c) TU is rising
   (d) TU is falling
**ANS: (B) MU is zero**
4. What is Normative economics? 1
**ANS: It indicates that more of one good can be obtained only by giving up the production of the other good.**
5. Giving reason, comment on the shape of production possibilities curve based on the following schedule. 3

| | | | | | |
|---|---|---|---|---|---|
| Goods X(units) | 0 | 1 | 2 | 3 | 4 |
| Goods Y(units) | 8 | 6 | 4 | 2 | 0 |

**ANS:**

| GOOD X (units) | GOOD Y (units) | MRT = ΔY/ΔX |
|---|---|---|
| **0** | **8** | **–** |
| **1** | **6** | **2 Y : 1 X** |
| **2** | **4** | **2 Y : 1 X** |
| **3** | **2** | **2 Y : 1 X** |
| **4** | **0** | **2 Y : 1 X** |

**Since the above schedule MRT is constant throughout, PPC will be a downward sloping straight line.**

**OR**

Explain the meaning of opportunity cost with the help of production possibility schedule.
**Opportunity cost is the value of the benefit foregone by opting for one alternative rather than the other. It can also be defined as the value of next best use to which that resource could be put. Look at the following Production Possibility schedule.**

| Possibilities | Good X | Good Y |
|---|---|---|
| A | 1 | 10 |
| B | 2 | 8 |
| C | 3 | 5 |

**For producing an additional unit of good X, 2 units of good Y are sacrificed, thus opportunity cost of producing an additional unit of good X is 2 units of good Y sacrificed.**

6. Distinguish between fixed cost and variable cost and give an example of each. 3

**ANS:**

- **Fixed costs are the costs incurred on buying/hiring of fixed inputs, whereas variable costs are incurred on buying/hiring variable inputs.**
- **Fixed costs do not vary with the change in the level of output whereas variable costs directly vary with the change in the level of output.**
- **An example of fixed cost is rent and an example for variable cost is cost of raw materials.**

7. Explain the Law of Diminishing Marginal Utility with the help of a relevant schedule. 4

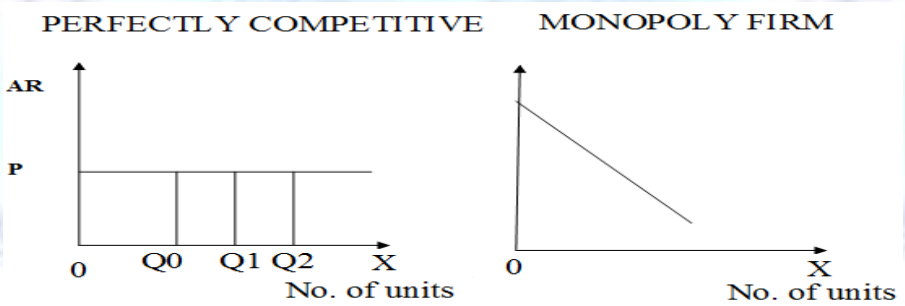
**ANS:**

- **The law of diminishing marginal utility states that as the consumer consumes more and more units of the given good, the addition made to the total utility, goes on diminishing.**
- **It is a common observation that after sometime marginal utility which goes on diminishing may become zero or even negative, i.e., a given consumers gets disutility from its consumption.**
- **On the basis of his rational behaviour, the given consumer will never go beyond the zero marginal utility stage**

| Units Consumed | TU (units) | MU(units) |
|---|---|---|
| 0 | 0 | – |
| 1 | 5 | 5 |
| 2 | 9 | 4 |
| 3 | 12 | 3 |
| 4 | 14 | 2 |
| 5 | 15 | 1 |
| 6 | 15 | 0 |
| 7 | 14 | –1 |

8. Draw and compare the demand curves of a firm under perfect competition and monopoly. 4

**ANS:**




**OR**

Give any two similarities and any one dissimilarity between perfect competition and monopolistic competition.

**ANS:**

**The two similarities between perfect competition and monopolistic are;**

- **In both the market forms, large number of buyers and sellers are found which reduces their individual influence on market price.**
- **Perfect knowledge prevails in both the markets with respect to market and state of**

**technology.**

**Dissimilarity between perfect competition and monopolistic competition is that under perfect competition, all producers produce 'homogenous products'. As a result, the individual seller has no influence on the market price. Whereas under monopolistic competition. All producers produce 'differentiated products'. As a result, have some influence on the market price of their differentiated product.**

9. A 15 percent rise in the price of a commodity raises its supply from 300 units to 345 units. Calculate its price elasticity of supply. 4

**ANS:**

**Elasticity of supply =** $\frac{\textbf{\% change in quantity supplied}}{\textbf{\% change in price}} = \frac{\frac{345-300}{300} \text{ X } 100}{15}$

$= \frac{\frac{45}{300} \text{ X } 100}{15} = \frac{15\%}{15\%} = 1 \quad Es = 1$

10. A consumer wants to consume two goods. The prices of two goods are ₹ 4 and ₹ 5 respectively. The consumer's income is ₹ 20. 6

a) Give the equation of budget line.
b) How much of good1 can he consume if he sends his entire income on that good?
c) How much of good2 can he consume if he sends his entire income on that good?
d) What is the slope of budget line?

**ANS:**

**a) The equation of the budget line is: $X.P1 + Y.P2 = M$ where P1 and P2 are the respective Prices of the two good X and good Y.**

**b) If the given consumer spends his entire income (₹ 20) on good 1, whose price is ₹4 per unit , it means that he can buy 5 units, i.e., 20/4 = 5 units of good 1 .**

**c) If he spends his entire income on good 2, whose price is ₹5 per unit, it means that he can buy 4 units, i.e., 20/5 = 4 units of good 2.**

**d) The slope of budget line** $= \frac{\Delta Y}{\Delta X}$ **OR** $\frac{Px}{Py}$

11. A producer produces output at which 6

a) TR – TC is maximum and
b) MC > MR beyond this level of output.

Is the given producer maximizing profits? Explain. Use diagram.

**ANS:**

**Yes, the given producer produces output at which TR–TC is maximum, meaning the total profit is maximum. In terms of MR and MC, there are two conditions required for maximizing profits. They are;**

**a) MC=MR**
**b) MC > MR beyond the MC = MR output.**

12. Market for a good X is in equilibrium. Supply of the good 'increases'. Explain the chain of effects of this change. Use diagram. 6

**ANS:**

**The excess supply results in competition among the sellers lading to a fall in the price. A fall in the price results in a rise in quantity demanded (a downward movement along the demand curve) and fall in quantity supplied (a downward movement along the new supply curve). These changes continue till we reach price OP0 which is new equilibrium price at which quantity demanded and quantity supplied are equal. Hence, equilibrium price falls from OP to OP0 and equilibrium quantity increases from OQ to OQ1.**

**OR**

Market for a good is in equilibrium. There is 'increase 'in demand for the good. Explain the chain of effects of this change.

**ANS:**

**If market for a good, say good X is in equilibrium, i.e. DX = SX and if its demand increases, on account of any other factor other than the price of the given good. Price remaining**

**unchanged, a situation of excess demand emerges. This in turn leads to competition among buyers causing price to rise.**
**Rise in price causes contraction in demand and expansion in supply.**
**Price of the given good will continue to rise till the market is in equilibrium again at a higher price.**

**Section B**

13. Give two examples of capital receipts. 1
**ANS: The two examples of capital receipts are borrowings and selling of shares held by government.**
14. In the budget, which type of expenditure is expenditure on land? (Choose the correct alternative) 1
(Choose the correct alternative)
(a) Revenue expenditure
(b) Plan expenditure
(c) Non–plan expenditure
(d) Capital expenditure
**ANS: (D) Capital Expenditure**
15. When investment multiplier is 1, the value of MPC is; (Choose the correct alternative)
(a) 1 1
(b) 0
(c) Both 0 and 1
(d) None of these
**ANS: (B) 0**
16. If planned savings are greater the planned investment, what will be its effects on inventories? 1
**ANS: Inventories will start pilling up with producers when S>I in the economy.**
17. How was the system of mutual exchange of commodities, responsible for the introduction of the monetary system? 3
**ANS: Introduction of the monetary system came up against the background of the difficulties faced in the system of mutual exchange, i.e. barter system. Some of these difficulties are as under:**
**a) It required 'double coincidence of wants.**
**b) It lacked common units of value.**
**c) No proper system of storing wealth was involved.**
**Thus, the above difficulties led to the introduction of money.**
**OR**
What has been the aim of demonetization?
**ANS: The aim of demonetization has been fourfold.**
**a) To curb corruption**
**b) to curb counterfeiting**
**c) To curb the use of high denomination notes for terrorist activities**
**d) To curb the accumulation of black money generated by income that has not been declared to the tax authorities**
18. Explain how the Central Bank can use 'margin requirements' to influence credit creation by the commercial banks. 3
**ANS: Margin requirements to the excess of security amount over loan amount. In other words, margin requirements refer to the difference between the Value of the security offered for loan and the value of loan granted. Suppose a person mortgages good worth ₹10,000 with a bank and the bank gives him loan worth ₹8,000 the margin requirement in this case would be 20%. To curb excess demand, the Central Bank raises the margin requirement. The borrowers are now given less money in the form of loan against the mortgaged goods. Thus, credit contracts and aggregate demand gets reduced. To correct the situation of deficient demand, margin is reduced to encourage borrowing. Commercial banks can now give more advances against the mortgaged good. Thus, credit expands and aggregate demand increases.**

19. Calculate NVA at market price from the following; 4

| | | ₹ in crores |
|---|---|---|
| a. | Changes in stock | (–) 20 |
| b. | Sales | 200 |
| c. | Excise duty | 15 |
| d. | Opening stock | 30 |
| e. | Intermediate consumption | 120 |
| f. | Depreciation | 10 |

**ANS:**

**NVA MP = (ii) + (i) – (v) – (vi)**

**= 200 + (–20) – 120 – 10**

**= ₹50 crores**

20. (a) Define multiplier and state its relation with MPC. 4

(b) Draw a savings function curve and locate the break–even point on this curve.

**ANS:**

**(a) Multiplier refers to the increase in national income as a multiple of a given increase in investment.**

**The value of multiplier is determined by the value of MPC.**

**Multiplier = 1**

**1– MPC**

**Higher the value of MPC, higher is the value of multiplier. There is a direct relation between the two. In the given diagram, the break -even point is shown at point B, because at this point, Y=C, i.e., savings are zero.**

**Diagrammatically, it is represented by upward sloping saving function, SS intersecting the OX axis this point at B, where savings are zero.**

**Diagram**

21. How would GST be administered in India? 4

**ANS: Keeping the federal structure of India, there will be two components of GST, i.e, Central GST (CGST) and state GST (SGST)**

**Both centre and state will levy GST across the value chain simultaneously.**

**Centre would levy and collect CGST and states would levy and collect the SGST on all transactions within a state.**

**The input Tax credit of CGST would be available for discharging the CGST liability on the output at each stage.**

**Similarly the credit of SGST paid on inputs would be allowed for paying the SGST on output.**

**OR**

Explain the role of government budget in fighting inflationary and deflationary tendencies.

**ANS: The government budget can be used to bring in economic stability. Economic stability refers to the minimization of fluctuations in prices (i.e., control of inflationary and deflationary trends) in the economy. Appropriate taxation, subsidies and public expenditure policies may be used for this purpose. When there is inflation, government can reduce its own expenditure and though GST reduce aggregate demand and inflationary pressure thereby. When there is deflation, the government can increase its own expenditure. It can also reduce tax and give subsidies to encourage spending by the people, thus increasing aggregate demand and reducing deflationary pressure.**

22. Exchange rate of US$ rose considerably in India. Explain the impact of this on Indian exports and analyze its repercussion (consequence) on the general masses. 6

**ANS: The price of US$ has risen considerably in India. This means, the value of rupee, in terms of US$ has fallen. The deliberate raising of the price of foreign currency in terms of domestic currency by the government is called "devaluation" of domestic currency.**

**Indian exports become cheaper and as a result their demand increases and more foreign exchange pours in, more exports mean more employment generation, which in turn will increase the income and standard of living of the masses, who will thus become better off.**

23. Explain the role of Moral Suasion and Reverse Repo Rate in affecting excess demand. 6

**ANS: Moral suasion. If refers to the advice given by the Central Bank to the commercial banks to expand or curtail credit. It may be written or oral. In the situation of excess demand, the Central Bank issues appeals to the commercial banks not to give loans and restricts the expansion of credit. Thus reduces the availability of credit and thereby reduce excess demand.**

**Reverse Repo Rate. Reverse Repo Rate is the rate at which the Central Bank borrows money from commercial banks. During excess demand, the Central Bank increases Reverse Repo Rate. Due the high rate of interest, more and more banks supply to the Central Bank because of more earnings. This decreases the supply of money in the market and thus, decreases the excess demand.**

**OR**

Explain the role of Bank Rate policy and changes in the government expenditure in correcting/checking the deficient demand inn an economy.

**ANS: Bank Rate Policy. In a situation of 'deficient demand' in an economy, the Central Bank lowers its Bank rate and the commercial banks are forced to lower their lending rates. As the lending rate falls, the demand for loans for investment is likely to rise. This encourages investment and other expenditure which thereby check deficient demand by raising the aggregate demand in the economy.**

**Changes in the Government expenditure An increase in the government's expenditure on giving free education, medical facilities etc. Will increase the income of the people which directly leads to an increase in aggregate demand. This will be helpful in checking deficient demand situation in an economy.**

24. Calculate (A) GDP at market price by Income Method and (B) National Income by the Expenditure Method; 6

| | | ₹ in crores |
|---|---|---|
| a. | Compensation of employees | 120 |
| b. | Exports | 25 |
| c. | Mixed income of self employed | 140 |
| d. | Imports | 30 |
| e. | Interest on national debt | 5 |
| f. | Private final consumption expenditure | 255 |
| g. | Gross fixed capital formation | 65 |
| h. | Consumption of fixed capital | 40 |
| i. | Subsidies | 10 |
| j. | Governments final consumption expenditure | 35 |
| k. | Changes in stock | 20 |
| l. | Indirect tax | 45 |
| m. | Net factor income from rest of the world | (–)10 |
| n. | Rent, interest and profit | 50 |

**ANS: (a) GDP MP by income method = (i) + (iii) + (xiv) +(viii) +(xii) –(ix)**

**= 120 +140+50+40+45 –10**

**= ₹385 crores**

**(b) NI/NPPFC by Expenditure Method = (vi) + (x) + (xi) + (vii) + (ii- iv) – (viii) – (xii) + (ix) +(xiii)**

**= 255 + 35 + 20 + 65 + (25-30)- 40-45+10+(-10)**

**= ₹285 crores**

# UNSOLVED PAPER - 1

## SECTION A

1. Give one example for a normative statement 1
2. A consumer buys 5 cups of ice-cream when its price is ₹10 per unit and is at equilibrium. If its price falls to ₹8 per unit, should she buy more units or less units to be at equilibrium? 1
3. If Marginal Product coincides with X axis, Total Product will: (Choose the correct alternative) 1
   a) Remains constant and maximum
   b) Increases at a constant rate
   c) Decreases at a constant rate
   d) Increases at an increasing rate.
4. Which one of the following is an example for implicit cost? (Choose the correct alternative) 1
   a) Rent of hired building
   b) Interest of borrowed fund
   c) Electricity and water charges
   d) Wages and salaries of managerial staff.
5. What does allocation of resource mean? How does the problem of "What to produce" become the problem of allocation of resources? 3

   **OR**

   Explain the problem of how to produce. Why does the problem arise?
6. In a diagram quantity demanded of good X is shown on X axis and its price is shown on Y axis. What changes happen on its demand curve under the following situation? 3
   a) Price of good X falls.
   b) Price of good X rises
   c) Money income of the consumer falls.
7. There is a market structure in which there are large number of firms producing goods which are not homogeneous. Identify the market and explain any of its three features. 4

   **OR**

   There is a market structure in which there are only a few large firms producing goods which are not homogeneous. Identify the market and explain any of its three features.
8. Good X and good Y are complementary goods. Using suitable diagram, explain the effect on demand for good X when price of good Y changes. 4
9. Define Average Product and Marginal Product. Using suitable diagram explain the relationship between the two. 4
10. Why must marginal cost be equal to marginal revenue for a firm's equilibrium? Explain using suitable diagram. 6

    **OR**

    Consider the following schedule. How many units of the good should the firm produce to be at equilibrium? Use Marginal Cost and Marginal Revenue approach. Assume the unit price as ₹10

| Units produced: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| Total Cost (₹ Crores): | 12 | 22 | 30 | 36 | 44 | 51 | 61 | 73 | 87 |

11. How does the following influence price elasticity of demand? 6
    a) Nature of the product.
    b) Time period
    c) Habits of the consumer
12. A firm is increasing the employment of a variable input while keeping the employment of all other inputs constant. Explain the how the Marginal Product and Total Product of the factor changes in its three stages. Use diagram. 6

## SECTION B

13. If Revenue receipts were 8.7% of Gross Domestic Product and Non Tax Revenue was 1.4% of the Gross Domestic Product, how much was the tax revenue? 1

14. If Marginal Propensity to Save is zero, the value of Multiplier is: (Choose the correct alternative) 1
   a) Infinity
   b) Zero
   c) One
   d) None of the above
15. Which of the following expenditure is a capital expenditure? (Choose the correct alternative) 1
   a) Expenditure on salaries
   b) Expenditure on Interest
   c) Expenditure of purchase of shares
   d) Expenditure on grants
16. Total money creation by the commercial bank is equal to: (Choose the correct alternative) 1
   a) Initial Deposit x 1/Legal Reserve Ratio
   b) Initial Deposit x 1/Statutory Liquidity Ratio
   c) Initial Deposit x 1/Variable Reserve Ratio
   d) Initial Deposit x 1/ Repo Rate
17. How are the following considered in balance of payment current account? State with reason. 3
   a) Current transfer from abroad
   b) Import of machinery from abroad
   c) Purchase of shares of foreign companies by residents
18. Calculate Value of Output and Gross Value Added at factor cost from the following information. 3

| | ₹ (thousands) |
|---|---:|
| Consumption of fixed capital | 200 |
| Domestic Sales | 5600 |
| Purchase of Intermediate goods | 2000 |
| Purchase of machinery for own use | 1000 |
| Opening stock of inventories | 800 |
| Subsidies | 300 |
| Exports | 400 |
| Indirect taxes | 800 |
| Closing stock of inventories | 1000 |

19. What does budget deficit mean? Explain the three types of budget deficit with their implications 4
20. How do the following policies of central bank help in expanding and contracting credit creation and money supply? 4
   a) Bank Rate Policy
   b) Open Market Operation
21. Distinguish between: 4
   a) Currency Devaluation and Currency Depreciation
   b) Balance of Trade and Balance of Payment current account
22. Calculate Gross National Product at market prices and compensation of employees from the following data. 6

| | ₹ Crores |
|---|---|
| Profits | 900 |
| Mixed income of self-employed | 600 |
| Indirect taxes | 350 |
| Net Domestic Product at factor cost | 4300 |
| Consumption of fixed capital | 200 |
| Interest | 500 |
| Factor income received from abroad | 200 |
| Rent | 700 |
| Subsidies | 150 |
| Factor payment made to abroad. | 100 |

23. Explain the concept of deflationary gap with suitable diagram. What monetary policies can be taken in order to rectify this situation? 6

**OR**

Explain the concept of inflationary gap with suitable diagram. What fiscal policy measures can be taken in order to rectify this situation?

24. a) An economy is at equilibrium. Autonomous consumption is ₹300. Marginal Propensity to consume is 0.8. Investment expenditure is ₹700. Calculate the level of income using savings and Investment approach. 6

b) As a result of increase in investment national income rises by ₹600 crores. If marginal propensity to consume is 0.75, calculate increase in investment.

## UNSOLVED PAPER - 2

**SECTION A**

1. A straight line supply curve which intersects the X-axis in its positive region indicates elasticity. (Choose the correct alternative) 1
   (a) Equal to one
   (b) More than one
   (c) Less than one
   (d) Equal to zero
2. MUx is 40 and MUy is 30. If price of Y is ₹ 9. What will be the price of X at equilibrium: (Choose the correct alternative) 1
   (a) ₹ 9
   (b) ₹ 30
   (c) ₹ 12
   (d) ₹ 15
3. If a good takes up significant share of consumer's budget, it will be: (Choose the correct alternative) 1
   (a) Inelastic
   (b) Elastic
   (c) Unitary elastic
   (d) Less than elastic
4. An increase in unemployment will lead to: (Choose the correct alternative) 1
   (a) Rotation in PPC
   (b) No change in PPC
   (c) Rightwards shift in PPC
   (d) Leftwards shift in PPC
5. Explain the effect of following on Budget line: 3
   (a) Decrease in Price of Good - X
   (b) Increase in Income of consumer

**OR**

Chocolate sells for ₹ 30. Ajay who likes chocolate, has already consumed 3. His marginal utility from eating 3 chocolates is 140. Suppose further that, for him, the marginal utility of one rupee is 4. Should he consume more chocolate or stop consumption?

6. Price of the commodity increases from ₹50 to ₹60. Quantity demanded initially was 200 units. What should be the new quantity so that elasticity of demand is established to be unitary? 3
7. Find Average cost, Average fixed cost and Marginal cost 4

| Output | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Additional variable cost (₹) | - | 10 | 5.5 | 12 | 13 |
| Fixed cost (₹) | 20 | - | - | - | - |

8. Differentiate between economies of scale and diseconomies of scale. How do they impact long run production? 4

**OR**

With the rise in price from ₹ 8 to ₹ 14, total expenditure on the commodity rises by 40% and

becomes ₹ 1,120. Calculate price elasticity of demand. Also indicate whether demand is elastic or inelastic. Draw an appropriate demand curve also.

9. On the basis of information given in table, determine level of output at which producer will be in equilibrium. Use MR & MC approach. Give reasons also. 4

| Output | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| AR (₹) | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| Total Cost (₹) | 7 | 15 | 22 | 28 | 33 | 40 | 48 |

10. X and Y are complementary goods whereas Y and Z are substitute goods. What will be the effect on demand of Z when price of X falls. Use diagram. 6

11. Explain any four determinants of supply. 6

**OR**

The ratio of elasticity of supply of two commodities A and B is 1: 1.5.20 per cent fall in price of A results a fall in its supply from 820 units to 492 units. Calculate the percentage increase in supply of B if its price rises from ₹ 7.50 to ₹ 8.25 per unit. Also draw supply curves when:

(a) Elasticity is more than 1
(b) (b) Elasticity is less than 1

12. Explain any two features of monopoly and also describe the causes that lead to creation of monopoly in market. 6

**SECTION B**

13. If LRR is 0.4 then money multiplier is: (Choose the correct alternative) 1
    (a) 0.6
    (b) 40
    (c) 2.5
    (d) 25

14. With the increase in income, autonomous expenditure. (Choose the correct alternative) 1
    (a) Will increase
    (b) Will decrease
    (c) Will remain unaffected
    (d) None of the above

15. When economy decides to save the whole of its additional income, then value of investment multiplier will be: (Choose the correct alternative) 1
    (a) 1
    (b) 0
    (c) 0.1
    (d) Infinity

16. Which of the following is not true for balance of payment? (Choose the correct alternative) 1
    (a) Accounts relating to specified period
    (b) Double entry system
    (c) It excludes capital transfers
    (a) It if self-balanced

17. Explain the meaning of deficit in balance of payment account. 3

**OR**

Explain the meaning and two merits of flexible foreign exchange rate.

18. Calculate value added by Firm A & B from the following data: 3

| | | |
|---|---|---|
| (a) | Purchase by Firms B from Firm A | 40 |
| (b) | Sales by Firm B | 80 |
| (c) | Imports by Firm B | 10 |
| (d) | Rent Paid by Firm B | 05 |
| (e) | Opening stock of Firm B | 15 |
| (f) | Closing stock of Firm B | 20 |
| (g) | Purchases by Firm A from Firm B | 20 |

| | | |
|---|---|---|
| (h) | Closing stock of Firm A | 20 |
| (i) | Opening stock of Firm A | 10 |

19. Explain the concept of equilibrium and disequilibrium in BOP. 4

20. In an economy 75 per cent of the increase in income is spent on consumption. Investment is increased by ₹1,000. Calculate: 4
    (a) Total increase in income
    (b) Total increase in consumption

**OR**

Derive the savings curve with the help of consumption curve.

21. There is a wide gap between rich and poor in the country how can the government through its budget help to reduce this gap? 4

22. When is an economy in equilibrium? Explain with the help of AD and AS curves. Also explain the changes that take place in the economy when the economy is not in equilibrium. Use diagram. 6

23. How will the following changes will affect the money supply (increase or decrease) in the economy? State with reasons. 6
    1. Rise in repo rate from 5% to 75%
    2. Margin requirement increases by 2%.
    3. RBI reduces statutory reserve ratio.
    4. Purchase of government securities by RBI.

24. Calculate compensation of employees 6

| | | ₹ in crores |
|---|---|---|
| (a) | Value of output of primary sector | 2,000 |
| (b) | Sales tax | 400 |
| (c) | Gross National Product at Market Price | 6,000 |
| (d) | Net factor income to abroad | 200 |
| (e) | Net domestic capital formation | 60 |
| (f) | Purchase of raw material by all sectors | 5,800 |
| (g) | Rent | 600 |
| (h) | Value of output of secondary sector | 4,000 |
| (i) | Subsidy | 100 |
| (j) | Interest | 700 |
| (k) | Import of machinery by all sectors | 1,000 |
| (l) | Gross investment | 300 |
| (m) | Value of Output of tertiary sector | 6,000 |
| (n) | Profits | 640 |
| (o) | Mixed income of self-employed | 1,660 |

**OR**

From the following data calculate Net National Product at Factor Cost by (a) income method and (b) expenditure method:

| | Items | (₹in crores) |
|---|---|---|
| (a) | Current transfers from rest of the world | 100 |
| (b) | Government final consumption expenditure | 1,000 |
| (c) | Wages and salaries | 3,800 |
| (d) | Dividend | 500 |
| (e) | Rent | 200 |
| (f) | Interest | 150 |
| (g) | Net domestic capital formation | 500 |
| (h) | Profits | 800 |
| (i) | Employers' contribution to social security schemes | 200 |
| (j) | Net exports | (–)50 |
| (k) | Net factor income from abroad | (–)30 |
| (l) | Consumption of fixed capital | 40 |

| | | |
|---|---|---|
| (m) | Private final consumption expenditure | 4,000 |
| (n) | Net indirect tax | 300 |

# UNSOLVED PAPER - 3

## SECTION A

1. When does 'change in demand' take place? 1
2. Price elasticity of demand of good X is (-) 2 and of good Y is (-) 3. Which of the two goods is more price elastic and why? 1
3. A firm is a Price taker under: (Choose the correct alternative) 1
   (a) Perfect Competition
   (b) Oligopoly
   (c) Monopolistic Competition
   (d) Monopoly
4. If the price of good Y rises, what will be its impact on the slope of budget line? (Choose the correct alternative) 1
   (a) Slope of budget line will rise
   (b) Slope of budget line will fall
   (c) No change in the slope of the budget line
   (d) None of the above.
5. Explain any two features of a market structure where the number of firms is large, but the goods produced by them are not homogeneous. 3
6. With an increase in the level of output, average fixed cost goes on falling till it reaches zero. Do you agree? Support your answer with valid reasons. 3

   **OR**

   With the help of a diagram explain the relationship between Average Product and marginal product.
7. Define Marginal Opportunity Cost. Explain the concept with the help of numerical example. 4
8. A producer supplies 80 units of a good at a price of ₹10 per unit. Price elasticity of supply is 4. How much will he supply at ₹9 per unit? 4
9. Distinguish between demand by an individual consumer and market demand of a good. Also state the factors leading to fall in demand by an individual consumer. 4

   **OR**

   How is price elasticity of demand affected by :
   (a) Nature of the good
   (b) Number of substitutes available for the good
10. Explain the conditions of producer's equilibrium with the help of a numerical example. Use marginal cost and marginal revenue approach. 6
11. A consumer consumes only two goods. For the consumer to be in equilibrium why must marginal rate of substitution be equal to the ratio of prices of the two goods? Explain 6
12. Market for a good is in equilibrium. Explain the chain of reactions in the market if the price is (a) higher than equilibrium price (b) lower than equilibrium price. 6

    **OR**

    Explain the chain of effects leading to a change in equilibrium price and quantity of a normal good due to increase in the income of its consumers.

## SECTION B

13. Define Investment Multiplier. 1
14. State the components of money supply. 1
15. Which of the following is an example of normal resident of India? (Choose the correct alternative) 1
    (a) Foreign worker working in WHO located in India

(b) The German working as Director in IMF office located in India
(c) Ambassador in India from rest of the world
(d) Ambassador of India in rest of the world.

16. The rate at which commercial banks are allowed to park their surplus funds with the RBI is called: (Choose the correct alternative) 1
(a) Bank rate
(b) Repo rate
(c) Currency rate
(d) Reverse repo rate.

17. Why does demand for foreign exchange rise when its price falls? 3

**OR**

What are the sources of demand of foreign exchange?

18. Explain how 'Non-Monetary exchanges' are a limitation in taking gross domestic product as an index of welfare. 3

19. Draw a straight line consumption curve. From it, derive a saving curve explaining the process of derivation. Also, show in this diagram the level of income at which Average Propensity to Consume is equal to 1. 4

**OR**

Outline the steps required to be taken in deriving the consumption curve from the given saving cur e. use diagram. Also show in this diagram the level of income at which Average Propensity to save is negative.

20. Distinguish between the current account and the capital account of the Balance of payments. Is import of machinery recorded in current account or capital account? Give reasons for your answer. 4

21. Explain the process of money creation by the commercial banking system. 4

22. (a) Define Primary deficit and write any two implications of the same.
(b) India is suffering from the problem of fiscal deficit for the last many years. Explain any two steps to deals with this problem. 6

23 What changes will take place to bring an economy in equilibrium if: 6
(a) Planned savings are greater than Planned Investment
(b) Planned savings are less than Planned Investment.

**OR**

Giving reasons, state whether the following statements are true or false.
(a) When Marginal Propensity to consume is Zero, the value of investment multiplier will also be zero
(b) Value of Average Propensity to Save can never be less than Zero
(c) Value of Marginal Propensity to Save will always be negative.

24. From the following data calculate National Income by (a) Income Method and (b) Expenditure Method: 6

| **Items** | ₹ (in crores) |
|---|---|
| Government final consumption expenditure | 790 |
| Indirect Taxes | 880 |
| Gross fixed capital formation | 1330 |
| Mixed income of the self employed | 2930 |
| Subsidies | 110 |
| Change in stock | 320 |
| Rent interest and profit | 960 |
| Consumption of fixed capital | 410 |
| Private final consumption expenditure | 5220 |
| Import of goods and services | 570 |
| Export of goods and services | 480 |
| Net Factor income from abroad | (-)50 |
| Compensation of employees | 2500 |

# UNSOLVED PAPER – 4

**SECTION A**

1. What is normative economics? 1
2. When 10% rise in the price of a commodity brings about 10% fall in its quantity demanded, its prices elasticity of demand is: 1
   a) Greater than one
   b) Equal to one
   c) Less than one
   d) Zero
3. What cost is also known as the economic cost? 1
4. What is the relation between Market Price and Marginal Revenue of a price-taking firm? 1
5. 'With an increase in the level of output, average fixed cost goes on falling till it reaches zero.' Do you agree? Support your answer with valid reasons. 3
6. Market for a necessary good is competitive in which the existing firms are earning super-normal profits. How can the policy of liberalization by the government help in making the market more competitive in the interests of the consumers? Explain. 3

   OR

   'Equilibrium price of an essential medicine is too high.' Explain what possible steps can be taken to bring down the series of changes that will occur in the market.
7. Give reasons comment on the shape of Production Possibility Curve based on the following schedule: 4

| Good X (units) | Good Y (units) |
|---|---|
| 0 | 8 |
| 1 | 6 |
| 2 | 4 |
| 3 | 2 |
| 4 | 0 |

8. Define Marginal Rate of Substitution. Why an indifference curve is convex? Explain with the help of diagram. 4

   **OR**

   Define an Indifference Map. Why an indifference curve to the right shows higher utility level? Explain with the help of diagram.
9. The quantity demanded of a commodity falls by 5 units, when its prices rises by ₹1 per unit. Its prices elasticity of a demand is (-) 1.5. Calculate the prices before change, if at this price quantity demanded was 30 units. 4
10. Explain the rationale behind the conditions of equilibrium of a producer. 6
11. Comment on the following statements as true or false. Give reasons. 6
    a) When equilibrium price of a good is less than its market price, there will be competition among the sellers.
    b) A monopolist can sell any quantity he likes at a price.
12. A firm's average fixed cost when it produces 2 units is ₹ 40. Its average total cost schedule is given below; calculate its Marginal Cost and Average Variable Coast at each level of output. 6

| Output (units) | Average Total cost (₹) |
|---|---|
| 1 | 80 |
| 2 | 48 |
| 3 | 40 |

**SECTION-B**

13. Which of the following is a stock variable? (Choose the correct alternative) 1
    a) Capital formation
    b) Capital

c) Income
d) Savings

14. Total money creation by the commercial banks is equal to: (Choose the correct alternative) 1
   a) Initial deposit X $\frac{1}{\text{LRR}}$
   b) Initial deposit X $\frac{1}{\text{VRR}}$
   c) Initial deposit X $\frac{1}{\text{SLR}}$
   d) None of the above

15. State the components of money supply. 1

16. Which one of these expenditures is a capital expenditure? (Choose the correct alternative) 1
   a) Expenditure on salaries
   b) Expenditure on interest
   c) Expenditure on purchase of shares
   d) Expenditure on grants

17. In an economy, C = 50 + 0.5 Y is the consumption function where C is consumption expenditure and Y is Nation Income. If investment expenditure is ₹ 2,000, calculate: 3
   a) Equilibrium level of national income.
   b) Consumption expenditure at equilibrium level of national income.

18. Draw a straight line consumption curve. From it, derive a saving curve explaining the process of derivation. Also, show in this diagram the level of income at which Average Propensity to consume is equal to 1. 3

**OR**

Outline the steps required to be taken in deriving the consumption curve from the given saving curve. Use diagram. Also, show in this diagram the level of income at which Average Propensity to save is negative.

19. Give reasons, explain the treatment assigned to the following while estimating national income: 4
   a) Social security contributes by employees
   b) Family members working free on the farm owned by the family

20. Give any two differences between consumer goods and capital goods. Which of these are final goods? 4

**OR**

Explain the problem of double counting in estimating the national income with the help of an example. How can this problem of double counting be avoided?

21. Explain the distinction between "above the line transactions" and "below the line transactions" in the balance of payments. Also, explain the concept of balance of payments 'deficit' in this context. 4

22. Explain any two methods of credit control used by the Central Bank. 6

**OR**

Explain the credit creation role of commercial banks with the help of a numerical example.

23. Explain national income determination through two alternative approaches. Use diagrams. Also, explain the changes that take place in an economy when the economy is not in equilibrium. 6

24. Calculate National Income and Gross National Disposable Income from the following: 6

| | | ₹ (in crores) |
|---|---|---|
| 1. | Net imports | 60 |
| 2. | Consumption of fixed capital | 40 |
| 3. | Change in stocks | (-) 40 |
| 4. | Net current transfer to R.O.W. | (-) 10 |
| 5. | Private final consumption expenditure | 1,000 |
| 6. | Net domestic fixed capital formation | 240 |
| 7. | Government final consumption expenditure | 400 |
| 8. | Net indirect tax | 200 |
| 9. | Net factor income to abroad | (-) 20 |

**BEST OF LUCK**